



An Arvin-Edison Water Storage Plant in Action



Arvin-Edison Water Storage District Arvin, California



An Arvin-Edison Water Level Indicator

About Arvin-Edison Water Storage District

The Arvin-Edison Water Storage District, south of Bakersfield, CA, is one of the world's most sophisticated conjunctive use programs. Arvin-Edison acquires water in wet years and stores it underground for use in dry years. This program provides water supplies to District areas covering 132,000 acres of prime agricultural land, which do not have access to surface water. Arvin-Edison and the Metropolitan Water District of Southern California cooperate in a groundwater storage and water exchange, which benefits both agricultural users in Arvin-Edison and urban users in Los Angeles; an example of how urban and agricultural water users can work together for mutual advantage.

ICONICS Software Deployed

Arvin-Edison Water Storage District selected ICONICS GENESIS32™ OPC Web-enabled HMI/SCADA suite, including: GraphWorX™32 HMI graphical display package; TrendWorX™32 Live and Historical Data Logging, Charting and Reporting software; and AlarmWorX™32 alarm management system.

Project Summary

Arvin-Edison Water Storage District uses ICONICS GENESIS32 for monitoring water levels and motors that pump water to upstream sites, as well as for remote turn on/off of pump motors in emergency situations. The district utilizes 46 pumping plants plus 10 plants that supply water level indicators only to the organization's headquarters.

The plants are controlled by local programming at the sites themselves through Westinghouse PC1100/PC1200 in older systems or SCADAPacks in newer systems. Of the 56 locations, four have recently been upgraded from older versions to more recent GENESIS32 software. The ICONICS solutions are linked to Lundahl DC1003 level indicators, Delta Controls 551 pressure transmitters, AB soft-start controllers and GE Multiline PQMII power monitors.

Benefits of the System

With their upgraded ICONICS solutions, Arvin-Edison Water Storage District is able to maintain accurate control and render visual displays of pump status and various water levels throughout the District and

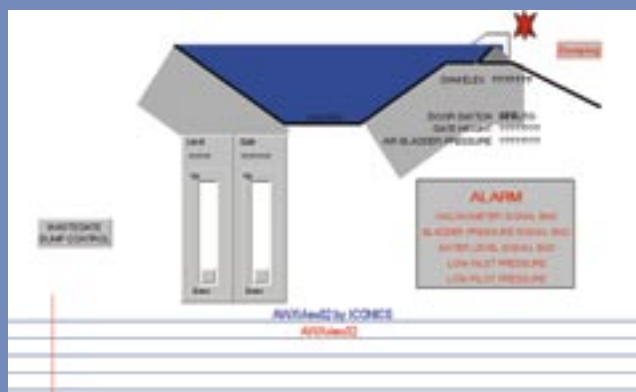
control slide gates regulating water in various parts of their canal system. GENESIS32 and the individual suite components integrate easily into the District's Windows 2000 network.

ICONICS provides the near real-time information and plant control the District requires, whereas the replaced system provided updates with an 8- to 15-second delay on a continuous basis to all the connected sites.

Product Highlight

AlarmWorX³²

AlarmWorX32 Logger captures alarms to Access, SQL 7.0 or Oracle databases. It also can print out the information to one or even a redundant set of printers. Users can create alarm reports and calculations with Microsoft's built-in VBA scripting.



Wastegate Control Overview



Water Transfer from Ground Storage

Conclusion

Arvin-Edison Water District is pleased with the speed of implementation coupled with the nearly instantaneous data retrieval of ICONICS GENESIS32. The organization plans additional upgrades of older software to the most recent V9 release. In addition, the District plans to add the ability to remotely control Check Gates into the system.

Further on, the District plans upgrades on starters with AB Soft Start and Variable Speed drives, as well as the addition of power factor correction equipment to the motor start system, all of which will integrate into their ICONICS solution.

Key Features

Arvin-Edison Water Storage District looked for specific benefits before deciding upon ICONICS solutions, including:

- Ease of Use in Building Graphics and Applications
- Ability to Upgrade as Needed
- Fast, Easy Implementation
- Remote Control
- Expertise with Water/Wastewater Applications