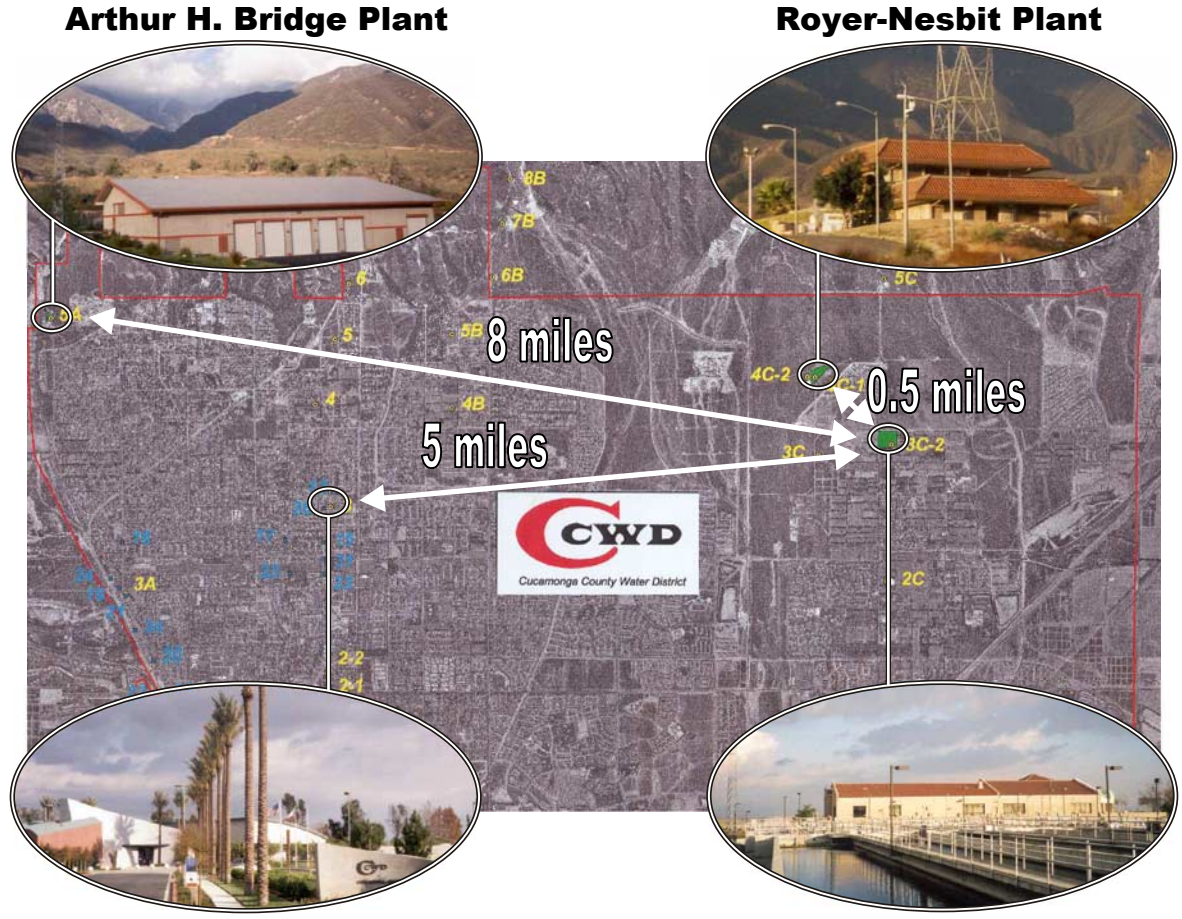
CASE STUDY: CUCAMONGA COUNTY WATER DISTRICT
RANCHO CUCAMONGA, CALIFORNIA

by John Shumate, Solectek Corporation and Ed Diggs, Cucamonga County Water District

Thousands of people pour into California on a daily basis, adding to the millions who already call it home. How to handle this explosive growth requires public utility companies to strategize years in advance to meet the demands of their ever-increasing customer base. No place is this more evident than at water treatment facilities. How to stay ahead of the population and build new facilities are constant factors of growth strategy high on the list of all water treatment facilities.

However, building new water treatment facilities take years to plan and construct and demand extensive research. Purchasing the latest technology is key to maintaining an edge on the demands of the population. Southern California's Cucamonga County Water District is no exception to these demands.

When the Cucamonga County Water District decided to expand their facilities in 1997 from two plants to three, not only was the latest technology key to the design of the new Arthur H. Bridge Plant, but key to operation of all three plants. The Cucamonga County Water District researched how to seamlessly connect all of the plants' control systems so anyone could perform plant operations from any of the three sites.



Cucamonga County Water District Facilities

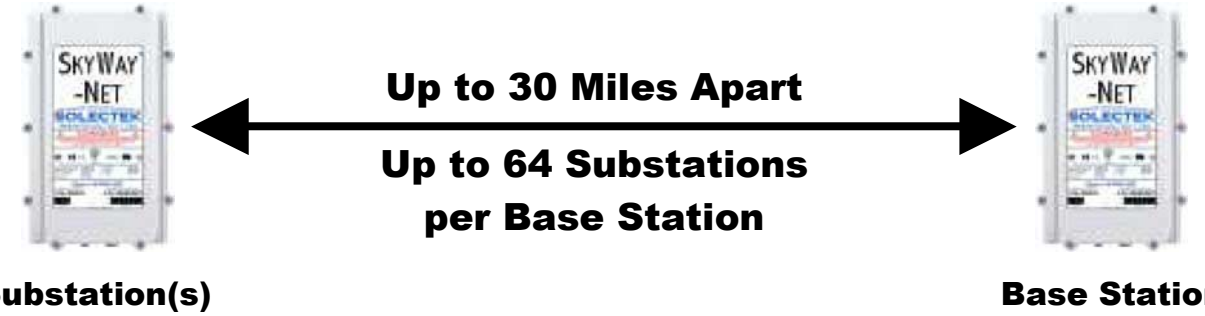
For the Royer-Nesbit and Lloyd W. Michael plants located only 0.5 mi. apart, it was an easy decision: fiber. However, the Arthur H. Bridge (remote) plant was located approximately 8 miles away and fiber was deemed prohibitively expensive. After exploring numerous options, they decided to connect the remote site using Solectek wireless bridge/routers.

Unlike other wireless options, the Solectek wireless bridge/routers could span the distance from plant to plant in one shot, when other options required repeaters just to span the 8 miles. In fact, the Solectek wireless bridge/routers could span three times the distance and still guarantee the high transfer rate. Another factor in choosing Solectek equipment was it's designed to operate in severe radio interference environments. Other wireless systems simply could not cope with the interference, causing costly service outages. Now, the Cucamonga County Water District could have clear, seamless access and control over all three plants.

Over the past three years, the Solectek bridge/routers have faithfully served the Cucamonga County Water District's control and operation requirements. The wireless units have allowed them to perform any number of plant operations - flushing, filtering, purifying, monitoring flows, troubleshooting pumps, reading gauges from any of the three plants. In addition, this has allowed them to maintain an efficient work force by not requiring on-site staffing at each plant.

Like most companies, the Cucamonga County Water District's needs have grown over the past three years to more than just operational control of the plants: real-time security imagery, more operational control, and future site expansion were just a few of the enhancements they sought to include. Who did the Cucamonga County Water District turn to for solutions? Again - Solectek had just what they needed - *and more...*

Solectek released their newest bridge/routers in February 2000 the SkyWay-Net. The Cucamonga County Water District selected the new wireless bridge/routers to upgrade their network and give them a treasure trove of new capabilities, including: transmitting video imaging, voice-over IP, surveillance and 11 Mbps transfer rate - over 5 times more bandwidth and numerous channels to rise above any wireless traffic both current and future...



With these new features, they can now remotely control all aspects of the three sites, both inside and outside. In addition to remote monitoring and control of any plant function, live camera imagery from their security cameras, internal operation imagery, and expanded operational control can now be added to their wireless transmission.

The SkyWay-Net bridge/routers allow the Cucamonga County Water District to expand the number of sites to their network. Sometime in 2001, the Cucamonga County Water District Administrative offices (approximately 5 miles from the Lloyd W. Michael SkyWay-Net Base unit) can be added to their wireless network, allowing them better communication and data transfer throughout their entire network of plants and offices. With the Lloyd W. Michael plant acting as a network hub, this network can be expanded to support more than 60 other sites throughout the city.

The Cucamonga County Water District wireless network is just one example of Solectek's commitment to customers. This commitment includes developing cutting-edge wireless products coupled with quality customer service. Support and service - both before and after the sale - keeps Solectek first in the wireless industry. Being first in the wireless industry is what Solectek has done for years: first to transmit 11 Mbps, first to span 30 miles, first (*and only*) with automatic RF antenna power attenuation to maintain optimum RF transmission, and first to use NEMA Class 4 (extreme weatherproof) chassis for industrial applications. Solectek has the widest range of equipment and options to suit your individual needs. If it's wireless, Solectek is the *only* choice.

Solectek Corporation, headquartered in San Diego, California, designs, manufactures and markets a full line of wireless interconnectivity products. Through technical innovation and steady revenue growth, Solectek has become a recognized leader in the wireless LAN/WAN connectivity market and the industry market leader in wireless bridges. Founded in 1989, Solectek has over 4,000 installations worldwide. The Solectek product line of wireless bridges and routers is the most flexible, reliable and secure in the industry. For more information on Solectek wireless products & services, contact Solectek's Marketing Communications at (858) 450-1220 or visit us on the web at www.solectek.com.

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