Low Cost Redundancy

Company Profile

This customer is a municipality located in New York City.

Challenge

A municipal wastewater facility experienced a failure in one of their obsolete GE 90-30 PLCs, which shut down a considerable part of the plant. The primary CPU that failed was no longer available so options for getting the facility running quickly were limited. The operations staff was not comfortable continuing operations with obsolete controls. The failure also called their attention to the risk inherent in a simplex control system.

Solution

Rawson/Industrial Controls provided a pair of modern RX3i rackless CPUs which are a natural replacement for the obsolete 90-30 PLCs. Also included was the necessary communications equipment to convert the existing 90-30 I/O to remote I/O for the new processors.

Results

The stand-alone processors can operate as a redundant pair eliminating the risk of a future processor failure shutting down the system. Being able to utilize the existing I/O allowed the customer to preserve the existing wiring, avoiding the cost of an electrician rewiring the field signals. A minimal incremental investment of $4,000 allowed an obsolete simplex system to become a modern, redundant control system. Rawson/Industrial Controls provided technical support so the customer could implement the new system without the need for hiring an outside engineering firm.

PACSystems High Availability with PROFINET and RX3i