Customer Background
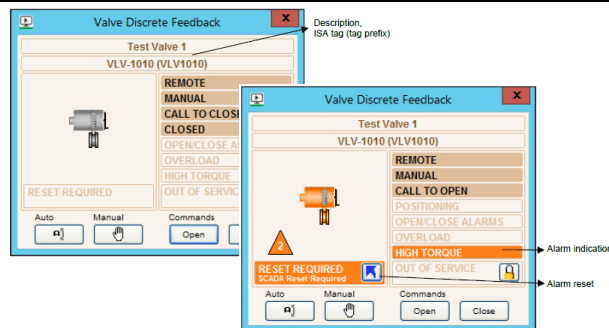
The Encina Wastewater Authority (EWA) is a public agency located in Carlsbad, California. EWA provides wastewater treatment services to more than 400,000 residents in northwestern San Diego County. EWA's facilities and services are essential for protecting the local ocean environment, preserving public health, and providing recycled water resources for the region. Enterprise Automation has provided sole-sourced automation and integration services to EWA since 2017 as part of a five-year professional services agreement.

Project Background

Prior to embarking on a plant-wide remediation program scheduled to last between five and ten years, EWA initiated a design and development project to first build a custom SCADA standards library that would meet the needs of their operators and management staff. The standards library would be designed around key instrumentation and controls standards (IO types and quantities, instrumentation types, equipment specifications, etc.) that would be included in every plant remediation project, ensuring consistency from the field device all the way through SCADA. The standards library would also reduce programming costs during the implementation of the remediation projects.

EA Solutions

After an extensive evaluation, EWA chose Schneider Electric's Ecostruxure Hybrid DCS as its new SCADA platform. EHDCS combines Citect SCADA and Unity Pro PLC software into a single integrated package. This ensures seamless integration, easier multi-developer configuration, and reduced programming cost. EA developed over 100 standards objects, from pumps and valves, to display pop-ups and PID controllers. The key benefit of standardized objects is to ensure that projects developed in the first year look, feel, and behave identically to those developed in 5-7 years.

Key Insights

- Over 100 standards (PLC code module and SCADA graphics sets)

Key Technologies:

- Ecostruxure Hybrid DCS
  - Citect SCADA
  - Modicon M580

Project Metrics:

- EA's Services Value: $350k
- Project Length: 9 mo.