



I&C SCADA Manager Operations Department

Full-Time/Exempt
Career Range: \$2,827.63 - \$4,177.27 per pay period (DOQ)

Fort Collins – Loveland Water District

Revision Date: September 2022

Approved by General Manager:

Approved by Human Resources:

General Purpose:

The I&C SCADA Manager is responsible for the oversight, programming, and electrical systems to ensure the optimal operation of instrumentation, controls, logic, and SCADA functionality of the Fort Collins - Loveland Water District (the District). This position is also responsible for managing and maintaining the CMMS program for the District. Reports to the Utility Operations Superintendent.

Essential Functions:

- Optimize existing SCADA scheme for the treatment plant and distributed assets.
- Direct and understand engineering design of RTU, PLC, and MCC panel fabrication of both new and existing panels.
- Responsible for new and existing PLC logic, with continuous modifications for optimizing all treatment plant and distributed assets.
- Responsible for the installation, calibration, maintenance, and audits of all sites instrumentation and control systems.
- Responsible for SCADA system maintenance, configuration, and development. Currently this includes GE Proficy iFix, and Historian.
- Responsible for radio system maintenance, configuration, and development. Currently this includes Motorola MOSCAD and ACE.
- Provide detailed technical reviews, life cycle assessments and quality assurance/quality control within the SCADA system and make recommendations to management.
- Train staff on new hardware, software, and use of the SCADA system.
- Interface with other departments, employees, and outside consultants regarding system capabilities, functions, programs, and applications, and to ensure assets are performing as intended.
- Responsible for maintaining documentation of SCADA system, PLC logic, HMI logic, electrical one-lines and control narratives.
- Responsible for collaborating with IT and Data Systems Manager in the maintenance and implementation of necessary cyber updates.
- Perform, manage, and coordinate system upgrades for new SCADA and instrumentation equipment and systems as required.
- Review bid and contract documents and specifications for new or upgraded projects that contain instrumentation and controls.
- Responsible for maintaining and assigning the District's CMMS programs and systems using Rockwell Automation FIIX in accordance District policy and applicable laws.
- Responsibility includes training employees

Supervisory duties:

- None

Knowledge, skills and abilities:

- Ability to consistently promote, support, work, and act with an expectation of agency in a manner in support of the District's mission, vision and values.
- Ability to provide strong employee, customer, contractor, developer, and distributor relations.
- Working knowledge of data communication systems, including radio and ethernet.
- Advanced knowledge of PLC systems, VFD configuration, and low voltage (480 volt) MCCs.
- Ability to communicate complex or technical concepts and terms to non-technical employees and others.
- Excellent attention to detail and problem-solving skills.
- Ability to read and update electrical schematics.
- Advanced knowledge of SCADA system programming.
- Ability to conduct themselves in a responsible and professional manner at all times.
- Ability to perform tasks unsupervised throughout an eight (8) hour day.
- Demonstrated ability to collaborate, communicate and work well with cross-functional teams, involving but not limited to dotted-line reporting to IT.

Additional Requirements/Licenses/Certifications:

- Must have reliable transportation.
- Must have a valid driver's license.

Materials, software and equipment directly used:

- Telephone, computer, fleet vehicle.
- Microsoft Office software.
- Windows Server platforms.

Physical Activities:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

- While performing the duties of this job, the employee is regularly required to talk or hear. May involve climbing ladders, stairs, steps and traversing catwalk grating, pushing, pulling, bending, stooping and kneeling on a frequent basis and working in confined space and manual dexterity required to complete work tasks through safe and proper operation of power and hand tools, and motor vehicles.
- Specific vision abilities required by this job include close vision, distance vision, color vision, and ability to adjust focus.
- Light physical effort may be required by moving and positioning objects up to 20 pounds occasionally and / or 10 pounds frequently.

Education:

- Bachelor's Degree in Electrical Engineering, Information Technology, Management of Information Systems, or Computer Science preferred; years of experience may be substituted.
- Water Industry Certifications in Distribution or Treatment is preferred.
- Certified SCADA Security Architect (CSSA) preferred.

Experience:

- Five years of experience related to the water, wastewater industry. A combination of education and experience will be considered.
- Must have at least five years' experience with PLC hardware and programming. Motorola MOSCAD, ACE (legacy systems) and GE VersaMax (future systems).
- Five years of experience with SCADA system configuration and development. GE Proficy, Ifix, and iHistorian preferred.

- Five years of experience with Instrumentation and controls.
- Database development/management, asset, and maintenance activity experience highly preferred.
- Colorado electrical Journeyman's License a plus.
- Electronics and/or radio systems technician experience a plus.

Working environment:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

- Work may be performed in field, and office environment during all types of temperatures, weather conditions and all times of day or night while being exposed to excessive noise from machines. Snowy, wet and muddy conditions will exist. Work may be done in confined or cramped spaces.
- Regular and long-term exposure to work areas containing toxic/caustic/hazardous/volatile chemicals; extreme conditions such as hot/cold; sharp hazards; dust/fumes/gasses; electrical shock; moving mechanical parts; high pitched and/or constant loud noise; sometimes long-term contact with bacteria and odorous, infectious/obnoxious material
- Work may involve assisting with sampling, calibration of equipment and process instruments calibration / maintenance often in difficult areas.
- Ability to use gas monitoring equipment, safety tripod and harness and any other required safety equipment for entering both high and low hazard confined spaces for either plant.
- Personal Protective Equipment (PPE) required including cold weather gear, eye protection, gloves, and provided uniform.
- A clean and safety-conscientious environment required while employed
- Work may involve long hours and overtime during holidays, weekends, and evenings.
- Subject to call-back work and incumbent must be able to respond to emergencies at all hours.

Passing a driving record (MVR) and criminal history background checks will be required prior to the start of employment.

I have read this Job Description, asked for clarification of any items that are unclear to me, and agree to fulfill my duties as outlined. I understand that this is not all-inclusive, and that I will be responsible for performing other duties as assigned. I understand that this does not constitute a contract of employment and that either the company or I may terminate my employment at will, with or without cause.

Printed Name

Date

Signature