



## San Juan Water District

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Granite Bay, California  
95746  
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www.sjwd.org

### Position Description Technical Services Lead

**Status:** FLSA Non-Exempt, Confidential in Nature & Safety Sensitive  
**Supervisor:** Information Technology Manager  
**Effective Date:** July 29, 2026

#### **Supervision Received and Exercised**

Receives general, technical, and functional supervision from the Information Technology Manager.

Exercises direct supervision over the Electrical Instrumentation Technician and may provide technical oversight and coordination of consultants, contractors, vendors, and project teams assigned to Operational Technology (OT), Supervisory Control and Data Acquisition (SCADA), electrical, instrumentation, control, automation, and asset management projects.

#### **Primary Function**

Plans, organizes, coordinates, and supervises the District's Operational Technology (OT), SCADA, automation, electrical, instrumentation, and Computerized Maintenance Management System (CMMS) programs. Manages, supports, and integrates operational technology networks and equipment, including SCADA systems, Programmable Logic Controllers (PLCs), Human Machine Interfaces (HMIs), Remote Terminal Units (RTUs), process instrumentation, electrical infrastructure, telemetry systems, and industrial control systems.

This position is responsible for ensuring the reliability, security, maintenance, operation, and continuous improvement of the District's control systems, automation systems, CMMS, and related infrastructure. The incumbent supervises technical staff, manages assigned projects and budgets, coordinates with internal departments and third-party vendors, and supports District operations through leadership in OT, automation, electrical, and instrumentation technologies. The position also performs assigned duties related to Geographic Information Systems (GIS) and asset management programs.

#### **Essential Duties** - *Duties may include, but are not limited to, the following:*

##### **Supervision and Leadership**

- Plan, prioritize, assign, supervise, review, and participate in the work of assigned staff.
- Directly supervise the Electrical Instrumentation Technician.
- Provide leadership, coaching, mentoring, training, and technical guidance to assigned personnel.
- Participate in employee recruitment, selection, onboarding, training, performance evaluations, and disciplinary processes.
- Develop work schedules and coordinate staff, consultants, vendors, and contractors to support District operational objectives.
- Ensure assigned employees comply with District policies, procedures, safety programs, and regulatory requirements.

- Promote a culture of safety, continuous improvement, collaboration, and customer service.

### **Operational Technology and SCADA Administration**

- Oversee the installation, maintenance, repair, and optimization of SCADA systems, HMIs, PLCs, RTUs, telemetry systems, and communications infrastructure.
- Provide advanced troubleshooting and technical support for OT networks, automation hardware, software applications, and industrial control systems.
- Coordinate integration of Operational Technology systems with Information Technology systems and infrastructure.
- Oversee development, modification, testing, implementation, backup, and maintenance of PLC, HMI, SCADA, and telemetry programming.
- Ensure proper documentation, configuration management, and version control of control system software and hardware.
- Monitor system performance and reliability and implement corrective actions as necessary.
- Collaborate with engineering staff to evaluate, approve, and procure all new electrical, instrumentation, automation, and control technologies.
- Maintain OT cybersecurity practices and coordinate with Information Technology staff to ensure secure network architecture, system resiliency, and compliance with cybersecurity standards.

### **Electrical and Instrumentation Program Management**

- Oversee corrective and preventive maintenance programs for electrical, instrumentation, automation, and control systems.
- Coordinate maintenance and troubleshooting activities related to electrical switchgear, transformers, breakers, motor control centers, motors, Variable Frequency Drives (VFDs), instrumentation, analyzers, telemetry systems, sensors, transmitters, and associated infrastructure.
- Assist with planning, installation, startup, calibration, testing, and maintenance of control, instrumentation, and electrical systems associated with treatment facilities, pump stations, distribution facilities, wholesale meter stations, and related District infrastructure.
- Establish maintenance standards and asset lifecycle management strategies for electrical and instrumentation assets.
- Evaluate equipment reliability and recommend repair, replacement, upgrade, and modernization projects.
- Coordinate arc flash studies, electrical safety requirements, and updates to electrical system documentation.
- Work collaboratively with Engineering, Operations, and Maintenance personnel to maintain and modify electrical drawings, PLC documentation, instrumentation records, control narratives, and SCADA system documentation.
- Assist with project design, inspection, construction, commissioning, startup, and troubleshooting of electrical, instrumentation, automation, and control system projects.

### **CMMS Administration and Asset Management**

- Serve as administrator for the District's Computerized Maintenance Management System (CMMS).
- Maintain functionality, integrity, and continuous improvement of the CMMS program.
- Coordinate CMMS updates, modifications, enhancements, and vendor support services.
- Coordinate with consultants, vendors, and internal departments to develop and maintain a

comprehensive asset management database.

- Create and maintain asset records, classifications, criticality rankings, lifecycle information, and maintenance procedures.
- Develop procedures for collecting, maintaining, and validating asset data.
- Create, modify, and maintain work order templates, preventive maintenance schedules, and employee access permissions.
- Monitor reports and performance metrics and work with District personnel to identify and correct deficiencies.
- Review maintenance work orders and service requests to ensure quality, accuracy, consistency, and effectiveness of workflow processes.
- Develop and maintain reporting structures to provide performance metrics, asset management data, and operational statistics.
- Provide daily support and long-term guidance to CMMS users regarding system functionality, capabilities, and best practices.

### **Project Management and Administration**

- Manage project requirements, schedules, budgets, resources, and deliverables related to OT, SCADA, electrical, instrumentation, and CMMS initiatives.
- Coordinate with project teams, engineers, contractors, consultants, and vendors to ensure successful project completion.
- Participate in the preparation, administration, and monitoring of operating and capital improvement budgets.
- Assist with development of technical specifications, requests for proposals, bid documents, contracts, and project scopes of work.
- Recommend improvements to equipment, systems, technologies, and operational practices to improve reliability, efficiency, safety, and performance.
- Develop standards, procedures, and best practices for operational technology, automation, electrical, instrumentation, and asset management systems.

### **General Duties**

- Comply with District's safety programs and policies
- Maintain current knowledge of industry trends, emerging technologies, regulatory requirements, and best practices.
- Perform assigned GIS-related duties.
- Perform other related duties as assigned.

### **Minimum Qualifications**

*Knowledge of:*

- Operational Technology (OT) systems, industrial automation, industrial control systems, and cybersecurity principles.
- SCADA systems, PLCs, RTUs, HMIs, telemetry systems, and industrial communications networks.
- Electrical theory and practices related to industrial electrical systems.
- Instrumentation, process controls, calibration techniques, and analytical equipment.
- Maintenance management principles and Computerized Maintenance Management Systems (CMMS).
- Asset management principles and lifecycle planning.
- Project management principles and practices.

- Supervisory principles, employee development, and performance management.
- Modern office procedures, software applications, and computer systems.
- Principles and practices of customer service.
- Applicable federal, state, and local regulations related to industrial control systems, water utilities, and workplace safety.

*Ability to:*

- Plan, organize, supervise, train, and evaluate assigned personnel.
- Manage multiple projects, priorities, budgets, and schedules simultaneously.
- Analyze, troubleshoot, and resolve complex operational technology, automation, instrumentation, and electrical issues.
- Develop and maintain effective preventive maintenance programs.
- Maintain accurate records, technical documentation, and reports.
- Communicate effectively both orally and in writing.
- Interpret technical drawings, schematics, specifications, and engineering documents.
- Establish and maintain effective working relationships with District staff, public agencies, consultants, contractors, vendors, and the public.
- Exercise sound judgment and independent decision-making.
- Develop and deliver technical training programs.
- Implement and maintain effective safety practices.
- Wear required personal protective equipment and safely perform field inspections and investigations.

*Experience and Education:*

- **Educational Background:**
  - Bachelor's degree from an accredited college or university in Information Technology, Computer Science, Electrical Engineering, Instrumentation Technology, Engineering Technology, Industrial Automation, or a closely related field.
- **Experience:**
  - Ten (10) years of progressively responsible experience supporting operational technology systems, industrial automation, electrical and instrumentation systems, SCADA systems, industrial controls, asset management systems, or closely related industrial technologies.
  - Three (3) years of lead, supervisory, project management, or team coordination experience is highly desirable.
  - Experience in a water, wastewater, utility, industrial, or process control environment is desirable.
- **Technical Expertise:**
  - Strong knowledge of SCADA systems, PLCs, RTUs, HMIs, OT network architecture, industrial cybersecurity, electrical systems, instrumentation, and industrial automation technologies.
  - Experience administering CMMS and asset management systems.
  - Experience managing vendors, consultants, contractors, and technology projects.
- **Project Management:**
  - Ability to manage project requirements, schedules, and resources effectively.
- **Communication Skills:**
  - Excellent verbal and written communication skills.
  - Ability to collaborate effectively with operations, maintenance, engineering, information technology, consultants, contractors, and regulatory agencies.

- **Problem-Solving:**
  - Strong analytical, organizational, troubleshooting, and decision-making skills to diagnose and resolve complex operational technology, electrical, instrumentation, and automation issues.
- **Industry Knowledge:**
  - Maintain current knowledge of technologies, regulations, standards, and best practices through professional development, training, certifications, and industry participation.

*License or Certificate:*

- Possession of, or ability to obtain and maintain, a valid California Class C driver's license.
- California General Electrician Certification, CWEA Electrical/Instrumentation Technologist Certification, international Society of Automaton (ISA) Certified Control Systems Technician (CCST), ISA Certified Automation Professional (CAP) Certification, or equivalent certifications are desirable.
- State Water Resources Control Board Treatment Certification is desirable.

**Physical Capabilities**

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. Reasonable accommodations may be made to enable individuals with disabilities to perform functions.

| <i>Physical Requirements</i>       | <i>Rarely<br/>(0-12%)</i>              | <i>Occasionally<br/>(12-33%)</i> | <i>Frequently<br/>(34-66%)</i> | <i>Regularly<br/>(67-100%)</i> |
|------------------------------------|----------------------------------------|----------------------------------|--------------------------------|--------------------------------|
| Seeing                             |                                        |                                  |                                | ✓                              |
| Hearing                            |                                        |                                  |                                | ✓                              |
| Standing/Walking                   |                                        | ✓                                |                                | ✓                              |
| Climbing/Stooping/Kneeling         |                                        |                                  | ✓                              |                                |
| Lifting/Pulling/Pushing            |                                        |                                  | ✓                              |                                |
| Approximate Maximum Weight to Lift |                                        | 60 Pounds                        |                                |                                |
| Fingering/Grasping/Feeling         |                                        |                                  |                                | ✓                              |
| Describe Working Conditions        | 60Percent Indoors, 40 Percent Outdoors |                                  |                                |                                |