



LAKEHAVEN WATER AND SEWER DISTRICT Job Description

POSITION TITLE CONTROL SYSTEMS TECHNICIAN IV (LEVEL 14)	
DEPARTMENT: ENGINEERING	SUPERVISOR: ELECTRICAL AND CONTROL SYSTEMS MANAGER
FLSA STATUS: NON-EXEMPT	INCUMBENTS(S):
SII CODE: 1501	REVISION DATE: 2018-07-17
REPRESENTED BY: IUOE	REVIEW DATE: 2021-12-20

JOB SUMMARY:

Performs a variety of tasks at a high skill level to maintain and install electrical controls, calibrate instrumentation controls, troubleshoot, and modify existing PLC and SCADA programming, maintain control systems networks, and performs various electrical tasks at all District facilities. Also participates in the design/design review of electrical controls and installations for Water and Wastewater facilities.

Work is generally performed under general supervision.

ESSENTIAL JOB FUNCTIONS:

- Maintains regular, predictable attendance.
- Physical ability to conform with all safety requirements.
- Maintains all control system components for the safe operation of both equipment and personnel.
- Troubleshoots a variety of electrical, instrumentation, and PLC related problems. Assists in developing recommendations for solutions to complex issues.
- Exercises sound judgment and decisions within the scope of each assignment.
- Accountable for the design, installation, and maintenance of control system equipment, to ensure efficient and reliable operation of all District equipment.
- Accountable for maintaining accurate records, ordering necessary material, and performing preventative maintenance and corrective repairs.
- Appropriately document tasks performed.
- Assists to ensure control system component inventories and supplies are organized and maintained.
- May review and oversee contractors performing control system work for the District to ensure that the work performed adheres to the District's contract specifications.
- Assists in preparation of section budget.
- Available for on-call duty and after hour emergencies.
- Requires shift, weekend and holiday work.
- Must be able to get to District boundary from residence in 30 minutes for on-call rotation.

ADDITIONAL DUTIES AND RESPONSIBILITIES:

- Maintains quality standards and schedules.
- May be assigned tasks and/or job duties with other Electrical and Control System Staff positions for the purposes of cross training.
- Performs corrective repairs and preventative maintenance on general electrical equipment, as needed.
- May review and develop contract and construction control system specifications to ensure the efficiency of equipment and/or processes.

EDUCATION AND EXPERIENCE:

- High School diploma or equivalent.
- Two (2) to four(4) years college degree in Instrumentation, PLC and SCADA programming, Control Systems Networking, and Electronics is desired but not required.
- Seven (7) to ten (10) years experience in an industrial environment installing electrical controls, calibrating instrumentation controls, modifying existing PLC and SCADA programs, modifying control systems networks, and providing preventative maintenance for industrial control system network equipment.
- Four (4) years experience in an industrial control system environment related to the water and wastewater industry is desired but not required.
- Must obtain within one (1) year from initial employment, any required certifications or licenses applicable to the utility; i.e., First Aid Training, Certified Flagging Safety, etc.

KNOWLEDGE SKILLS AND ABILITIES:

- Ability to competently perform all assigned tasks and assists in the training of other electrical staff as required.
- Advanced skills in writing PLC Ladder Logic on a wide range of PLC platforms.
- Advanced skills in programming SCADA system software on a wide range of software platforms to maintain controls for District facilities.
- Demonstrated ability to perform corrective repairs and preventative maintenance on all instrumentation, telemetry equipment, PLC related equipment, and general electrical equipment as needed.
- Thorough understanding of control system programming languages and electromechanical control theory.
- Advanced troubleshooting skills to diagnose and correct programming, process control loops, and control system devices on existing PLC, SCADA, and network systems.
- Understands job procedures, rules, safety, policies and procedures.
- Skilled in designing, troubleshooting and calibrating instrumentation process control loops and instrumentation equipment for new processes.
- Ability to operate necessary portable programming and calibration equipment to ensure that control systems are operating correctly and process control is maintained.
- Competent using a basic personal computer and using windows based software to produce spreadsheets and files for maintenance reports.
- Working knowledge of computerized maintenance management software to develop work orders and keep records for assigned maintenance activities.
- Ability to competently read and understand electrical and control system drawings, read and record measurements, interpret data and prepare reports, and maintain accurate records.

GENERAL REQUIREMENTS:

- Ability to communicate courteously, effectively, tactfully, and maintain confidentiality.
- Demonstrate strong written and oral communications skills.

- Ability to carry out oral and written instructions.
- Ability to organize and prioritize workload.
- May perform task/job duties of other work unit positions in order to balance workload and/or cross train personnel.
- Proficiency with common office practices, equipment and software.
- Follow all safety requirements set forth by District policy, State and Federal codes.
- Follow all District Policies and Procedures.
- Other duties as assigned.

SPECIAL REQUIREMENTS:

- Must have valid WA State Driver's license.

WORK ENVIRONMENT:

- Work is generally performed in a field environment.
- May require shift, weekend and holiday work as required by emergency or work assignment.
- Anticipated to respond in emergency situations.
- Work is generally performed in an industrial environment or in the field.
- Work is generally performed in an environment consisting of loud noises, biological agents, chemical hazards, and odors associated with wastewater treatment plants, water production facilities, and sewer pump stations.
- While performing the duties of this job, the employee occasionally works near moving mechanical parts; in high, precarious places and in outside weather conditions; occasionally exposed to wet and/or humid conditions, fumes or airborne particles, toxic or caustic chemicals, risk of electrical shock, and vibration.
- Ability to work in or around confined space areas.
- Ability to perform manual tasks involving physical strength and endurance.
- Requires visual and hearing acuity and substantial manual dexterity.
- Ability to withstand exposure to variable weather conditions.

MACHINERY, TOOLS, EQUIPMENT, PERSONAL PROTECTIVE EQUIPMENT:

- Equipment utilized includes laboratory equipment; miscellaneous hand and power operated tools and equipment associated with the maintenance and repair of pump stations, water production facilities, and wastewater treatment plants; vehicles including small and full size pick-up trucks, single and tandem axle dump, forklift, boom truck and standard office equipment including a computer.
- Personal Protective equipment (PPE's) shall be comprised of all PPE's associated with chemical, confined spaces, and atmospheric conditions common in the work place. Level of PPE protection will be determined by District and safety guidelines.
- Able to wear and use a respirator (tight fitting negative and positive pressure type).
- Arc Flash PPE. Instruments typically utilized by electricians and control systems technicians.

PHYSICAL DEMANDS:

N: Never (not at all)

O: Occasional (1-33% of the time)

F: Frequent (34%-66% of the time)

C: Constant (67%-100% of the time)

STRENGTH: Sedentary Light Medium Heavy Very Heavy

	Frequency	Comments	
Sitting	F		
Standing	F		
Walking	F		
Driving	F		
Lifting: 50 lbs.	O		
Carrying: 50 lbs.	O		
Push/Pull: 50 lbs.	O		
Climbing Stairs/Ladders	O		
Working at Heights/Balancing	O		
Bending at Waist	O		
Twisting at Waist	O		
Crouching/Kneeling	O		
Crawling	O		
Reaching	F		
Repetitive Motion	F		
Handling/Grasping	F	Pinch Grasp 80%	Whole Hand Grasp 50%
<i>Comments for line above:</i>			
Fine Finger Manipulation	F		
Talking	F		
Hearing	C	Indoors 100%	Outdoors 100%
Seeing	C		
Temperature Extreme	O		
<i>Comments for line above:</i>			
Vibration	O		
Other			

The statements contained herein reflect general details as necessary to describe the principal functions of this job, the level of knowledge and skill typically required, and the scope of responsibility, but should not be considered an all-inclusive listing of work requirements. Individuals

may perform other duties as assigned including work in other functional areas to cover absences or relief, to equalize peak work periods or otherwise to balance the workload.

This job description does not constitute an employment agreement and may be changed or amended at any time to meet the needs of the District.