



TAHOE CITY PUBLIC UTILITY DISTRICT

Job Description

Job Title: Senior Operations Technician - Electrician
Department: Utilities
Supervised By: Utilities Superintendent
FLSA Status: Non-Exempt
Revised as of: January 2015

JOB SUMMARY

To oversee and perform a variety of skilled and specialized work in the installation, testing, maintenance and modification of electrical, electronics and instrumentation equipment related to water and wastewater facilities and District buildings and yards throughout the District.

DISTINGUISHING CHARACTERISTICS

The Senior Operations Technician – Electrician is the advanced journey level technical classification in the Operations Technician – Electrician series. This is a responsible position with emphasis on technical expertise, critical thinking and independent judgment and decision-making. The Senior Operations Technician position is distinguished from the Operations Technician – Electrician position by attainment of higher level certification and a higher level of responsibility including providing technical and functional supervision.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Utilities Superintendent.

Exercises technical and functional supervision over maintenance personal.

ESSENTIAL FUNCTIONS

The duties listed are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

- Oversee and perform a wide variety of skilled installation, preventive maintenance and repair of electrical, electronic and instrumentation equipment and systems for the District to include sewage collection and pumping systems, water distribution and pumping systems, water treatment plants and various District buildings and facilities as assigned.
- Act as a resource to other departments and employees in the maintenance and repair of a variety of electrical, electronic and instrumentation systems; oversee or perform troubleshooting, diagnostic and problem-solving activities in support of motor control centers, telemetry alarm systems, circuit breakers, motors, generators, general electrical and related equipment.

- Install, maintain, operate, test and repair conduits, lift stations, wiring systems and circuitry, transformers, ballasts, protective devices, switches, control devices and other electrical, electronic and instrumentation devices.
- Update and modify existing wiring to maximize the effectiveness, energy savings and efficiency of systems while better meeting the District's needs; expanding, modifying and/or replacing wiring and related electrical equipment/appliances as necessary.
- Assist in the creation, review and tracking of the preventive maintenance schedule for the District's sewage collection and pumping systems, water distribution and pumping systems, water treatment plants and various District buildings and facilities as assigned including, but not limited to, the repair and maintenance of motor and pump control panels; connecting and disconnecting electrical motors pertaining to basic overhaul and troubleshooting, cleaning and replacing defective parts and components of electrical motors.
- Review and prioritize maintenance work orders; order appropriate parts and equipment needed for the completion of projects.
- Provide technical and functional supervision to subordinate employees as assigned, including training, observation of performance, and providing feedback to Utilities Superintendent.
- Routinely perform activities of field personnel as required.
- Respond to emergency calls on weekends, holidays and evenings as well as be available for standby duty as assigned and necessary; participate in the on-call rotation.
- Maintain regular attendance and adhere to prescribed work schedule to conduct job responsibilities.
- Establish and maintain effective working relationships with co-workers and all others contacted in the performance of assigned duties.
- Utilize appropriate safety procedures and practices for assigned duties.
- Work safely and cooperatively with others.

ADDITIONAL DUTIES AND RESPONSIBILITIES

- Install, maintain, repair and program minor changes to a radio-based telemetry system and operate telemetry system as assigned.
- As needed, coordinate with and assist contractors, government agency representatives and other utility providers in projects affecting the District's drinking water and wastewater pumping facilities.
- Operate and maintain District's water treatment plant facility, including disinfection, coagulation, flocculation, filtration and backwashing; collect samples and test for overall quality of raw and treated water; determine and add required chemicals to ensure water is safe for consumption; monitor chemical feed tanks and restock as necessary; adjust water flow rates as needed.
- Participate in the review, design and installation of new electrical, electronic and instrumentation systems for the District; work with outside contractors as assigned.
- Review, maintain and update records of preventive maintenance inspections and document action taken regarding District's electrical, electronic and instrumentation equipment and systems.
- Operate a wide variety of tools, equipment and vehicles necessary to perform assigned tasks.
- Assist in administrative tasks as assigned; provide backup to the Utilities Superintendent in his/her absence and as necessary.
- Assist other departments as requested by the Utilities Superintendent.
- As needed, assist other staff and/or perform other tasks within the Utilities Department.
- Provide training to other employees as directed by the Utilities Superintendent.
- Perform all other duties as assigned.

EMPLOYMENT STANDARDS

1. Knowledge of:

- Electrical systems, electrically operated valves, pumps, electrical motors and related electronic control devices utilized in all District operations and facilities.
- Standard and accepted components and parts currently utilized in a variety of electrical, hydraulic and pneumatic equipment as well as the appropriate diagnostic methods and techniques for troubleshooting all types of electrical and telemetry systems.
- Standard and accepted principles and practices of electrical systems preventive and corrective repair and maintenance; the current National Electrical Code as a reference resource.
- Standard and accepted methods and practices of occupational and electrical safety in the workplace.
- Basic principles and practices of technical and functional supervision, work oversight and skills training.
- Expert knowledge of basic electrical systems, radio telemetry systems, instrumentation and 3-phase motors and controls.
- Electrical drawings, schematics, symbols and blueprints.
- Methods of calculating load and sizing for wire, cable, breakers and other electrical components.
- Modern office practices, methods, and computer equipment.
- Safe work practices.
- Principles and practices of customer service.

2. Ability to:

- Apply understanding and common sense to carry out and interpret a variety of oral, written and diagram instructions in an independent and successful manner.
- On a continuous basis, know and understand operations, and observe safety rules. Intermittently analyze problem equipment; identify safety hazards; identify and locate equipment; interpret work orders; remember equipment location; and explain jobs to others.
- Intermittently, sit while studying or preparing reports; bend, squat, climb, kneel and twist when performing installation of equipment; perform simple and power grasping, pushing, pulling, and fine manipulation; and lift or carry weights of 75 pounds or less.
- Deal with problems involving several concrete variables in standardized situations.
- Function as a productive, effective, positive and proactive member and/or leader of assigned work team(s).
- Read and interpret a variety of complex technical manuals, instructions, blueprints, sketches and diagrams related to electrical installation as well as the maintenance, repair, operation and installation of electrical and electronic equipment and instruments.
- Locate, diagnose and adjust defects in the electrical systems, electronic systems, equipment and instrumentation.
- Determine the quantity and type of material, supplies, labor and time frames necessary to successfully complete detailed, complex and multiple electrical installation, repair and maintenance projects.
- Read, write and comprehend the English language at a level necessary for effective job performance exercising correct English usage, vocabulary, spelling, grammar and punctuation.
- Calculate figures and amounts such as proportions, percentages, area, circumference and volume.
- Apply concepts of basic algebra and geometry.
- Work methodically and with attention to detail in order to calculate outcomes and plan for potential problems.
- Communicate effectively, tactfully and positively in both oral and written form.

- Understand both oral and written instructions and carry out in a positive manner.
- Provide courteous and positive customer service.
- Operate and use modern office equipment including computers and applicable software.
- Establish, maintain and foster positive working relationships with those contacted in the course of work.

EDUCATION AND TRAINING REQUIREMENTS

1. Education and Experience Requirements:

Any combination of education and experience which would likely provide the necessary knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education: Equivalent to the completion of the twelfth grade.

Experience: Five (5) years of progressively responsible experience performing journey level work as an electrician or instrumentation technician in commercial and/or industrial electrical applications and codes comparable to an Operations Technician - Electrician with the District.

2. Certification & Licensing Requirements:

- Possession of appropriate and valid driver's license and driving record that complies with District policy.
- Possession of a valid T2 Water Treatment Plant Operator Certificate issued by the California State Department of Public Health or the ability to obtain within eighteen (18) months of employment.
- Possession of a valid D2 Water Distribution Operator Certificate issued by the California State Department of Public Health or the ability to obtain within eighteen (18) months of employment.
- Possession of a valid Grade II Collection System Maintenance Certificate issued by the California Water Environment Association or the ability to obtain within eighteen (18) months of employment.
- Possession of a Grade II PM Electrical/Instrumentation Certificate issued by the California Water Environment Association or the ability to obtain within eighteen (18) months of employment.

WORKING CONDITIONS

Work is performed both outdoors and indoors, with exposure to hot and cold temperatures, inclement weather, excessive noise, and exposure to dust, water and chemical particulates. Work may be performed in confined spaces, or at heights. (See detailed Job Analysis for a more complete list of physical and mental requirements.)

Reviewed by: 

Date: 01/30/2015

Classified by: 

Date: 01/15/2015

Approved by: 

Date: 01/15/2015