

Job Description

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties or responsibilities that are required of the employee for this job.

Job title	Electrician
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GENERAL PURPOSE

Under general supervision, performs skilled electrical work in the maintenance, installation, and repair of electrical equipment and systems used in water and reclaimed-water systems and facilities; installs or replaces electronic components and defective parts; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

This fully qualified journey-level classification performs the full range of electric systems and equipment installation, maintenance, and repair duties as assigned, working independently, and exercising judgment and initiative. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit.

Employees in this classification are subject to on-call, which may include rotating-duty schedule, weekends and 24-hour emergency call out with little or no notice.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from assigned supervisory or management personnel. Exercises no direct supervision over staff.

TYPICAL DUTIES AND RESPONSIBILITIES

The duties listed below 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 this position.

- Performs skilled electrical work in the maintenance, installation, and repair of electrical equipment and systems used in water and reclaimed-water systems and facilities; tests, troubleshoots, locates, repairs, and performs preventive maintenance on a variety of industrial electrical systems, components, and devices; utilizes appropriate electrical testing equipment (e.g., amp probe, voltmeters, etc.).
- Installs new lighting circuitry and fixtures, outlets, switches, relays, circuit breakers, power disconnects, and circuit panels.

- Installs new or replaces various industrial electrical components such as transformers, motors, and devices that operate from low to 600 volts.
- Repairs and replaces defective parts in motors, generators, storage batteries, solar-generating equipment, switchboards, conductors, switches, and other industrial electrical fixtures in making additions, extensions, and modifications in electrical systems.
- Installs, maintains, and repairs electromechanical and electrical components of equipment and machinery, including transformers, pneumatic and hydraulic-operated devices.
- Performs (industrial and commercial) electrical and electrical estimating on new construction.
- Performs preventive maintenance and new installations on various electrical systems, fan motors, valves, compressors, pump appliances, starter motors, public address systems, air handlers, HVAC controls, and ventilating equipment.
- Disconnects electrical sources (up to 600 volts), uses lockout/tag-out procedures and current OSHA requirements; reconnects and operates equipment at panel for maintenance purposes.
- Bends and installs conduits, wires, pull boxes, switchboards, and switches required in making additions, extensions, or alterations in industrial electrical systems; installs motors, controls, and transformers; modifies motor control equipment circuits, planning, laying out, and wiring the work.
- Plans jobs from blueprints, drawings, sketches, or verbal instructions; reads and interprets blueprints, schematics, and wiring diagrams; records modifications made to the system; maintains records in the form of blueprints, plans, and specifications for industrial electrical systems and other related devices.
- Schedules and coordinates work with other departments and contractors as needed.
- Responds to emergency situations as necessary.
- Observes and complies with all District and mandated safety rules, regulations, and protocols.
- Performs related duties as assigned.

REQUIRED QUALIFICATIONS

Knowledge of:

- Principles, practices, and techniques applicable to the maintenance, installation, and repair of industrial electrical equipment common to a large waterworks system.

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- Local and national electrical codes applicable to the maintenance, installation, and repair of designated facilities.
- Methods and techniques of using diagnostic and testing equipment to determine electric system issues.
- Operational characteristics of a wide range of electrical systems, devices, and components.
- Methods and techniques of estimating electrical costs for construction projects.
- Concepts of electric theory and their application to District systems.
- District and mandated safety rules, regulations, and protocols.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

Ability to:

- Install, maintain, and repair a diverse range of electric system devices and components.
- Use applicable testing equipment in the diagnosis of facility maintenance and repair issues and to take necessary corrective action.
- Perform preventive maintenance on assigned equipment.
- Plan and implement electric system projects.
- Read and interpret plans, specifications, and manuals.
- Coordinate work assignments with other departments.
- Work in confined spaces.
- Exercise sensory acuity in related diagnostic and repair work.
- Operate a motor vehicle and other work-related equipment such as trenchers, boom trucks, and forklifts.
- Effectively use computer systems, software applications relevant to work performed, and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Experience:

Any combination of experience and education that provides the required knowledge and abilities is qualifying, along with the specific licenses/certifications as outlined below:

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- Two (2) years of journey-level experience in the installation, maintenance, and repair of industrial electrical equipment and devices common to large waterworks systems.

Education:

- Equivalent to the completion of the twelfth (12th) grade.

Licenses/Certifications:

- A valid California driver's license and the ability to maintain insurability under the District's Vehicle Insurance Policy.
- California Certified Journeyman Electrician Card desirable.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Must possess mobility to work in a plant and field environment; strength, stamina, and mobility to perform medium to heavy physical work; to sit, stand, and walk on level, uneven, or slippery surfaces; frequently reach, twist, turn, kneel, bend, stoop, squat, crouch, grasp and make repetitive hand movement in the performance of daily duties; possible entry into confined spaces and the use of confined entry equipment, to climb and descend ladders, to operate varied hand and power tools and construction equipment, and to operate a motor vehicle and visit various District sites; vision to inspect and operate equipment and color vision to detect colored wiring. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards, which includes working on live electrical wires. Finger dexterity is needed to operate and repair tools and equipment. Employees must possess the ability to lift, carry, push, and pull materials and objects averaging a weight of 50 pounds or heavier weights, in all cases with the use of proper equipment and/or assistance from other staff.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

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Employees work in the plant and field environments and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, hazardous physical substances and fumes, dust and air contaminants. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

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This job description has been reviewed and approved by all levels of management in cooperation with the union (if applicable):

Approved by:	<i>Board of Directors</i>
Date adopted:	<i>March 29, 2020</i>
Date modified:	
FLSA determination:	<i>Non-Exempt</i>

Job Description Acknowledgment

I have received, reviewed and fully understand the job description for Electrician. I further understand that I am responsible for the satisfactory execution of the essential functions described therein, under any and all conditions as described.

Employee Name (print): _____ *Date:* _____

Employee Number: _____

Employee Signature: _____