



Title: **ELECTRICIAN**

Salary Code: 22
Effective Date: 07/22/16
FLSA Designation: Nonexempt

GENERAL DESCRIPTION

Under general direction of the Supervisor of Electrical Maintenance, performs and may direct a crew performing troubleshooting, overhauling, testing, repairing, and installing of electrical circuits, motors, controls, and equipment with low and high voltage. Electrician is a skilled level classification.

EXAMPLES OF WORK PERFORMED

The information listed below is meant to serve as examples of the job duties and responsibilities for this classification. This list is neither inclusive nor exclusive, but indicative of several types of duties performed.

1. Installs, maintains, overhauls, repairs, troubleshoots, modifies and tests all electrical equipment and components, including up to 7,000 HP synchronous motors, generators, motor control centers, potential and current transformers up to 4,160 volts, large storage battery banks, high voltage switching and switchgear up to 115 KV, manual and combination starters, and control circuits .
2. Installs, troubleshoots, repairs, calibrates, and tests simple and complex protective relaying, revenue power metering equipment and demand recorders, automatic telemetry control equipment, canal elevation and flow control equipment, automatic cathodic protection systems, SCADA systems, high voltage circuit breakers and disconnects, and buried communications cables, and status of neighboring facilities.
3. Installs, designs, programs, troubleshoots, and repairs, programmable logic controllers; and develops programs and support documentation for programmed logic control systems.
4. Installs and maintains lighting fixtures, outlets and heating, ventilation and air conditioning equipment.
5. Installs, troubleshoots and maintains radios, antennas, solar panels, switches etc., for the District's wireless network.
6. May design, develop and maintain replacement circuitry, revamp electrical facilities and electrical drawings.
7. Inspect field contract work.
8. Makes decisions affecting District and landowner facilities.
9. Uses a personal computer and spreadsheet, and word processing and computer-aided drafting software to develop and maintain electrical schematics.
10. Responds to emergency situations.
11. Performs rigging for the transportation of motors and motor control equipment after their removal and installation.

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12. Installs and maintains corrosion control equipment with impressed current protection.
13. Performs other duties as assigned.

CLASSIFICATION REQUIREMENTS

Education and Experience: Any combination of equivalent education and experience that has led to the acquisition of the knowledge required by the position. A typical way of acquiring the knowledge would be:

Minimum Qualification Example 1:

Experience: Six (6) years of full-time, paid work experience at journey level, installing, maintaining, and repairing electrical equipment, wiring, and systems, up to and including 480 volts, in a commercial and/or industrial setting; OR

Minimum Qualification Example 2:

Certification: Possession of a certificate of completion from an electrician apprenticeship program recognized by the California Apprenticeship Council, Federal Bureau of Apprenticeship Training, or a state apprenticeship council authorized by the Federal Bureau of Apprenticeship Training, **and**

Experience: Two (2) years of full-time, paid work experience at journey level, installing, maintaining, and repairing electrical equipment, wiring, and systems, up to and including 480 volts, in a commercial and/or industrial setting; OR

Minimum Qualification Example 3:

Experience: Two (2) years of full-time, paid work experience as an Electrician-Apprentice with the District; OR

Minimum Qualification Example 4:

Completion of the twelfth (12) grade and successful completion of 45 semester units in electrical related course work at an accredited academic, trade or technical school, **and**

Experience: Four (4) years of full time, paid journey level electrical work experience, preferably in commercial and/or industrial setting.

Knowledge of:

- Standard practices, materials, tools, and equipment of the electrical trade.
- The operation of a wide variety of electrical measurement, diagnostic, and testing instruments.
- Western Area Power Administration and District high voltage switching orders.
- The National Electrical Code and relevant Electrical Safety Orders of the

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- California Division of Industrial Safety.
- Standard operating procedures for the Pleasant Valley Pumping Plant and the Coalinga Canal.
- The applicable safety and accident prevention procedures of the California Occupational Safety and Health Act.
- The National Electrical Manufacturers Association standards.
- The operation of a telecrane and other moveable and permanently mounted cranes up to 20-ton capacity.
- The operations of a wireless network.

Skills/Abilities to:

- Communicate effectively.
- Read work instructions and safety labels.
- Effectively and safely operate and use modern electrical tools and equipment.
- Differentiate colors.

SPECIAL REQUIREMENTS

Must qualify to be authorized by Westlands Water District and Western Area Power Administration to issue and receive clearances and perform switching at high voltage installations up to 115 KV within 12 months of assignment.

WORKING CONDITIONS

- Heavy lifting up to 90 pounds.
- Work in all weather conditions.
- Possess physical characteristics to perform the critical and important duties of the job, including the ability to climb stationary ladders up to 100 feet in height, work suspended above ground level (approximately 45 feet) in a bosun chair or aerial lift, and work in confined spaces, such as in excavations (approximately 20 feet below ground level), buried dewatered pipelines and manifolds (ranging in size from 3 feet to 13 feet in diameter), and dewatered sumps and turnout facilities (approximately 30 feet below ground level).
- Respond to emergency calls on a 24-hour-day basis on a rotating on-call schedule.

STANDARD REQUIREMENTS

- Possession of a valid Class C California Driver's License with a driving record acceptable to the District's automobile insurance provider is required.