

Title: **SENIOR ELECTRICIAN**

Salary Code: 24  
Effective Date: 11/28/07  
FLSA Designation: Nonexempt

GENERAL DESCRIPTION

Under the general direction of the Supervisor of Electrical Maintenance, plans, organizes, directs, and reviews the work of assigned staff performing troubleshooting, overhauling, testing, repairing, and installing of electrical circuits, motors, controls, and equipment with low and high voltage. Senior Electrician is a single position classification. Ability to communicate effectively is required.

EXAMPLES OF WORK PERFORMED (Illustrative Only)

Plans, organizes, directs and reviews the work of assigned staff performing electrical duties and resolves work problems.

Inspects, performs and directs installation, maintenance, repair, troubleshooting, modifying, and testing of 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.

Inspects, 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.

Installs, designs, programs, troubleshoots, and repairs, programmable logic controllers; and develops programs and support documentation for programmed logic control systems.

Installs and maintains lighting fixtures, outlets and heating, ventilation and air conditioning equipment.

Performs live man-on-line work applying hotstick techniques in accordance with Western Area Power Administration regulations.

Designs, develops and maintains replacement circuitry, revamps electrical facilities and electrical drawings.

Inspects field contract work. Makes decisions affecting District and landowner facilities.

Uses a personal computer and spreadsheet, and word processing and computer-aided drafting software to develop and maintain electrical schematics.

Responds to emergency situations.

Performs rigging for transportation, removal and installation of motors and motor control equipment.

Installs and maintains corrosion control equipment with sacrificial and impressed current protection.

## **SENIOR ELECTRICIAN**

Page 2

Assists in formulation and implementation of long range planning goals.

Assists in preparation of the Department's annual budget.

Performs other duties as assigned.

### **CLASSIFICATION REQUIREMENTS**

**Education and Experience:** Any combination of 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:

Completion of a two-year program (60 semester units) in electrical and electronics at an accredited academic, trade or technical school, and seven years journey-level electrician/electronic experience, two years of which must have included lead or supervisory responsibilities; or two years as an Electrician for the District; or equivalent.

### **Knowledge and Ability:**

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 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.

Principles and techniques of supervision.

### **Ability to:**

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 60 days of appointment.

## **SENIOR ELECTRICIAN**

Page 3

### **WORKING CONDITIONS**

Heavy lifting up to 90 pounds.

Work in all kinds of weather.

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 California Driver's License/Class C and a driving record acceptable to the District's automobile insurance provider.