

**ELECTRICIAN****DEFINITION**

Under general supervision, performs skilled work installing, altering, maintaining and repairing electrical systems, equipment, and fixtures owned by the City of Fresno.

**SUPERVISION RECEIVED/EXERCISED**

No supervision exercised. Receives supervision from assigned supervisor.

**DISTINGUISHING CHARACTERISTICS**

Electrician is a skilled trades class used in various City Departments. Incumbents install, alter, maintain, and repair electrical systems, equipment, and fixtures in various City-owned buildings, facilities, fire alarms, street lighting systems, traffic signals and pump stations. This class is distinguished from Industrial Electrician in that incumbents of the latter maintain 15K volt power generation equipment, including gas and steam turbines, or install, repair, and maintain electrical components for large rotating equipment above 200 hp including associated motor control centers, PLC, VFD equipment.

**EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES**

*may include, but not limited to, the following:*

Installs conduits, wires, pull boxes, switchboards, and switches required for additions, extensions, or alterations to electrical systems.

Services, repairs, and maintains lighting, power, heating, and electronic fire alarm systems.

Installs, services, repairs, maintains, and overhauls electromechanical and solid state electronic traffic signal controllers and associated electronic equipment.

Repairs and replaces defective parts in motors, generators, pumps, storage batteries, switchboards, controllers, contactors, switches, and other fixtures and appliances.

Tests, locates, and repairs trouble in electrical circuits and equipment.

Uses aerial boom for overhead work; repairs and replaces damaged electroliers, fire alarm boxes, and junction boxes; replaces defective overhead and underground cables or other electrical facilities.

Performs preventative maintenance and repairs on 15,000 volt substations, switchgear, transformers, breakers, and distribution systems.

Installs, programs, calibrates, maintains, and repairs electronic analog and digital type

equipment including programmable logic controllers, variable frequency motor drives, and process instrumentation and control equipment, including fiber optic systems.

Performs related duties as required.

## **JOB RELATED AND ESSENTIAL QUALIFICATIONS**

### **Knowledge of:**

The standard practices, materials, tools, and equipment of the electrical trade.

High voltage service and related equipment up to and including 15 kilovolts.

Occupational hazards and safety precautions of the trade.

Local and national electrical codes.

Solid state electronic systems, including programmable logic controllers, process instrumentation and control equipment..

Solid state motor controllers and variable frequency drives.

### **Ability to:**

Read and interpret blueprints, sketches, and diagrams.

Establish and maintain effective working relationships with those contacted in the performance of duties.

Safely operate a motor vehicle.

### **Skill in:**

Locating and repairing defects in electrical systems and equipment.

Trouble shooting and the repair of electronic analog and digital type control equipment.

The use and care of tools and equipment of the electrical trade.

Strength and agility to perform arduous outdoor work.

## **MINIMUM QUALIFICATIONS**

Completion of a recognized apprenticeship program, or equivalent, and one year of journey-level experience as an Electrician in an industrial setting performing trouble shooting and a wide variety of electrical/electronic repairs and installation work.

## **SPECIAL REQUIREMENTS**

Possession of a Class C California Driver's License is required at time of appointment, and

must be maintained through entire term of employment in this class.

Depending upon assignment, may be required to obtain a valid California Commercial Class B Driver's License with airbrake endorsement within 6 months of appointment and may be required to maintain the appropriate license for the entire term of employment in this class.

Depending upon assignment, must possess a valid Electrician's Certificate of Competency issued by the City of Fresno Board of Electrical Examiners at time of appointment and maintain a valid certificate for the entire term of employment in this class.

APPROVED:           *Signature on File*            
Director of Personnel Services

DATE: 5.7.17

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