

City of South San Francisco  
Human Resources Department

**Senior Electrical Technician**  
Class Description

**Definition**

Under direction, performs highly skilled electrical work in the design, installation, maintenance, and repair of a wide variety of electrical equipment and wiring systems; leads and trains assigned staff, inspects and approves field work; and does related work as required.

**Distinguishing Characteristics**

This position differs from that of lower class in that this is a highly skilled position performing a wide variety of more complex and difficult electrical work, and it provides direction and training to lower level staff assigned to the electrical crew. Incumbents may also be assigned to design and install sophisticated electrical projects.

**Typical and Important Duties**

1. Inspects and diagnoses difficult and complex electrical problems.
2. Assigns and trains skilled and semi-skilled crews to perform repair work on traffic signals, controllers, and street lighting.
3. Makes daily reports of activity of crews and status of work assignments.
4. Keeps time and material records on electrical work performed.
5. Orders supplies and equipment as necessary.
6. Reads and interprets schematics, diagrams, and blueprints for general construction plans.
7. Lays out work and plans ahead for future expansion or maintenance.
8. Designs, implements, maintains, and repairs sophisticated electrical projects as required.
9. Prepares written reports and proposals.
10. Inspects and approves electrical fieldwork being done by contractors.
11. Works occasionally at a considerable height above the ground.
12. Relieves the lead, as necessary.
13. Performs related duties and responsibilities as assigned.

**Job-related Qualifications**

Knowledge of:

- Principles, practices, techniques, tools, and materials of the electrical trade.
- Advanced electrical knowledge, particularly as relates to the operation of traffic signals, street lighting, and fire alarm systems.
- Operation, maintenance, and repair of electrical motors, mechanisms, and traffic signal controllers.
- Blueprints, diagrams, and schematics.
- Proper safety procedures.
- Principles of effective leading and directing of staff.

Ability to

- Examine and diagnose faulty wiring operations.
- Plan, assign, and inspect work projects.
- Prepare comprehensive written reports and proposed projects.
- Establish and maintain cooperative working relationships with other employees and the general public.
- Communicate effectively in writing, orally, and with others to assimilate, understand, and convey information, in a manner consistent with job functions.
- Understand and carry out oral and written directions.
- Use initiative and independent judgment within established policy and procedural guidelines.
- Take a proactive approach to customer service issues.
- Make process improvement changes to streamline procedures.
- Organize own work, set priorities, meet critical deadlines, and follow-up on assignments with a minimum of direction.
- Work in a safe manner, following City safety practices and procedures.
- Represent the City, the department, or the organizational unit effectively in contacts with representatives of other agencies, City departments, and the public.
- Maintain confidentiality regarding sensitive information.

Skill in:

- Driving a variety of vehicles safely.

**Experience and Training**

Any combination of experience and training that would provide the required knowledge, skills, and abilities would be qualifying. A typical way to obtain the knowledge, skills, and abilities would be:

Experience:

Four years of progressively more responsible journey-level electrician experience comparable to an electrical technician position with the City of South San Francisco.

Training:

Equivalent to graduation from high school, supplemented by courses in the principles of applied electrical theory.

**Licenses and Certificates**

All licenses and certificates must be maintained as a condition of employment.

- Possession of, or ability to obtain, an appropriate, valid California commercial driver's license with proper endorsements and a satisfactory driving record.

### **Special Requirements**

Essential duties require the following physical skills and work environment:

#### **Physical Skills:**

Able to sit, stand, walk, kneel, crouch, stoop, squat, crawl, twist, and climb; lift and carry 75 pounds; dexterity to drive trucks and large vehicles; distinguish among various colors; distinguish various computer generated auditory signals; use common hand tools; vision to read printed materials and a computer screen; hearing and speech to communicate in person and over the telephone.

#### **Work Environment:**

Work in a shop and field setting; exposure to inclement weather, cold, heat, noise, outdoors, dust, dirt, vibration, chemicals, traffic, traffic hazards, confining workspace, mechanical hazards, electrical hazards, and explosive hazards; work from a height of up to 100 feet above ground.

#### **Ability to:**

Travel to different sites and locations; drive safely to different sites and locations; maintain a safe driving record; maintain a clean and neat appearance; work protracted and irregular hours; respond to a pager; take 24-hour call and stand-by; available for evening meetings; available for unusual hours in emergencies.

### **Additional Information:**

- Approved: April 1994
- Revised Date: December 2001, June 2003
- Former Titles:
- Abolished:
- Bargaining Unit: AFSCME
- DOT: Yes
- Status: Classified/Non-exempt
- Job Code: A500