



Electrical Maintenance Worker I/II

Summary

Install, maintain, and repair electrical traffic signals, light and power circuits, electrical pumps, motors and controls, and a whole range of electrical circuitry, fixtures, and appliances.

Class Characteristics

General supervision is provided by the Public Works Manager; responsibilities may include the indirect supervision of support staff.

Electrical Maintenance Worker I

The entry-level class of the series, that initially under close supervision, incumbents learn and perform basic duties in the installation, modification, and repair of electrical circuits, fixtures, and appliances.

Electrical Maintenance Worker II

The journey-level class of the series, fully competent to perform the full range of duties assigned. Due to the highly diversified and technical nature of the work performed, incumbents may train and direct the work of Electrical Maintenance Worker I's, on a project relief basis, in the individual's area of expertise.

Essential Duties, Skills, and Demands of the Position

The duties, skills, and demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with a disability to perform the essential duties, skills, and demands.

Inspect, repair, service and maintain electrical and lighting systems, including conduit and duct systems, light and power circuits, motor appliances, generators, breaker panels, fans, heaters, fixtures and clocks.

Install interior and exterior wiring for equipment and appliances; wire new and altered buildings; troubleshoot and locate defects in electrical systems; replace fuses, cords, and sockets.

Interpret electrical plans and specifications; check for conformity with codes, regulations, and safety orders; install, service, repair, and maintain, street lighting and traffic control systems.

Install and maintain traffic control devices such as amplifiers, beacons, cables, and detector loops; check intersections for proper signal operations, and maintain and repair as necessary; program traffic control timing into controllers.

Install and maintain remote telemeter equipment in weather and flood alert systems.

Install batteries and solar panel at remote sites; troubleshoot electronic equipment using computerized diagnostic equipment.

Install wiring drops for computer installations to extend to new terminals or peripheral equipment.

Install pumps, motors, and controls; maintain motors by installing new brushes and cleaning armatures.

Estimate time and material costs for projects and order supplies and materials.

Keep records as required.

Observe safe work methods and utilize safety equipment related to the work.

Perform related duties as assigned.

Skills/Abilities:

Read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals.

Perform basic mathematics; add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals, compute rate, ratio, and percent. Estimate time and materials.

Apply common sense understanding to carry out instructions furnished in written, oral, or diagram form.

Deal with problems involving several concrete variables in standardized situations.

Write routine reports and correspondence.

Communicate effectively both verbally and in writing.

Establish and maintain effective working relationships with those contacted in the course of the work.

Physical Demands and Work Environment:

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, or feel; reach with hands and arms; and talk or hear. The employee frequently is required to stand, walk, and sit. The employee is occasionally required to climb or balance; stoop, kneel, crouch, crawl; and smell. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus. The employee must be able to perform heavy physical labor, including having sufficient strength to lift and carry tools and materials weighing up to 90 pounds. While performing the duties of this job the employee is occasionally exposed to outside weather conditions, wet and/or humid conditions, moving mechanical parts, fumes or airborne particles, toxic or caustic chemicals, and vibration. The noise level in the work environment may be moderate to loud depending on working conditions.

Qualifications

Knowledge of:

Methods, techniques, parts, tools, and materials used in the electrical maintenance trade.

Installations and maintenance of electrical apparatus and equipment.

National Electrical code.

Operation and maintenance of a variety of hand, power, and shop tools used in the work.

Traffic signal installation, maintenance, and repair.

Electrical motors, pumps, and control systems.

Safe work methods and safety regulations pertaining to the work.

Education and Experience

Any combination equivalent to education and experience likely to provide the required knowledge and abilities would be qualifying. A typical way of gaining such knowledge and abilities would be:

Electrical Maintenance Worker I/II

Education:

Equivalent to graduation from high school.

Electrical Maintenance Worker I

Experience:

One year of experience in the installation, maintenance, or repair of electrical services or equipment. Successful completion of trade school or technical coursework may be substituted for the required experience on a year-for-year basis.

Electrical Maintenance Worker II

Experience:

In addition to the above, either two years of experience equivalent to the City's Electrical Maintenance Worker I class or completion of a recognized apprenticeship in the electrician or traffic signal maintenance trade.

Certificates/Licenses:

Possession of a valid California Class C driver's license.

Established: 03/90
Resolution #:
Revised: 06/30/06
Department: Various
FLSA Status: Non-exempt