



CAJON VALLEY UNION SCHOOL DISTRICT PERSONNEL COMMISSION

Job Class Description

<u>ELECTRICIAN</u>			
DEPARTMENT/SITE:	Facilities, Maintenance, and Operations	SALARY SCHEDULE:	Classified Bargaining Unit
		SALARY RANGE:	31 per 2023-2024 Schedule
		WORK YEAR:	12 Months (260 Days)
REPORTS TO:	Director Facilities, Maintenance, and Operations or assigned supervisor	FLSA:	Non-Exempt

BASIC FUNCTION:

Perform journey-level electrical work in the installation, maintenance, and repair of electrical circuits, systems, and equipment in the repair and remodeling of District facilities; assist other maintenance personnel in the performance of a variety of duties as assigned. The incumbents in this classification assist in supporting students by ensuring safe and healthy classrooms and work environments for staff and students which directly supports student learning.

ESSENTIAL FUNCTIONS, DUTIES, AND TASKS:

The following list of functions, duties, and tasks is typical for this classification. Incumbents may not perform all the listed duties and/or may be required to perform other closely related or department-specific functions, duties, and tasks from those set forth below to address business needs and changing business practices.

Perform journey-level electrical work in the installation, maintenance, and repair of electrical circuits, systems, and equipment in the repair and remodeling of District facilities; inspect, repair, install, test, service, and maintain electrical systems, including conduit, wiring, light, and power circuits, motor appliances, generators, and switches; ensure compliance with building codes applicable to the electrical trade.

Troubleshoot and resolve electrical malfunctions; trace out wiring, perform diagnostic tests on system components, and replace defective wires and parts, including switches, receptacles, and fuses; restore power outages of buildings, electrical panels, outlets, and lighting.

Install electrical wiring and systems; assemble conduit, bend conduit, and pull wire; place conduit in appropriate spacing; wire main and sub-electrical panels; install new circuits, panel boards, and new equipment or replace existing circuits as needed.

Assemble, install, and repair lighting fixtures, wiring, and controls; install and repair ballasts, sockets, capacitors, bulbs, and other lighting parts, wiring, and assemblies; repair scoreboards as needed; install new electrical systems, panel boards, and equipment.

Install, service, repair, and maintain a variety of electrical equipment and controls including electrical lighting circuits, conduit and duct systems, transformers, and other types of electrical power equipment.

Troubleshoot, plan, lay out, maintain, and install fire alarms, panels, emergency lighting, and signal systems including wiring, rectifiers, master clocks, secondary clocks, ringing relays, and bells and buzzers.

Repair and replace switches, receptacles, and circuit breakers; install and maintain fluorescent lights,

light-emitting diodes (LED) lights, LED drivers, ballasts, and fixtures.

Estimate labor, material, and equipment needed for assigned projects; monitor inventory levels of materials and equipment; research, order, receive, and maintain inventory of materials and equipment as needed; research and purchase custom electrical power, lighting, and control equipment.

Perform preventive maintenance on District-wide electrical panels; check and service circuit breakers, distribution panels, and transformers; replace parts as needed; conduct inspections of and repair electrical outlets, panels, and other potential hazards.

Plan, organize, and lay out assigned tasks; interpret electrical plans, diagrams, blueprints, sketches, and specifications; work from verbal and written instructions and work orders; review plans and work with contractors to facilitate special work projects as assigned.

Install and maintain automated systems including current lighting controls and programs, parking lot lights, emergency lights, and security lists and controls.

Repair a variety of electrical tools and electrical equipment such as vacuums, scrubbers, food warmers, kitchen coolers, and freezers; maintain records on time, labor, and materials; prepare cost estimates for repairs and new jobs; order required materials and supplies.

Inspect and test various electrical systems for proper function; perform electrical load calculations and tests to assist in locating the placement of new electrical equipment.

Operate a variety of specialized equipment including meters, testers, soldering irons, wire pullers, conduit benders, lifts, drills, and various hand and power tools; drive a District vehicle to conduct work.

Communicate with personnel and various outside agencies to exchange information and resolve issues or concerns.

Assist other maintenance personnel in the performance of a variety of duties as assigned.

Maintain shop and work areas in a safe, clean, and orderly condition.

Confer with school administrators and supervisor regarding needs.

Maintain and review work order database and update work order status.

Perform classification-related duties as assigned for ensuring the efficient and effective functioning of the work unit and the District, including various mandatory District trainings.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Methods, procedures, equipment, and materials used in the installation, maintenance, repair, and operation of electrical equipment and systems.

Building and Commercial codes related to the electrical trade.

Operation and maintenance of tools and equipment used in the electrical trade.

Proper methods of storing equipment, materials, and supplies.

Mathematical calculations.

Technical aspects of the electrical trade.

Appropriate safety precautions and procedures.
Electrical blueprints.
Oral and written communication skills.
Record-keeping techniques.
Proper lifting techniques.

ABILITY TO:

Perform skilled electrical work in the inspection, repair, alteration, construction, installation, and maintenance of electrical systems, wiring, and equipment.
Operate and maintain specialized machinery, equipment, and tools utilized in the repair, installation, and maintenance of electrical systems.
Plan and lay out electrical work.
Troubleshoot and diagnose electrical device, system, and equipment malfunctions.
Replace defective parts and components as necessary.
Read and work from plans, blueprints, sketches, specifications, and diagrams of electrical work.
Observe health and safety regulations and procedures.
Communicate effectively both orally and in writing.
Establish and maintain collaborative and effective working relationships with others.
Meet schedules and timelines.
Understand and follow oral and written instructions.
Work independently with little or no direction.
Maintain various records related to work performed.
Calculate, plan, and estimate electrical time and materials for projects.
Perform mathematical calculations with speed and accuracy.

EDUCATION AND EXPERIENCE:

Any combination equivalent to graduation from high school supplemented by completion of an approved apprenticeship program in the electrical trade and two years of journey-level experience in the installation, maintenance, and repair of electrical systems and equipment.

LICENSES AND OTHER REQUIREMENTS:

Must possess a valid California driver's license and the ability to qualify, and maintain qualification, for District vehicle insurance coverage.

WORKING CONDITIONS:

ENVIRONMENT:

Indoor and outdoor work environment with exposure to various weather conditions.
Regular exposure to fumes, dust, dirt, and oil/grease.
Driving a District vehicle to conduct work.
Trade shops.
Constant interruptions.

PHYSICAL DEMANDS:

Dexterity of hands and fingers to operate specialized equipment and tools.
Hearing and speaking to exchange information.
Seeing to read and perform electrical functions and view computer screens.
Regularly lift, push, pull, and/or carry heavy objects up to 50 pounds; occasionally lift, push, pull, and/or carry very heavy objects, with the use of hand trucks or other equipment, more than 100 pounds.
Reaching overhead, above the shoulders, and horizontally.
Bending at the waist, kneeling, or crouching.

Climbing ladders and working from heights.
Standing, sitting, or walking for extended periods of time.
Heavy physical labor.

HAZARDS:

Working around and with machinery having moving parts.
Exposure to high voltage and electrical shock.
Working from heights.
Traffic hazards.

CLEARANCES:

Criminal Justice Fingerprint/Background
Tuberculosis
Pre-placement Physical and Drug Screen

JOB CLASS HISTORY

Approved: 9/93

Revised: 8/98; 10/00; 12/13 (Ewing)

Revised: 05/24 (EH&A / MGT Consulting) / GB 10/08/24; PC 09/26/24