

RIVERSIDE UNIFIED SCHOOL DISTRICT

CLASS TITLE: ELECTRICAL AND BUILDING AUTOMATION CONTROLS TECHNICIAN (Range 31)

BASIC FUNCTION:

Under the direction of an assigned supervisor, perform journeyman-level electrical work in the repair, alteration, installation and maintenance of electrical systems and equipment.

DISTINGUISHING CHARACTERISTICS:

Incumbents perform journeyman-level mechanical and electrical work for the District in the installation, repair and service of switch gear, marquees and Energy Management Systems (EMS), Direct Digital Control (DDC) and related systems.

REPRESENTATIVE DUTIES:

Install, repair, maintain and service high voltage (no higher than 480 volts), low voltage, DDC and EMS related equipment/systems. *E*

Inspect, repair, install, test, service, and maintain electrical systems, including conduit and duct systems, light and power circuits, motors, generators, control equipment, switches, switchboards, fans, buzzers; assure balanced load and clean electrical flow. *E*

Install primary and secondary conductors for air conditioning equipment. *E*

Install controls and write simple and complex operating programs (code) for energy management systems (EMS), i.e., pumps, and lighting systems. *E*

Install interior and exterior wiring and conduit; install, repair and maintain ceiling lighting, ballasts and lamps. *E*

Wire new construction, remodels and altered structures according to established safety standards. *E*

Inspect and repair main distribution breakers on transformers and high voltage systems. *E*

Replace circuit breakers and panels. *E*

Assemble, install, and maintain lighting fixtures, switches and field lighting systems. *E*

Maintain an adequate inventory of supplies, parts, and materials. *E*

Operate and maintain a variety of specialized hand and power tools and equipment. *E*

Electrical & Building Automation Controls Technician

E = Essential Duties

Revised and Approved by Negotiation Team on 9/11/14

Drive a District vehicle to conduct work and complete regularly scheduled vehicle inspection reports. *E*

Assure work completed and in progress comply with applicable electrical codes, laws, rules and regulations. *E*

Compile, implement and assure correct operation of EMS programs. *E*

Diagnose EMS communication problems. *E*

Create, configure, and monitor EMS graphics. *E*

Install supplemental power supply to temporary and additional facilities and equipment as assigned.

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Methods, practices, materials, tools, and equipment used in the electrical trade.

PC or laptop operation (Windows and DOS)

Electrical building codes and regulations applicable to school facility maintenance and repair.

Electrical and electronic theory.

Design, installation and maintenance of electrical apparatus.

National Electrical Code and Electrical Safety Orders of the Industrial Accident Commission.

Safe working methods and procedures.

Technical aspects of field of specialty.

Safe working methods and procedures.

High voltage installation, tools and safety.

Energy Management Systems (EMS), Direct Digital Control (DDC) and related systems.

Health and safety regulations.

ABILITY TO:

Skillfully use tools and equipment including desktop and lap top computers in performing electrical installation, maintenance, and repair activities.

Plan, organize, and lay out electrical work.

Accurately estimate labor and material.

Work from diagrams, blueprints, shop drawings, sketches, as-builts, manuals, and specifications.

Maintain records and prepare clear, complete and concise EMS records and reports.

Understand and follow oral and written directions.

Establish and maintain cooperative working relationships.

Perform complex or varied tasks.

Diagnose EMS communication problems.

Perform technical EMS tasks.

Read and write program code using District related EMS programming languages.

Apply current industry standards.

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Effectively operate a computer/laptop and commonly used job related software programs.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: graduation from high school and one year journeyman-level electrical experience.

LICENSES AND OTHER REQUIREMENTS:

Valid California driver's license.

WORKING CONDITIONS:

ENVIRONMENT:

Indoor and outdoor environments.

Driving a vehicle to conduct work.

Noise from equipment operation.

Exposure to adverse weather conditions.

PHYSICAL ABILITIES:

Seeing to diagnose problems.

Crawling, crouching and kneeling to conduct work.

Lift, push, pull or carry heavy objects.

Climbing ladders and work from heights.

Dexterity of wrists, hands and fingers to operate hand tools and specialized equipment.

Reaching overhead, above the shoulders and horizontally.

Standing and walking for extended periods of time.

Bending at the waist.

Perform heavy manual labor.

Hearing and speaking to exchange information.

HAZARDS:

Working on ladders or scaffolding at heights.

Working in cramped or restrictive work chamber.

Working around and with machinery having moving parts.

Electrical power supply and high voltage.

Exposure to vapors, gases and fumes.