

JOB DESCRIPTION

Coachella Valley Water District

DATE: December 2020

TITLE: Electrician II

SECTION: Electric Shop

DEPARTMENT: Facilities and Maintenance

REPORTING RELATIONSHIP:

Reports to: Electrical Supervisor

Supervises the following positions: not applicable

DEFINITION:

Under general supervision to perform a wide variety of electrical work in the installation, maintenance and repair of wiring, air conditioning, pumps, and other related work as required. Will train subordinates in basic electrical methods and procedures. This is the second level in the Electrical series.

ESSENTIAL FUNCTIONS:

1. Installs and connects power supply wiring and conduit for newly installed machines and equipment. Connects cables and wires between machines and equipment.
2. Disassembles defective electrical equipment, replaces defective or worn parts, and reassembles equipment.
3. Measures, cuts, bends and threads conduits, using Rigid, PVC, and/or EMT conduit for electrical conduit runs to include installing conduit runs, fasteners such as clamps or brackets, digging and backfilling trenches always adhering to NEC standards.
4. Lifts, positions, and fastens objects such as wiring, conduit, and motors.
5. Studies system blueprints, specifications, and performance data to determine configuration and purpose of system components such as motors, pumps, fans, switches, ducts, or pipes. Inspects system to verify system compliance with plans and specifications and to detect malfunctions in system component parts.
6. Assembles and tests experimental motor control devices, switch panels, transformers, generator windings, solenoids, and other electrical equipment components.
7. Diagnoses causes of electrical or mechanical malfunction or failure of operational equipment and performs preventative and corrective maintenance. Lubricates and cleans parts. Adjusts functional parts of devices and control instruments.
8. Diagnoses malfunctioning apparatus such as transformers, motors, and lighting fixtures and replaces damaged or broken wires and cables.

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9. Diagnoses and repairs or replaces faulty electronic components such as circuit boards.
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ESSENTIAL FUNCTIONS (Cont.)

10. Replaces faulty electrical components of machines such as relays switches, and motors, and positions sensing devices.

11. Observes mechanical devices in operation and listens to their sounds to locate causes of trouble. Repairs or replaces defective parts. Discuss system operation with users and other electricians or mechanical workers to verify that malfunctions have been corrected.

12. Tests coils, armatures, stator, rotor and field coils for continuity, shorts, and grounds and insulation resistance. Examines for broken or defective wiring and traces out short circuits in wiring.

13. Examines bearings, shafts, and other moving parts for excessive wear or defects. Replaces defective motor bearings and motors.

14. Gathers tools and supplies to be used at work site. Maintains tools and equipment and keeps supplies and parts in order. Cleans work area, machines, tools, and equipment.

15. Adheres to District safety policies and procedures, which include confined spaces practices and NFPA 70 E.

16. Collects and enters data such as: time cards, work orders, service logs, units of production, and information relating to Asset Management and Computerized Maintenance Management System (CMMS).

MINIMUM QUALIFICATIONS:

License or Certificates: Valid California Operators license issued by the State Department of Motor Vehicles. Department of Motor Vehicles driving record may influence employment or classification.

Experience: A minimum of one year as an Electrician I. Perform 100% of the field evaluation criteria for the Electrician I, and 80% of the criteria for the Electrician II.

Or

Any combination of training and experience that would likely provide the required knowledge and abilities would be qualifying. A typical way to gain the required knowledge and abilities would be to have a minimum of four years electrical experience.

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MINIMUM QUALIFICATIONS (Cont.):

Knowledge of:

- Hydraulic relationship between wells, booster stations, reservoirs, lift stations, and irrigation pumping facilities.
- Electrical theory, practices, tools and equipment.
- Relay logic.
- Mechanical theory, practices, tools and equipment.
- Principles and practices of reclamation plant, water production, and distribution operations as maintained by the District.
- Principles and practices for the maintenance and repair of air conditioning systems.
- Electrical codes and related ordinance and regulations.
- Principles and practices for the installation, maintenance and repair of electric motors.
- Safe working practices.

Abilities:

- Analyze, diagnose, troubleshoot, inspect, install, maintain, and repair a variety of electrical and mechanical equipment under minimum supervision.
- Maintain accurate logs, records, reports, and charts.
- Read and interpret maintenance procedures from manuals.
- Read and understand blueprints, diagrams, and schematic of electrical/mechanical equipment.
- Works safely around energized electrical and mechanical equipment.
- Follow written and oral directions.
- Work cooperatively with others.
- Provide technical direction to other workers.
- Communicate effectively with others.
- Use hand and power tools in a safe manner.
- Understand and comply with O.S.H.A. electrical regulations.

PHYSICAL REQUIREMENTS:

1. Drive District vehicle to job sites including over rough terrain. Uses a two-way radio to communicate.

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2. Works in extreme weather conditions including heat and rain. Will work in areas containing dust, fumes, exhaust.
 3. Climbs ladders and work at heights up to 100 feet.
 4. May work in potential confined spaces. Must have the ability wear and use appropriate safety equipment including a Self Contained Breathing Apparatus (SCBA).
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PHYSICAL REQUIREMENTS (Cont.):

5. Will work nights, weekends, holidays, and overtime, and standby when required.
6. Lift and carry objects in excess of fifty pounds.

See Human Resources for physical assessment form.

This job description is an accurate representation of this position as of this date.

Department Head Approval _____ Date _____

Reviewed by General Manager _____