

Electrical Maintenance Technician

**CITY OF BOULDER CITY
NEVADA**

CLASS TITLE: ELECTRICAL MAINTENANCE TECHNICIAN

BASIC FUNCTION: Performs a variety of skilled electrical work involved in the construction, maintenance, and troubleshooting of electrical equipment, electrical substations, supervisory systems, communication and traffic signal systems, street lighting systems, water and wastewater automatic control systems, and other City electrical facilities of the municipally-owned electric distribution system and the lighting and power systems in City buildings. Some positions may specialize in the maintenance of equipment located in electric substations or maintenance of electrical systems in City-owned buildings. May assist in working on the electrical distribution and transmission systems. Provides solutions for problems on all systems serviced; to plan, coordinate, lead and participate in the work assigned; and to perform a variety of technical tasks relative to assigned areas of responsibility.

DISTINGUISHING CHARACTERISTICS: This is skilled electrical work in the maintenance of electrical equipment at water and wastewater treatment and pumping facilities, electrical distribution and transmission systems of the municipally-owned electric distribution system, and the lighting and power systems in and on City facilities. Positions assigned to this classification may specialize in the maintenance of equipment located in electric substations or maintenance of electric systems associated with City-owned facilities.

REPRESENTATIVE DUTIES:

(It is important to note that the duties listed below are representative only and are not intended to cover the full range or scope of duties in this class.)

1. Performs preventive maintenance and repair of plant, field and shop equipment such as, but not limited to: wiring, motor control centers, lighting control panels, generators, motors, switches, alarms, motor heaters and starters, bus bars, light fixtures, cooling fans and blowers, space heaters, and water heaters.
2. Installs conduits, wires, pull boxes, switchboards, controllers and switches as needed to improve or modify electrical systems; installs motors, controls, transformers, generators, and appurtenances.
3. Replaces or repairs motors, generators, storage batteries, switch gear, controllers, contactors, switches and other fixtures and systems; installs, maintains, tests and repairs electro-mechanical, pneumatic and hydraulic components of electrical devices.
4. Performs advanced troubleshooting of electrical, security, life safety and related systems and performs scheduled maintenance. Brings any regulatory, specification or procedural infractions into compliance.
5. Isolates and resolves equipment and system failures in the field; performs bench repair to the component level; troubleshoots equipment with voltmeters, oscilloscopes, multimeters, ammeters, megger meters, and other specialized test equipment typically used in the industry.
6. Maintains and repairs control systems associated with high voltage electrical distribution substations.
7. Maintains and repairs street lighting and traffic signal systems.

8. Operates switching equipment, when directed to do so, in high voltage electrical substations including reclosers, air break switches, power switches, etc.
9. Tests, calibrates, and repairs electric watt hour meters.
10. Provides written and oral reports of job assignment progress and status of work in progress.
11. Performs underground electric line locations.
12. Installs and removes electric watt-hour meters, including performing electric service turn-ons and turn-offs, as requested by the Utility Department.
13. Acts as a helper to the electric line crew during electrical outages or emergencies, or whenever requested to do so.
14. Performs inspections of electrical work performed by electrical contractors doing work on City facilities.
15. Keeps track of electrical parts inventory and prepares purchase requests as necessary in order to maintain a well-stocked supply room.
16. Services and maintains emergency standby generators and electrical transfer switches on City facilities.
17. Performs related duties as assigned.

KNOWLEDGE AND ABILITIES

KNOWLEDGE OF:

- The principles, standard practices, methods, tools and materials of the electrical trade.
- The occupational hazards and safety precautions of the work performed.
- Installation, repair and maintenance techniques and materials used in field and bench service of electrical equipment.
- Skill in operation of a wide variety of hand tools, power tools and electrical equipment and controls, equivalent to those typically used in water and wastewater treatment and pumping facilities.

ABILITY TO:

- Troubleshoot and repair electrical circuits.
- Read, interpret and modify blueprints, schematic diagrams, electrical diagrams, wiring diagrams and technical manuals.
- Do detailed work with a high degree of accuracy and neatness.
- Keep records of equipment and machinery repair and maintenance.
- Work in potentially hazardous environments and outdoors in all kinds of weather.
- Enter and exit confined spaces in accordance with established procedures.
- Safely climb and descend ladders and work safely on tall structures.

- Operate and work out of aerial lift devices.
- Hear and understand normal conversations.
- See with a visual acuity correctable to 20/40.
- Be properly fitted with protective respirators, including the ability to remove facial hair if needed to achieve the required fit.
- Maintain effective working relationships with co-workers, City officials and the general public.
- Understand and follow oral and written instructions.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: Any combination of education and/or experience that has provided the knowledge, skills and abilities for satisfactory job performance. Example combination includes graduation from high school or GED equivalent, trade school or vocational school supplemented by course work in electrical theory and electronics, plus three (3) years of progressively responsible experience in electrical repair work or any equivalent combination of training and experience.

LICENSES: Possession of a Valid Class B Nevada Motor Vehicle Operator's License with tanker endorsement. Possession of a Journeyman Electrician Certificate. Maintain licenses and certificates as may be required for the position by Federal, State and local regulatory agencies. All licenses and certificates must be obtained and maintained at incumbent's expense.

WORK DIRECTION, LEAD AND SUPERVISORY RESPONSIBILITIES: Not Applicable.

PHYSICAL EFFORT: Performs physically demanding work including bending, stooping, and reaching, and requiring manual dexterity.

CONTACTS:

- Co-workers
- Contractors
- Employees from other City departments

WORKING CONDITIONS: Subject to the hazards involved in working in and around electrical systems, materials, and equipment. Works in potentially hazardous environments and outdoors in all weather conditions.

NOTE: THIS CLASS IS NON-EXEMPT UNDER FLSA PROVISIONS.

The City of Boulder City is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City will provide reasonable accommodation to qualified individuals. The City of Boulder City encourages both incumbents and individuals who have been offered employment to discuss potential accommodations with the employer.