



EMPLOYMENT OPPORTUNITY

Instrumentation Electrical Technician **(Public Works Department)**

Salary: \$4,544 monthly / Grade G11
Filing Deadline: Open until filled

The City of El Centro is seeking to fill a full-time permanent position of Instrumentation Electrical Technician in the El Centro Public Works Department. Applicants should possess the required qualifications as outlined below. Interested applicants should submit a completed job application to the Human Resources Department located at 1275 W. Main St., El Centro by the closing date listed above.

Summary: Under moderate supervision, performs specialized and skilled work in the design, construction, installation, calibration and maintenance of electrical and instrumentation equipment at City's water and wastewater facilities.

Distinguishing Characteristics: Receives supervision from Streets and Utilities Supervisor in close collaboration with the Water and Wastewater Plants Supervisors.

Essential Job Functions: *Essential functions, as defined under the Americans with Disabilities Act, may include any of the following tasks, knowledge, skills and other characteristics. The list that follows is not intended as a comprehensive list; it is intended to provide a representative summary of the major duties and responsibilities. Incumbent(s) may not be required to perform all duties listed, and may be required to perform additional, position-specific tasks.*

- This is the journey-level position that performs work that has considerable variation and requires the application of judgment in the selection of appropriate work methods, materials and procedures.
- Receives general instructions when tasks are assigned and is expected to determine the appropriate procedures and materials necessary to complete the project unless significant unanticipated problems are encountered.
- Serves as the City's qualified electrical worker and performs a variety of skilled scheduled and unscheduled maintenance tasks that requires checking, servicing, lubricating repairing, rebuilding and maintaining city-wide facility mechanical electrical/electronic equipment.
- The incumbent is able to operate various hand tools to install, remove and repair electrical equipment. Incumbent also performs a full range of electronic and electrical service duties in the installation, maintenance, and inspection of telemetry controls,

instrumentation, communications radio systems, PLC equipment and other Process Control Systems. Incumbent will respond to work orders and service requests and monitor and track work progress.

- Installs, maintains, and repairs electrical mechanisms, panels, switches, motors, controls, power output, solenoids, voltage controls, high and low cutout alarms, relays and other electrical apparatus.
- Installs, maintains and repairs control circuits, pressure switches, floats, underground cables, circuit breakers, medium and low voltage switches, capacitors, conductors, insulators, heating, ventilating and air conditioning equipment and various lighting fixtures.
- Reads and interprets electrical plans, specifications, blueprints and sketches.
- Troubleshoot electrical, mechanical, instrumentation and analytical equipment.
- Installs and maintains solar equipment, including PV panels, inverters, charge controllers and batteries.
- Runs, bends and threads electrical conduit.
- Pulls, splices and terminates wiring.
- Operates power tools commonly used in electrical work.
- Follows established safety procedures.
- Perform scheduled maintenance on electrical equipment as required by City's maintenance program.
- Serves as technical resource City-wide.
- Performs the most skilled maintenance/mechanical/electrical/electronic tasks, such as checking, testing, troubleshooting, servicing, repairing, rebuilding, calibrating, installing, and aligning mechanical/electrical/electronic facilities city-wide with such devices as frequency generators, voltmeters, oscilloscopes, multimeters, logic analyzers, meggers, ammeters, micro-computers, thermo-imaging devices, digital analyzers and other specialized test and repair equipment.
- Performs complex installation, maintenance and repair duties to the City's telemetry system, instrumentation, radio, telephone and electrical/electronic equipment.
- Reviews and modifies control logic to troubleshoot and maintain equipment.

- Reviews drawings and material requests to determine compliance with the City's specifications based on local and national electrical and applicable codes.
- Recommends improvements to preventive maintenance schedule.
- Reads and interprets blueprints, schematics and wiring diagrams, and upon any revision, draws modifications made to the system.
- Recommends stores, tools and equipment purchases.
- Writes and completes service requests and work orders.
- Performs routine pump station duties including testing pressure temperature switches, oil changes, lubrications and checking coupling alignments, motor AMP loads and pump output capacities.
- Drafts maintenance reports and procedures.
- Performs routine checks, oil changes, pump repacks, lubrications, cleaning and other preventive maintenance tasks on facility and pump station equipment and structures.
- Assists with installation of new equipment.
- Operates City's vehicles and maintenance equipment.
- Performs other duties as assigned.

MINIMUM QUALIFICATIONS

Required:

- High School Diploma or equivalent.
- Two (2) years of experience performing installation, repair and maintenance of electrical equipment required.
- Current California Class C Driver's license and acceptable driving record. Must maintain driver license and acceptable driving record.
- Possession of Grade I Mechanical Technologist from California Water Environment Association at hire or within six months of hire required and maintain during course of employment.

Desirable:

- Formal education/training in college, vocational school, or industry-recognized apprenticeship program.

- Two (2) years of experience performing installation, repair and maintenance of electrical equipment in Wastewater and/or water treatment.
- Possession of Grade II Electrical/Instrumentation Technologist from California Water Environment Association at hire or within one year of hire desirable.
- State of California General Journeyman Electrician certification is desirable.

Knowledge of:

- Theory, principles, hardware, testing equipment and procedures common to the repair and maintenance of electronic devices and electrical systems.
- Operational characteristics of telemetry equipment, meters, controls, treatment plant instruments, and other electrical/electronic equipment.
- Methods and techniques used to diagnose operational defects in telemetry systems.
- Principles of preventive maintenance governing electrical/electronic systems.
- Pertinent Federal, State and local laws and regulations, including electrical codes.
- Instrumentation calibration and adjustment procedures.
- Occupational hazards, standard safety practices.

Environmental Factors and Conditions/Physical Requirements:

The environmental and physical demands described here are representative of those that must be performed by an employee to successfully perform the essential functions of this position.

- Works in conditions with almost constant noise.
- Works outside with variations of temperature and weather.
- Works in confined spaces with heat and humidity.
- Works in water treatment plant environment; exposure to electrical energy; unpleasant odors, and work in or around water.
- Moves about on foot often in confined spaces and over grating.
- Transports objects by holding them in hands or arms.
- Operates electrical and computerized instrumentation; operates hand and power tools.
- Seizes, hauls or works with hands.
- Raises and lowers pumps, motors, and related items.
- Extends hands and arms in any direction.

- Bends body downward and forward by bending at the knees or waist often while digging with a shovel.
- Up and down from roofs; ascends and descends ladders up to 50 feet in height.
- Reads work tickets, ID tags on pumps and motors, instrument gauges, operates City equipment and vehicles.
- Communicates by radio and in person in a noisy environment.
- Hears well enough for safety in and around plant equipment.
- Sits at workbench and in City vehicles.
- Standing up to two hours per day while monitoring instrumentation.
- Occasional prolonged work periods wearing 40cal/cm² arc flash PPE while performing energized electrical work.
- Lift up to 50 pounds daily.
- Frequent exertion.

If you have a disability that requires assistance at any point in the recruitment process (for example, filling out applications, testing, interviewing), please notify the Human Resources Department. The City of El Centro performs job-related medical/physical evaluations and pre-employment/promotional drug screening. EEO/ADA.