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## **ELECTRICAL & INSTRUMENT TECHNICIAN**

Department: Production  
Range: 40

FLSA Status: Non-Exempt  
Effective Date: July, 2017

### **General Purpose**

Under general direction of the Production Supervisor, to operate and perform skilled work in the monitoring of the District's telemetry system; to install, inspect, adjust and repair of a variety of SCADA equipment, meters, controls and other electrical/electronic equipment; to maintain the District reservoirs and assist in the maintenance and operation of the Water Filtration Treatment Plant; and to perform other related duties as required.

### **Essential Duties and Responsibilities**

The duties and responsibilities listed below are intended to provide a representative list of the various types of work that may be performed. Specifications are not intended to reflect all duties performed within the job class, and incumbents may expect to perform other related similar duties.

- Monitors the District's SCADA system; repairs well sensors and reservoir sensors.
- Interacts with representatives of SCADA contractors.
- Repairs, troubleshoots, and maintains automation systems at the District's Water Filtration Treatment Plant, water wells, pump stations and well head treatment facilities.
- Performs a variety of repair and preventive maintenance on electronic motor controls, controllers, turbidity meters, electronic flow meters, pH meters, chlorine analyzers, and automatic chlorination equipment.
- Maintains portable and stationary emergency generators; installs emergency generator transfer switches and sets proper rotation of electrical phasing.
- Calibrates, adjusts and troubleshoots equipment as required; assists other District staff in the operation of the SCADA system, computers and other electronic/electrical equipment.
- Guides lesser skilled workers in the proper performance of duties associated with the SCADA and electronic equipment.
- Maintains records of work performed.

- Assists in the maintenance of the Water Filtration and Treatment Plant equipment.
- Performs a variety of construction, maintenance, and repair work on pump houses and facilities.
- Performs a variety of skilled and semi-skilled water system repairs and maintenance, as needed or assigned.
- Serves “on call” on a rotating basis and remains subject to overtime with fellow field workers.
- Cross-trains in other department job duties.
- Maintains assigned District vehicle including servicing and periodic safety checks.
- Participates in District safety meetings.
- Performs other related duties, as assigned.

### **Qualifications**

#### ***Knowledge of:***

- Theory, principles, systems, hardware, tools, testing equipment, and procedures common to the repair and maintenance of electronic devices and electrical systems.
- Telemetry equipment including hardware and theory of operation.
- Domestic water sampling techniques and chlorination equipment/control.
- The District’s distribution system.
- Geography and street locations of the District.
- District policies, rules, procedures and regulations related to water production service, treatment and repairs.
- Automatic control valves and their maintenance.
- Blending operations and equipment.
- Water distribution facilities including mains, meters, hydrants and valves.
- Methods and practices of basic facility construction, maintenance, and repair work.
- Cross Connection Control practices for detection of contamination into the water system.
- Routine record keeping.
- Modern office procedures, methods and equipment including computers.
- Safe work practices.

***Ability to:***

- Inspect, operate, diagnose problems, and perform preventive maintenance and repair work on relays, electric motors, electrical panels, remote telemetry units, telemetry devices, meters, controllers, and related equipment.
- Independently perform the most complex, skilled, and responsible aspects of water production work.
- Train lesser-skilled staff in duties associated with the SCADA and electronic equipment.
- Determine work methods and materials for assigned jobs.
- Maintain accurate records of work performed.
- Read and interpret a variety of charts and gauges.
- Assist in the maintenance of water filtration plants.
- Perform skilled responsible water system maintenance duties at an advanced journey level.
- Perform heavy physical labor.
- Communicate clearly and concisely.
- Establish and maintain cooperative working relationships.
- Understand and carry out oral and written instructions.
- Observe proper safety precautions.
- Work overtime as required.
- Operate a vehicle observing legal and defensive driving practices.
- Operate standard office equipment, personal computers, Internet, and Microsoft Office software.

**Minimum Qualifications**

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

***Education:***

A high school diploma or satisfactory equivalent, and the completion of two (2) years of college level or trade school coursework (60 semester units or 90 quarter units) in electronics or a related field; and

***Experience:***

A minimum of two (2) years of progressively responsible experience in the repair and maintenance of SCADA, electronic control devices and related equipment. Up to four (4) years of additional qualifying experience may be substituted for the required education on a “two for one” basis (two years of experience for one year of education).

**Necessary Special Requirements**

Must possess an appropriate valid, Class “C” Driver’s License issued by the California State Department of Motor Vehicles, and a good driving record.

Must obtain a Crane Operator's Certificate, issued by the National Commission Certification of Crane Operators within 12 months of hire.

Ability to obtain a Grade II Water Treatment Operator's Certificate, issued by the State Water Resources Control Board – Division of Drinking Water within 24 months of hire.

Ability to obtain a Grade III Water Distribution Operator's Certificate, issued by the State Water Resources Control Board – Division of Drinking Water within 24 months of hire.

Completion of one (1) semester of Predictive Maintenance training.

### **Physical Tasks and Environmental Conditions**

The physical demands described below are representative of those that must be met by an employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions on a case-by-case basis.

While performing the duties of this classification, an incumbent is regularly required to stand; use hands and fingers to handle, or feel; and talk and hear. The employee is frequently required to walk and to reach with hands and arms. The employee is occasionally required to sit, climb or balance and stoop, kneel, crouch or crawl. The employee must regularly lift and/or move up to ten (10) pounds, frequently lift and/or move up to fifty (50) pounds, and occasionally lift and/or move up to one-hundred (100) pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

#### **Article 3.306**

Advancement in salary is not automatic. It should be considered a reward for meritorious service. The General Manager may authorize the advancement of an employee who has performed twelve (12) months continuous satisfactory service.

An employee who furthers his/her knowledge in the field or employment may become eligible for consideration of a salary review by the General Manager. The General Manager may authorize reimbursement to the employee for cost of tuition, registration fees, required text books, certification costs and other related charges upon proof of receiving a passing grade, and /or certificate, whichever may be appropriate or both.

***THIS POSITION MAY BE ELIMINATED, OR THE DUTIES, QUALIFICATIONS AND TRAINING REQUIRED CHANGED BY THE BOARD OF DIRECTORS AND/OR THE GENERAL MANAGER, WHEN IN THEIR JUDGEMENT, IT IS CONSIDERED NECESSARY AND PROPER FOR THE EFFICIENT OPERATION OF THE DISTRICT.***