



Orange County Water District

SENIOR INSTRUMENTATION & ELECTRICAL (I&E) TECHNICIAN

SALARY	\$44.34 - \$55.42 Hourly	LOCATION	Fountain Valley, CA
JOB TYPE	Full Time	JOB NUMBER	2024-00007
DEPARTMENT	Water Production	OPENING DATE	02/06/2024
CLOSING DATE	3/1/2024 4:00 PM Pacific		

Description

The Senior Instrumentation and Electrical (I&E) Technician is the second level in a four-level instrumentation and electrical series. Incumbents are responsible for performing journey-level instrumentation and electrical work. The Senior I&E Technician is distinguished from the I&E Technician by its skilled-level responsibilities in both areas.

Examples of Duties

The following essential job functions are typical for this classification. Incumbents may not perform all of the listed job functions and/or may be required to perform additional or different job functions from those set forth below to address business needs and changing business practices. Management reserves the rights to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

- Installs, repairs, and calibrates instrumentation systems and equipment, which includes specifying parts and equipment required for installation or repair of instrumentation systems and equipment such as low voltage signal loops and isolators, pneumatic and electric valve controllers and positioners, programmable logic controllers, flow meters, level, pressure & temperature transmitters, analyzers, digital buss devices, and other related systems and equipment.
- Assists with troubleshooting, and repairs of medium and low voltage electrical equipment and lighting, which includes specifying parts and equipment necessary for installation and/or repair of motors and drives, starters and contactors, circuit breakers, switchgear, distribution panels, enclosures and cabinets, electrical conduit, discharge and incandescent lighting, and other related equipment and lighting. Perform work on electrical distribution and systems up to voltages of 12 kv.
- Directly participates in the daily support of OCWD's Supervisory Control and Data Acquisition (SCADA) system. This system is comprised of Allen Bradley PLC's and a Wonderware front end. Knowledge of SCADA system architecture, servers, and networking is highly desired.. This position will also directly participate in troubleshooting SCADA software and hardware. Assists with providing technical support to operations, engineering, and programming staff as well as field technicians in performing testing and installation of SCADA system upgrades. Provides after-hours SCADA standby support to operations personnel and field technicians.
- Prepares and maintains reports and documentation detailing work progress and project operational parameters and

upgrades.

- Installs & troubleshoots electrical controls which include relay logic and solid state controls, variable frequency drive systems, soft start drive systems, and other related controls.
- Provides instrumentation and electrical support as necessary to Process Control System (PCS) Programmers in the maintenance of that system and its associated network equipment.
- Reads and interprets electronic prints and schematics to aid in troubleshooting and/or installing instrumentation, control systems, and electrical equipment; performs updates as required.
- Troubleshoots and repairs HVAC systems.
- Conducts scheduled preventative maintenance of electrical, mechanical, and instrumentation system support equipment at voltage levels up to 12KV.
- Performs work in both non-permitted and permitted confined spaces as required.
- Wears a self-contained breathing apparatus and responds to emergencies as required.
- Depending on the needs of the District, may be required to work extended shifts, weekends, overtime, and Holidays. Will be required to work a standby shift rotation with the ability to be on-site within one hour of being called.
- Handles job stress.
- Interacts effectively with others in the workplace.
- Follows all workplace and job safety rules and policies.
- Performs other duties of a similar nature or level as required.

Typical Qualifications

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Knowledge of:

- Windows-based operating systems.
- Networking platforms.
- Computer hardware.
- Low voltage control loops.
- Pneumatic control systems.
- Process control instrumentation.
- Electrical power distribution equipment.
- Lighting systems.
- Programmable logic controllers
- Control programming languages.

- Digital buss instrumentation/controls.
- Heating and air conditioning systems.
- Safe work practices.

Ability and Skills in:

- Developing control programming of process systems.
- Creating graphical display pages.
- Developing automated control for computerized energy management systems.
- Following procedures.
- Reading, interpreting, and modifying diagrams, blueprints, and schematics.
- Troubleshooting, repairing, and calibrating process control instrumentation.
- Installing, maintaining, and repairing electrical power distribution equipment and lighting systems.
- Troubleshooting and repairing electrical portions of HVAC systems.
- Writing reports.
- Using a computer and related software applications.
- Communication, and interpersonal skills as applied to interaction with coworkers, supervisor, the general public, etc. sufficient to exchange or convey information and to receive work direction.
- Establish, maintain, and foster positive working relationships with those contacted in the course of work.

EDUCATION AND EXPERIENCE GUIDELINES

Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education/Training: High School Diploma or General Equivalency Degree. Verifiable certification in instrumentation, electrical, and/or process controls is required.

Experience: Six years of related journey-level instrumentation and electrical experience; or an equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above.

License: Valid California Class “C” Driver’s License.

Supplemental Information

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein 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 job functions.

Physical: Positions in this class typically require climbing, balancing, stooping, kneeling, crouching, standing, walking, lifting, grasping, feeling, talking, hearing, and seeing. Light Work: Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or negligible amount of force constantly to move objects. Incumbents may be subjected to moving mechanical parts, electrical currents, fumes, odors, dusts, poor ventilation, chemicals, workspace restrictions, intense noises, and travel. Required to wear personal protective clothing/equipment appropriate for job assignments including SCBA. Must comply with District’s Respiratory Protection Program and CAL OSHA Safety Regulations. Incumbents require sufficient physical ability to work in an office setting; stand or sit for prolonged periods of time; operate office equipment including use of a computer keyboard; push, pull, lift, and/or carry light amounts of weight; verbally communicate to exchange information.

Vision: See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

Hearing: Hear in the normal audio range with or without correction.

DISASTER SERVICE WORKERS

All Orange County Water District employees are designated Disaster Service Workers through state law (California Government Code Section 3100-3109). Employees are required to complete all related training as assigned, and to return to work as ordered in the event of an emergency. Training as assigned and to return to work as ordered in the event of an emergency.

SCHEDULE: 9/80 with alternating Monday's or Friday's off. Will be required to work a standby shift rotation with the ability to be on-site within one (1) hour of call-in once proficiency in performance is adequate. Depending on the needs of the department, may be required to work extended shifts, weekends, and Holidays.

Hourly (Non-Exempt) Range: \$44.34 - \$55.42

Candidates given an offer of employment will be required to pass a medical examination and background check. You must submit an OCWD online employment application to be considered. Please visit www.ocwd.com to complete an application. Applications will be accepted until a sufficient number apply. EOE

Agency

Orange County Water District

Address

18700 Ward Street

Fountain Valley, California, 92708

Phone

714-378-3200

Website

<http://www.ocwd.com>

SENIOR INSTRUMENTATION & ELECTRICAL (I&E) TECHNICIAN Supplemental Questionnaire

***QUESTION 1**

Do you have a high school diploma or G.E.D. equivalent?

- Yes
 No

***QUESTION 2**

Do you have at least 6 years of journey level instrumentation and electrical experience?

- Yes
 No

***QUESTION 3**

Do you have experience working with and around medium voltage?

- Yes
 No

***QUESTION 4**

Do you have any relevant instrumentation, electrical and/or process controls certification? If yes, please describe.

***QUESTION 5**

Do you have experience using a Supervisory, Control and Data Acquisition (SCADA) system? If so, please describe your experience.

***QUESTION 6**

Depending on the needs of the District, may be required to work extended shifts, weekends, overtime, and Holidays. Will be required to work a standby shift rotation with the ability to be on-site within one hour of being called. Are you able to report to work on-site within one (1) hour of being called?

- Yes
 No

***QUESTION 7**

Do you currently possess a valid California Class "C" Driver's License? For out-of-state applicants: Currently possessing the equivalent of a California Class "C" driver's license from another state and having the ability to readily obtain a Class "C" driver's license in the State of California would temporarily suffice this requirement.

- Yes
 No

***QUESTION 8**

I hereby understand and declare that the statements on this supplemental questionnaire are true and complete to the best of my knowledge. As applicable, I hereby authorize the Agency and/or designees to contact the references listed to verify the information I have supplied. I hereby release from liability all persons and organizations furnishing such information. I understand that the Agency reserves the right to validate information received on the supplemental questionnaire and that I will be subject to disqualification and/or termination if any statement in this supplemental questionnaire is found to be untrue or determined to be misleading.

- Yes
 No

* Required Question