

Amador Water Agency

Job Title: INSTRUMENTATION/ELECTRICIAL TECHNICIAN
FLSA Status: Non-Exempt
Approved Date: December 14, 2017
Bargaining Unit: General Unit- AWA Employee's Assn

Classification specifications (job description) are intended to present a descriptive summary of the range of duties and responsibilities performed by an incumbent in the classification. Specifications are intended to outline the minimum qualification for entry into the classification and not intended to reflect all duties and responsibilities of an incumbent in the classification.

SUMMARY

Under direction of the Instrumentation/Electrical Supervisor, operates, interfaces, installs, troubleshoots, maintains and repairs electrical, electronic and computerized equipment used in the Agency's water/wastewater treatment systems, as well as conduct integration and networking. Maintain, troubleshoot telemetry radios, computerized controls involving SCADA systems, programmable logic controller, servers, level and flow monitoring devices.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following. Other duties may be assigned.

- Troubleshoot and maintain Agency control systems
- Performs skilled testing of analog and digital systems
- Maintenance and programming of process control systems, including computer servers, system integration and networking as well as repair of portable generators, stationary generators, motors, pumps, controllers, power switching gears and distribution systems, data communication, including fiber optic, radio and hard wire, lighting circuits, single and high & low voltage systems, multi-phase power and control circuits, plant condition status and alarm circuits and laboratory equipment
- Perform PLC and computer programming tasks
- Performs special pump maintenance and repairs on valve actuators, submersible pumps and variable speed and level control devices
- Utilizes test equipment including oscilloscopes, digital and analog ohmmeters, vibration meters, RF wattmeter, 4-20 ma signal generator and valve actuator gear trains
- Assists in the development of P&ID, designs and lays out electrical and control projects
- Assist in engineering review of capital projects and system upgrades
- Assists in system integration of HMI, PLC, SCADA and computer systems
- Submits to the Instrumentation/Electrical Supervisor purchase requisitions for parts and interfaces with vendors and other utility personnel on operations and repair of related equipment and facilities
- Maintains records for preventative maintenance work on parts inventories and identification equipment
- Maintains current training in proper personal protective equipment and safety procedures for chlorine leaks, electrical hazards and other emergencies
- Maintaining, operating, installing, adjusting and calibrating systems and equipment
- Programming, configuring and optimizing the analytical, recording and electronic or pneumatic control instruments and related equipment
- Operates computer programs for testing electrical equipment

QUALIFICATIONS To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

KNOWLEDGE, SKILLS AND ABILITIES

- Applicable State and Federal laws, codes and regulations
- English language usage, spelling, grammar and punctuation
- Ability to read and interpret documents such as safety rules, operating and maintenance instructions, Technical/Engineering manuals and procedure manuals
- Ability to write technical reports and correspondence
- Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists
- Ability to interpret a variety of instructions including technical manuals furnished in written, oral, diagram or schedule form
- Ability to establish and maintain professional working relationships with internal and external customers, vendors and fellow employees

EDUCATION and/or EXPERIENCE

High School Diploma or GED; two (2) years of formal technical college education and five (5) years' experience; or equivalent combination of education and experience.

CERTIFICATES, LICENSES, REGISTRATIONS

A valid California Driver's License with a continuing acceptable driving record. Desirable qualifications include: journey level electrical background, formal training in instrumentation, communication and computer technology.

PHYSICAL DEMANDS The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, or feel objects, tools or controls; reach with hands and arms; and talk or hear. The employee frequently is required to reach with hands and arms. The employee frequently is required to stand; walk; climb or balance; stoop, kneel, crouch, or crawl. The employee must frequently lift and/or move up to 20 pounds and occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, color vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly exposed to risk of electrical shock. The employee occasionally works near moving mechanical parts and in outside weather conditions and is occasionally exposed to toxic or caustic chemicals. The noise level in the work environment may be loud.

Revised: 10/2017