

Calleguas Municipal Water District

JOB DESCRIPTION

Job Title: CONTROLS SYSTEM SUPERVISOR

Division: Operations & Maintenance

Position Type: Full Time

Reports To: Manager of Ops and Maintenance **FLSA Status: Non-Exempt**

Revision Date: January 2006

POSITION SUMMARY

Incumbent supervises the Control Systems Division and is responsible for the installation, maintenance, calibration, testing and repair of all process control interfaces, metering and monitoring equipment, cathodic protection systems, and the SCADA/DPCS system used in water treatment, water supply, water distribution and power generation applications. Position requires DOHS Water Distribution Operator Grade 2 and Water Treatment Operator Grade 2 certificates; the ability to program PLC ladder logic and the SCADA system operating software; a demonstrated proficiency in water system operations and controls; a keen understanding of water system hydraulics; an individual with a high degree of initiative, versatility and innovation; and the ability to budget, plan, schedule, coordinate, supervise and effectively communicate. Typical duties include the establishment of work priorities for the division; development of maintenance programs, procedures and schedules; complex troubleshooting requiring a diverse knowledge of mechanical, electrical and automated controls; design and implementation of system improvements; review of construction plans and specifications; management of automation projects; and regular interface with other divisions, engineers, outside agencies, contractors and the general public.

ESSENTIAL DUTIES AND RESPONSIBILITIES

To perform this job successfully, an individual must be able to perform each essential duty satisfactory. 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 duties and responsibilities.

- Supervises the Control Systems division by prioritizing and planning work, assigning and directing tasks, monitoring progress and employee performance.
- Establishes preventive and predictive maintenance programs, procedures and schedules to assure the reliability of the electrical, metering and monitoring, cathodic protection and process control systems and components used by the District.
- Generates, modifies and implements PLC ladder logic programming and SCADA/DPCS system programming for a variety of applications in water distribution, water treatment, ASR well operations, standby power systems and hydroelectric generation.

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- Performs complex troubleshooting, analyzes current control strategies and proceeds to develop and recommend alternative approaches to optimize the operations of District control systems facilities.
- Maintains knowledge of current technology and serves as an expert, providing input for the design, modification, installation and construction of electrical systems, control systems and associated hardware and software.
- Reviews technical reports, project plans and specifications, and provides analysis and technical support to the Engineering and Operations and Maintenance Divisions.
- Interfaces with engineers, technical personnel, operations personnel, purveyors and other agencies to solve problems relating to water supply, water delivery and power generation.
- Responsible for the development and maintenance of as-built drawings, reports and records of water sales, calibration and testing and other documentation as necessary.
- Be responsible for their own safety and the safety of coworkers by recognizing hazards and potentially hazardous situations, and having an awareness of safe practices on the job site.
- Performs other work, as assigned

SUPERVISOR RESPONSIBILITIES

Directly supervises all of the employees working in the District's Controls System Branch carrying out supervisory responsibilities in accordance with the District policies and applicable laws. Responsibilities include interviewing, hiring, and training employees; planning, assigning, and directing work; annual performance reviews; rewarding and disciplining employees; addressing complaints and resolving problems. Prepares schedules, verifies time sheets and approves overtime when necessary.

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.

Education and Experience

A high school diploma or general education degree (GED) and a minimum of at least three years of related experience and/or training or equivalent combination of education and experience in the field of instrumentation and controls for electro-mechanical equipment and systems used in water delivery and water treatment. The incumbent should have experience with the installation, maintenance, repair and programming of SCADA systems and equipment; such as, programmable logic controllers, power supplies, modems, transmitters, receivers, multiplexers and communications equipment. Ability to add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals. Should have the ability to compute rate, ratio, and percent and to draw and interpret bar graphs.

Skills and Abilities

Ability to read and interpret documents such as safety rules, operating and maintenance instructions, procedure manuals and blue prints. The Controls System Supervisor should be able to write routine reports and internal memoranda, plus be able to communicate effectively with employees and customers. Must have knowledge of safety requirements for working around heavy and power equipment, construction sites, high voltages, and in confined spaces. The position requires the individual to apply common sense understanding in carrying out instructions furnished in written, oral, or diagram form and be able to solve day-to-day problems, which may occur in stressful environments. Must have demonstrated knowledge and skill of advanced theories, principles and practices applied to computer hardware, programming, electrical and electro-mechanical equipment and systems. In addition the individual must have a full range of electrical and computer programming skills and be familiar with water hydraulics, pneumatic, electrical and mechanical equipment and systems and be skilled in the use of precision measurement devices.

EQUIPMENT TO BE USED

The Controls System Supervisor must demonstrate an ability to perform maintenance and measurements with tools and test equipment; such as, computers, multimeters (VOM) and meggers. Must also be able to use radio and telephones to communicate, and office equipment; such as, computer terminals and printers.

PHYSICAL DEMANDS

The physical demands described 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 stand; walk; use hands to finger, handle, or feel; reach with hands and arms; and talk or hear. The employee frequently is required to climb stairs and ladders or balance and is occasionally required to sit; stoop, kneel, crouch, or crawl; and taste or smell. Controls System Supervisor must be able to regularly lift and/or move up to 10 pounds, frequently lift and/or move up to 25 pounds, and occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus. Personal protective equipment provided by the employer is regularly required to be worn. The employee must have the ability to be able to wear and operate a half and full face air purifying respirator.

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.

The Controls System Supervisor is normally required to work in an outdoor environment, which frequently consists of hillsides and uneven terrain and exposure to allergens. In

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addition the employee may work in the industrial environment of the water treatment plant, well fields, pipelines, support-structures, and construction sites, confined space environments and is frequently exposed to moving mechanical parts. The employee is occasionally exposed to interior wet and/or humid conditions; high, precarious places; fumes or airborne particles; toxic or caustic chemicals; risk of electrical shock; vibration and moving mechanical parts. The noise level in the work environment is occasionally loud. The employee is a designated Emergency Services Worker and is occasionally called upon to work overtime or odd schedules.

SPECIAL REQUIREMENTS

The individual must possess a current California Operators license and have a good driving record. A driving record provided by the Department of Motor Vehicles showing less than two (2) points assessed within the last 36 months and/or no serious or multiple traffic violations or accidents or failure to appear notices within the last 36 months.

The applicant will agree to submit to and pass the District's pre-employment, post-offer medical examination including drug and alcohol screening performed by a physician chosen by the District and agree to authorize background reference checking with past employers and personal references.

The Controls System Supervisor must also possess or obtain a State of California Department of Health Services Water Distribution Operator Grade 2 certificate and Water Treatment Operator Grade 2 certificate within 18 months of hire or assignment.