



JOB DESCRIPTION

TITLE: SCADA TECHNICIAN
STATUS: Union/Non-exempt
GRADE: Grade 15

JOB SUMMARY:

Incumbent is responsible for conducting preventative and corrective maintenance on SCADA and telemetry systems, as well as applicable instrumentation, controls, and power distribution systems.

REPORTING RELATIONSHIPS:

This position reports to the SCADA/Electrical Manager. This position may take direction and training from the SCADA System Specialist or the SCADA Lead.

ESSENTIAL DUTIES include the following.

- Conducts preventative maintenance on the District's Supervisory Control and Data Acquisition (SCADA) systems for water and sewer system operations, pump and lift stations and the wastewater treatment plant;
- Troubleshoots, modifies, repairs, and performs other corrective maintenance tasks on SCADA, telemetry, and all related programs and systems as needed in cooperation with the Sr. SCADA Technician;
- Participates and assists in systems analysis for new and upgraded systems, including documenting systems, procedures and applications;
- Performs a variety of technical support work related to the instrumentation and related electrical systems, including process control instrumentation systems, programmable logic controllers (PLCs), motor controls and telemetry systems;
- Participates in the updating of technical and program documentation as well as determining and ordering appropriate inventory of spare parts for critical instrumentation;
- Competently performs all assigned tasks and assists in the training of other personnel on SCADA systems;
- Assists Sr. SCADA Technician, electricians, mechanics, and Wastewater Treatment plant staff as needed;
- Responds to duty after normally scheduled work hours as required;
- Performs other duties as required or assigned.

MINIMUM QUALIFICATIONS:

Knowledge of:

- Current technology related to the communication between PLCs, SCADA software, and a database server;
- PLC logic fundamentals;
- Basic mathematics through first level calculus (proportional, integral, derivative calculations);
- Electronic/electrical circuits and instrumentation test equipment;
- Physics and chemistry applicable to electronics and water quality and wastewater treatment;
- PID control loops; and
- Soldering techniques.

Skill in:

- Using electrical and electronic test equipment;
- Computers including;
 - Computer maintenance of the SCADA compute and instrumentation, including programming;
 - Knowledge of the District's SCADA software and ability to program and troubleshoot;
 - Troubleshooting computer based communication issues;
 - Ability to maintain the SCADA computer systems, including hard drives, communication cards and other systems;
 - Reviewing SCADA and instrumentation design drawings;
- Safely operating power tools and using customary hand tools;
- Effectively troubleshooting equipment using limited documentation;
- Working in harsh environments and in emergency situations;
- Applying all relevant codes and guidelines;
- Working safely around electrical, mechanical and environmental hazards.
- Communication, both written and oral, and interpersonal skills as applied to interaction with coworkers, supervisors, the general public, etc. sufficient to exchange or convey information and to receive work direction.

Experience/Education:

Any equivalent combination of education and experience that provides the applicant with the knowledge, skills and abilities required to perform the job. A typical way to obtain the knowledge and abilities would be two years of progressively responsible experience in SCADA system maintenance, instrumentation and electronics, and two years of higher education in Instrumentation and Industrial Automation or a related field.

Licensing Requirements:

Possess and maintain a Valid Washington State Driver's License and an Industrial CPR/First Aid Card. A (06) Limited Energy Systems electrical license/certification is desirable.

WORKING CONDITIONS:

Duties are performed in an office environment sitting at a desk or computer terminal. Duties require visual inspection of construction drawings and projects. Duties are also performed in the field with exposure to varying weather conditions and temperatures, confined spaces, mechanical parts, electrical currents, fumes, odors, grease and chemicals, inadequate lighting, intense noise and travel.

PHYSICAL REQUIREMENTS:

This position typically requires climbing, balancing, stooping, kneeling, crouching, crawling, reaching, standing, walking, pushing, pulling, lifting, finger dexterity, grasping, feeling, talking, hearing, seeing and repetitive motions.

Heavy Work: Exerting in excess of 75 pounds of force occasionally, and/or up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects.

This job description does not constitute an employment agreement and may be changed or amended at any time to meet the needs of the District.

Adopted: February 7, 2011