



103 ST. PHILIP STREET, CHAS SC 29403
 JOB ANNOUNCEMENT NO: **18-043**
 DATE: May 16, 2018

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| Position Title: SCADA System Technician | | Location: Hanahan / James Island | Status: Established Position, Full-time |
| Salary Range: \$53,331.20 (\$25.64/hr) – \$82,680.00 (\$39.75/hr) | Grade: 110 | Department: SCADA | Hours: 7:00 am – 4:00 pm |

APPLICATIONS ACCEPTED THROUGH FRIDAY, JUNE 1, 2018.
WE ARE AN EQUAL OPPORTUNITY EMPLOYER.

Position Summary:

Under limited supervision of the SCADA System Manager, this associate works directly with the CWS SCADA and Security systems, to assist and optimize the operations and maintenance of the water treatment, water distribution, wastewater collection and wastewater treatment systems. The primary goal of the position is to insure complete functionality of the SCADA and Security Systems along with system upgrades and improvements. Interface with vendors, plant personnel, inter-department personnel, and management. This associate may be required to work under emergency conditions.

Essential Functions:

- Proactively communicate with the SCADA Manager to determine modifications to the SCADA (Supervisory Control and Data Acquisition) and GE/Lenel Security Systems to assist and optimize the operations and maintenance and security of the water treatment, water distribution, wastewater collection and wastewater treatment systems.
- Assist SCADA manager in the technical support and optimization of the SCADA and Security Systems. Includes field input/output (I/O) devices, access and control, wiring, PLC and Micro controller hardware and software, fiber optic network systems, radio communications systems, personnel computer workstation both server / client application hardware and software. User department instrumentation and facilities staff will assist the SCADA System Technician as directed by respective department manager.
- Under the direction of the SCADA System Manager:
 - Use Rockwell FactoryTalk View SE and Allen Bradley PLC programming software to create and modify screens and programming to support operation groups' ability to monitor and control processes.
 - Use GE/Lenel security software to create and modify screens and programming to support facilities groups' access and control and video monitoring systems.
 - Coordinate with Information Services (IS) SCADA Network Administrator for interfacing the SCADA and GE/Lenel security networks with the Administrative Local Area Network (LAN) and Wide Area Network (WAN) and the SCADA and Security servers, workstations to include both hardware and software.
 - Coordinate with the SCADA Network Administrator related activities at all wastewater or water treatment plants, wastewater collection system and the water distribution systems. Includes, software and hardware warranty issues, system upgrades, modifications or expansions, new software installation, routine database backups, and other recognized computer best practices.
 - Coordinate with user departments' maintenance planner and/or instrumentation and/or facilities staff for preventive and corrective maintenance of all SCADA and Security systems hardware, software, and communications components.
 - Develop SCADA modifications and expansions to support cost reduction and work streamlining for operations groups.
 - Participate in long range planning to determine future SCADA improvements and expansion.
 - Develop, maintain and enforce requirements of a comprehensive SCADA System Management and Standards Manual as directed by SCADA Manager.

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- Ensure that complete records are maintained for work activities, including software logs, system availability/failure records, strategy and loop records, software modifications records, and preventive maintenance records.
- Assist the SCADA Manager in the development of training programs and in the training of staff, including new operators and other system users.
- Order parts, materials and equipment utilizing the automated financial management system.
- Maintain up to date knowledge of safety regulations and incorporate into plant installations and maintenance functions.
- Provides quick and courteous customer service to the end users of the SCADA and Security systems.
- Prepares clear, concise, and complete technical documents reports, and correspondence.
- Provide department management with daily and weekly reports (written or oral, as requested) on the status of the SCADA system in the respective department.
- Participate in budget preparation as required for SCADA and Security system improvements.
- Required to work during emergency conditions.
- Regular attendance is required.
- Job performance must conform to all CWS policies and procedures.
- Specific knowledge of CWS Environmental Management System Policy and Procedures.

Additional Duties

- Attend meetings in support of system operations.
- May require technical manual research to perform repairs, part procurement and calibrations.
- May be required to attend intra/interdepartmental cross training.
- Performs other related duties as assigned.

Physical Requirements, Activities, and Working Conditions

- Ability to communicate effectively in writing, verbally and with a 2-way radio, to include comprehension of complex oral and written instructions.
- Ability to communicate verbal instructions quickly, loudly, and effectively in emergency situations.
- Ability to distinguish colors in the visible color spectrum using the naked eye or prescription eyeglasses.
- Ability to express and receive detailed information through oral communication and to make fine distinction in sound, such as when making fine adjustments on alarm and process control systems.
- Frequent maneuvering in complex positions, standing, and lifting over 50 pounds. Objects greater than 50 lbs require a two-person operation.
- Ability to reach and handle documents, tools and equipment as required performing the essential functions.
- Reaching and pulling necessary for performance of routine tasks.
- Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects. Objects greater than 50 lbs require a two-person operation.
- Ability to ascend or descend ladders, stairs, and ramps. May be as high as thirteen (13) stories at Plum Island and three (3) stories at Hanahan.
- Ability to ascend and tread on top of or below vertical or horizontal piping and valves in confined spaces.
- Must be able to tread long distances to accomplish tasks.
- Ability to work independently of others.
- Subject to both environmental conditions--activities occur inside and outside.
- Subject to atmospheric conditions: one or more of the following conditions that affect the respiratory system or the skin: fumes, odors, dusts, gases, or poor ventilation. Personnel Protective Equipment Required.
- Worker may be required to wear a respirator and/or self-contained breathing apparatus (SCBA).
- Required to work with chemicals used in water and wastewater treatment processes.
- Ability to operate and maintain motor vehicles.
- Must be able to wear Personnel Protective Equipment (PPE) as defined in the Job Safety Analysis (JSA) to perform the required essential functions.

Education and/or Experience

- Associates Degree in Electronics or related technology with three (3) years experience in an Instrumentation /SCADA / Security access and control / Information Technologies systems field or minimum of six (6) years experience in the Information Technologies / SCADA / Security systems area.
- Working knowledge of Windows based computer operating systems to include server / client application.
- Working knowledge of field I/O devices and access and control concepts.
- Knowledge of SCADA and Security applications in an industrial facility especially in the area of water and wastewater plant operations.
- Knowledge of troubleshooting and programming techniques involving Allen Bradley PLC's, GE Micro Controllers, field I/O devices, access and control systems, wiring, fiber optic networks, GE/MDS radio communications equipment, and server / client workstations application.
- Must be able to effectively communicate and demonstrate leadership skills in working with user departments and Information Technology.
- Must have a basic understanding of water and wastewater treatment processes and security requirements.
- Prior work record indicating dependability and conscientiousness.

Licenses, Certifications, Registrations

- Valid South Carolina Driver's License required.

Training Needs:

- OSHA and Departmental safety training as required.
- Skills Based Training.
- Standard Operating Instruction (SOI) per department requirements.
- ISO 14001 standards for department and company.
- See Department Competency and Training Matrix for this position.

Potential Career Path:

ELIGIBILITY FOR PROMOTION TO VARIOUS POSITIONS THROUGHOUT THE COMMISSION DEPENDS UPON INDIVIDUAL QUALIFICATIONS, AND NOTED JOB PROGRESSIONS ARE NO GUARANTEE OF CAREER PATH TO THESE OR ANY OTHER JOB(S) AT THE COMMISSION.

- SCADA Manager
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Computer Skills: Advanced

To perform this job successfully, an individual should have a **thorough knowledge** of Microsoft Windows, Outlook, Excel and Word or similar software, *i.e.* Mainframe System Program, CMMS, other specialized software.

Mathematical Skills: Professional

Ability to apply concepts of basic algebra and geometry to practical situations. Ability to solve basic algebraic equations and develop budgets and spreadsheets.

Decision-making Authority: Procedural (Exempt)

Follows general policies and procedures and makes regular decisions impacting subjects or employees under their responsibility. The employee may collect data, establish facts and draw conclusions on which to base decisions. The decisions affect the immediate workgroup or customer involved and may impact the operations of the division or organization. Decisions may be reviewed and reversed by a higher authority.

Reasoning Ability: Professional

Ability to apply principles of logical thinking and to solve a wide range of intellectual and practical problems where only limited information may exist.

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Supervisory Responsibilities: None

This job has no supervisory responsibilities.

Language Skills: Professional

Ability to comprehend abstract instructions. Ability to read and analyze complex periodicals and journals, financial reports, and government regulations. Ability to write general reports, correspondence, procedure manuals, and articles for publication. Ability to effectively present information to top management, The Commissioners, and the general public. Ability to respond to common inquiries or complaints from the general public.

Safety Sensitive Position: Yes

This position falls under our Substance Abuse Policy and is subject to: post-accident, reason suspicion, random, periodic, and pre-employment alcohol/controlled substance testing. For additional information about safety sensitive drug testing, see CWS Substance Abuse Policy and Procedures.

Environmental Sensitive Position: Yes

Charleston Water System is an ISO 14001 Certified company promotes activities which support environmental protection, prevention of pollution, positive impacts on human health, and continual improvement to work processes and the environment. The carrying out of the job requirements as herein described present the potential to significantly impact the environment. Therefore, specific knowledge and application of CWS Environmental Management System (EMS) policies, procedures and instructions are needed to carry out the job requirements.

NOTE: THE COMMISSION RESERVES THE RIGHT TO MODIFY, INTERPRET, OR APPLY THIS JOB DESCRIPTION IN ANY WAY THE CWS DESIRES. THIS JOB DESCRIPTION IN NO WAY IMPLIES THAT THESE ARE THE ONLY DUTIES, INCLUDING ESSENTIAL DUTIES, TO BE PERFORMED BY THE EMPLOYEE OCCUPYING THIS POSITION. THIS JOB DESCRIPTION IS NOT AN EMPLOYMENT CONTRACT, IMPLIED OR OTHERWISE. THE EMPLOYMENT RELATIONSHIP REMAINS "AT WILL." THE AFOREMENTIONED JOB REQUIREMENTS MAY BE CHANGED BY THE COMMISSION TO COMPLY WITH APPLICABLE FEDERAL OR STATE LAW.