

S.C.A.D.A. – C.M.M.S. SYSTEMS ADMINISTRATOR

SUMMARY: Under limited supervision, performs responsible technical work and directs work in maintaining a computer-based process control system (Supervisor Control and Data Acquisition – SCADA) and the computerized maintenance management system (CMMS) for the City of West Palm Beach Public Utilities Department. Employee reports to the Assistant Public Utilities Director.

ESSENTIAL FUNCTIONS: *(Essential functions, as defined under the Americans with Disabilities Act, may include the following tasks, knowledge skills, and other characteristics. This list is ILLUSTRATIVE ONLY, and is not a comprehensive listing of all functions and tasks performed by incumbents of this class.)*

DUTIES AND RESPONSIBILITIES: *(Which are **not** in any hierarchical order)*

1. Responsible for directing and assisting in the evaluation, analysis, design, programming and implementation of highly complex information processing systems and procedures.
2. Responsible to provide uninterrupted service to large scale production facilities regulated under the Florida Administrative Code (FAC). Operation and coordination of City's Utilities is paramount to maintaining compliance with the FAC.
3. Analyzes, evaluates and reviews systems and procedures to provide solutions to reported problems or to improve current operations of the computer-based process control system; communicates evaluations, alternatives, solutions and recommendations to management, users, co-workers, contractors and vendors.
4. Installs, maintains and repairs various S.C.A.D.A. monitoring equipment and software throughout the water system, including adding and modifying database for Geographic Information System (GIS); creating and maintaining S.C.A.D.A. controls database for Public Utilities computer system, including utility work orders.
5. Oversees maintenance of S.C.A.D.A. equipment; evaluates, designs, programs, tests and implements highly complex information systems and procedures; evaluates complex test data and unit tests to assure correction of program errors; evaluates and modifies existing programs or modifications to existing ones to ensure correction of program deficiencies by revision to instructions or altering the sequence of operations.
6. Supervises the work of the S.C.A.D.A. and CMMS Technicians; trains system operators in the operation of equipment and implementation of procedures.
7. Performs all aspects of system and network administration including design, analysis, configure, implement, maintain, troubleshoot, test, upgrade, secure, and document the Public Utilities S.C.A.D.A. local and wide area network systems (LAN/WAN), security systems, storage systems, disaster prevention and recovery systems, and all cabled and wireless communication systems related to the S.C.A.D.A. network.
8. Will work as a technology liaison between the City's MIS division and the Public Utilities Department.
9. Installs, maintains and repairs a variety of personal computer equipment and peripheral equipment for Public Utilities employees.
10. Participates in the development and implementation of all S.C.A.D.A. technical policies and procedures including those for architecture, security, disaster recovery, standards, purchasing and service provision.
11. Creates maps and layouts for specific applications dealing with S.C.A.D.A. and water and wastewater system pumps; storage reservoirs and remote transmittal units.
12. Monitors and recommends changes to engineering standards for S.C.A.D.A. system for all new water treatment, water storage tanks, pumps construction, wastewater treatment, and lift stations.
13. Monitors and recommends changes to established development and administrative standards.
14. Serves as member of various committees, panels, commissions, etc., attending meetings and providing input based on expertise and observations, as appropriate; maintains liaison with other departments to ensure smooth flow of operations and communication.
15. Develops customized Actuate reports and enhances existing ones. This includes Actuate, e-spreadsheet, e-query, KPI (Key Performance Indicators), and Start Centers.
16. Performs related duties as assigned.

S.C.A.D.A. – C.M.M.S. SYSTEMS ADMINISTRATOR**KNOWLEDGE, SKILLS AND ABILITIES:** (Based on area of assignment)

- Knowledge of industrial electronic and electrical system controls, radio modem communications, serial communication protocols, Microsoft SQL database structure, and CISCO network technologies.
- Knowledge of PLD programming and troubleshooting, setup and troubleshoot of personal computers, servers configuration and troubleshooting, and configuration and execution of server backups.
- Thorough knowledge of data processing techniques, systems and methods.
- Thorough knowledge of methods, procedures, and practices of computer programming.
- Thorough knowledge of programming techniques, programming languages, operating systems, electronic computers, and peripheral equipment used by the Department.
- Considerable knowledge of data processing equipment, systems and methods.
- Considerable knowledge of the principles and techniques of systems analysis and design and its application to data processing.
- Considerable knowledge of office procedures, methods and practices.
- General knowledge of current literature, trends, and developments in the field of large-scale electronic computer operations and personal computers.
- Skill in the operation of common office machines, including popular computer-driven word processing and file maintenance programs.
- Skill in recognizing, analyzing and providing solutions to difficult data processing problems.
- Ability to recognize, analyze, and solve moderately complex problems in a logical manner.
- Ability to communicate effectively orally and in writing, speak before groups of people.
- Ability to assist with training of new users.
- Ability to evaluate and critique the work of other users.
- Ability to prepare clear and concise instructions, and convey them orally and in writing.
- Ability to analyze operations and to organize their component parts into logical systems.
- Ability to detect and correct system failures and report programming failures.
- Ability to coordinate and evaluate the work of others.
- Ability to exercise considerable independent judgment and initiative in independently performing assigned projects.
- Ability to supervise the work of others.
- Ability to establish and maintain effective working relationships with those contacted in the course of work.

PHYSICAL REQUIREMENTS AND WORK ENVIRONMENT: Work involves performing moderate work in inside and outside work environments including all types of weather. There is occasional need to stand, stoop, walk, lift moderately heavy objects (up to 50 pounds) and perform other similar actions during the course of the workday. The City of West Palm Beach promotes and maintains a drug/alcohol free work environment through the use of mandatory pre-employment and random drug testing for certain employees.

MINIMUM QUALIFICATIONS: Bachelor's degree from an accredited college or university with a major in Computer Science or any technology related field and six (6) years of progressively responsible experience in network and/or communications, or any equivalent combination of training and experience. Two (2) years supervisory/lead experience, required. Experience working with electrical power systems, RTUs, PLCs, and real time control systems, required. Experience with MIS Windows OS servers and clients, UNIX (Sun & HP) and Cisco network equipment, highly desirable. A valid Florida driver's license is required; a valid driver's license from any state (equivalent to a State of Florida Class E) may be utilized upon application; with the ability to obtain the State of Florida driver's license within 30 days from day of appointment