CITY OF FORT WAYNE JOB POSTING

Job Vacancy:	SCADA System Analyst I	Department:	City Utilities Engineering
Requisition Number:	2021201		
Hours:	8:00 a.m. – 5:00 p.m., may vary	Rate of Pay:	\$61, 000.00 - \$73,000.00 Annually
Date Posted Up:	7/20/2021	Date Posted Down:	Until Filled
Time Up:	9:00 a.m.	Time Down:	

Applicants and Employees must meet duties/essential functions and minimum requirements.

SUMMARY

Working under the direction of the City Utilities Engineering and working closely with Management in Operations, incumbent plans, designs, manages, monitors, and coordinates the programs, policies, and standards associated with controls and programming of City Utilities operational facilities. The incumbent works as a subject matter lead in the industrial control system including programmable logic controllers (PLC), instrumentation, and motor drive technologies. The incumbent is expected to exercise good judgment, independence, initiative, and professional expertise in conducting day-to-day operations. All work duties and activities must be performed in accordance with the City and Utility's safety rules and operating regulations, policies and procedures as well as federal, state, and local regulations.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the ability to interact with the public, City incumbents, and outside agencies with patience, tact, respect, and professionalism and the following. Other duties may be assigned.

PLANNING/JUDGEMENT

- Develop plans and participate as a resource to meet current and future control system, SCADA and Instrumentation & Control (I&C) utility-wide needs.
- Establish, implement and monitor program policies, procedures and service level standards related to the overall utility industrial control systems.
- Develops and maintains hardware infrastructure repair and replace program for programmable logic controllers and instrumentation equipment including firmware upgrades and patch management on existing instrumentation supporting operations, maintenance, and engineering activities.

INFORMATION/COMMUNICATION

- Responds to operation needs for planned and unplanned equipment repair as needed to support continued operations. Some support will be required outside of normal working hours.
- Performs regular training for internal engineering and operational staff for SCADA, PLC, and Instrumentation needs.
- Works with facility engineering and operations to help manage or perform all phases of planning and implementation of instrumentation and controls projects. Activities include evaluation, documentation, design, programming, implementation, startup and troubleshooting of those systems.
- Respond to requests for information and consultation for control systems issues.
- Works with engineering and operations staff to understand control/SCADA/I&C system problems and to develop solutions to resolve them.
- Assist facility engineering with control system, SCADA / I&C systems project planning and master planning. Identifies opportunities for improvement evaluates new hardware, data collection methods, and equipment controls.
- Ability to train operations staff to perform calibrations using certified calibration equipment for measurement as required by regulatory reporting needs.

• Strong leadership, excellent verbal and communication skills. Demonstrated ability to work within a team environment to solve technical issues.

MANAGEMENT/OPERATIONS

- Has knowledge and hands-on experience in the area of industrial controls, including programming of industrial controllers, graphical interface programming, industrial communications, and instrumentation.
- Assists with repair and replacement planning and prioritization efforts for control systems.
- Knowledge of water and wastewater instrumentation (level, flow, pressure, analytical process monitors). Be proficient in low voltage electrical circuits and analog signals. Ability to use GaMP tools related to instrumentation and calibration for operational reporting.
- Demonstrates a diverse technical experience related to controls engineering planning and implementation.
- Knowledge of industrial control PLC platforms (Modicon; Allen-Bradley Control Logix). Manage version control, firmware, and manufacturer supplied product updates. Ability to troubleshoot PLC hardware and software issues, ability to reload a PLC program and firmware for replaced devices.
- Knowledge of industrial communications such as ControlNet, Devicenet, Modbus, and Ethernet/IP. Be familiar with communications hardware including gateways, LAN/WAN communications devices, routers, and wireless communication systems. Ability to troubleshoot connectivity issues.
- Ability to create ladder diagrams, control system schematics, loop diagrams and other control system circuits for documentation within AutoCAD.
- Ability to create custom historical trend on the graphical interface system and interface with nontechnical users to be able to provide requested information obtained from the system.
- Ability to specify new PLC and instrumentation to replace old or obsolete equipment in the event of an unplanned device retirement.
- Ability to use alarm and event logs provided by the SCADA system, industrial communication analyzer tools, and historical trends to aid with troubleshooting of industrial control system anomalies.
- Ability to configure variable frequency drives (VFD), power monitors, motor and pump protection devices
- Ability to achieve ISA Certified Control System Technician or Rockwell Control Logix Certified Maintainer status within 2 years of hire.

PERFORMANCE EXPECTATIONS

The incumbent is responsible to manage their performance in accordance with this job description and the performance expectations provided to them by management. If at any time the incumbent is unsure of their role or specific responsibilities, it is the incumbent's responsibility to refer to their job description and ask for clarification from their supervisor. Management will work with the incumbent, as needed, to ensure performance expectations are clearly communicated and performance goals are achieved.

SUPERVISORY RESPONSIBILITIES

Serves as a technical resource and may assist Operations Management with oversight of electrical technicians during automation projects and associated programming work. Responsible to represent electrical, controls, and automation in projects; manages and gives direction of resources supporting organizational goals. Carries out supervisory responsibilities in accordance with the organization's policies and applicable laws.

MINIMUM REQUIREMENTS

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/or EXPERIENCE

Bachelor's degree (B. S.) in an approved program engineering discipline of Computer Science, Electrical Engineering, Industrial Engineering, Electronics Technology, or Electrical Engineering Technology or

approved equivalent degree from an accredited four-year college or university, or equivalent combination of education and experience. 2-5 years of experience in an industrial facility with emphasis on industrial control systems, programming, instrumentation and process automation.

LANGUAGE SKILLS

Ability to read, analyze, and interpret scientific and technical information, technical procedures, financial reports, and legal documents. Ability to write reports and procedure manuals, communicate effectively in order to manage staff and represent the program at various meetings. Ability to maintain effective work relationships with operational staff, engineers, contractors and utility customers.

MATHEMATICAL SKILLS

Ability to comprehend and apply principles of advanced calculus, modern algebra, and advanced statistical theory. Ability to work with concepts such as limits, rings, quadratic and differential equations, and proofs of theorems.

REASONING ABILITY

Ability to define unprecedented problems, collect data, establish facts, and draw valid conclusions by extending accepted methods or developing new ones. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables. Ability to develop program work plans designed to improve or expand current service levels.

CERTIFICATES, LICENSES, REGISTRATIONS

- Valid Indiana Driver's License, if a City vehicle is used;
- Indiana Professional Engineer's License desired.

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.

While performing the duties of this job, the employee is regularly required to sit and talk or hear. The employee is occasionally required to stand; walk; use hands to finger, handle, or feel; reach with hands and arms; climb or balance; and stoop, kneel, crouch, or crawl. The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance 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.

While performing the duties of this job, the employee is occasionally exposed to wet and/or humid conditions, moving mechanical parts, fumes or airborne particles, toxic or caustic chemicals, outside weather conditions, extreme cold, extreme heat, and vibration. The employee is occasionally exposed to high, precarious places and risk of electrical shock. The noise level in the work environment is usually moderate.

Applications may be submitted on-line at <u>www.cityoffortwayne.org</u> or using the City of Fort Wayne Human Resources Department computer kiosks located at Citizen's Square, 1st Floor, 200 E. Berry Street, Fort Wayne IN between the hours of 8:00 a.m. – 4:00 p.m. Applicants must be 18 years of age or older. Applicants must be 21 years of age or older to hold a CDL with the City of Fort Wayne. Reasonable accommodations for person with a known disabling condition will be considered in accordance with State and Federal Law.

(Those individuals who accept employment with the City and live outside one of the six contiguous Indiana counties that border Allen County (DeKalb, Whitley, Noble, Huntington, Wells, and Adams) will have six (6) months from

their start date to become residents of either Allen County or one of the six counties listed above. Policy and Procedure Number 204 Page: 1 of 1)

Equal Opportunity Employer

All qualified applicants will receive consideration for employment without regards to age, race, color, religion, sex, disability, veteran's status, national origin, genetic information or sexual orientation. Reasonable accommodations for persons with a known disabling condition will be considered in accordance with State and Federal Law.