Operations Systems Administrator

Class Code:
459

DEFINITION

Under direction of the Engineering Supervisor, performs a variety of technical and administrative tasks, control and computer system configuration, programming and special assignments related to the operation and maintenance of the District's Supervisory Control and Data Acquisition (SCADA) systems, Programmable Logic Controllers (PLC), Human Machine Interface (HMI) software, and other support systems used in the supply, treatment, production, and distribution of water; performs project management activities and may direct the work of District staff, contractors, and consultants engaged in SCADA system installations and/or upgrades; conducts training, both formal and informal for systems users; and performs related work as required.

DISTINGUISHING CHARACTERISTICS

Operations Systems Administrator is a fully-experienced, single-position classification. Under direction, within a framework of established policies and procedures, the incumbent performs complex technical and administrative tasks of advanced difficulty and complexity that require thorough knowledge and technical expertise of the District's SCADA and other operational support systems, including communications hardware and systems, and a high level of proficiency in system analyses tools, programming, and project management techniques. This position serves as the subject matter expert for SCADA and all Operations related applications, networking, communications, and technology matters. Assignments are given in broad terms and are subject to review primarily upon completion. There is significant latitude for independent judgment and action in well-defined areas of work.

TYPICAL DUTIES

TYPICAL EXAMPLES OF DUTIES MAY INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

- Performs and/or oversees SCADA system Human Machine Interface software and PLC programming changes; may direct the work of District staff, contractors, and consultants engaged in making system changes; maintains system documentation; modifies and updates databases; monitors system performance after changes are implemented.

- Responsible for operations automation systems hardware maintenance activities including installation of software upgrades, troubleshooting software or hardware failures and control system wiring problems, communication systems, ensures adequate inventory of replenishments parts; may direct work of District staff, contractors, and consultants engaged in work associated with SCADA systems.

- Responsible for long-term and short-term planning of the Capital Improvement Program (CIP) associated with the Supervisory Control and Data Acquisition (SCADA) systems and other operations and maintenance related automation and controls.

- Serves as liaison between the Operations and Engineering Departments on Engineering projects involving SCADA systems.

- Chairs and/or participates in work teams to evaluate the District's future needs for SCADA system hardware and software (both HMI and PLC); evaluates District future instrumentation needs; identifies hardware, software, and instrumentation best suited to meet those needs; oversees acquisition and implementation.

- Oversees day-to-day administration of installed SCADA applications (including setting up user accounts and policies) as well as other support systems.

- Prepares specifications and Requests for Proposals; evaluates and selects consultants and contractors and may direct contractor work activities; performs project management including monitoring budgets, schedules, and quality of deliverables.

- Researches and stays informed on new developments in the field of SCADA systems and related technology, server computer hardware and software, and instrumentation and control components.

- Conducts training, both formal and informal, for automated systems users including plant operations personnel, maintenance support staff, and staff engineers.

- Performs development and maintenance of data reporting from the SCADA systems.

- Performs other related work as required.

REQUIREMENTS

Any combination of education and experience that would likely provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the knowledge, skills, and abilities would be the equivalent of:

Education and Experience:

Possession of a Baccalaureate degree from an accredited college or university with a curriculum accredited by Accreditation Board for Engineering and Technology (ABET Inc.) with a major in engineering, computer science, information systems, or related field; and

Operations Systems Administrator: Four (4) years of full-time experience in systems analysis and computer programming work, which includes two (2) years' experience involving work with SCADA systems.

Knowledge, Skills, and Abilities:

Knowledge of: SCADA systems hardware and software, control system wiring practices, communication systems and equipment, instrumentation, work-related computer hardware and software, and process control theory; networking principles and practices; general engineering principles; project management principles and practices, including planning, budgeting, scheduling, and control; security principles and practices; basic principles of employee training; applicable federal, state, and local regulations, laws, guidelines, and District policies and procedures; safe work practices and the ability to identify workplace hazards and/or unsafe conditions and take appropriate corrective action; modern office practices, methods, and computer equipment and applications related to the work, including word processing, database, and spreadsheet software.

Skill and Ability to: conduct complex systems analyses, studies, and evaluations; utilize effective project management skills to oversee system implementation or upgrade projects; operate various process control test equipment; provide technical and applications support to various operations and maintenance systems; prepare and maintain complete and accurate records; prepare clear and concise reports; oversee and direct the work of consultants, contractors, and District staff; provide technical training to District staff; organize work, set priorities, meet critical deadlines, and follow-up on assignments; perform essential duties of the job without causing harm to self or others; evaluate and enhance existing systems for performance and take appropriate action when system operating problems occur; utilize effective project management skills to oversee major system installation and upgrade projects; operate modern office equipment including computer equipment and specialized software applications programs; communicate clearly and concisely, both orally and in writing; establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Additional Requirements:

- Must possess a valid driver's license and have a satisfactory driving record.

Working Conditions/Physical Requirements:

The essential duties of these classifications require the ability to speak to verbally exchange ideas and information; hear to receive verbal detailed information and instruction; see sufficiently to perform assignments; sit for extended periods of time while operating a computer and related hardware; to periodically work under various climatic and geographic conditions; to work near hazardous machinery and equipment and in an environment with potential exposure to loud noise, chemicals, fumes, and other environmental substances; to respond to emergency call-outs as required; finger dexterity for fine manipulation, and hand strength to operate a computer and related hardware and to grasp tools and equipment on a daily basis; and frequently lift and/or carry objects weighing up to 25 pounds and occasionally up to 55 pounds.

Revised: 03/2015, 02/21

Approved: _____
Human Resources/Risk Manager