CLASS SPECIFICATION
Instrumentation and Security Systems Supervisor

FLSA Status: Exempt
Union Representation: Nonrepresented

GENERAL PURPOSE

Under general direction, performs instrumentation and security system project and program management. Plans, assigns, supervises and inspects the work of journey-level craft personnel involved in the design, installation, programming, testing, calibration, modification, maintenance, repair and servicing of communications, instrumentation, and security and electronic equipment, controls and devices used in the production, treatment, storage, transmission and distribution of the City's water supply; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

With administrative oversight from the Water Operations and Support Manager, this single incumbent class provides first-line supervision, technical assistance and training to a staff of journey-level instrumentation technicians and related maintenance personnel. Incumbents are responsible for formulating and developing unit goals and objectives, supervising assigned personnel and directing day-to-day activities of the work unit. Work and results are reviewed through inspection and analysis of records, reports and completed work orders, and equipment and system performance. An incumbent in this classification formulate standards for a bureau's instrumentation and security systems.

Instrumentation and Security Systems Supervisor is distinguished from Instrumentation Supervisor in that an incumbent in the former class has program supervision responsibility for security system project and program management, as well as instrumentation program responsibilities.

ESSENTIAL DUTIES AND RESPONSIBILITIES

Any one position in this class may not perform all the duties listed below, nor do the listed examples of duties include all similar and related duties that may be assigned to this class.

1. Plans, supervises and evaluates the work of assigned staff; with staff, develops, implements and monitors work plans to achieve division mission, goals and performance measures; participates in developing and monitoring performance against the biennial division budget; supervises, participates in developing, recommends and implements plans, policies, systems and procedures applicable to unit responsibilities.

2. Plans and evaluates the performance of assigned staff; establishes performance requirements and personal development targets; regularly monitors performance and provides coaching for performance improvement and development; recommends merit increases and other rewards to recognize performance; recommends disciplinary action, up to and including termination, to address perform-

ance deficiencies, in accordance with the City Charter, Code, human resources policies and labor contract provisions, subject to director and City management concurrence.

3. Provides leadership and works with staff to create a high performance, service-oriented work environment that supports the City's and bureau's mission, objectives and service expectations; provides leadership and participates in programs and activities that promote workplace diversity and a positive employee relations environment.

4. Authorizes the purchase of materials and monitors work activities and acceptance of bids, inspects equipment and devices for conformance with project specifications and drawings.

5. Schedules, coordinates and supervises the work of personnel engaged in the design, installation, programming, testing, calibration, maintenance and repair of instrumentation, communications, security and computer equipment, devices and related appurtenances used in the production, treatment, storage, transmission and distribution of the City's water supply;

6. Plans, lays out and inspects the installation, maintenance and repair of a variety of electronics equipment, such as SCADA systems, data communication networks, uninterruptable power systems, 928 MHz radio communication systems, scientific instrumentation, programmable logic controllers (PLC), remote terminal units (RTU), distributed control systems (DCS), security system digital interfaces, INET7 software and computer servers, workstations, data networks and telephone systems.

7. Provides technical assistance to staff.

8. Provides for the training of staff in work methods, use of tools and equipment, and relevant safety precautions.

9. Inspects and evaluates work being performed; identifies problem areas and directs remedial action.

10. Schedules and coordinates activities with other divisions and/or bureaus; responds to inquiries and complaints.

11. Prepares and maintains a variety of records and reports, including time cards, worksheets, accident reports, maintenance requests, etc.

12. Recommends special work or necessary equipment maintenance; reviews completed work.

13. Schedules and coordinates activities with other divisions.

14. Responds to emergency situations as necessary.

15. Ensures the timely completion of preventive and predictive maintenance programs.

16. Requisitions necessary tools, equipment and supplies.

17. Ensures the timely completion of preventive and predictive maintenance programs.

18. Carries out the City's safety program; ensures subordinates follow safety practices in work methods and procedures; enforces proper safety procedures while working in dangerous situations; educates employees on rules, regulations, codes, safe work habits and potential hazards presented by their work environment.

19. Directly supervises skilled and semi-skilled personnel assigned to section activities.
20. Researches new operational methods, techniques and equipment and recommends their application.
21. Plans and lays out jobs from blueprints, drawings, sketches or verbal instructions; maintains records in the form of blueprints, drawings and specifications for electrical and electronic system circuitry, components and devices.
22. Reviews or prepares drawings and specifications for contract work and inspects work performed to determine compliance to standards.
23. Plans and oversees the testing of electrical and electronic equipment, components and devices on a scheduled basis.
24. Develops, reviews and updates written maintenance instructions and schedules.
25. Responds to emergency situations as necessary. Performs field work during emergencies.

MINIMUM QUALIFICATIONS

Knowledge of:

1. Principles and practices of project management, including developing project schedules, work plans, and budget preparation and administration.
2. Principles and practices of public administration, including purchasing, contracting and maintenance of public records.
3. Principles and practices of employee supervision, including selection, training, work evaluation and discipline.
4. Principles and practices of administration, including goal setting, policy and procedure development and implementation, evaluation and work standards.
5. Principles, methods and equipment used in installation, maintenance and repair of electronics equipment and devices common to a large water works system.
6. Tools, materials, processes and techniques of installing, troubleshooting, programming and maintaining precision instruments, and process control equipment and electronics.
7. Application of drawing software to draw blueprints and work flow diagrams; and methods and techniques of structured International Electrotechnical Commission (IEC) programming logic.
8. Safety practices, safe work methods and safety regulations pertaining to the work.
9. Relevant local, state and federal regulations including FCC requirements pertaining to City utilized radio systems, National Electrical Codes (NEC), and the Instrument Society of America (ISA) standards.
10. Database principles and concepts, and computer software applications related to the work.
11. Principles and practices of business communications.

Ability to:

1. Analyze complex instrumentation and security systems issues and problems, evaluate alternatives, and recommend polices, strategies or effective courses of action.
2. Develop and manage projects including contract and budget administration.
3. Apply and/or interpret laws, regulations and technical information related to assignments.
4. Plan, organize, estimate, coordinate, assign, review and evaluate the work of others.
5. Select, motivate and evaluate staff and provide for their training and development.
6. Principle, practices and techniques of group process facilitation and conflict resolution.
7. Identify and implement effective courses of action to complete assigned work.
8. Create and develop concise technical documents and reports; performs layout and sketch designs for process control installations, modifications and repairs; detect, isolate and resolve local control program and system hardware problems; analyze and assess systems needs.
9. Read and interpret drawings, specifications and manuals.
10. Present information and conclusions clearly, logically and persuasively to both internal and external stakeholders.
11. Prepare clear and concise records, technical reports, correspondence and other written materials.
12. Exercise independent judgment and initiative within general policy guidelines.
13. Establish and maintain effective working relationships with those encountered in the course of the work.
14. Coordinate work assignments with other divisions, bureaus or agencies.

Training and Experience:

A typical way of obtaining the knowledge, skills, and abilities outlined above is graduation from high school or G.E.D. equivalent or higher level of education; and four years of journey-level water works or similar industrial electronics maintenance and repair experience; or an equivalent combination of training and experience.

Licenses; Certificates; Special Requirements:

A valid state driver's license.

Oregon State Limited Energy Technician Class A or B or higher level Electrical license.

PHYSICAL AND MENTAL DEMANDS

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depends, in

part, on the specific requirements for the job, the limitations related to disability and the ability of the hiring bureau to accommodate the limitation.

Class History:

Adopted: 11-09-09