CLASS SPECIFICATION
Electrical/Instrumentation Systems Supervisor

FLSA Status: Exempt
Union Representation: Nonrepresented

GENERAL PURPOSE

Under general direction, plans, assigns, supervises and inspects the work of journey-level craft personnel involved in the design, installation, testing, calibration, modification, maintenance, repair and servicing of industrial electrical and electronic instruments, equipment, devices, controls and machinery used in the wastewater collection system and at large, state-of-the-art wastewater treatment plants; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

This class provides first-line supervision, technical assistance and training to a staff of journey-level industrial electrical, instrument and electronics technicians and related maintenance personnel in the Wastewater Division of the Environmental Services Bureau and the Operations Division of the Water Bureau. Incumbents are responsible for formulating and developing unit goals and objectives, supervising assigned personnel and directing day-to-day activities of the work unit. This class is distinguished from Electrical Supervisor in its responsible for systems, which are larger and more complex.

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 performance 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. Schedules, coordinates and supervises the work of technical personnel engaged in the design, installation, testing, calibration, maintenance and repair of electrical, instrument, electronic and electro-mechanical equipment, devices, controls, machinery and related appurtenances such as above- and below-ground electrical distribution systems, motors, controllers, transformers, excitors, switches, generators, programmable logic controllers and state-of-the-art process control and SCADA systems.

5. Performs a variety of difficult and complex tasks in the diagnoses, calibration, installation and troubleshooting of fiber-optic telecommunication system equipment, telemetry-based controllers, PLCs, RTUs Power Monitoring, instrumentation and related systems, equipment and facilities, using sophisticated electronic test and measurement instrumentation.

6. Provides for the training of staff in work methods, use of tools and equipment, and relevant safety precautions; provides specialized, electrical and electronic training for staff in other sections and departments.

7. Inspects and evaluates work being performed by City staff and contractors; identifies problem areas and directs remedial action.

8. Responds to inquiries and complaints from users.

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

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

11. Schedules and coordinates activities with other sections and divisions.

12. Responds to emergency situations as necessary.

13. Ensures the timely completion of preventive and predictive maintenance programs and analysis of their effectiveness.

14. Requisitions necessary tools, equipment and supplies.

15. Prepares specifications for the purchase of electrical and electronic equipment and devices; reviews and makes recommendations on acceptance of bids; inspects equipment and devices for conformance with specifications.

16. Researches new operational methods, techniques and equipment and recommends their application.

17. Responsible for carrying 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.

18. Directly supervises skilled and semi-skilled personnel assigned to section activities.
19. 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.
20. Reviews or prepares drawings and specifications for contract work and inspects work performed to determine compliance to standards and equipment.
21. Plans and oversees the testing of electrical and electronic equipment and devices on a scheduled basis.
22. Develops, reviews and updates written maintenance instructions and schedules.

MINIMUM QUALIFICATIONS

Knowledge of:

1. Principles and practices of employee supervision, including selection, training, work evaluation and discipline.
2. Principles and practices of administration, including goal setting, policy and procedure development and implementation, evaluation and work standards.
3. Principles, methods and equipment used in installation, maintenance and repair of electrical, instrument, fiber optic and electronics equipment and devices common to a large water works system.
4. Practices, methods, techniques, tools and equipment used in the design, development, installation, testing, calibration, maintenance and repair of electrical, instrument, electronic and computer-based supervisory control and telecommunications systems and equipment common to a large water works.
5. PLC logic programming.
6. Electrical power distribution and motor/pump control system design.
7. Operating characteristics of electrical, instrument, and electronic components, including microprocessor controls.
8. Safety practices, safe work methods and safety regulations pertaining to the work.
9. Computer software applications related to the work.
10. Codes, ordinances and regulations pertaining to the work.
11. Radiological controls.

Ability to:

1. Analyze, diagnose and modify computer-based hardware and software programs.

2. Use spreadsheets and database management systems for field RTU configuration and report generation.
3. Use modern, state-of-the-art precision and diagnostic instruments to test, calibrate and repair complex electrical and electronic devices and equipment.
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. Identify and implement effective courses of action to complete assigned work.
7. Read and interpret drawings, specifications and manuals.
8. Exercise independent judgment and initiative within established guidelines.
9. Establish and maintain effective working relationships with those encountered in the course of the work.
10. 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; and five years of journey-level water works or similar industrial electrical and/or electronics maintenance and repair experience, including supervisory control and telemetry systems, of which two years included responsibility for leading the work of others; or an equivalent combination of training and experience.

Licenses; Certificates; Special Requirements:

A valid state driver's license.

An Electrical Supervisor's License issued by the State of Oregon.

A Professional Electrical Engineering License (PEE) or a General Supervising Electrician License (GSEL) issued by the State of Oregon, or the ability to obtain either the PEE or GSEL within six months of appointment.

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: 07-01-02

Class created as a result of Nonrepresented Classification & Compensation Study, 2000-2002. This class is composed of positions from the following class(es):

1952 PUBLIC WORKS MANAGER. Adopted: 07-01-92; Revised: 07-13-99; 02-03-00

Revised: 01-22-07 to include PEE or GSEL license requirement and to reflect current duties.

June 2009 - Change Job Class number from 7564 to 30000635, due to system change.