INDUSTRIAL ELECTRICAL/ELECTRONICS TECHNICIAN

DEFINITION

Install, inspect, test, maintain, calibrate, troubleshoot, upgrade and repair City-owned electrical and electronic systems.

SUPERVISION RECEIVED AND EXERCISED

General supervision is provided by the Electrical/Signs and Markings Supervisor or his/her designee. This is a journey level position and may include supervision of less experienced personnel.

EXAMPLES OF DUTIES

The following are typical of duties encompassed by the position, not an all-inclusive or limiting list:

ESSENTIAL JOB FUNCTIONS

| Install, inspect, test, calibrate, repair, troubleshoot, upgrade and maintain a wide variety of electrical/electronic equipment and software related to water distribution, water treatment and City facilities; research, design, procure and install equipment and/or upgrade existing electrical/electronic systems; verify equipment compatibility with existing devices; conduct routine maintenance on electrical/electronic equipment, motor controls and electro-mechanical/electronic starters, automatic transfer switches, standby power generators and medium voltage switch gears; keep accurate and up to date records on all related assignments; proficiently reads and interpret circuit diagrams, ladder logic, construction drawings, and service and repair manuals; prepares plans and specifications for the procurement of parts and supplies on assigned projects; ensures that proper safety precautions and safe work methods are followed; assist with the preparation of standard operating procedures; inspect contract construction projects and submittals; inspect and test equipment; develop punch lists for work to be completed or corrected during construction; perform other duties as assigned; Regular, predictable, consistent and timely attendance is an essential function of the position, in that Employee must be present to work on facilities and equipment impacting the public’s health and safety. |

OTHER JOB FUNCTIONS

Prepare and maintain accurate maintenance and repair records; present oral and written reports; performs electrical inspections; use and maintain a variety of tools and test equipment as required; answers emergency calls and performs emergency repairs; meet all standby program requirements; take standby duty, work any shift including weekends and holidays; perform related duties as assigned.
QUALIFICATIONS:

Knowledge of:

In depth knowledge of electrical and electronic equipment as it relates to industrial controls and facilities; fundamental principles of instrumentation and application needs, personal computers and their operational and maintenance software programs; methods, tools, and equipment, used to maintain, repair, test, troubleshoot, calibrate and perform preventative maintenance on a wide variety of electrical, electronic and instrumentation systems; safe work practices, applicable codes, laws and ordinances, circuit diagrams, and shop mathematics.

Skill to:

Use electrical and electronic tools and equipment skillfully and safely. Read and follow electrical plans and specifications. Keep written records.

Ability to:

Work independently and exercise good judgment; diagnose malfunctions in a variety of electrical, electronic systems; use and care for tools and test equipment used in maintaining and repairing electrical and electronic systems; make cost estimates of labor and materials; maintain detailed records; follow oral and written directions; read and interpret electrical and process control drawings, plans and specifications; establish and maintain effective work relationships with those contacted in the performance of required duties; maintain effective audio-visual discrimination and perception needed for making observations, communication with others; proficiently read, write, and operate assigned equipment; ability to setup efficient and safe traffic control worksites in high volume vehicle traffic areas while applying good judgment and practical knowledge to help resolve unusual or irregular problems in the area of work assigned.

Minimum Education and Experience:

Education:

High school diploma or equivalent is required. Associate degree in electrical/electronic technology or closely related field is highly desirable.

Experience:

Four years of recent experience as an Industrial Electrician (or equivalent, as determined by the Department Head) is required.

License and Certificates:

Possession of a valid California Driver's License and State of California General Journeyman Electrical License is required upon hire Possession of a valid International Municipal Signal Association (IMSA) Work Zone Safety Certification is required prior to completion of the probationary period as a condition of employment. Possession of a California Water
Environment Association (CWEA) Electrical/Instrumentation Technologist Level II certificate is desirable.

**ADA COMPLIANCE**

**Physical Ability:** Positions in this class typically require: climbing, balancing, stooping, kneeling, crouching, reaching, standing, walking, pushing, pulling, lifting, fingerin\ng, grasping, talking, hearing, seeing, and repetitive motions.

Very Heavy Work: Exerting in excess of 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects.

**Other Requirements:**

**Sensory Requirements:** Requires the ability to recognize and identify similarities and differences between shade, degree or value of colors, shapes, sounds, forms, textures or physical appearance associated with objects and people.

**Environmental Factors:** May be subjected to moving mechanical parts, electrical currents, vibrations, fumes, odors, dusts, gases, poor ventilation, chemicals, oils, extreme temperatures, work space restrictions, intense noises, and environmental dangers.

Council Action: