

DEFINITION:

Under direction, a journeyman electrician performing all types of electrical, or electronics work on water treatment and supply facilities; waste water collection and treatment facilities, and all other City owned facilities.

DISTINGUISHING CHARACTERISTICS:

An employee of this class performs highly skilled electrical and instrumentation work in the troubleshooting and maintenance of electrical equipment. Hazardous conditions are an extremely critical factor of this job, working in close proximity to energized equipment from low to 2400 volts. Work is frequently performed under adverse weather conditions with exposure to gases, chemicals and infectious materials. Employee works under the general supervision of the Field Foreman - Electrical Technician. Employee is subject to 24 hour per day emergency call in.

EXAMPLES OF DUTIES:

NOTE: The following are the duties performed by employees in this classification. However, employees may perform other related duties. Duties listed are not necessarily performed by each individual in the classification.

1. Installation, testing, calibration, repair and maintenance of process control equipment including, transmitters, recorders, PID loop controllers, ultrasonic meters, pneumatic and telemetry equipment.

Measures: Installation, maintenance and testing performed in a proper and timely manner.

2. Install, program, debug and modify process control equipment involving the use of PLCs and related communication network equipment; also variable speed drive systems.

Measures: Implement control scheme changes following up with documentation performed in a proper and timely manner.

3. Research and design for purchase and installation of equipment to correct and/or upgrade existing electrical control systems as well as minor expansions. Verify equipment compatibility for interface to existing equipment.

Measures: Upgrades and expansions designed and built with equipment that is compatible with existing equipment.

4. Conduct routine maintenance on electrical control equipment, motor control and starter equipment, automatic transfer switches, standby power generators, and medium voltage switch gear.

Measures: Repairs and maintenance performed completely, accurately and in a timely manner.

5. Keep accurate and up-to-date records and notes on all related assignments.

Measures: Follows up with documentation and backup procedures in an accurate and timely manner.

6. Inspect contract construction projects and submittals; inspect and test equipment. Develop punch lists for work to be computed or corrected during construction.

Measures: Communicates directly to project manager verbally and in writing in an accurate and time manner.

7. Perform related duties as assigned.

QUALIFICATIONS:

Knowledge of:

Motors, and motor controls, instrumentation & process controls, signal transmitters, telemetry, alarm systems, medium voltage switch gear, drive systems, analog and digital electronics, commercial and industrial wiring practices, electrical codes and PLC (Programmable Logic Controller) based control systems.

Ability to:

Interact effectively with the public and employees. Diagnose and repair electrical and control problems, install, maintain, and repair electrical/electronics equipments, program, configure, de-bug and troubleshoot PLC equipment, climb ladders and scaffolds, work safely on energized electric equipment, and work in confined spaces.

Education:

Typical education would include a high school diploma, or equivalent, with post-high school, college course work in electricity, electronics; or relevant training in a trade or vocational school, AND

Experience:

Typical experience would include five years of progressively responsible relevant training and experience as an Industrial Journeyman Electrician which included training in PLC and VSD applications.

Special Requirements:

Possession of the appropriate California driver's license, or the ability to acquire one within ten days of appointment.