

DEFINITION:

Under general supervision, assists with electric utility engineering design and construction of substations, power line, power plant and other projects. Prepares electric utility standards/drawings, performs complex electric utility facility mapping and record keeping; performs complex technical computer-aided drafting assignments. Performs complex computer mapping, database management, computer graphical applications.

DISTINGUISHING CHARACTERISTICS:

Incumbents in the class perform paraprofessional work that is of a complex nature. Appointments to this class require that the employee be performing the full range of duties in drafting and office and field work relating to the electric utility distribution system. Work in this class is distinguished from that of the Electric Utility Distribution Technician I class by the greater complexity of the assignments received and by the greater independence with which an incumbent is expected to operate. When filled from the outside, previous work experience is required.

EXAMPLES OF DUTIES:

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

1. Prepare complex drawings for electric utility design and construction of power lines, substations, power plants and other electric utility related projects; provides requested reports, data or documentation.

Measure: Quality, legibility, completeness, and a minimum of errors. Accuracy, speed, thoroughness and efficiency of tasks.

2. Maintain current electric system circuit, schematic and switching maps for the Power Operations Division. Maintain current electric system maps on a local area network geographical information system (GIS).

Measure: Accuracy, thoroughness and efficiency of tasks, timeliness.

3. Perform data entry to a computer-aided drafting/geographic information system. Work with a variety of computer applications from simple to very complex using programs such as Microsoft Access, Microsoft Excel, Adobe, Corel Draw, and AutoCAD Map.

Measures: Quality delineation, legibility, completeness, and a minimum of errors. Accuracy, speed, thoroughness and efficiency of tasks. Job knowledge.

4. Prepare complex graphical design presentations for Customer Service and other Divisions of the Electric Utility. Prepare diagrams, charts, maps, graphs, presentations for City Council, management and public meetings.

Measure: Presentations are creative and get the necessary point across. Quality delineation, legibility, completeness, and a minimum of errors. Accuracy, timeliness, speed, thoroughness and efficiency of tasks.

5. Perform complex electric utility facility mapping and record keeping on the Electric Utility's local area network.

Measures: Timeliness, quality delineation, legibility, completeness, and accuracy. Accuracy, speed, thoroughness and efficiency of tasks. Job knowledge.

6. Provide assistance to Electric Utility engineers, Electric Utility field operations staff and other Department staff regarding electric utility facility/system records.

Measure: Professional, courteous and helpful. Prompt assistance. Treats all staff as customers.

7. Assist with preparation of complex electrical schematics and SCADA drawings. Prepare as-built drawings of electric utility facilities with emphasis on electrical schematics, SCADA drawings and construction details.

Measure: Quality, accuracy, minimum errors. Follow Department and industry standards. Job knowledge.

8. Prepare complex electric utility construction/design and engineering standards and detailed design drawings.

Measure: Job knowledge. Quality delineation, legibility, completeness, and accuracy. Accuracy, speed, thoroughness and efficiency of tasks.

9. Review plans and transfer information on to the electric utility mapping system for field and other departmental uses. Provide data, computer files, and information as requested by the City's GIS Division.

Measures: Timeliness, quality delineation, legibility, completeness, and a minimum of errors and corrections. Accuracy, speed, thoroughness and efficiency of tasks. Job knowledge.

10. Participate as a member of a survey crew; develop complex electric utility facility cross sections; plot topography; keep survey notes and records; research property information.

Measure: Quality delineation, legibility, completeness, and a minimum of errors. Accuracy, speed, thoroughness and efficiency of tasks.

11. Perform detailed field inspections of City Electric Utility facilities where necessary to assure facilities are properly mapped.

Measures: Accuracy, speed, thoroughness and efficiency of tasks. Meets job standards.

12. Perform other related duties as assigned.

QUALIFICATIONS:

Knowledge of:

Engineering design principles and practices; manual and computer-aided drafting equipment; electric utility engineering calculations; electric utility construction and standards; legal descriptions; electric utility construction specifications; electric utility engineering cost estimates; GIS applications; electric utility facility mapping and record keeping; filing systems; and effective customer service and public relations skills and techniques; Windows operating system, computer networks, AutoCAD Map, Microsoft Office Suite with emphasis on the Access and Excel; and Corel Draw and Adobe.

Ability to:

Interact effectively with the public and employees; perform drafting; operate engineering calculators; operate complex computer-aided drafting systems and equipment; prepare complex electric utility databases and spreadsheets; conduct research; make routine electric utility engineering/surveying calculations quickly and accurately; work with geographic information systems; read and interpret plans and drawings; assist with electric utility engineering design/construction projects; communicate clearly and concisely; and coordinate work with others.

Education:

Any combination of training and experience that provides the required knowledge, skills, and abilities is qualifying; typical education would include a high school diploma, or equivalent, and an Associate of Arts/Science degree from an accredited college or Technical School with courses in drafting, engineering, computers, mathematics or a related field.

Experience:

Typical experience would include three years of relevant experience in the electric utility transmission and distribution field with a minimum of one year experience equivalent to an Electric Utility Distribution Technician I.

Special Requirements:

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