

DEFINITION:

Under direction, designs new and modifies existing overhead and underground electric transmission and distribution facilities; develops master distribution system plans; prepares work orders, estimates, material lists, cost of service studies.

DISTINGUISHING CHARACTERISTICS:

This is the journey level classification in the Electric Utility Distribution Planner series. Incumbents are assigned responsibility for complex and specialized projects with occasional instruction or assistance from higher level professional staff. Employees are fully aware of the operation procedures and policies of the work unit and perform a full range of duties using precise, technical engineering knowledge and techniques. Positions in this classification series are flexibly staffed and may be filled by advancement from the Electric Utility Distribution Planner I position.

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 the classification.

1. Conduct field engineering for the purpose of designing new and/or upgrading existing underground and overhead electric distribution and transmission facilities.

Measures: Thoroughness of field work, job knowledge, completeness, timeliness, quality of work, customer satisfaction, and reliability.

2. Examine plans and specifications prepared by other departments, agencies, and consultants; advise, design and coordinate with the general public, City officials, customers, contractors, consultants and architects on matters relating to relocations and new or additional electric loads, and advise them of the City's electric service policy, applicable City codes; and applicable City standards.

Measures: Ability to communicate effectively both orally and in writing; customer satisfaction; job knowledge; and responsiveness.

3. Design distribution system improvements to provide service, maintain the continuity of service and the overall integrity of the distribution system. Design distribution circuit protection external to substations.

Measures: Thoroughness; quality of analysis; timeliness; creativeness; customer satisfaction; adherence to Department and industry standards.

4. In order to maintain and establish system reliability, perform technical research, conduct feeder loading and electrical voltage drop calculations, short circuit calculations, customer load studies, phase balancing studies, motor starting calculations, and economic evaluations of alternative service arrangements.

Measures: Job knowledge; timeliness; quality of work; thoroughness; speed of analysis.

5. Design new and modify existing overhead and underground electric distribution and transmission facilities; determine the effect of proposed work on existing electric utility facilities and the feasibility of alternate construction proposals.

Measures: Job knowledge; quality and efficiency of design; thoroughness; timeliness and speed; adherence to established Department and industry standards.

6. Coordinate and prepare electrical equipment specifications for contractor bid and prepare the applicable bid documents for contract work. Upon contract award, administer the construction contract.

Measures: Timeliness; thoroughness; quality of work; speed of preparation; reliability.

7. Develop and prepare Electric Department transmission and distribution standards. Research, evaluate and recommend new distribution products for possible system use.

Measures: Thoroughness; quality, quantity, speed of preparation, job knowledge.

8. Coordinate and prepare joint facility agreements with other utilities. Obtain any necessary permits, easements, and right-of-way for electric transmission and distribution.

Measures: Thoroughness; quality; speed; timeliness; job knowledge; communication.

9. Design electrical distribution facilities to serve subdivisions, apartment complexes, mobile home parks, commercial buildings, and public facilities.

Measures: Timeliness; job knowledge; thoroughness; quality and efficiency of design. Ability to communicate effectively with customers, developers, and contractors; customer satisfaction; reliability, creativeness.

10. Provide technical support to line construction crews as required.

Measures: Job knowledge; communication skills; responsiveness.

11. Coordinate annexation activities with Pacific Gas and Electric Company.

Measures: Thoroughness; quality, quantity, speed of preparation, communicate effectively.

12. Perform related duties as assigned.

QUALIFICATIONS:

Knowledge of:

Electrical theory, principles, and practices relating to electric distribution and transmission engineering; land use requirements for obtaining permits and rights-of-way; overhead and underground transmission and distribution construction standards, techniques, methods, equipment, and material; utility policies and practices; California PUC General Orders 95 and 128, and the National Electric Code; personal computers, spreadsheets, wordprocessors, and databases; and a working knowledge of governing agencies codes, regulations, and safety standards.

Ability to:

Interact effectively with the public and employees. Provide and implement strategies for transmission and distribution facilities in regards to voltage performance, loading of system components, system operating procedures, system protection, system capacity, and energy losses; read and interpret electrical, mechanical and civil engineering drawings related to municipal and private electric systems; investigate the impact of additional power requirements on the system and the costs for added construction or its modification to accommodate new requirements; operate personal computers and utilize computer-aid-design (CAD) software and Power Line Systems (PLS-CAD) software; and effectively communicate both orally and in writing.

Education:

Any combination of training and experience that provides the required knowledge, skills, and abilities is qualifying; typical education would include an Associate of Arts degree from an accredited college, or university, or equivalent with appropriate technical coursework.

Experience:

Typical experience would include five years relevant experience in the electrical utility transmission and distribution field with 3 years in electric estimating/design, or a related field.

Special Requirements:

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