

MAJOR FUNCTION

This is beginning professional level electrical engineer work assisting in performing system simulation studies, economic analysis and in the preparation of specifications and design of electrical plans for residential and commercial customers. Duties may include supervision of technicians and/or clerical employees. Assignments are received from a superior and procedures to be followed are generally well-defined. Work is checked upon completion for technical proficiency and adherence to standard practice.

ESSENTIAL AND OTHER IMPORTANT JOB DUTIES**Essential Duties**

Assists in the preparation of plans, specifications and bid documents. Evaluates bids for contract award for equipment and services required by the transmission/distribution and/or generation system. Participates in determining transmission system requirements including bulk power substations, transmission lines, distribution lines and distribution substation planning, construction, operation and maintenance. Conducts field work in staking poles and lights, checking temporary services for safety and construction requirements, and preparing field notes. Answers questions received from general public concerning electrical related projects. Oversees project to completion and makes changes if problems arise during construction. Maintains accurate records and files. Assists in the design and planning of generating, transmission and distribution systems to maintain a reliable system for the supply of power to customers. Forecasts energy requirements and peak loads for budgetary, operation and planning purposes as required. Conducts limited scope system simulation to assess the adequacy of the power system and recommends improvement as required. Performs related work as required.

Other Important Duties

Performs general engineering economic analysis as directed. Keeps abreast of general developments in areas related to job responsibilities. Performs related work as required.

DESIRABLE QUALIFICATIONS**Knowledge, Abilities and Skills**

Knowledge of modern practices, methods, techniques and equipment used in activities involved in electrical power engineering. Knowledge of electrical systems. Knowledge of engineering drafting. Ability to take field notes and use them in the drawing of plans and specifications. Ability to prepare cost estimates, maintain records and maintain effective working relationships with fellow employees, contractors and the public. Ability to express oneself clearly and concisely, orally and in writing. Skill in the use of personal computers and associated programs and applications necessary for successful job performance.

Minimum Training and Experience

Graduation from a four year college or university with a degree in electrical engineering; or general engineering, science or mathematics degree with one year of professional experience in the electrical engineering field.

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