

<a href="#">Salary Schedule</a>	<a href="#">MOU</a>	<a href="#">Benefits</a>
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City of Alameda  
Code No. 7230  
Revised: 6-12-91  
Approved by C.S.B.  
September 4, 1991

## ELECTRICAL ENGINEER

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### DEFINITION

Under direction performs responsible electric utility power engineering involving planning, general engineering design, and operations analysis; performs other related work as required.

### EXAMPLES OF DUTIES

1. Prepares and may supervise the preparation of plans, specifications and cost estimates for the construction and repair of overhead and underground electric power transmission, distribution and street light systems.
2. Manages utility construction projects, taking responsibility for contract administration, schedule coordination, public relations, liability claims, inter-utility coordination, and quality control. Field decisions and supervision of tests may be required.
3. Makes recommendations for the electric utility in areas such as electric power, transmission, distribution substations, system operation, system protection, metering, energy management, lighting, communications, load forecasting, system planning, budget planning, transmission and distribution routing studies and easement acquisition.
4. Works with and provides guidance to the utilities' customers in establishing utilities' service requirements and efficient usage and outside consultants working on major programs.
5. Coordinates construction operation and maintenance of system transmission, distribution and generation with other utilities.
6. Monitors utility compliance with State and Federal regulations; makes recommendations and may develop and implement procedures for compliance.
7. Develops and implements operation, maintenance, and testing procedures for utility facilities.
8. Performs complex electrical calculations and analysis; conducts various studies in areas such as protection coordination, system planning and load forecasting.
9. Assists in long-range planning of utility capacity and reliability.
10. Assists in the preparation of the utility's annual budget and capital improvement plans.
11. Supervises, trains and evaluates assigned staff.

### EMPLOYMENT STANDARDS

#### Education/Experience

Any combination equivalent to education and experience likely to provide the required knowledge and abilities. A typical way to obtain the knowledge and abilities would be:

Education: Graduation from an accredited four year college or university with major course work in Electrical Engineering.

Experience: Three years of professional utility power system engineering experience.

(OVER)

**EMPLOYMENT STANDARDS** (continuation)

Knowledge

Knowledge of the principles and practices of electrical engineering related to utility power distribution systems; control systems design that utilizes computer based systems and electromechanical devices; electrical system operation characteristics; electrical testing methods and procedures; methods and materials used in construction of electric utility facilities; policies and regulations governing the construction, extension and maintenance of electric utility facilities.

Ability

Ability to perform electric utility power engineering work related to planning, design and operation of distribution and transmission systems; prepare complete plans and estimates of electric utility projects; effectively manage utility construction projects; perform complex engineering calculations and analysis with speed and accuracy; interpret and apply established policies, procedures and codes; interpret and apply complex governmental regulations; interpret computerized information and utilize computer equipment; establish and maintain accurate records; maintain level of knowledge required for satisfactory job performance; communicate effectively; establish and maintain effective working relationships with employees and the general public and supervise, train and evaluate assigned staff.

Other Requirements

Registration as a Professional Electrical Engineer with the State of California.

Possession of a valid California Driver's License and satisfactory driving record as a condition of initial and continued employment.