JOB DESCRIPTION

SENIOR POWER ENGINEER or POWER ENGINEER

(Exempt/Management Position)

DEFINITION

The City of Ukiah is looking for a highly qualified and motivated individual to plan, organize, direct and coordinate the engineering activities of the Electric Department. Responsibilities include system design, operation and asset management for the electric distribution system which includes the substation(s), distribution system, hydroelectric plant, SCADA and advanced metering infrastructure.

This is an exempt, management level position in the Electric Utility Department. General direction is provided by the Electric Utility Director. Leadership responsibilities include the direct supervision over assigned personnel, which may include various consultants and/or contractors.

Power Engineer: The Power Engineer provides technical staff assistance to the Electric Utility Director and works with staff in the coordination of operations. Under general direction, the Power Engineer performs engineering studies, prepares load forecasts, prepares plans and cost estimates for electric utility construction projects, and makes feasibility and economic studies of alternative plans.

Senior Power Engineer: The Senior Power Engineer provides highly responsible and technical staff assistance to the Electric Utility Director and assists in the coordination of operations and maintenance activities of the utility department and outside agencies, as needed. The Senior Power Engineer must work closely and effectively with the Electric Operations Superintendent providing highly responsive technical support to assist in the efficient and prudent operation of the Electric Department.

DISTINGUISHING CHARACTERISTICES

Power Engineer: This is a mid-level class within the Power Engineering series. This class is distinguished from the journey level by the performance of more routine tasks and duties. Employees at this level are expected to perform under general and technical direction from the Assistant Utility Director or the Utility Director.

Senior Power Engineer: This is the journey level class within the Power Engineering series and is distinguished from the Power Engineer level by assignment of the full range of duties, including supervision and management of the department functions. Employees at this level receive occasional instruction or assistance as new, unusual or unique situations arise.

SUPERVISION RECEIVED AND EXERCISED

Power Engineer: Receives general supervision form the Electric Utility Director or as assigned. May exercise technical and functional supervision over technical staff.

Senior Power Engineer: Receives direction from Electric Utility Director or as assigned. Exercises technical and functional supervision over technical staff.

EXAMPLES OF DUTIES:

Power Engineer:

- Provide technical assistance to engineering, technical services and field staff as well as customers to identify and solve various problems related to construction, operation and delivery of power.
- Work closely with the Electric Operations Superintendent in the review and evaluation of work methods and procedures.

- Review project plans and drawings with supervisors and other staff as appropriate; recommend changes based on field observations and operational requirements; provide technical advice and assistance on difficult work problems.
- Research and develop material specifications and standards for electric equipment and construction practices.
- Perform system protection and coordination studies and review system protection equipment settings and operations, adjusting as necessary to provide a highly reliable distribution system.
- Complete distribution modeling including underground and overhead distribution systems design, voltage drop/correction, load flow, power factor correction, and system protection.
- Maintain up-to-date knowledge of and oversee the implementation of local, state, and federal regulatory compliance activities related to area of assignment.
- Assist and support the Electric Operations Superintendent in the development, review and updating of safety training, procedures and standard operating procedures.
- Perform a variety of advanced technical and professional engineering tasks using sound engineering judgment, including project planning, analysis, design, construction management, contract administration; special studies and report preparation for various utility construction projects related to distribution line, metering, substation, and power engineering.
- Assists in the preparation of the capital improvement plans and budget.
- Assists in the preparation of presentations and at times will be required to attend meetings outside of normal business hours.
- Serve as construction manager for various large or technical electric projects, oversee preparation of bid documents, oversee contractor performance and compliance with project plans and specifications; coordinate, schedule and oversee specialty inspections; review and approve payment requests and review technical submittals. Prepare and/or oversee the preparation of project documents including project justifications, budget analyses, preliminary cost estimates, and schedule.
- Prepares reports, presentations, analyses, and estimates for new or modified services and facilities, as well as long range maintenance and capital improvement needs. Justifies and recommends specific proposals and projects. Participates in the preparation of the Capital Improvement Plan and budget of the utility. Prepares the budget recommendations including projecting project costs, staffing needs and anticipated expenditures by fiscal year with detailed breakdowns and justification as assigned.
- Build and maintain positive working relationships with co-workers, other City employees, and the public using principles of good customer service.

<u>Senior Power Engineer</u> (Must perform all duties listed above, in addition)

- Develop and implement division goals, objectives, policies, procedures, and metrics to operate the Electric department using best practices.
- Direct, oversee, and participate in the development of the Electric Operations work plan; prioritize work activities, projects, and programs; monitor and correct workflow issues.
- Manages the activities and operations of the Engineering division of the Electric Utility Department; develops and implements goals, objectives, policies and procedures to enable the division to meet the business goals of the Department and the City.
- Directs and manages day-to-day operation of the Engineering department and assists in the work load management of the Electrical Department.
- Identifies and implements necessary system expansions/modifications to provide sufficient capacity and quality of power to serve new and existing loads under both normal and emergency conditions.
- Prepares multi-year capital improvement plans and budget.
- Prepares presentations and presents at meetings outside normal business hours. Represent the department to outside agencies and organizations, participate in outside community and professional groups and committees.
- Recommends the assignment of work, provide or coordinate staff training, conduct performance evaluations, implement discipline procedures as required, and maintain high standards necessary for the efficient and professional operation of the Department.
- Manage the operation and maintenance of the 3.5 MW hydroelectric generation plant.

QUALIFICATIONS

Knowledge of:

- Principles and practices of electrical engineering as applied to the design and construction of an electrical power transmission and distribution (T&D) system.
- Methods and materials used in the construction, operation, and maintenance of an electrical (T&D) system.
- Safety practices and State and Federal regulations relating to T&D system operation, maintenance and construction.
- Computer applications: MS Office, Computer Aided Drafting and distribution system analysis software.
- Principles and practices of organization, administration, budget, and personnel management.
- Pertinent State, Federal and local rules, regulations and ordinances.

Ability to:

- Properly interpret and make decisions in accordance with Federal and State laws, regulations, and policies.
- Communicate clearly and concisely, orally and in writing.
- Perform technical electrical engineering work of a complex nature.
- Review plans and documents for conformance to regulations.
- Develop design drawings for customers and construction teams.
- Gather data and make accurate engineering computations.
- Prepare plans and specifications, neatly and accurately.
- Establish and maintain cooperative relationships with those contacted in the course of work.
- Tolerate changes in outside temperature from winter to summer and tolerate dust, pollen, wind and rain.
- Sit or stand for long periods of time.
- Walk on uneven or steep ground.
- Supervise, train and evaluate assigned staff.
- Work flexible hours when required.

Education:

Both positions require a Bachelor's Degree from an accredited college or university in electrical engineering, preferably Power Engineering. Registration as a Professional Engineer in California or ability to obtain P.E. License in two years required.

Experience:

Power Engineer: Three years of increasingly responsible experience in electrical engineering work within the Electrical Utility industry.

Senior Power Engineer: Five years of increasingly responsible experience in electrical engineering work in the Electric Utility industry. Supervisory experience desirable.