



## Position Description

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Job Title: Generation Electrical Engineer

Department: Generation

Reports To: Director of Generation

FLSA Status: Exempt

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### POSITION SUMMARY

This individual provides engineering support for operation, maintenance, and capital improvement activities at AEL&P and Snettisham facilities. Duties include engineering design of power, control, relaying systems, and SCADA systems; documentation; and administration of engineering or construction contracts. This individual analyzes the electrical system for safe efficient operation and monitors system reliability and resolves areas of concern as necessary. This individual works closely with System Operators to ensure effective SCADA system operation and provides support in the automation of AEL&P's generation, substation, transmission and distribution systems. This individual provides guidance and direction to employees whose duties relate to the maintenance and operation of the Juneau area power system.

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### KEY or ESSENTIAL FUNCTIONS

- Provides Engineering support for operation, maintenance, and capital activities at AEL&P and Snettisham facilities.
- Responsible for design, project management and construction oversight of maintenance and capital projects. Writes requests for proposals and evaluates proposals to recommend a suitable consultant, contractor, vendor, or manufacturer. Writes project scoping documents and contracts, and works directly with consultants, contractors, vendors, and manufacturers to ensure project schedule, budget and all other deliverables are met.
- Coordination and design of AELP and Snettisham protective relay and automation schemes. Analyzes the electrical system for efficient and safe operation and updates the electrical system engineering model and databases.
- Responsible for generation facilities compliance with all federal, state, local, environmental and safety regulations that apply.

### SECONDARY FUNCTIONS

- Manages the Generation Department Safety Program including coordination with Company Safety Engineer on the AELP Safety Plan regarding Generation facilities and activities.
- Develops engineering design and construction standards, specifications, drawings and materials standards.
- Responsible for overseeing AELP's communications systems; including fiber optic, leased lines, 5.8GHz radios, 900MHz radios and VHF radios.
- Administer Generation Department Training Programs.
- Assist in the annual update and maintenance of the Emergency Contingency Plan in the Event of Failure of the Salmon Creek Dam.
- Updating of the Generation Department procedures.
- Assist in the preparation and implementation of departmental Operating, Maintenance, and Capital budgets.
- Provide electrical engineering support to other departments.
- Serve in on-call rotation for after-hours calls.

## **QUALIFICATIONS/REQUIREMENTS**

This position requires a minimum of a bachelor's degree in electrical engineering. An emphasis in power systems is preferred. A valid Alaska State Driver's License is required.

### **SENIOR POSITION**

A minimum of ten (10) years of work experience in electrical utility engineering activities is preferred. A Professional Engineering License in the State of Alaska or the ability to obtain one within one year is preferred.

### **JUNIOR POSITION**

A minimum of two (2) years of work experience in electrical utility engineering activities is preferred. Successful completion of the Fundamentals of Engineering (FE) Exam is preferred.

## **EQUIPMENT UTILIZED**

Duties of this position will require the ability to:

- Operate a personal computer, and programs for word processing, spreadsheets, and CAD as well as specialized applications for engineering studies and device configuration.
- Operate standard office equipment and machines such as a printer, fax, calculator, copy machine and telephone.
- Operate portable and mobile two-way radios.
- Test equipment including multi-meters, vibration meters, ultrasonic thickness testers and other test equipment.
- Use a meter puller to remove electrical meters for troubleshooting in emergency situations.
- Wear and care for PPE including 1kV and 15kV rubber gloves, FR Clothing.
- Switch high voltage equipment in emergency conditions.

## **PHYSICAL REQUIREMENTS**

To meet all expectations of this position the employee will need to be able to lift 10 pounds without assistance and sit for long periods of time. The employee will also need to be able to fly in helicopters and single engine airplanes. At times the employee will need to be able to work outside in inclement weather for long periods of time.

The nature of this work requires that the individual reside on the Juneau road system in an area that has adequate phone coverage.

## **MENTAL REQUIREMENTS**

For an employee to succeed in this position they will need to:

- Possess good interpersonal and customer service skills to courteously deal with and to establish and maintain effective working relationships with co-workers, other employees, outside vendors, contractors, and the general public.
- Work in a fast-paced environment, with constant interruptions and distractions. The ability to multi-task, adapt to changing priorities, and meet set deadlines is required. Attention to detail and strong organizational, analytical, drafting, and proofreading skills are required. Must be able to work efficiently with little or no supervision to meet deadlines and balance multiple tasks.
- Be able to work well and complete duties accurately while under pressure, while attending to multiple duties simultaneously.
- Have demonstrated ability to be punctual and reliable in attendance.
- Must be willing to tackle projects outside of the electrical field when assigned.
- Must be able to give instructions clearly verbally and in writing and oversee the work of others effectively.

- Communicate effectively both verbally and in writing with all levels of the organization, outside agencies, governmental bodies and the public.

## **WORK ENVIRONMENT**

Normal work hours are Mon-Fri, 8am to 5pm, with a one-hour lunch. At times, hours in excess of these may be required. This individual will have to respond to after-hours callouts, day or night, in all weather conditions.

At times, this individual may be required to travel for training or project purposes outside of the Juneau area. Extended trips of one to two weeks may be required at remote company facilities.

At Alaska Electric Light and Power Company, we maintain a drug-free workplace with a commitment to safety and job satisfaction. All employees must comply with AEL&P company policies, including the Drug and Alcohol Policy.

AELP is an equal opportunity employer. Qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.

## **SALARY**

Depends on experience.