



SPRINGFIELD UTILITY BOARD

Job Description

TITLE: Electrical Engineering Associate 1 / Electrical Engineer 1 **STATUS:** Exempt / Non-union
Electrical Engineering Associate 2 / Electrical Engineer 2 **RANGE:** 25 – 36 – 43
Electrical Engineer 3 (Oregon Professional Engineer license required)

REPORTS TO: Electric Engineering Manager

POSITION SUMMARY: This position has the responsibility for engineering, drafting and planning of electrical facilities. The work includes, but is not limited to, the preparation of designs, reports, studies, layouts and estimates for the installation and maintenance of electric facilities and other electrical engineering work. Assignments and review will be given from the Electrical Engineering Manager, Division Director, and/or designee. The work requires independent judgment, creativity, quality, timeliness and the ability to work well with others. This position also provides technical support to the Engineering Technicians. An Electrical Engineering Associate 1 / Electrical Engineer 1 will initially work under close supervision. With experience, this position will work with minimal supervision on projects of increasing complexity and scope. Performs other duties as assigned.

MAJOR RESPONSIBILITIES

Essential Functions

1. Supports and models behavior to promote the Mission and Core Values of SUB to staff and customers.
2. Develops and maintains professionalism and effective teamwork in the performance of job duties.
3. Maintains reliable and predictable attendance.
4. Performs electric engineering support for transformer loading, pole loading in PLS-CADD, fuse coordination, and system protection devices.
5. Provides engineering design work and estimates for substation and transmission projects.
6. Provides engineering support to the substation department on operating and maintenance issues.
7. Assists in planning, studies, reports and policies dealing with distribution, substation and transmission facilities for the ten-year plan, WECC/NERC, Oregon PUC, SUB policies and division projects.
8. Performs special projects as assigned by the director, supervisor, and/or designee.
9. Investigates and assists customers on power quality issues.

Page 2 – Electrical Engineering Associate 1-2 / Electrical Engineer 1 – 3

10. Assists other engineers on tasks. Serve as project manager for projects, which includes timely completion of drawings in AutoCAD, purchasing of materials, monitoring and inspection of construction and documentation.
11. Serves as an engineering resource within the division for day-to-day feedback on process and design questions.
12. Develops, modifies and runs management and special reports from the division's databases.
13. Follows the progress and inspects the construction or maintenance of projects with contractors and SUB crews (line or substation).
14. Ensures electric facilities (distribution, transmission and substation) are constructed to SUB's standards, the National Electric Safety Code (NESC) and the National Electric Code (NEC).
15. Provides a positive, inspiring and motivating work environment with co-workers.
16. Maintains confidentiality of organizational and staff information.
17. Maintains valid Oregon driver's license and good driving and safety record.
18. Support SCADA Engineer with the operation and maintenance of the SCADA system.
19. Provides engineering support to the meter department.
20. Designs, plans and produces drawings and estimates for complex metering installations.
21. Reviews customer designs for compliance with net metering and interconnection policy.
22. Support Standards Engineer with construction and material standards for electric facilities.

Marginal Functions

23. Works with engineering consultants and contractors on engineering projects.
24. Obtains site permits for major projects.
25. Interface on projects with other agencies to ensure coordination and efficiency. Represents SUB at public meetings and other public forums.
26. Researches and assists in identifying improvements in procedures and techniques using internal and external resources for ESC division operations.
27. Assists with accounting and division staff to complete job closings and standard/retirement costs for the division each year.

Page 3 – Electrical Engineering Associate 1-2 / Electrical Engineer 1 – 3

Given the dynamic and challenging environment of the utility industry and our mission to provide exceptional service to our internal and external customers, additional duties and responsibilities, other than those listed in this job description, may be assigned (contingent on labor agreement provisions, if applicable) Your supervisor will communicate these changes either formally or informally, verbally or in writing.

Attributes

SUB strives to promote a safe, positive and caring work environment. In addition to the above responsibilities, the following attributes are essential to be a successful employee at SUB:

- Being committed to SUB’s Mission and Core Values
- Complying with safety practices and policies
- Being professional, honest, courteous and respectful to others in your conduct
- Being responsive to suggestions to improve performance
- Being flexible to adapt to a changing work environment
- Performing as a productive team member
- Being accountable for your own performance, behaviors and contributions
- Taking the initiative to accomplish your responsibilities to the best of your ability

These qualities in our employees ensure that working at SUB is motivating, fun and enjoyable while performing a valuable service to our utility and community.

OTHERS SUPERVISED

- None

MINIMUM QUALIFICATIONS

Experience

- Will consider recent graduate for this position and will provide on-the-job training
- Engineering experience in a utility or related experience is preferred
- Auto CAD experience preferred
- Experience with PLS-CADD is preferred

Knowledge, Skills & Abilities

- Considerable knowledge in mathematics and science
- Proficiency in Microsoft Word, Excel, Power Point and Access
- The title of Electrical Engineer, at all levels, requires an Oregon Professional Engineer license
- An Electrical Engineering Associate 2 is required to have an Oregon Engineer-in-Training license
- Movement to levels 2 and 3 are based on years of experience and performance and licensure

Education

- High school diploma or equivalent
- A Bachelor's degree in electrical engineering, or comparable engineering degree, from an ABET accredited program.

PHYSICAL AND MENTAL REQUIREMENTS

- **ALERTNESS & CONCENTRATION:** Maintains full alertness and concentration at all times while working with co-workers or by oneself.
- **ABILITY TO DEAL WITH STRESS:** Makes decisions quickly and calmly in stressful situations. Thinks and reacts quickly if accidents occur. Interacts well with co-workers. Able to coordinate and direct many jobs/tasks, employing a variety of people at the same time.
- **VISION:**
 - Far visual acuity:** Sees adequately to drive a vehicle.
 - Near visual acuity:** Reads small print on maps, plans, labels, reports, numerous other written documents and computer screens.
 - Peripheral vision/depth perception:** Maintains full field of vision in all directions to assess proximity to construction hazards, holes, traffic, co-workers, movements of equipment, or falling objects.
 - Color vision:** Judges red, green and yellow traffic lights adequately to drive on highways. Differentiates color of documents and reports.
 - Night vision:** Maintains the visual abilities listed above when working at night and in poor light and inclement weather conditions.
- **HEARING:** Hears spoken conversation well and on telephone despite heavy background noise from traffic, construction equipment, rain or wind, and when visual signals cannot be used. Hears adequately to operate a two-way radio.
- **SPEECH:** Speaks loudly and clearly enough to be accurately understood when speaking to a co-worker, or when up to 100 feet away from a co-worker despite heavy background noise from traffic, construction equipment or wind, and when visual signals cannot be used. Speaks clearly communicating by two-way radio.
- **STANDING:** The worker stands on the job a very short period of time. The worker may actually be on their feet for longer periods of time, but maneuvers around the work site at intervals.
- **SITTING:** Worker sits on a variety of vehicle seat types and office furniture. May spend up to an eight-hour shift sitting.
- **WORKER MOBILITY:** Can change positions frequently, in and out of vehicles and in and out of holes/trenches using ladders and not using ladders, which requires full body bending and/or twisting and/or lifting. At times on knees and bent over. Must be able to operate manual transmission.

WALKING: Rarely walks one to two miles at a time on uneven ground. More common maximum distance walked is 1/8 to 1/4 mile. Total walking per shift is 0-15 percent. Walking occurs in slippery conditions, in mud, on rocks and on uneven ground.

- **LIFTING/CARRYING:** 0-10 lbs.--often; 11-20 lbs.--occasionally; 21-50 lbs.--occasionally.
- **PUSHING/PULLING:** Pushing /pulling may be done while bent over and limited to office work.
- **REACHING/HANDLING:** Occasionally works at full extent of his/her reach. Writes information and draws diagrams. Uses 10-key, computer, telephones, and radios.
- **TWISTING:** Rotates head fully to both sides to observe equipment and co-workers while maintaining body in awkward position. Some twisting is required when lifting items or handing items to fellow workers.
- **CLIMBING:** Climbs hills and walks over uneven ground but usually climbs stairs in business.
- **CRAWLING:** Not usually required.
- **ENVIRONMENTAL FACTORS:** Performs a variety of non-strenuous tasks outside with temperatures varying from below zero to over 100 degrees, sometimes in rainy, windy, snowy or icy conditions. Exposed to occasional noise from traffic construction, heavy equipment near construction sites, jack hammers, power saws, and tamps. Hearing protection is provided. Exposed to numerous types of pollen - depending on location, season or climatic conditions. Bee/wasp stings, animal bites or poison oak may also occur.
- **PRODUCTS AND MATERIALS:** Exposed to chemicals (primarily through skin contact or inhaling) glue, toner and disinfectant.
- **MACHINES/TOOLS/EQUIPMENT:** Uses 10-key, computer, copier, phone, two-way radio and other office equipment.