



PROJECT ENGINEER

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| DEPARTMENT: | Engineering | UNION REPRESENTATION: | None |
| CLASS/GRADE: | 12 | FLSA CLASSIFICATION: | Exempt |
| HOURS OF WORK: | 8:00 a.m. to 5:00 p.m. | | |
| REVISED: | April 30, 2018 | | |

PURPOSE

This position oversees the design and construction of transmission and switch yard/substation facilities. The position coordinates project activities with various internal and external personnel to ensure on budget and timely completion of reliable, high quality transmission and switch yard/substation facilities.

ESSENTIAL FUNCTIONS OF THE POSITION

1. Prepares and directs preparation of detailed plans and specifications for project construction, as assigned.
2. Monitors and reports the progress of assigned projects relative to schedule and compares the results to current budget and work plan.
3. Prepares and maintains transmission and substation unit cost data for various types of evaluations.
4. Evaluates transmission and substation cost data for effectiveness or method and scheduling of construction.
5. Assists in the preparation of the transmission and substation capital projects portion of division budgets, work plans and long-range plans, as assigned.
6. Assists with the development of special studies to support project selection and technical operation, as assigned.
7. Establishes design criteria for the facilities to be constructed.
8. Maintains Quality Assurance in the work of engineers, technicians, consulting engineers, contractors, subcontractors, and vendors/manufacturer's representatives on transmission and substation construction project sites.
9. Coordinates outage switching and clearance requirements with Power Control.
10. Reviews engineering, manufacturer and contractor submittals, specifications and other written material to ensure conformance with project requirements.
11. Directs and performs inspection of projects during construction and upon completion, as assigned.
12. Provides direction to consulting engineers, staff engineers and technicians that are performing engineering services for transmission and substation projects, as assigned.
13. Prepares or directs preparation of contract documents and administers contracts for procurement of transmission and substation equipment and materials, engineering services and construction.
14. Prepares or directs preparation of project and contract close out documentation.
15. Reviews and recommends contractor/vendor invoices for approval, within authorized limits.
16. Prepares construction change orders and negotiates the cost of change orders with contractors for transmission and substation projects, within authorized limits.
17. Verifies equipment acceptance tests in conformance with the manufacturer's recommendations.
18. Participates in external committee assignments on behalf of the Association, as directed.
19. Consults and coordinates with Federal, State and local agencies regarding location of facilities, construction methods and schedules to minimize conflict.
20. Provides technical assistance to member-owners and other concerned parties to resolve substation/transmission voltage/outage problems and recommends corrective action to be taken.
21. Reviews and makes recommendations for operation and maintenance practices and activities
22. Promotes a safety culture in which safety is a value. This culture is based on joint and individual engagement, ownership, and accountability regarding job safety and responsibility to perform work safely and adhere to safe work practices.
23. Performs the essential functions of the position in a safe and efficient manner.

The above items are not intended to be all inclusive of the essential functions or requirements of this type of work as they are subject to change based on operating necessity. The employee will also perform other related business duties as assigned by the immediate supervisor and other management personnel.

ESSENTIAL POSITION REQUIREMENTS

- Qualified candidates are required to have:
 - A Bachelor of Science in electrical, mechanical or civil engineering.
 - Minimum of three (3) years of experience managing the design and construction of electrical transmission or substation facilities.
 - A valid Alaska driver's license (or ability to obtain as required under State of Alaska regulations) and a driving record, which is acceptable and insurable by the Association and the Association's insurance carrier at standard group rates.
- Preference will be given to candidates with:
 - A State of Alaska Professional Engineer (PE) license.
 - A Project Management Professional (PMP) Certification.
 - Responsible engineering experience in the design and construction of substations, system protection and transmission lines.



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NOTE: The Association will consider, in its sole discretion, relevant work experience in lieu of required education qualifications or other required certifications or qualifications.

KNOWLEDGE, SKILLS AND ABILITIES

- Support a culture of safety excellence through active involvement in safety improvement and promote a sense of shared responsibility for safety.
- Effectively communicate with internal and external personnel.
- Ability to solve problems based on facts and sound engineering judgment.
- Proven ability to translate engineering knowledge into sound, economical design.
- Capable of carrying several simultaneous projects through from inception to completion as expeditiously as practicable with limited supervision.
- Knowledge of the FERC Accounting System and the ability to interpret the National Electrical Safety Code and other relevant codes and regulations
- Extensive knowledge of workflows pertaining to design, permitting, and construction. Ability to track costs, schedules and other data as necessary on projects.
- Knowledge of substation operations and procedures, Company policies and procedures, and applicable codes and policies of local City, County, State, and Federal Regulatory Agencies.
- Broad knowledge of construction methods and standards, materials, and equipment used in electrical design and wiring, maintenance procedures and practices, and safety procedures and practices.
- Ability to organize, coordinate and schedule various projects; interpret union contract; prepare comprehensive reports; and supervise the work of others.
- Ability to develop and document new procedures and techniques to assure quality and expedite response of service to internal and external customers.
- Ability to establish and maintain good working relationships with directors, managers, supervisors, fellow employees, representatives of other utilities, outside consultants and the public.
- Ability to maintain a strong sense of propriety concerning confidential matters.
- Able to write a wide variety of detailed reports to management or the public about such complex issues as large line extension problems, various cost estimates, alternative line extension options, complex electrical problems, major accidents, etc.
- Effectively represent the Association's interests at community council meetings and other venues.
- Working knowledge of personal computers in a windows environment, including the use of the Microsoft Office Suite AutoCAD, and GIS software. Must be familiar with the following types of computer programs: electrical system design analysis, spreadsheets, databases, word processors, and file/disk management. Must be proficient in creating and manipulating spreadsheets and word processing.
- Ability to facilitate cooperation between work groups and work functionally across all levels of the organization
- Self-motivated improvement based on successes and failures.
- Analyze processes for efficiency and make recommendations for improvements.
- Embrace and embody the Association's Core Values through decisions, actions, attitude, and behavior to directly contribute to the success of the organization

PHYSICAL DEMANDS

- The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this position; this list is not inclusive of all the physical demands that may be required. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions.
- While performing the duties of this position, the employee will be required to:
 - Medium work: Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.
 - Climbing: Ascending or descending ladders, stairs, scaffolding, ramps, poles and the like, using feet and legs and/or hands and arms.
 - Balancing: Maintaining body equilibrium to prevent falling when walking, standing or crouching on narrow, slippery or erratically moving surfaces.
 - Stooping: Bending body downward and forward by bending spine at the waist.
 - Kneeling: Bending legs at knee to come to a rest on knee or knees.
 - Crouching: Bending the body downward and forward by bending leg and spine.
 - Reaching: Extending hand(s) and arm(s) in any direction.
 - Standing: Particularly for sustained periods of time.
 - Walking: Moving about on foot to accomplish tasks.
 - Pushing: Using upper extremities to press against something with steady force in order to thrust forward, downward or outward.
 - Pulling: Using upper extremities to exert force in order to draw, drag, haul or tug objects in a sustained motion.



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- Lifting: Raising objects from a lower to a higher position or moving objects horizontally from position-to-position.
- Fingering: Picking, pinching, typing or otherwise working, primarily with fingers rather than with the whole hand or arm as in handling.
- Grasping: Applying pressure to an object with the fingers and palm.
- Feeling: Perceiving attributes of objects, such as size, shape and temperature or texture by touching with skin, i.e., fingertips.
- Hearing: Ability to receive detailed information through oral communication, and to make fine discriminations in sound, such as when making fine adjustments on machined parts.
- Repetitive motions: Substantial movements (motions) of the wrists, hands, and/or fingers.
- Visual acuity: Color, depth perception and field of vision to include measurement devices for close inspection and analysis.
- Talking: Expressing or exchanging ideas by means of the spoken word; those activities in which detailed or important spoken instructions must be conveyed to other workers accurately, loudly or quickly.
- Strength rating is light work involving exerting up to fifty pounds of force occasionally, and/or up to twenty pounds of force frequently.

ENVIRONMENTAL CONDITIONS

- The work environment conditions described here are representative of those an employee encounters while performing the essential functions of this position. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions.
- This position primarily works in an office setting; however, this position may require field work in variable weather conditions. The incumbent must be able to work in variable weather conditions including, but not limited to rain, high winds, temperatures in excess of 80 degrees Fahrenheit and minus 40 degrees Fahrenheit, large amounts of snow, possibly over long periods of time and in darkness, etc.
- This position is subject to bee stings and insect bites.

EMPLOYMENT STATUS

- This position is classified as an exempt, nonrepresented position; and therefore is not eligible for overtime compensation. All Association employees are expected to work widely varying amounts of time outside the normal shifts to assist in power restoration or other needs of the Association.

REPORTS TO: Director of Engineering

DIRECTLY SUPERVISES: Not Applicable

DIRECTS: Engineering Support Staff

SIGNATURES

The Association reserves the right to revise or change position duties and responsibilities. This position description does not constitute a written or implied contract of employment.

**I HAVE READ AND UNDERSTAND THIS
POSITION DESCRIPTION:**

APPROVED:

Employee

Supervisor

Date

Date