



JOB DESCRIPTION: ELECTRICAL ENGINEER

1 JOB SUMMARY:

To plan, coordinate, engineer, and evaluate the Cooperative's distribution system for the long-range viability of the Cooperative systems. To manage and coordinate installation, operation and maintenance of the distribution facilities in such a manner that meets the established standards and reflects the most efficient utilization of construction and operation methods, techniques and equipment. Will work closely with staff, consulting engineers, construction contractors, and maintenance contractors. Will provide advice/assistance to the President/CEO and will give a monthly report to the Board on all aspects of his/her responsibility. The Electrical Engineer must maintain a cooperative relationship built on mutual trust with members, employees, and operations personnel at Dairyland Power and other electric utilities.

2 MAJOR RESPONSIBILITIES:

- (a) Oversees preparation of detailed plans, drawings and specifications necessary for construction. Must anticipate resource requirements and meet time constraints of construction season and system operation.
- (b) Develops special studies to be used in conjunction with construction plans and technical operations.
- (c) Reviews for technical accuracy and completeness, designs prepared by self or consultants. Reviews cost estimates related to design projects.
- (d) Prepares written correspondence associated with design projects.
- (e) Establishes or assists in the establishment of design criteria for facilities construction. Design is to be optimized within the constraints of applicable codes, the Cooperatives specifications, RUS specifications, and good engineering practice.
- (f) Provides needed assistance to member-owners through telephone conversation and/or immediate contact.
- (g) Reviews and approves, up to financial authority limit, work orders and plans for facilities improvements, line extensions and services.
- (h) Provides technical advice or information to various requesting parties.
- (i) Responsible for updating of system diagrams and maps for use by others, as appropriate.
- (j) Develop, recommend and monitor the departmental annual work plan and budget and prepares regular reports to the President/CEO to assure coordination and compliance with overall Cooperative plans and goals and to serve as the basis for future planning.
- (k) Administer, design, and inspect construction projects so that engineering requirements and system needs are met, including those set by standards, specifications, policy, and rules and regulations of the Cooperative.

- (l) Promote and contribute to maintaining high standards for work place safety throughout the organization. Assists in evaluating safety practices and recommends improvements as needed.
- (m) Develop, and ensures acceptable voltage and load limits on the system and evaluates the physical and electrical conditions of the distribution system; and implement appropriate and timely remedial action to maintain continuity and power quality standards for electric service in an efficient and safe manner.
- (n) Maintain a system of records, reports, and statistical charts and data of pole, overhead and underground inspections, utilizing that information for planning of improvement in operating practices.
- (o) Assists with the direction in emergency maintenance and repair of the electrical system to ensure quality work repair in a timely manner. Serves as an alternate to the PEC ROPE coordinator in emergency situations.
- (p) Direct the preparation of power requirement studies, long and short-range engineering plans, departmental work plans, and other engineering and operational studies to assure adequate system capacity, service reliability and workplace and public safety and to provide distribution plan capitalization estimates for financial planning.
- (q) Establish system performance criteria and reviews measure thereof to determine consistency with system reliability and power quality goals; and develop and implement action plans, including pole inspection, right of way maintenance, oil circuit reclosers and underground inspection programs, required to maintain electric service within the limits of established quality and continuity standards.
- (r) Assist with the development of cost-of-service studies and appropriate rate tariffs which result in retail rates that are cost-based, fair, and equitable and which provide for the achievement of approved financial goals.
- (s) Coordinate the inspection of completed work orders, including work order inspection and certification for the consulting engineer, to assure conformance with applicable specifications, accurate material charges, and quality workmanship.
- (t) Maintain a current knowledge and understanding of OSHA, RUS, NESC, Cooperative safety manual and other applicable standards, methods, materials, and regulations to ensure that the Cooperative's distribution facilities are constructed and operated in a safe manner, consistent with these standards.
- (u) Interpret cooperative policies, viewpoints, and objectives when needed and ensure compliance.
- (v) Approve purchases of all material, supplies and equipment for his/her department. Assures that items purchased are of quality, and prices paid are in the best interest of the Cooperative.
- (w) Administer engineering contracts to include, but not limited to: contractor bid procedures, bid evaluation, and obtaining contract approval.
- (x) Participate in staff meetings to develop future plans, confer on mutual problems, and interchange information and to share in the determination and formulation of management policies.
- (y) Contribute to the Cooperative performance by completing other related duties as assigned.

3 POSITION SPECIFICATIONS

(a) EDUCATION:

Four-year accredited college degree in electrical engineering.

(b) WORK EXPERIENCE:

A minimum of five years of electric utility experience preferred.

(c) JOB KNOWLEDGE:

Experience in electric distribution system design and operation preferred. Experience with staking programs and electrical system analysis programs desired. Project management experience preferred.

(d) ABILITIES AND SKILLS:

Must be able to supervise and direct and contract staff in designing all outside plant facilities required for the efficient operation of electrical distribution systems. Must have the skills to recognize the system needs and to prepare designs that can meet the electrical and mechanical demands, while also fulfilling aesthetic, economic, regulatory and environmental requirements. This includes complete design of overhead and underground distribution lines, transformers, regulators, capacitors and other special projects and loads. Ability to work with other department personnel and supervisors in carrying out plans, construction, contracts, etc., utilizing a high level of teamwork skills, is necessary. Must have excellent customer skills, the ability to resolve conflicts, and a high degree of project management and follow-up skills to keep reports, correspondence and projects on schedule. Must be able to expedite work while maintaining necessary standards. Must be able to balance multiple priorities and make necessary decisions promptly. Must be able to innovate new methods and designs for improving system and plant facilities. Must have ability to organize and train an efficient work group.

Must have a working knowledge of Excel, Word, Outlook, database functions, and preferably have knowledge of NISC iVUE software.

(e) LICENSE REQUIREMENTS;

Maintain a valid Wisconsin Driver's License required with a satisfactory driving and safety record. Ability to become a registered professional engineer in Wisconsin preferred.

(f) WORKING CONDITIONS:

(g) A portion of the work will be performed in a standard office environment and a portion in the field in varying weather conditions. Occasional exposure to extreme cold for extended periods will be necessary, as will working in hazardous areas around heavy equipment with high noise levels. Occasional overnight travel is required.

(h) PHYSICAL REQUIREMENTS:

Must be able to sit or stand for sustained periods during the workday. Must be able to work outdoors and travel as occasioned by meetings and job duties. Must be able to perform light work continuously, frequently lifting up to 10 pounds without assistance and infrequently lifting up to 50 pounds. Must be able to move throughout the facility and to/from job sites. Must be able to reach in all directions, bend/stoop to store and retrieve files, and effectively use a telephone, calculator and computer. Must have dexterity and hand/eye coordination necessary to operate computer keyboard and other equipment.

4 REPORTS TO:

(a) Reports to:

President / CEO

(b) Responsible for:

No direct reports.