

**CARTERET-CRAVEN ELECTRIC COOPERATIVE  
POSITION DESCRIPTION**

**POSITION:**  
Staff Engineer

**REPORTS TO:**  
VP Engineering and Operations

**DEPARTMENT:**  
Engineering

**DIRECTS:**  
None

**EFFECTIVE:** 04/2018

**GRADE:** 13

**PURPOSE OF POSITION:**

Provide engineering data for the construction and maintenance of Carteret-Craven Electric Membership Corporation's electric distribution system in conformity with established engineering practices, RUS specifications and the National Electric Safety Code and in accordance with established policies, procedures, and budgets.

**MINIMUM JOB SPECIFICATIONS:**

All requirements are subject to possible modification to reasonably accommodate individuals with disabilities. Some requirements may exclude individuals who pose a direct threat or significant risk to the health and safety of themselves or other employees.

**Education:** Require Bachelor's Degree/Equivalent in Electrical Engineering or Electrical Engineering Technology or a related discipline

**Experience:** Prefer Engineer-in-training and ability to become Registered Professional Engineer. Prefer demonstrated experience of electrical distribution and transmission systems, experience in various phases of operating an electrical distribution system, knowledge of all national and local electric codes and OSHA. Require ability to acquire proficiency in the RUS construction specifications and procedures. Demonstrate computer experience including spreadsheets. Prefer experience with SCADA, engineering software, Auto Cad, and databases. Become knowledgeable of retail rate schedules and structures, and Carteret-Craven Electric's policies, procedures, and service rules and regulations.

Require excellent verbal and written communications skills; excellent interpersonal skills for effective interaction with personnel/public. Require ability to work irregular hours.

**Driver's License and Employment:** Require the ability to have and maintain a valid North Carolina driver's license and successfully pass Carteret-Craven Electric Cooperative's employment entrance examination and drug screen.

**WORKING CONDITIONS:**

General office conditions and business-related travel with irregular hours deemed necessary by the position and emergency situations. Require the physical ability in stooping, kneeling, crouching, reaching, standing, walking, fingering, grasping, talking, hearing, defined light work.

Require visual acuity in machine operation (a) and (c). Exposure to outside environmental conditions on a regular basis.

**WORKING RELATIONSHIPS:**

Internal: Two-way communication with the VP Engineering and Operations to receive direction, instruction, approval; to provide work related information in a timely manner; with subordinate staff to provide direction; with other Cooperative personnel to coordinate and provide support.

External: Demonstrates an awareness that the job exists to effectively serve each and every customer, and at every opportunity to achieve increased customer and public understanding for support of the Cooperative.

**ESSENTIAL DUTIES:**

Note: The following are the essential duties and performance standards of this position. The essential duties do not include marginal functions that are incidental to the performance of fundamental job duties. The scope and duties of a given position may change or be temporarily altered based on the business needs of Carteret-Craven Electric Cooperative. This document does not create an employment contract, implied or otherwise, other than an “at will” employment relationship.

1. Effectively plans, develops, and recommends appropriate modifications for the most reliable, safest, and economical distribution system.
  - a. Ensures the distribution system is designed, constructed and maintained in accordance with RUS and NESC specifications.
  - b. Ensures economical considerations are based on sound engineering principles.
  - c. Ensures coordination with other utilities in accordance with established guidelines.
  - d. Assists with the proper design and staking of the distribution system.
  - e. Effectively directs the efficient securing and coordination of materials and supplies.
  - f. Effectively directs contractors in large construction or conversion projects.
  
2. Assists in preparing and recommending the Engineering Department budget, short- and long-range plans, and the work plan to the VP Engineering and Operations.
  - a. Annually assists with the budget and work plan within allotted timeframe.
  - b. Assist with short- and long-range departmental planning.
  - c. Annually reviews system demands, design limitations, and power factors and takes corrective actions in a timely manner.
  - d. Assists in preparation of Construction Work Plans.
  - e. Assists in preparation of contracts per Cooperative and RUS standards for Work Plan items performed by outside contractors.
  - f. Assists in ensuring approved work plan items are staked and constructed within allotted time frames.
  - g. Performs various system studies, including coordination studies, ensuring coordination with relay and substation breaker settings for safe and reliable

- h. service.
  - h. Studies and monitors system voltage and current, performing load balancing studies as necessary, ensuring substation loads are equally balanced and proper voltage is maintained throughout the system.
3. Ensures Cooperative engineering and operation management systems are maintained and updated.
- a. Keeps abreast of new and improved technologies as well as security measures related to SCADA, CVR, mapping, AMI outage management, work order, and engineering software systems and recommends needed enhancements and improvements.
  - b. Maintains software ties between the engineering software and billing system for accurate and efficient transfer of data.
  - c. Assists mapping personnel to ensure accurate and complete system maps are kept.
  - d. Communicates with the IT Department on issues affecting the transfer of data, system upgrades, and enhancements to ensure coordinated efforts between departments.
  - e. Ensures all IT-related security policies are strictly followed and plays an active role in maintaining system's security.
4. Assists in operation and maintenance of the Cooperative's transmission and distribution systems.
- a. Assists with restoration of power during outages.
  - b. Assists or performs inspections, repairs, operations, maintenance of substation and downline equipment.
  - c. Operates and assists in maintaining the SCADA system, CVR system, work order system, mapping (GIS) system, AMI system and other engineering related systems essential to providing reliable service.
  - d. Assists in the testing, repair, and calibration of all electronic substation equipment.
  - e. Assists in setting, testing, and calibration of AMI meters to ensure proper levels of operation.
  - f. Performs power quality investigations using electronic monitoring equipment to identify and correct power quality issues as necessary.
  - g. Assists in the accurate installation of line voltage regulators, switched capacitors, reclosers and associated control wiring.
  - h. Assists and directs as needed annual substation maintenance activities.
5. Effectively addresses customer complaints; investigates and recommends effective solutions to customer complaints in a timely manner.
- a. Keeps supervisor informed of any unusual customer complaints.
  - b. Ensures that all customers' complaints from the field within his/her area of responsibility are immediately resolved.
  - c. Ensures that any complaints which cannot be resolved and are within his/her area of responsibility are routed to the proper person within one day of notification.

Staff Engineer

6. Maintains safety standards and awareness.
  - a. Establishes and maintains acceptable safety standards.
  - b. Maintains current knowledge of Carteret-Craven Electric Membership Corporation's safety regulations and evaluation of personal compliance.
  - c. Performs in accordance established safe environment.
  - d. Enforces safety standards, as necessary.
  - e. Assists in conducting safety meetings on engineering topics.