

Concho Valley Electric Cooperative, Inc.
Position Description

Position Title: Electric Engineer I

Departments: Engineering

Reports To: Manager of Engineering

Oversees: None

FLSA Status: Exempt

NRECA Job Code: 16K

Reviewed/Revised: 04/2022

GENERAL DESCRIPTION: Receives supervision weekly; works in accordance with work plan and applicable laws/codes; works with people internally and externally - particularly with members; may be called back in emergencies; work is moderately stressful in dealing with consumer complaints and meeting deadlines; may work overtime; follows written directives, procedure manuals, operational instructions and checklists; provides cost estimates.

PURPOSE: To provide engineering and technical services for existing and new systems; advise on construction, maintenance and operations of the system; oversee system maps, construction drawings, circuit diagrams and sectionalizing maps as directed; assist in plans for changes in the plant; plan for future changes and demands by gathering data and performing analysis as directed to ensure electrical systems are functioning properly.

ENVIRONMENT: Mixture of inside and outside work; exposed to the outside weather.

INTERNAL CONTACTS: Engineering and Operations, Customer Service, IT/Communications, Billing.

EXTERNAL CONTACTS: Members-Consumers, Consulting Engineer, Federal, County and State Highway Department, General Public, Other Utilities, Suppliers and Manufacturers and Contractors.

DUTIES AND TASKS OF THE JOB:

- Gathers and prepares data for plans and designs of all system improvement and maintenance projects.
- Complies with budgetary requirements.
- Keeps informed of developments in the irrigation, industrial and small commercial industry.
- Closely adheres to Cooperative specifications for the electrical system.
- Monitors kWh usage and kW demands on substations and metering points.
- Monitors system components and numerous data sources to ensure overall system protection and functioning.
- Operates and prepares system modeling analysis for new construction, routine and special studies as directed.
- Assists with Annual Meeting.
- Resolves Members-Consumers complaints.
- Interprets staking sheets.
- Is trained in CPR.
- Uses only approved products, material and equipment.
- Oversees original and maintenance of system maps to ensure they are correct and up-to-date.
- Prepares estimates and coordinates relocation of lines.
- Operates all department equipment in accordance with safety rules.
- Adapts new technologies as directed to Cooperative operations and systems, and trains other employees in their operation.
- Performs duties of an Engineering Technician when needed.
- Assists with preparation of annual operations and maintenance survey.
- Participates in design/construction of substations, transmission and distribution lines and related facilities.

- Assists/reviews digitizing of maps and extracts engineering data for improvement.
- Develops input into Cooperative work plan.
- Prepares contracts for "requests for proposals."
- Assists in training staff in areas such as sectionalizing, surveying, design and routing of lines.
- Ensures compliance with and is knowledgeable with NEC, NESC, ANSI standards, IEEE recommendations, Cooperative safety procedures and local codes.
- Will issue reports on a time scheduled basis (i.e. daily, weekly, monthly, yearly, etc.) dependent upon the nature of the report and desired outcome including preparing numerous reports/forms for state and federal agencies.
- Will interact with the members/consumers as necessary in the execution of field work.
- Will be required to operate a computer daily in the execution of assigned duties.
- Attends Safety Meetings and is knowledgeable about safety rules.
- Responsible for maintaining an engineering model of the Cooperative's electric system which includes performing system coordination, load allocation, and load management.
- Performs large load studies, load forecasting and long-range studies.
- Performs system protection analysis, including fault current studies and sectionalizing studies.
- Performs Arc Flash analysis and provides documentation for this analysis.
- Performs circuit capacity, power factor correction and system loss analysis.
- Addresses power quality issues.
- Provides operational procedures for complex switching operations.
- Performs SCADA system administrator duties by maintaining the SCADA database, reviewing and applying software updates and keeping the SmartVU maps updated.
- Develops the settings and implantation plans for electric controls, RTU's and IED's.
- Assists with communications projects, demand response (DR) and distributed energy resource (DER) programs.

- Provides necessary in-house metering maintenance and administrative support for the NISC MDMS.
- Provides a portion of the in-house administrative support for the Sensus RNI.
- Follows safety rules and guidelines
- Performs all other reasonable and proper duties/task assigned.
- Must be regular in attendance.
- Must possess a valid Texas driver's license with safe driving record.
- Attends trainings as needed to obtain job knowledge.
- Note: Nothing in this job description restricts management's right to assign or reassign duties and responsibilities to this job at any time.

PHYSICAL DEMANDS: Able to move 50 pounds; depth/distance visual ability necessary; movement and physical nature of job includes activities such as standing, walking, sitting, stooping, bending, reaching, kneeling, crouching; must drive a vehicle; minimum exposure to hazardous environment

EDUCATION AND EXPERIENCE REQUIREMENTS:

- A Bachelor of Science Degree in Electrical Engineering or equivalent.
 - Electric power electives preferred.
- Engineer-in-Training (EIT) preferred.
- Knowledge of relaying and system protection preferred.
- One (1) to three (3) years' experience preferred.
- Must be able to obtain a Professional Engineering (PE) license within five (5) years of employment.