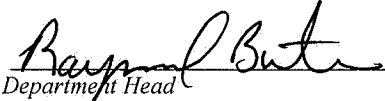
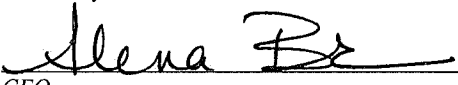
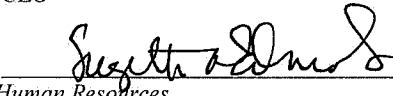
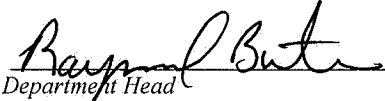
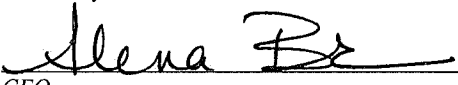
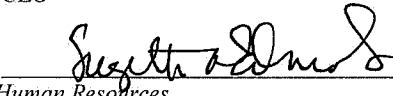
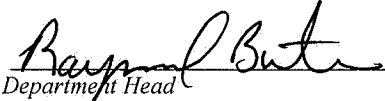
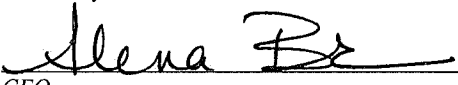
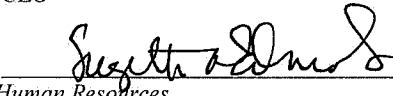


# CENTRAL NEW MEXICO ELECTRIC COOPERATIVE, INC.

## POSITION DESCRIPTION

<b>JOB TITLE:</b> System Engineer	<b>FLSA STATUS:</b> Exempt						
<b>REPORTS TO:</b> Manager of Operations	<b>SALARY GRADE:</b> 7						
<b>DEPARTMENT:</b> Engineering	<b>LOCATION:</b> Moriarty						
<table style="width: 100%; border: none;"> <tr> <td style="width: 60%; border: none;"> <b>APPROVED BY:</b> <u></u>  <i>Department Head</i> </td> <td style="width: 40%; border: none; text-align: right;"> <u>7/27/2023</u>  <i>Date</i> </td> </tr> <tr> <td style="border: none;"> <u></u>  <i>CEO</i> </td> <td style="border: none; text-align: right;"> <u>7-27-2023</u>  <i>Date</i> </td> </tr> <tr> <td style="border: none;"> <u></u>  <i>Human Resources</i> </td> <td style="border: none; text-align: right;"> <u>7-27-2023</u>  <i>Date</i> </td> </tr> </table>		<b>APPROVED BY:</b> <u></u> <i>Department Head</i>	<u>7/27/2023</u> <i>Date</i>	<u></u> <i>CEO</i>	<u>7-27-2023</u> <i>Date</i>	<u></u> <i>Human Resources</i>	<u>7-27-2023</u> <i>Date</i>
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<u></u> <i>Human Resources</i>	<u>7-27-2023</u> <i>Date</i>						

### **Job Summary**

The Engineer will be required to assist with engineering, construction, operations and maintenance functions of the Cooperative’s substations, distribution, and transmission system in such a manner as to assure all facilities meet the highest standards of capacity and condition by employing the most efficient application of engineering planning. Will be required to evaluate, and trouble shoot the electric system and to develop long and short-range planning associated with all major system design, improvement, and inspections ensuring that plans are executed efficiently and orderly.

### **Essential Duties and Responsibilities**

- To perform load forecasts, long range plans, four-year construction work plans, voltage drop studies, short circuit analysis, arc-flash analysis, coordination studies and other engineering and operational studies on the cooperative’s distribution & transmission system to assure adequate, balanced system capacity and service reliability to the cooperative’s membership.
- Prepares or directs preparation of analytical studies to develop design for electrical facilities, equipment, apparatus, and associated components and structures.
- Develops or directs development of long and short-term system work plans.
- Analyzes data to determine feasibility of technical proposals.
- Analyzes equipment specifications and performance requirements of electrical system and components.
- Analyzes engineering proposals, process requirements, and related technical data pertaining to distribution/substation/transmission applications and equipment design.
- Determines feasibility of designing new equipment or modifying existing facilities.
- Prepares or directs preparations of databases, systems, layouts, and detailed drawings and schematics.
- Analyzes test data and reports to determine if design meets functional and performance specifications.
- Responsible for quality control oversight and field engineering projects.

- To develop and implement protective or control settings for breakers, reclosers, capacitor and regulator IEDs (intelligent electronic devices).
- Knowledge of IEEE, ANSI, IEC, NERC/SPP and other industry standards as well as NESC, NFPA/NEC, RUS and other applicable codes and regulations to ensure that the Cooperative's substation facilities are designed, constructed, and operated in a safe and efficient manner with consideration for limiting the Cooperative's liability.
- To prepare written technical documents such as procedures, design criteria, specifications, reports, RFI's (Request for Information), and RFP's (Request for Proposal).
- To develop, maintain and administer the Cooperative's SCADA system.
- To maintain and administer the Cooperative's NERC compliance requirements.
- Responsible for oversight of substations and the equipment within the substation.
- To review and modify new and existing engineering designs for the Cooperative's substations and equipment within, including substation relay schemes or settings which may require periodic modifications. Interacts with consultant engineers to ensure substation designs are correct before construction and facilities are installed properly during construction.
- Provides technical support with voltage drop analysis, motor start analysis, fault current analysis, and other technically related area.
- Complies with CNMEC's safety rules and regulations while performing duties. Complies with OSHA rules and regulations.
- Performs other miscellaneous job duties as assigned.

### **Supervisory Responsibilities**

None

### **Minimum Qualifications**

A Bachelor of Science in Electrical Engineering from an accredited college or university or a Master of Science in Engineering Technology from an accredited school is required plus 6 years or more of electrical engineering experience. Power Cooperative experience is a plus. Experience in substation design, distribution design and system protection/coordination are desired. A licensed Professional Engineer in the state of New Mexico is highly desirable. Possession of a valid New Mexico Driver's License and satisfactory driving record as a condition of initial and continued employment.

### **Knowledge, Skills and Abilities**

- Knowledge of relay programming
- A working knowledge of distribution system design, construction, operations and maintenance specifications and standards is preferred.
- A working knowledge of applicable codes, regulations, and standards, both Federal, State, and local, is also essential.
- Must be able to handle multiple projects and be a project lead.
- Knowledge of budgeting, load forecasting, and engineering related information systems is desirable.
- The ability to effectively coordinate available resources is essential.
- The ability to effectively communicate with others, both orally and in writing, and maintain accurate records is essential.

- Should be capable of drawing valid conclusions and project consequences of decisions and recommendations as well as set priorities and meet deadlines.
- Must possess the ability to maintain effective working relationships with employees and the general public.
- Must present a friendly, courteous image for the Cooperative at all times.
- Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals.
- Ability to speak effectively before groups or employees of the organization.
- Ability to add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals. Ability to compute rate, ratio, and percent and to draw and interpret bar graphs.
- Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral diagram, or schedule form.

### **Working Conditions and Physical Effort**

Generally accepted office working conditions that may include outdoor work within substations or around parts of the distribution/transmission system. Occasional work outside normal working hours may be required. Subject to restricted smoking areas, random drug and alcohol testing (consistent with DOT regulations and CNMEC policies). Occasional travel to allied organizations and professional groups to represent the Cooperative at training and informational meetings may be required.

- **Physical Effort and Dexterity:** Sedentary work requiring exertion of up to 25 pounds of force occasionally and/or a negligible amount of force frequently or light lifting of generally 25 pounds or less. Job requires sitting most of the time requiring repetitive motions with hands and fingers such as dialing and keyboarding. Work is primarily indoors but could require outside work within our substations or on the system evaluating electrical equipment.
- **Machines, Tools and Equipment:** Use of office equipment such as personal computer, calculator, copy machine, printer, fax, and telephone.
- **Visual Acuity, Hearing and Speaking:** Must have excellent written and oral communication skills, expressing oneself clearly, accurately and to the point. Must be able to read, write and do engineering calculations with proficiency, analyzing data and reports, conducting research, coordinating people and resources. Skills in developing plans procedures, and goals required. Must be able to present information to others clearly and accurately and work under stress.
- **Environment/Working Conditions:** Frequently subject to both environmental conditions when activities occur inside and outside; widely fluctuating temperatures. Occasionally subject to extreme temperatures below 32 degrees and/or above 100 degrees for periods of more than one hour. Occasionally subject to hazards while working with electrical currents. Established OSHA, APPA, and CNMEC safety precautions and practices are required.

*Note: The preceding statements describe the general nature and level of work performed by the individual assigned to this position. This is not an exhaustive list of all duties, responsibilities and skills required of this position. Nothing in this job description restricts management's right to assign or reassign duties, tasks and responsibilities to this job at any time.*