Position: Part-Time Engineering Services Support

Function: To assist in assuring that the present and future requirements of the electrical system are met by applying technical knowledge, sound engineering judgement, and skills.

Reporting Relationships:
Reports to: Engineering Manager
Responsible for: Non-supervisory position

Responsibilities and Authorities:
Assists the Engineering Manager and other engineering personnel in the following:

A. System Planning
   1. Produces Long Range Engineering Plans and Construction Work Plans, by consulting with the Rural Utilities Service (RUS), consulting engineers, the Engineering Manager, Engineering and Operations personnel, and the General Manager, and acquires RUS approval of these plans as required.
   2. Performs and reviews studies and prepares plans relating to sectionalizing, overcurrent protection, device coordination, overvoltage protection, voltage improvement, power factor correction, load balancing, and system reliability.
   3. Routinely analyzes the electrical transmission and distribution systems by utilizing engineering planning and analysis software to identify system problems and abnormalities.
   4. Prepares or directs the preparation of system data used for system analysis studies.

B. System Design
   1. Develops specifications, assists in evaluating quotes, and makes recommendations regarding the purchase of power transformers, distribution transformers, voltage regulators, overcurrent protection equipment, substation materials and equipment, and other equipment or materials to be used on the electrical system.
   2. Designs power systems to serve subdivisions and large commercial and industrial customers to ensure that they are electrically and economically well designed and are in accordance with good engineering practices and RUS specifications.
   3. Reviews information gathered from monthly substation readings, the SCADA system, engineering and operations personnel, and consumers to identify problem areas on the electrical distribution system; makes recommendations to eliminate problems and improve reliability.
   4. Works with engineering personnel, sales engineers and manufacturer's representatives to prepare specifications, resolve problems, and investigate new

product developments and technologies as they relate to the Association's electrical and automation systems.

C. System Operation and Maintenance
   1. Maintains records of system equipment such as capacitors, voltage regulators and overcurrent protection devices.
   2. Maintains files on substations and other important facilities.
   3. Reviews and analyzes the Association's rates.
   4. Reviews and analyzes monthly power bills from the Association's power supplier.
   5. Consults with Engineering and Operations personnel to plan and implement alternate feed arrangements and switching operations to allow for voltage conversion, construction, planned maintenance, and power restoration.
   6. Maintains the Geographic Information System map and distribution system model (including the staking design system) and trains personnel in using this system.
   7. Assists SCADA Technicians in maintaining the SCADA system and ensuring that equipment specified for line and substation construction projects will be compatible with the system. Trains Operations personnel in operating the system.
   8. Working independently or in conjunction with outside consultants, performs routine and emergency testing of major system components such as power transformers, relays, and circuit breakers. Uses test results to diagnose and mitigate problems with these components.
   9. Performs other duties as assigned by supervisor.

Qualifications

Education/Experience: Seeking a Bachelor of Science degree in an engineering field is required. Seeking a degree in Electrical Engineering is desired.

Job Knowledge: Should have basic understanding of electrical circuit analysis, trigonometry, and calculus. Should be able to obtain a working knowledge of GIS, CAD, and analysis software.

Abilities and Skills: Must be a problem solver, organized, and future-oriented. Ability to isolate problems and use resolution skills is required. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form is mandatory. Ability to quickly adjust to schedule changes and to set and follow priorities necessary. Ability and desire to work in a team environment as well as individually needed.

Working Conditions: Both office environment and outside weather conditions exist for this position. Subject to field work on special projects. Must be able to work outdoors in cold wintry conditions as well as the heat of summer. Required work may be dirty and dusty. May work under close supervision near live electrical circuits during field work.

Physical Requirements: Regularly required to talk, sit at a desk, or in a vehicle. Work requires repetitive motions with hands and fingers such as keyboarding and dialing. Regularly required to walk, and to reach with hands and arms. Infrequent requirement to stoop, kneel, or crouch and to balance in order to reach high places. Lifting and carrying

of 10 to 50 lbs. required infrequently. Specific vision abilities required include depth perception with the ability to focus in order to meet the need for inspecting and verifying improvements and replacements of power line and equipment on the distribution and transmission system. Close vision is needed to work on computer systems. Noise level is generally moderate. Must be able to use office equipment such as copier, computer, and telephone. Must be able to communicate effectively with individuals and groups of people. Ability to read and write English required.

Compensation: The monthly rate for this position is $20/hour based on qualifications, operational needs and other considerations permitted by law. The amount may vary above and below the stated amounts, as permitted by Colorado Equal Pay Transparency Rule 4.1.2.

Approved:_____ Date: April 7, 2025
General Manager