Distribution System Engineer Highline Electric Association Holyoke, Colorado

Highline Electric Association (HEA) in Holyoke, Colorado and Y-W Electric Association, Inc. (YWEA) in Akron, Colorado, are currently seeking a qualified candidate to fill the position of System Engineer in the Electrical Engineering Department. This engineer will be stationed in the Holyoke office and report to the Engineering Manager.

All engineering duties for the two cooperatives are fulfilled by an existing team of four electrical engineers, two based in Holyoke and two based in Akron. The qualified individual will have strong communication and coordination skills and work closely with operations personnel, communications technicians, and staking engineers to assure that the overall needs of the Cooperatives are met.

Responsibilities include:

System planning studies, substation design/modification, contract administration, system protection, voltage drop analysis, power factor analysis and correction, mapping system management, Supervisory Control and Data Acquisition system operation, and system modeling.

Qualifications:

B.S. in an engineering field is required. Degree in Electrical Engineering is desired. Completion of the Fundamentals of Engineering exam is desired. Prior utility experience desired but not required. Ability to register as a Professional Engineer within five (5) years is desired.

Wage and Benefits:

HEA offers a System Engineer salary range from \$126,130 to \$146,748 annually, based on qualifications and experience. In addition, benefits include medical and life insurance, 401k retirement with 15% employer contribution, paid time off, sick leave, and holidays.

Applications will be accepted until the position is filled. Interested persons should e-mail or mail resume along with references to:

Human Resources
Highline Electric Association
E-mail: jobs@hea.coop
P.O. Box 57
Holyoke, CO 80734

About Highline Electric Association: HEA was incorporated in 1938 and is headquartered in Holyoke, Colorado, with additional offices in Sterling and Ovid. A team of just over 50 employees provides reliable and affordable electric service to approximately 10,500 meters on 5,100 miles of line throughout Northeastern Colorado and Southwestern Nebraska. With friendly people and a calm community, Holyoke is a great place in which to raise a family with small-town values. To learn more about our cooperative and the communities we serve, please visit our website at www.hea.coop.



About Y-W Electric Association, Inc: YWEA was incorporated in 1945 and is headquartered in Akron, Colorado. With just under 50 employees, YWEA provides reliable and affordable electric service to approximately 9,000 meters on 3,800 miles of line throughout Washington and Yuma Counties. To learn more about our cooperative and the communities we serve, please visit our website at www.ywelectric.coop.

-An Equal Opportunity Employer-





Position: System Engineer

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; and to provide accurate data and recommendations to the Manager of Engineering for the purpose of determining the electrical system's present and future requirements.

Reporting Relationships:

Reports to: Engineering Manager

Responsible for: Non-supervisory position

Responsibilities and Authorities:

Within the limits of approved board policies, operating guides and procedures, assumes responsibility and has commensurate authority for the following activities.

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.
- Reviews Long Range and Construction Work Plans for needed modifications or additions, prepares amendments as needed, and seeks RUS approval.
- 3. Completes Borrower's Environmental Reports (BERs) for all Construction Work Plans and amendments as required by RUS.
- 4. 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. Approves the results of these plans and studies, and recommends changes in consultation with the appropriate Engineering and Operations personnel.
- Routinely analyzes the electrical transmission and distribution systems by utilizing engineering planning and analysis software to identify system problems and abnormalities.
- 6. Prepares or directs the preparation of system data used for system analysis studies.
- 7. Assigns Construction Work Plan reference codes to completed Work Orders.

B. System Design

- 1. Develops, administers, and closes Equipment Contracts, Engineering Service Contracts, Construction Contracts, and contracts for other services required by the Association. Manages projects associated with these contracts.
- 2. Obtains estimates from consulting engineering firms, contractors, and vendors for needed services or assistance.

- 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.
- 4. 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.
- 5. 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.
- Stays abreast of all standards and developments regarding the application of electrical equipment, devices, cables, etc. as they apply to the Association's electrical system.
- 7. 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 Outage Management System, trains personnel in entering data into and operating the system, assists Operations personnel in keeping accurate records of the Association's outages, and reviews outage records in support of the planning functions.
- 7. Maintains the Geographic Information System map and distribution system model (including the staking design system) and trains personnel in using this system.
- 8. Supports Operations personnel in the writing, review, and/or direction of switching orders, including coordinating with the Association's power supplier, area transmission companies, neighboring utilities, and affected key accounts.
- 9. 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.
- 10. Assists Operations personnel with dispatching and outage management via the SCADA, OMS, and AMI systems.
- 11. 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.
- 12. Performs other duties as assigned by supervisor.

Qualifications

Education/Experience: A Bachelor of Science degree in an engineering field is required. A degree in Electrical Engineering is desired. Registration as a Professional Engineer (PE) in the states of Colorado and Nebraska is highly desirable. Experience with an electrical distribution system, preferably an electric cooperative, is desired. It is expected to require three (3) years in this position to become proficient.

Job Knowledge: Should have or develop an effective working knowledge of RUS specifications, requirements, procedures, and accounting as they apply to planning, purchasing, construction, retirement, contracting, operations, and maintenance associated with an electrical distribution system. Must have or develop an effective working knowledge of the National Electrical Safety Code (NESC). Should be familiar with the general requirements of the National Electrical Code (NEC). Must be able to obtain a working knowledge of GIS and analysis software, AMI/Load Management software, and Unix and Windows operating systems.

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. Must be able to initiate and complete projects without supervision. Written and verbal skill in communicating Association practices, policies and programs to Association employees needed. Should be skilled in working and communicating with members and the public. Must be skilled in planning, designing, and preparing specifications to meet the Cooperative's requirements for electrical distribution. Must have a good understanding of automated technologies and how to apply them to the Cooperative's needs. Ability and desire to work in a team environment as well as individually needed. Must maintain a valid driver's license.

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 near live electrical circuits during field work. Some travel outside of service area for training and meetings will be required. Training may last up to a week. Subject to irregular hours and outside work in adverse weather conditions during emergencies/outages.

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. May occasionally assist in moving and/or lifting up to 100 pounds while loading materials or equipment. 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 required.

Approved:

General Manager

Date: March 20, 2023