

Maquoketa Valley Electric Cooperative
Job Description NRECA Job Code – 160

Job Title: Engineering Technician – Substation/System Automation

Department: Technical Services

Reports To: Technical Services Manager

FLSA Status: Nonexempt-Hourly

Prepared By: Human Resources

Prepared Date: January 23, 2026

Approved By: Dean Koopmann

Approved Date: January 26, 2026

SUMMARY

The Engineering Technician assists in providing continuous and reliable electric service by installing, testing, and maintaining all distribution automation (SCADA, line equipment, etc.) and substation equipment. The Engineering Technician will also assist with the operation and maintenance of computer network, telephone systems, and radio communication systems.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended to describe the general nature and level of work being performed by the individual. They are not intended to be construed as an exhaustive list of all responsibilities. The Engineering Technician shall be required to perform any other duties assigned to fulfill the objective of the Cooperative.

1. Perform work in a safe manner and in accordance with Cooperative Operating Procedures
2. Install, diagnose and repair SCADA equipment
3. Test, maintain, and repair all substation equipment. Prepare the necessary reports, logs and documentation
4. Maintain reclosers, regulators, capacitors, switches and breakers. Repair, rebuild, test and calibrate hydraulic and electronic devices on these units. Prepare the necessary reports, logs and documentation
5. Program and test electronic controls for regulators and reclosers
6. Maintain MVEC radio and telephone systems
7. Inspect and document inspections for substation equipment and distribution automation equipment in accordance with Cooperative maintenance and inspection schedules

8. Perform dielectric testing of oils and equipment
9. Assist the metering department as needed
10. Conduct safety inspections on vehicles, tools and safety equipment as needed
11. Maintain work order paperwork for inventory and recordkeeping purposes
12. Inspect work after completion to ensure that it has been done in accordance with applicable specifications and codes
13. Comply with all traffic laws, safety rules and regulations while operating assigned vehicles. Maintain awareness of the safety of the vehicle, its occupants and its load
14. Assist with the installation, repair and maintenance of Cooperative property and facilities as needed

SUPERVISORY RESPONSIBILITIES

This position has no supervisory duties.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform the duties listed in the job description. The individual must be able to maintain records required to document work performed and account for time and materials. They must have or be able to obtain a valid Iowa CDL, operate assigned equipment and be proficient in first aid methods and CPR.

Must be able to read and interpret wiring diagrams, equipment manuals, electrical maps and other similar materials. Should have basic knowledge of electronics and substation equipment. Should have a working knowledge of National Electric Code and National Electric Safety Code.

Education and/or Experience

An associates degree in electronics, engineering or a related field or equivalent work experience is required. This position is required to participate in ongoing technical and safety training.

At least three years' experience in distribution automation equipment and substation equipment operation and maintenance is preferred.

Language Skills

This position must have the ability to read, analyze and interpret technical manuals and effectively present information and respond to questions from managers and co-workers.

Mathematical Skills/Computer Skills

Basic math skills are required, as well as proficiency with Microsoft Word and Excel

Reasoning Ability

Ability to apply common sense understanding and to carry out instructions furnished in written or oral form; ability to define problems, collect data, establish facts and draw conclusions.

Required licensing or certifications

Valid Iowa CDL (or ability to obtain)

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. While performing the duties of this job, the employee is regularly required to sit, use hands to finger, handle or feel; reach with hands and arms; and talk or hear. The employee is required to stand. The employee is required to walk. The employee will regularly lift 50 pounds and occasionally lift up to 100 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. A combination of inside and outside work in all kinds of weather will be required. Irregular hours including nights, weekends and holidays may be involved particularly during emergency situations. **Overtime is required.**

EXTERNAL RELATIONSHIPS

This position will also work frequently with people outside the Cooperative, extending a positive professional image of Maquoketa Valley Electric Cooperative in all communication and actions.

General Public: Maintains friendly, cooperative relationships with the general public in the performance of responsibilities.

Dealerships and Vendors: Receive and exchange information, purchase equipment, resolve problems and take corrective action as necessary.

Other Utilities: Exchanges information and coordinates projects