

**Maquoketa Valley Electric Cooperative**  
**Employee Job Description NRECA Job Code 55-6434**

**Job Title:       Apprentice Lineman**

**Prepared by: Human Resources**

**SUMMARY**

This position becomes proficient in the construction, maintenance, and operation of overhead and underground distribution lines and transmission lines and operates substations. Keeps informed on changes in the industry and learns and complies with all safety policies, procedures, rules and regulations.

**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 Apprentice Lineman shall be required to perform any other duties assigned in order to fulfill the objective of the Cooperative. Under the direction of the Line Foreman or Lead Construction or Maintenance Lineman, the Apprentice Lineman acquires the skills to successfully carry out the following activities:

1. Performs all the necessary activities in the construction and maintenance of energized and de-energized overhead and URD distribution lines. Activities include but are not limited to the following:
  - a. Frames, sets and aligns poles
  - b. Strings armor-rod
  - c. Sags and ties in conductors on all types of poles and structures
  - d. Installs and changes out all transformers
  - e. Installs underground primary and secondary lines, pad mount transformers and related equipment
  - f. Performs hot line work
  - g. Operates line trucks and bucket trucks and other assigned equipment.  
Ensures that these are maintained in good working condition.
2. Loads and unloads poles, transformers and other materials
3. Assists in adjusting, setting and operating regulators, oil circuit reclosers, cutouts, and other line devices.
4. Assists in the maintenance and operation of all substation facilities
5. Learns how to install security lights
6. Learns how to install single-phase and three-phase metering equipment
7. Pulls scheduled stand-by duty and emergency maintenance, as required
8. Trims trees and clears right-of-way, as required.
9. Reads and sets meters, as required
10. Collects delinquent accounts, as required

11. Is familiar with system circuits and knows line feeds
12. Patrols the line and checks for defective materials, equipment or unsafe conditions and notifies crew leader or supervisor of problem areas.
13. Inspects work after completion to ensure that it has been done in accordance with applicable specifications and codes.
14. Is familiar with the considerable hazards that exist, including falls, electric shock and electric flash, automobile traffic, and falling objects. Understands and utilizes safety and protective equipment. Must be able to render first aid, CPR and pole- top resuscitation.
15. Responsible for providing a safe work environment for themselves and all employees working near them.

### **SUPERVISORY RESPONSIBILITIES**

This position has no supervisory responsibilities

### **QUALIFICATIONS**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Must be able to maintain records required for accounting of time and materials
- Must be able to demonstrate knowledge at each stage of the apprenticeship program
- Must be proficient in first-aid methods and CPR

### **Education and Experience**

High School graduate or equivalent required. Post high school training in electricity and in powerline courses is required. Position is required to participate in ongoing technical and safety training including hot line schools, applied electricity course, etc.

### **Required Licenses or Certifications**

Valid Iowa CDL

### **Language Skills**

This position must have the ability to read, analyze, and interpret maps, work orders and written instructions, as well as the ability to effectively present information and respond to questions from managers, and co-workers.

### **Mathematical /Computer Skills**

Basic math and computer skills are required.

**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.

**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.

Employee required to operate vehicles that include but is not limited to:

- (i) Aerial lift
- (ii) Trencher
- (iii) Digger derricks
- (iv) Cranes
- (v) Dump trucks
- (vi) Forklift
- (vii) Backhoe Trucks
- (viii) Cable Plow
- (ix) Tampers
- (x) Skid Loaders
- (xi) Tractor Loader Backhoe

- (2) Employee uses a variety of hand tools, machines and special equipment that include but is not limited to:

- (i) Chain saw
- (ii) Air hammer
- (iii) Tree trimmer
- (iv) Boring tools
- (v) Snowplow
- (vi) Crimping tools
- (vii) Hydraulic tools
- (viii) Compressor
- (ix) Torches
- (x) Portable generator
- (xi) Shovel
- (xii) Chipper
- (xiii) Variety of hand tools
- (xiv) Climbing hooks and belts

- (3) Lifting/Carrying:

On a frequent to continuous basis, employee is using a variety of hand tools throughout the day, weighing approximately 10 to 50 pounds. On an occasional basis, up to one-third of the day, employee is lifting and carrying 10-50 pounds of cable equipment and tools. The heaviest weight a worker is required to carry is a conductor, weighing up to 60-100 pounds. This is lifted on average of several times per week, usually with the assistance of another employee.

- (4) Reaching:

- (i) For the majority of the day, up to two-thirds, the employee is reaching below shoulder height. The employee is working below shoulder height while performing maintenance work on substations and while operating a variety of equipment.
  - (ii) The employee is also working at shoulder height on an occasional basis, occasionally reaching four - six feet out to the side while performing line maintenance work.
  - (iii) On an occasional basis, employee is also reaching above shoulder height while working from the pole, maintaining equipment and working with the conductor.
  - (iv) Employee may also be using and reaching from eight, ten and twelve foot ladders to check the connections on a house. This may be done on a daily basis.
- (5) Pushing/Pulling:
- (i) On a continuous basis, employee may be required to push and pull and lift while using a five foot shovel and while pulling cables which may be lying in a trench.
  - (ii) Most often this work is done independently, but occasionally is done with another employee. The cables weigh 2-3 pounds per foot and are dispensed in heavy reels.
  - (iii) The employee is also pushing and pulling while loading poles, and while using crimping tools and other various tools and equipment.
- (6) Climbing:
- (i) On an occasional basis, employee is required to climb out of trenches which may be up to four feet deep. During the summer months, this is done on a daily basis.
  - (ii) On an occasional basis, employee is also climbing an eight to twelve foot ladder to check the connection on a house or trim a tree. This is also occasionally done from a pole.
  - (iii) Employee must be able to climb a pole a minimum of 40 feet, work from heights, and rescue other linemen if required.
  - (iv) Employee is climbing two to three steps in to and out of the truck on a continuous basis throughout the work day. The employee is required to climb these steps an estimated ten to twenty times per day.
- (7) Twisting/Rotating:
- (i) Continuous twisting and rotating from the hips, shoulders, and neck is required throughout the work day.
  - (ii) The employee is twisting and rotating from the hips and shoulders while shoveling dirt and while operating equipment. The employee is twisting from the neck on a continuous basis while working on the pole.
- (8) Handling:

- (i) On a continuous basis, finger dexterity is required to operate a variety of hand tools and while stripping cable.
  - (ii) Simple and firm grasping and gripping is required while using the crimping tools and while operating the bucket. Gripping and grasping is also used throughout the day while shoveling and while using hand and power tools.
- (9) Stooping/Bending/Squatting:
- (i) Stooping, bending, and squatting are performed on a frequent basis throughout the work day.
  - (ii) The employee is stooping on a frequent basis while shoveling. Shoveling with a five foot shovel may be required up to two-thirds of the work day.
  - (iii) The employee is bending while working on cables, conductors, or pieces of equipment.
  - (iv) The employee may be required to squat for short duration while working on various equipment.
- (10) Kneeling:
- (i) The worker may be kneeling on a frequent basis while working on underground transformers and while performing other underground work.
  - (ii) During the summer, working in trenches may be required on a daily basis. This is required less often during the winter months.
- (11) Standing/Walking/Sitting:
- (i) For the majority of the work day, the worker is standing. It is estimated the worker stands approximately fifty percent of the day. The employee may be standing while performing maintenance work on the lines, substations and equipment.
  - (ii) The worker is walking approximately thirty percent of the day. Since the employee works outdoors, the worker may be exposed to uneven ground, ice, snow, and mud when the employee is walking to reach the worksite, to move equipment and tools from the truck to the worksite, and while moving cable.
  - (iii) The worker is sitting approximately twenty percent of the day while riding or driving in the truck to and from the worksite. In addition, the worker is required to attend meetings and to complete time sheets and reports as required daily.
- (12) Talking/Hearing:
- (i) Since employee may be required to work independently or work with other employees as a team, talking is required to communicate with team members. The employee is talking while coordinating work activities with other team members and while communicating with dispatch over two-way radio.
  - (ii) Hearing is required in order to receive instructions and direction from the person in charge. Hearing instructions over two-way radio from dispatch is also required on a frequent basis throughout the work day.

- (iii) In addition, talking and hearing while operating and working around potentially dangerous tools and equipment is necessary as a safety concern for the employee and other team members.

(13) Vision:

- (i) Specific vision abilities required by this job include close vision, distance vision, color vision and ability to adjust focus.
- (ii) Good eyesight and ability to identify colors, particularly red, white green and blue, are used to identify appropriate parts and equipment. Color coding is used on energized cables of the electrical system to identify phases.
- (iii) Depth perception is also used by the worker to recognize distances from the conductor and is required on a continuous basis to maintain safety for the employee.
- (iv) The employee must have the ability to read specifications, diagrams, map books for work locations, and numbers on parts and equipment.

(14) Working Above Ground:

- (i) On a frequent basis, worker is working above ground in a bucket while performing maintenance work.
- (ii) On an occasional basis, worker is working above ground on poles. These poles, on average, are 35 to 40 feet above the ground. A variety of climbing and safety equipment is used by the employee while climbing and working on the pole.

(15) Foot Controls:

The employee uses foot controls on a continuous basis while operating a variety of vehicles. Foot controls are used while operating digger derricks, trucks, backhoe, pickup trucks, and forklifts, etc., etc.

### **Physical Assessment**

The employee must be able to pass the pre-employment physical which includes the Job-Task Assessment listed on Attachment A at the end of this document.

### **Work Environment**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Outside work in all kinds of weather is required. Irregular hours including nights, weekends and holidays may be involved particularly during emergency situations. Overtime and participation in the on call rotation is required. If bad weather is forecast, the employee must consider the possibility of being called into work even when not on call.

## **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.

**Member-Consumers:** Advises and assists member-consumers in every way possible. Takes advantage of the opportunity to obtain increased understanding and acceptance of cooperative objectives, policies, plans and programs.

**General Public:** Maintains friendly, cooperative relationships with the general public in the performance of responsibilities. Ensures their safety at all times they may be present on a Cooperative job-site.

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## ATTACHMENT A

Maquoketa Valley Electrical Cooperative  
LINEMAN POSITION  
JOB TASK ASSESSMENT

Client Name: \_\_\_\_\_ SSN: \_\_\_\_\_  
Tester: \_\_\_\_\_ Date: \_\_\_\_\_

<b>Grip strength:</b> Minimum 80 lbs, 3 reps each hand	Yes	No
<b>Step-up into cab:</b> 25" off floor, using handholds, 3 reps	Yes	No
<b>Simulated hydraulic hose pulling:</b> 30 lbs for 10 feet, 4 reps	Yes	No
<b>Sustained forward bend posture</b> (light hand work at 36" height) for 2 minutes	Yes	No
<b>Sustained forward reach</b> (light hand work at 48" height) for 2 minutes	Yes	No
<b>Lifting:</b> 10 lbs, (single-arm) waist-to-above head, 5 reps	Yes	No
40 lbs, floor to 36", 5 reps	Yes	No
80 lbs, floor to 48", 2 reps	Yes	No
<b>Carry:</b> 40 lbs, 40 feet, 3 reps	Yes	No
80 lbs, 40 feet, 1 rep	Yes	No

**Simulated Shoveling:** 2 minutes with 10 lb load (two 10 second rest breaks allowed)      Yes      No