

JOURNEY/MASTER ELECTRICIAN

BURKE-DIVIDE ELECTRIC COOPERATIVE, INC.

1 POSITION FUNCTION:

To provide for effective and efficient wiring, installation and maintenance on electrical services and equipment for consumers with or without supervision in a safe, logical manner complying with all electrical codes and safety regulations

2 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) Performs electrical installation and maintenance activities and makes decisions at the job site as to wiring methods and materials to complete the job in compliance with state and national electrical codes and to the member's satisfaction.
- (b) Performs electrical maintenance, installation, repairs and Cooperative offices, shops and warehouses.
- (c) Performs locates of consumers secondary lines and provides the correct documentation to assure proper billing
- (d) Provides effective and efficient advice, assistance, and service to the members and consumers to assist them in achieving a safe and efficient electrical operating system
- (e) Informs the immediate supervisor and the general manager, of conditions which are unsafe or prevent the proper operation of completed installations so that the Cooperative can assist consumers in correcting hazardous conditions.
- (f) Prepares time and material reports as required to allow for proper billing. Hands in billouts for jobs in a timely orderly manner and assures proper inventory items and non inventory items are fully accounted for on each job.
- (g) Assists with year-end physical inventory of all electrician parts in a timely manner.
- (h) Maintains, accounts for and reconciles material inventories for assigned jobs to help assure that proper materials inventories are available as needed. Responsible for ordering materials and supplies according to the cooperative purchase order guidelines.
- (i) Makes frequent checks of tools and protective equipment and attends and participates in safety meetings to become aware of safety rules and regulations and to help assure that safe working practices are followed and a safe working environment exists for the individual, fellow employees and consumers.
- (j) Keeps fully informed of established state and national electrical codes and keeps up to date on required testing and licensing to assure that the Cooperative is meeting the necessary regulations and requirements.
- (k) Electricians are required to do a wide range of jobs on numerous electrical and electro-mechanical pieces of equipment, including, but not limited to, low and medium voltage motorized breakers, motors up to 6,000 horsepower, load centers, switch gear, electrostatic precipitator controllers, soot blower systems, fire protection systems, communications systems, grounding systems, lighting systems, heating and cooling systems, elevators, and generator excitation equipment. With respect to the systems and equipment listed above, the following duties are performed:
 - A. Inspection of the equipment and systems, including, but not limited to, the following duties:

1. using sight, hearing, and the sense of touch and smell to examine the equipment and systems for defects and operating modes outside normal parameters
 2. using test equipment, control schematics, and other tools to examine the equipment and systems for root cause of defects and operation outside design parameters or to compare actual system design to engineering drawings and other schematics
 3. dismantling, troubleshooting, and reassembling equipment and systems to examine parts that cannot be examined when the equipment is intact
 4. identifying root cause of defects and failures and recommending repairs or other measures to eliminate the defect or failure
 5. maintaining clearance orders as appropriate
- B. Installation of equipment and systems, including, but not limited to, the following duties:
1. rewiring equipment and systems
 2. cutting, threading, and bending conduit
 3. installing new wiring and cables in equipment and systems along raceways and other paths
 4. connecting equipment and systems to power sources
 5. fabricate and install brackets, hangers, and panels for equipment and systems
 6. rigging, lifting, and bracing heavy motors and other equipment in its designed location
 7. returning the equipment and systems to service
 8. maintaining clearance orders as appropriate
- C. Removing equipment and systems, including, but not limited to, the following duties:
1. using hand tools, cranes, forklifts, rigging, and other tools and equipment to remove brackets, hangers, and panels and to remove specific equipment from its normal location
 2. disconnecting wiring from the equipment and systems on which work is done
 3. dismantling equipment and systems to facilitate inspection, repair, and replacement
 4. maintaining clearance orders as appropriate.
- D. Repairing equipment and systems, including, but not limited to the following duties:
1. replacing defective parts
 2. fabricating parts as needed
 3. temporarily bypassing defects to assure operation of equipment and systems
 4. returning the equipment and systems to normal operation
 5. maintaining clearance orders as appropriate
 6. Safely operating equipment, including, but not limited to, the following:
 7. rigging
 8. hoists
 9. mobile and overhead cranes
 10. forklifts
 11. mechanical work platforms

12. megger
13. double test equipment
14. high potential test equipment
15. relay test equipment
16. digital and analog multi-meters
17. oscilloscope
18. amp meters
19. telephones
20. two-way radios
21. respirators
22. cars and utility vehicles
23. aerial lifts
24. computer and terminal
25. miscellaneous hand tools and hydraulic tools

(I) Miscellaneous duties include, but are not limited to:

1. contributing to overall plant safety by adhering to safety standards
2. assisting in the instruction and on-the-job training of apprentices and trainees as assigned
3. keeping personal work areas clean and free of safety hazards
4. providing assistance with the Cooperative's Annual Meeting
5. performing other duties as assigned

3 DIFFICULTY OF WORK

The work is highly technical and analytical in nature. It requires excellent eye/hand coordination and the ability to work with small components and delicate instruments. The work requires extensive walking, climbing, crawling, bending, and working in awkward positions. The work also requires the application of independent reasoned judgments, mechanical aptitude, and abstract reasoning pertaining to the identification, analysis, evaluation, and disposition of the job duties listed above. In addition, the employee may be required to work in high or confined places and may be exposed to extremes of temperature, noise, dust, fumes and high voltages. The hours of work are generally daylight hours from Monday to Friday, but will include overtime at any time of the day or week. The employee must be able to adapt to revised schedules and long hours of work, manage changes in methods and priorities of work, and deal with disputes professionally.

Guidelines consist of supervisory directions, written procedures, diagrams, drawings, and independent judgment.

4 RESPONSIBILITY/ACCOUNTABILITY

The employee will be accountable for safely and satisfactorily completing jobs as assigned. The employee will be responsible for analyzing all requirements to complete a job, recognizing impediments to satisfactory completion, and seeking guidance when needed.

5 RESPONSIBILITY FOR OTHERS

The employee may have utility workers, apprentices, and trainees assigned to work as assistants. In such cases, the employee is responsible for directing their work and assuring that they perform it safely.

6 INTERNAL RELATIONSHIPS

Contacts are both internal and external. Internal contacts are with supervision and other plant personnel. External contacts are with vendors and technical representatives of equipment manufacturers and most importantly our consumers

The above statements are intended to describe the general nature and level of work being performed by personnel assigned to this position. They are not intended to be an all-inclusive list of responsibilities, duties, or requirements for personnel in this position. This description is subject to periodic review and change as needed.

7 EDUCATION

High school diploma or equivalent required. Graduation from vocational/technical school in wiring program required. Successful completion of a qualified four-year Journey/Master Electrician training program or equivalent on the job training required. Educational requirements for Certification as Journey/Master Electrician must be maintained.

8 EXPERIENCE

Four years of experience as an Apprentice Electrician required. An additional two years of experience in electrical wiring may be substituted for vocational/technical education.

9 JOB KNOWLEDGE

Knowledge of electrical wiring principles and techniques, National Electric Code and local requirements, and applicable OSHA regulations required. Must have sound knowledge of the proper and safe use of the tools and equipment used in the wiring craft. Must have a thorough knowledge of first aid and CPR.

10 ABILITIES AND SKILLS

Must be skilled in the use of wiring tools and techniques. Must be able to apply knowledge of code requirements to field conditions. Ability to operate trencher, backhoe, digger/derrick, bucket truck and vehicles used for towing required.

11 PHYSICAL REQUIREMENTS

Heavy work requiring exertion of up to 100 pounds of force occasionally and/or up to 50 pounds of force more frequently and or/up to 20 pounds of force constantly to move objects. Lifting and carrying of 10 to 50 pounds occasionally. Reaching and lifting overhead is required. Job requires standing, crawling, climbing, bending, and pulling majority of the time. Variety of inside and outside environments. Exposure to varying temperature conditions including cold below 32 degrees and heat above 100 degrees. Includes exposure to mechanical hazards, electrical, burns, confined space, radiant heat, work at heights and operating machinery. Some exposure to fumes, odors, gases, chemicals, dust and dirt. Must be able to read, write and do arithmetic. Safety equipment required. Must be able to communicate with individuals. Driver's license required.