

MISHAWAKA UTILITIES – ELECTRIC DIVISION

A. JOB TITLE – APPRENTICE LINEMAN LEVEL 1

B. DEFINITION

Under the direction and supervision of a Journeyman; install, maintain, repair, test, operate and replace all three phase and single phase primary lined, both overhead and underground; all secondary lines, both overhead and underground; all transformers, three phase, single phase and aerial. Install all metering, current transformers and voltage transformers for both secondary and primary metering. Install all switching, fusing, cutouts, lightning arresters, tie switches, and capacitors for both overhead and underground systems. Locate and repair all faults on underground lines, both primary and secondary. Install all utility poles, cross arms, cross arm braces, down guys, span guys and anchors. Operate all substation protection devices. Reports to and accepts assignments from Crew Leader, Construction Foreman and Superintendent.

C. EQUIPMENT USED

Must have sufficient knowledge and dexterity to operate:

1. Aerial lift devices
2. Material handling line trucks
3. Lift trucks
4. Backhoes
5. Trenchers
6. Pipe pushing equipment
7. Concrete saws
8. Compactors
9. Welders
10. Pipe Threading machines
11. Pipe bending machines, both manual and automatic
12. Air compressors and jack hammers
13. Drill presses, power hand held drills
14. Grinders, stationary and hand held power grinders
15. Band saws and powered hand held saws
16. Electrical power recording devices
17. Electric voltage and amperage recording devices
18. Electrical measuring equipment for voltage, amperage, a/c, d/c, ohm's and resistance.
19. Meter test equipment for calibrating and testing of single phase, polyphase and solid state metering.
20. Personal Computer, Small hand tools; pliers, hammers, screwdrivers, sockets, ratchets, clamping devices, nut drivers, wire cutters, wire strippers, sta-con tools, knives, files, wrenches, punches and splicing tools.

21. Fault finding equipment for both primary and secondary wire, meggers, hypots phasing sticks and turns test ratio equipment.
22. Use ropes, blocks and tackle; slice rope, make correct knots for lifting, typing, transporting and rigging of equipment.
23. Shovels, pick, axes, sledge hammers, manual and powered tamping tools
24. Hot line and line hoses.

D. JOB LOCATION

Apprentice Lineman work is performed at customer residences, businesses (both industrial and commercial), in areas under construction; and both overhead and underground.

E. PHYSICAL REQUIREMENTS

Must be able to walk, bend, stoop, crawl, crouch, kneel, reach, climb utility poles a minimum of 60 feet in height, climb ladders both up and down, climb stairs both up and down, lift a minimum of 75 pounds without assistance and have color vision. Must be able to sit for extended periods of time. Must be able to do balancing, pushing, pulling, handling, fingering, talking, seeing, hearing, and turning. Must wear approved safety shoes or boots.

F. ENVIRONMENTAL/WORKING CONDITIONS

Must be able to work with others in the performance of line work both overhead and underground. Must be able to perform duties inside, outside, in rain, sleet, snow, very hot, very cold, very humid, dusty, noisy, dirty, cramped quarters, windy and high places up to a minimum of 60 feet, be exposed to flash burns and material explosions. Must be able to walk on wet grass, wet leaves, and heavy dew and frost covered ground. Must be able to work around all type of animals and insects; such as dogs, cats, livestock, bees, wasps, and fleas. Must be able to work around obstacles such as trees, bushes, enclosures, roofs of buildings, basements and on utility poles. Must be able to work during high pollen and mold spore count days.

ESSENTIAL FUNCTIONS OF THE JOB

Must work well with others under direct and supervise the installation of primary three phase and single phase lines, both underground and overhead. Must work with others in the installation of three phase and single phase transformers both underground and overhead. Must work with others in the installation of residential, single phase and three phase demand meters and installation and wiring of current transformers and voltage transformers for metering both secondary and primary. Must work with others to install utility poles, cross arms, insulators, switches, disconnects, fuses, taps, pole mounted switching and current tie devices and cutouts. Must be able to work with, on, in, and around energized and de-energized lines above 600 volts both primary and secondary from utility poles, from aerial lift devices and with material handling line trucks. Must be

able to locate and repair (splice) both primary and secondary underground residential and underground distribution lines. Must be able to take out of service and put in service substations for installation and repair of equipment and transformers. Must be able to make mathematical computations and calculations of moderate complexity. Must be able to determine loads and overloads of lines, circuits, transformers and metering on both primary and secondary installations. Must be able to refuse line cutouts, both primary and secondary.

G. ADDITIONAL EXAMPLES OF WORK PERFORMED

During inclement weather, clean and wash vehicles, rubber goods, stock truck, clean building and do housekeeping chores as directed.

I. REQUIRED KNOWLEDGE AND ABILITIES

Must have the ability to deal with employees, customers, and the general public in a professional manner. Must have sufficient knowledge and dexterity to use and operate equipment listed in C.

J. QUALIFICATIONS

1. Must possess a high school diploma or equivalent
2. Must possess a valid CDL class "A" license
3. Must be proficient in the application of resuscitation, first aid and pole top rescue.
4. Must satisfactorily complete IMEA climbing school or an approved equivalent.
5. Must acquire and maintain an acceptable level of efficiency in performance of job
6. Must pass a pre-employment physical and drug screening.
7. Must adhere to the City of Mishawaka's Drug and Alcohol Free Policy