

MISHAWAKA UTILITIES – ELECTRIC DIVISION

A. JOB TITLE – SUBSTATION TECHNICIAN

B. DEFINITION

Responsible for the effective implementation of a substation preventive maintenance (PM) program. This includes analyzing overall system performance trends, as well as results of PM performance, and making recommendations to enhance system reliability. Responsibilities include making appropriate personnel contacts, ensuring process flow requirements are effectively implemented, generating required design documents and updating required databases. The Substation Technician reports to and receives assignments from the Substation Supervisor.

C. EQUIPMENT USED

Must have sufficient knowledge and dexterity to operate:

1. Electrical power recording devices
2. Electrical voltage and amperage recording devices
3. Electrical measuring equipment for voltage, amperage, a/c and d/c and resistance
4. Meter test equipment for calibrating and testing of single phase, polyphase and solid state meters
5. Personal computers and industry related programs
6. Radio equipment
7. Relay test equipment, radio test equipment, megger, turns test ration and (PC) metering program equipment
8. Fault finding equipment for both primary and secondary wire, hipot, and phasing equipment
9. Small hand tools; pliers, hammers, screwdrivers, sockets, ratchets, clamping devices, nut drivers, wire cutters, knives, files, wrenches and punches.

D. JOB LOCATION

Substation Supervisor work is performed at the Electric Division Office, job sites and construction sites.

E. PHYSICAL REQUIREMENTS

Must be able to walk, bend, stoop, crawl, crouch, kneel, reach, and 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.

F. ENVIRONMENTAL/WORKING CONDITIONS

Must be able to work with others in the performance of duties. Must be able to perform duties inside, outside, in rain, sleet, and snow, very hot, very cold, very humid, and windy weather in dusty, noisy, dirty, cramped quarters. Must be able to walk on wet grass, wet leaves, and heavy dew and frost covered ground. Must be able to work around obstacles such as pallets, storage racks, vehicles, railings, on balcony and confined spaces. Must be able to work during high pollen and mold spore count days.

G. ESSENTIAL FUNCTIONS OF THE JOB (i.e., process requirements)

The Substation Technician reports to and receives assignments from the Substation Supervisor. The Substation Technician is responsible to contact and meet with appropriate personnel (such as engineering partners and equipment vendors) in order to determine system design requirements. Subsequent to making appropriate contacts, the Substation Technician issues required documentation as well as estimates of the cost of the design changes. In addition, the Substation Technician provides concurrence concerning the appropriate feed (substation and circuit breaker) to the Project Manager when significant load additions are made.

After establishing design change scope the Substation Technician oversees engineering partners in the preparation of all drawings, and reviews required circuit analysis to ensure appropriate system protection.

The Substation Technician develops engineering technical procedure for PM performance, and develops switching procedures, if required, and prepares danger tags.

The Substation Technician is responsible to walk down projects implementing system design changes to ensure integration of existing and upgraded system facilities. The Substation Technician submits Engineering Support Requests to the Supervisor the Supervisor Projects for processing to ensure construction resources are appropriately scheduled to support substation activities.

H. ADDITIONAL EXAMPLES OF WORK PERFORMED

The Substation Technician will attend, when directed, meetings with our engineering partners and contractors.

I. REQUIRED KNOWLEDGE AND ABILITIES

Must have the ability to deal with employees, customers, contractors and the general public with 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. Five years experience in management with a comparable size municipal utility with engineering department experience or experience in a related field.
3. Working knowledge of electrical distribution systems, including transformer operation, system protection schemes, relaying and transformer and circuit breaker protection standards.
4. Must have a valid driver's license.
5. Ability to read electrical prints, wiring connection diagrams, blue prints and construction drawings.
6. Proficient in the use of PC based computer equipment and software.
7. Must pass a pre-employment drug screening
8. Must adhere to the City of Mishawaka's Drug and Alcohol Free Policy.
9. Must sign and adhere to the City of Mishawaka Confidentiality Statement.
10. Must acquire and maintain a high level of efficiency in performance of job

K. MINIMUM REQUIREMENTS FOR PROMOTION

1. In order to be considered for a promotion the candidate must have demonstrated outstanding performance on assigned tasks

Employee Signature

Date

Department Manager

Date