



Job Description

Substation Technician

Pay Grade: 09

Employment Status: Full-Time

FLSA Status: Exempt or Non-Exempt

Experience Required:

Minimum Education Requirements: High School diploma or G.E.D.

Direct Supervisor: Electric Superintendent

Supervisory Responsibility: No

Primary Work Location: Substation

Certification: Completion of a 36-month period, TVPPA substation maintenance correspondence program. Valid State of Missouri CDL driver's license, at a level appropriate to the equipment operated.

Job Summary: Inspects, test, constructs, and maintains the delivery of energy to the distribution system. Troubleshoots and maintain electrical substations, capacitor controllers, voltage regulators, and other related systems as assigned for the City of Nixa.

Essential Job Functions

An employee in this position may be called upon to do any or all of the following essential duties:

- Oversee all duties of substation testing, maintenance, repairs, and oversee work completion by outside contractors.
- Perform monthly inspections of all substation equipment and routine maintenance including weed control, painting, and general cleaning.
- Oversee all phases of the construction, repair, testing, and modification on electrical substations including digging trenches, building concrete forms, pouring and finishing concrete, erecting steel towers, and structures, pulling and terminating all sizes and kinds of wire, installing equipment such as switchgear, power transformers, power circuit breakers, protective relaying systems, crushed rock, bus pipe, high voltage switches, and operators, surge arresters, and any other equipment associated with electrical substations.
- Perform preventive maintenance of all electrical substation equipment such as: switchgear, power transformers, power circuit breakers, high voltage switches, surge arresters, potential and current transformers, power cables, terminators, and any other equipment associated with electric substations.
- Perform repair, testing, modification, and perform preventive maintenance on capacitor controllers, voltage regulators, and line re-closers.
- Perform installation and repair of various communication systems such as metallic pairs or fiber optic cables.
- Safely operate all equipment necessary for the construction of an electrical substation including light trucks, bucket trucks, derrick trucks, backhoes, cranes, trenchers, and any other equipment necessary.
- Troubleshoot energized distribution substations, capacitor controllers, voltage regulators, and other related systems to determine nature of the problem and appropriate corrective actions.
- Perform manual switching and other mechanical duties to transfer load between substations to facilitate routine maintenance and emergency repair activities; patrols



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and inspects substations, transmission/distribution lines, and related equipment locations to ensure system is functioning safely and properly.

- Continue studying a variety of local, State, and national electric codes and industry standards for transmission and distribution systems including installation, construction, maintenance, and repair and industry safety standards and guidelines and materials related to electric theory.
- Complete continual training to perform a variety of journey level substation activities and keep current on all advancements in the field of electrical transmission and substations.
- Effectively perform as a member of a team in carrying out the City's organizational development plan philosophy.
- Perform other system and organizational related duties and functions as assigned.

Essential Functions, Qualifications, Knowledge, Skills, and Abilities (KSA's) for Employment

An employee in this class must have the following knowledge, skills, and abilities upon application:

Knowledge

- Knowledge of principles of substation and transformation equipment and operations.
- Knowledge of transmission and distribution principles and operations.
- Occupational hazards and safe working practices.
- Theory and principles of electricity.
- Good practices and techniques of electric utility overhead and underground transmission, distribution, and service line installation, maintenance, and repair.
- Established safety standards and industry guidelines and regulations for the tools, equipment, and materials, used in the installation, maintenance, and repair of overhead and underground transmission, distribution, service lines, and associated equipment.

Skills

- Good oral and written communications.
- Establishing and maintaining effective working relationships with other staff, and members of the public.
- Reading and understanding detailed design plans and information.
- Establishing and maintaining effective working relationships with contractors, engineers, other City employees, officials, and the public.
- Operating a variety of tools and equipment used for the installation, maintenance, and repair of energized/de-energized overhead/underground transmission, distribution, and service lines.

Abilities

- Determining probable causes of service outages and corrective actions necessary to restore services.
- Performing journey-level installation, maintenance and repair work on low and high voltage overhead and underground transmission and distribution feeder lines within or directly related to substation facilities and controls.
- Stooping, climbing, bending.
- Pushing and pulling 100 pounds, and lifting 60 pounds 3 feet above head.



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- Exposed to extreme weather conditions, dust, and/or pollen.
- Mentally analyze a situation, solve problems and make decisions under pressure in area of responsibility.

**This position description is a general guideline for work behavior and is not intended to be a comprehensive listing of all job duties. Therefore, it is also not, nor can it be implied to be, a contract of employment. The contents of this position description may be changed without notice, and employment may be terminated by either party, at will.

Signatures / Date

Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential functions of this job.

Check the appropriate box, fill in the needed accommodations, if required, then sign and date.

- ☐ I have read and understand this job description and acknowledge that I am able to complete the essential functions of my job without accommodations.
- ☐ I have read and understand this job description and I would require the following reasonable accommodations to fulfill the essential functions of this job:

_____ Employee Signature	_____ Date
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_____ Supervisor Signature	_____ Date
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_____ Human Resources	_____ Date
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