

Job Title: Substation Technician I**Location:** Service Center**Department:** Electric Substation**Job Status:** Full-Time**Reports To:** Substation Technician II**Job Grade:** 906**Pay Status:** Non-Exempt**Date Created/Updated:** 9/14/2022

Position Summary

The Substation Tech I, under direct supervision, will perform various tasks in construction, operations, and maintenance of electric substation and transmission facilities to include distribution breakers and apparatus, transmission breakers and apparatus, power transformers, control systems, structures, substation properties, and transmission rights of way. Responds during and after normal business hours to all trouble calls relating to Substations in all weather conditions. Demonstrates safe driving habits and maintains a clean driving record. Expected to learn NBU systems and processes in order to execute both routine and abnormal work activities safely and efficiently. The Substation Tech I develops skills and knowledge developing the overall team's capability.

Essential Duties & Responsibilities**SUBSTATION AND TRANSMISSION OPERATIONS**

- Responsible to maintain clean and organized work areas such as:
 - Service Trucks
 - Control Houses
 - Storerooms and work stations
- Assist as instructed with
 - Substation and transmission operations tasks
 - 12.5 kV and 138 kV switching operations
 - Information gathering activities
- Support NBU staff with tasks related to or collocated with substations and transmission rights of way
- Learn about substation design plan sets and technical specifications with guidance from senior substation personnel
- Schedule, plan, and successfully complete an approved general substation technician training program

SUBSTATION AND TRANSMISSION MAINTENANCE

- Assist as instructed with periodic site and equipment inspections, report findings, and routine maintenance items to ensure proper operation such as:
 - Change compressed gas cylinders
 - Equipment maintenance as prescribed by manufacturer
 - Replace, adjust, and modify equipment and components
 - Conduct infrared camera inspections and address areas of concern
 - Power and control wiring repairs
- Assist as instructed with periodic and reactive inspections of transmission lines and rights of way and report findings

SUBSTATION AND TRANSMISSION CONSTRUCTION

- Assist as instructed with building, modifying, and enhancing substation and transmission facilities
- With guidance from senior substation personnel learn how to ensure safety and quality of construction and capital improvement activities performed on and around NBU facilities by others such as:
 - Contractors and consultants

- NBU staff
- LCRA and other utility Personnel
- With guidance from senior substation personnel learn how to perform construction project management duties such as:
 - Review and develop construction project contracts, design drawings, and specifications
 - Supervise contractors and consultants and inspect their work products
 - Resolve requests for information and change orders
 - Resolve material procurements
 - Review project after completion and report successes, lessons learned, and opportunities for improvement

GENERAL RESPONSIBILITIES

- Ability to work
 - on and near equipment energized at hazardous voltage levels
 - in confined spaces and at hazardous heights
- Ability to read, write, and understand verbal and written communications in English
- Ability to understand design plan sets and technical specifications
- Ability to lift and carry tools, equipment, and materials in hazardous environments and across uneven ground
- Ability to distinguish colors accurately
- Maintain regular attendance; leave schedule should be managed so as to not interfere with ability to accomplish tasks, including special projects and assignments with deadlines
- Adhere to NBU safety and administrative policies, procedures, and practices at all times and in all situations
- Ensure NBU staff, contracted staff, and visitors adhere to NBU safety and security standards
- Develop & maintain effective customer service skills for communications with co-workers, customers and the public in general
- Maintain strict confidentiality of business, employee and customer information in written and oral communications and safeguard sensitive documents
- Exemplifies NBU Core Values of Safety, Team, Integrity, Culture, and Stewardship
- Participate in and support initiatives to reach annual NBU Performance Measures
- Other duties as assigned

Formal Education and Work Experience Requirements

Degree/Diploma Obtained: High School Diploma/GED

Field of Study: General Studies

Work Experience Time Frame: One Year or More

Other: [Click or tap here to enter text.](#)

Certification and Licensures Requirements

- Class 'C' Driver's License must be maintained as a condition of employment

Other Minimum Qualifications

- Must reside within a thirty-minute response time of the NBU Service Center as measured by an internet mapping tool
- Prior electrical experience is required; specialized and/or technical training is preferred.
- Two years of electric relay and control, substation maintenance, substation construction, journeyman electrician, HVAC technician, or similar experience.
- Ability to use basic computer software programs such as Microsoft Excel, Microsoft Word, Outlook, and PowerPoint is preferred.
- Must be available for standby, emergency response, after hours work, weekends, and holidays.

Knowledge of Computer Software

	No Knowledge	Beginner	Intermediate	Expert
Arc GIS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AutoCAD	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crystal Reports	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Microsoft Access	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Microsoft Excel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Microsoft Word	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Microsoft Publisher	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Microsoft PowerPoint	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other Software Knowledge

Click or tap here to enter text.

Experience with Machines, Tools, Equipment and Other Work Aids

Hand tools, power tools, meters, high & low voltage tools, crane truck, trucks, infrared imaging devices, aerial lift devices, pumps, insulated tools, multimeters, grounding cables, computer, printer, cameras.

Physical Demands

Standing: Frequently

- ☒ Making Presentations
- ☒ Observing Work Sites
- ☒ Observing Work Duties
- ☒ Communication with Co-Workers

Fine Dexterity: Frequently

- ☒ Computer Keyboard
- ☒ Telephone Keypad
- ☒ Calculator
- ☒ Calibrating Equipment

Walking: Frequently

- ☒ To Other Departments/Office/Office Equipment
- ☒ Around Worksite

Carrying: Occasionally

- ☒ Supplies
- ☒ Equipment
- ☒ Files

Sitting: Occasionally

- ☒ Desk Work
- ☒ Meetings
- ☒ Driving

Reaching: Occasionally

- ☒ For Supplies
- ☒ For Files

Handling: Rarely

- ☒ Paperwork
- ☐ Monies

Kneeling: Occasionally

- ☒ Filing in Lower Drawers
- ☒ Retrieving Items from Lower Shelves/Ground

Pushing/Pulling: Occasionally

- ☒ File Drawers
- ☒ Equipment
- ☒ Table and Chairs
- ☒ Hose

Climbing: Occasionally

- ☒ Stairs
- ☒ Ladder
- ☒ Step Stool
- ☒ Onto Equipment

Vision: Constantly

- ☒ Reading
- ☒ Computer Screen
- ☒ Driving
- ☒ Observing Worksite

Foot Controls: Occasionally

- ☒ Driving
- ☒ Operating Heavy Equipment
- ☐ Dictaphone

Balancing: Occasionally

- ☒ On Ladder
- ☒ On Equipment
- ☒ On Step Stool

Bending: Occasionally

- ☒ Filing in Lower Drawers
- ☒ Retrieving Items from Lower Shelves/Ground
- ☒ Making Repairs

Crouching: Occasionally

- ☒ Filing in Lower Drawers
- ☒ Retrieving Items from Lower Shelves/Ground

Crawling: Rarely

- ☒ Under Equipment
- ☐ Inside Attics/Pipes/Ditches

Hearing: Constantly

- ☒ Communication Via Telephone/Radio/To Co-Workers/Public
- ☒ Listening to Equipment

Twisting: Occasionally

- ☐ From Computer to Telephone
- ☒ Getting Inside Vehicle

Talking: Constantly

- ☒ Communication Via Telephone/Radio/To-Co-Workers/Public

Other: [Click or tap here to enter text.](#)

Environmental Factors

	Never	Seasonally	Several Times Per Year	Several Times Per Month	Several Times Per Week	Daily
Extreme Temperature (Heat, cold, extreme temp. change)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wetness and/or humidity (bodily discomfort from moisture)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Respiratory Hazards (Fumes, gases, chemicals, dust, and dirt)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Noise and Vibration (sufficient to cause hearing loss)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical Hazards (High voltage, dangerous machinery, aggressive Customers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Health and Safety Conditions

	Never (Never Occurs)	Rarely (Less than 1 hour per week)	Occasionally (1/3 or more of the time)	Frequently (From 1/3 to 2/3 of the time)	Constantly (2/3 or more of the time)
Mechanical Hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Chemical Hazards	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electrical Hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire Hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Explosives	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Communicable Diseases	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical Danger or Abuse	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other: Click or tap here to enter text.

Primary Work Environment: Outdoors/Field

Other: Boots, Fire Retardant clothes, glasses, hard hat, gloves, high and low voltage gloves, ear plugs.

Overall Strength Demands

- ☐ Sedentary - Exerting up to 10 pounds occasionally or negligible weight frequently, mostly sitting
- ☐ Light - Exerting up to 20 pounds occasionally, 10 pounds frequently, walking or standing often
- ☐ Medium - Exerting 20 - 50 pounds occasionally, 10 - 25 pounds frequently, or 10 pounds constantly
- ☒ Heavy - Exerting 50 - 100 pounds occasionally, 25 - 50 pounds frequently, or 10 - 20 pounds constantly
- ☐ Very Heavy - Exerting 50 pounds constantly

Non-Physical Demands

	Never	Rarely	Occasionally	Frequently	Constantly
Time Pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Emergency Situations	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frequent Change of Task	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Irregular Schedule/Overtime	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Performing Multiple Tasks Simultaneously	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Working Closely with Others as Part of a Team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tedious or Exacting Work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Noisy/Distracting Environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other: Click or tap here to enter text.

Employee Statement of Understanding

THIS JOB DESCRIPTION DOES NOT CONSTITUTE AN EMPLOYEE AGREEMENT BETWEEN NEW BRAUNFELS

UTILITIES (NBU) AND THE EMPLOYEE. Nothing in this position description restricts NBU's ability to assign, reassign or eliminate duties and responsibilities of this job at any time.

I HAVE READ AND RECEIVED A COPY OF THIS JOB DESCRIPTION.

Employee's Signature

Employee's Printed Name

Date