

Job Title: Electric Distribution Designer**Job Status:** Full-Time**Department:** Electric Engineering**Job Grade:** 209**Reports To:** Chief Engineer of Electric Services**Work Setting:** Hybrid**Pay Status:** Exempt**Date Created/Updated:** 9/29/2025**Location:** Service Center

Position Summary

The Electric Distribution Designer is primarily responsible for analyzing, designing, and assisting customers with electric line extensions, upgrades, repairs, new service availability, electrical conflicts.

Essential Duties & Responsibilities

CUSTOMER SERVICE

- Meet with customer to determine requirements of the job
- Request and analyze requirements and historical data related to the project
- Explain policies, procedures, options and cost evaluations to customer
- Address potential and existing conflicts and seek resolutions
- Identify layouts, proposals and location of equipment based on site evaluation
- Provide copies of work order documents and instructions for construction
- Address any necessary changes to design while in process
- Process solar system and backup generator interconnections
- Process communication attachment permits

Communicate with communication entities related to permits, violations, and transfers

DESIGN AND ANALYSIS

- Calculate expected load amounts and demand
- Estimate environmental impact on new and existing infrastructure
- Compare estimates with historical data
- Calculate deposit amounts for commercial use
- Apply estimates to design via equipment ratings
- Calculate fees to be applied for cost of internal projects
- Submit proposed design and make corrections/changes as needed
- Stake pole and equipment locations, survey site and access routes for construction
- Submit locate requests, as needed for projects
- Submit TXDOT, UPRR, LCRA and County permits, as needed for projects
- Creates work order documents to include design drawing with instructions, Bill of Materials, and other technical documents as needed
- Prepares designs for distribution overhead and underground electric utility line extensions and modifications to the electrical system
- Creates electrical design drawings using GIS software and AutoCAD.
- Staking lines while referencing easements and rights-of-way limits, and gathering data necessary to prepare for construction
- Develops master system plans for future growth in large developments
- Creates fiber designs using GIS software
- Knowledge of the National Electric Code and the National Electric Safety Code requirement relevant to distribution design

SPECIFIC ANALYSIS DOCUMENTS

- Meet with supervisor and Executive Director about analysis
- Research evaluation methods and data & apply to analysis
- Prepare analysis documents and report findings, update as needed

PROJECT MANAGEMENT

- Coordinate work details between customer and Electric Operations Division.
- Responsible for follow-up during and after construction to verify integrity of designed project
- Settle conflicts and track changes during course of project
- Verify material and design specifications are communicated on as-built sent to GIS Division
- Assemble material packages for electric distribution projects in advance of construction

GENERAL RESPONSIBILITIES

- 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 guidelines and practices at all times and in all situations
- Maintain a clean and safe work area, office, field site and vehicle as applicable
- 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
- Adhere to NBU policies and procedures
- Exemplifies NBU Core Values of Integrity, Stewardship, Team and Safety
- Participate in and support initiatives to reach annual NBU Performance Measures

Formal Education and Work Experience Requirements

Degree/Diploma Obtained: High School

Field of Study: General Studies

Diploma/GED

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

Work Experience Time Frame: One Year or More

Certification and Licensures Requirements

Valid Texas Driver's License

Must complete TEC Design Technician certification, Level I, II and III, within four years.

Other Minimum Qualifications

- Maintain composure and commitment to work during periods of stress and heavy workload, and willing to work extra hours whenever needed.
- Demonstrated expertise and knowledge of electrical design activities.
- Demonstrated planning and organizing skills.
- Demonstrated effective oral and written communications skills.
- Demonstrated effective decision making and problem-solving skills.
- Demonstrate strong mathematics and science background.

Knowledge of Computer Software

	No Knowledge	Beginner	Intermediate	Expert
ArcGIS	☐	☐	☒	☐
AutoCAD	☐	☐	☒	☐
Crystal Reports	☒	☐	☐	☐

Microsoft Access	☒	☐	☐	☐
Microsoft Excel	☐	☐	☒	☐
Microsoft Word	☐	☒	☐	☐
Microsoft Publisher	☒	☐	☐	☐
Microsoft PowerPoint	☐	☒	☐	☐

Other Software Knowledge

CityWorks, Harris NorthStar, AutoCAD, ArcGIS, SmartSheet

Experience with Machines, Tools, Equipment and Other Work Aids

Hand Tools, Motor Vehicle, Measuring Wheel, Measuring Extendo, GPS Unit, Camera, Telephone, Radio, Ruler, Calculator, Copiers, Fax Machines, Maps, Procedure Books, Computer, Scanners, Printers, Plotters, NEC Code, NESC

Physical Demands

Standing: Occasionally

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

Fine Dexterity: Constantly

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

Walking: Frequently

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

Lifting: Rarely

- ☒ Supplies
- ☒ Equipment
- ☒ Files

Carrying: Occasionally

- ☒ Supplies
- ☒ Equipment
- ☒ Files

Sitting: Occasionally

- ☒ Desk Work
- ☒ Meetings
- ☒ Driving

Reaching: Occasionally

- ☒ For Supplies

- ☒ For Files

Handling: Occasionally

- ☒ Paperwork
- ☐ Monies

Kneeling: Rarely

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

Pushing/Pulling: Occasionally

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

Climbing: Rarely

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

Vision: Constantly

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

Foot Controls: Frequently

- ☒ Driving
- ☐ Operating Heavy Equipment

☐ Dictaphone

Balancing: Rarely

☐ On Ladder

☐ On Equipment

☐ On Step Stool

Bending: Rarely

☐ 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: Never

☐ 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)	☐	☒	☐	☐	☐	☐
Wetness and/or humidity (bodily discomfort from moisture)	☐	☒	☐	☐	☐	☐
Respiratory Hazards (Fumes, gases, chemicals, dust, and dirt)	☐	☒	☐	☐	☐	☐
Noise and Vibration (sufficient to cause hearing loss)	☐	☒	☐	☐	☐	☐
Physical Hazards (High voltage, dangerous machinery, aggressive Customers)	☐	☐	☒	☐	☐	☐

Health and Safety Conditions

	Never (Never Occurs)	Rarely (Less than 1 hour per	Occasionally (1/3 or more of the time)	Frequently (From 1/3 to 2/3 of the	Constantly (2/3 or more of the time)
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		week)		time)	
Mechanical Hazards	☐	☒	☐	☐	☐
Chemical Hazards	☐	☒	☐	☐	☐
Electrical Hazards	☐	☐	☒	☐	☐
Fire Hazards	☐	☒	☐	☐	☐
Explosives	☒	☐	☐	☐	☐
Communicable Diseases	☐	☒	☐	☐	☐
Physical Danger or Abuse	☐	☒	☐	☐	☐

Other: Click or tap here to enter text.

Primary Work Environment: Choose an item.

Other: Office Environment, Vehicle, Outdoors /Field

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	☐	☐	☐	☒	☐
Emergency Situations	☐	☒	☐	☐	☐
Frequent Change of Task	☐	☐	☐	☒	☐
Irregular Schedule/Overtime	☐	☐	☒	☐	☐
Performing Multiple Tasks Simultaneously	☐	☐	☐	☒	☐

Working Closely with Others as Part of a Team	☐	☐	☒	☐	☐
Tedious or Exacting Work	☐	☐	☒	☐	☐
Noisy/Distracting Environment	☐	☐	☒	☐	☐

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