

Texas 138 kV Substation and Transmission Line Project

To support growth in your area, Entergy Texas, Inc. has launched a project designed to bring additional power to our customers and growing communities. The project consists of a new 138 kV single pole/double circuit transmission line that will connect to the existing Entergy Texas Lewis Creek to Goree 138 kV transmission line (L-487) in Walker County. The new transmission line will follow a path through Walker County until it reaches the new Texas Distribution Substation. The Texas Substation is planned to be located along Interstate Highway 45 between Huntsville and New Waverly in Walker County. The new transmission line could be approximately 3-5 miles in length, depending on the route ultimately approved by the Public Utility Commission of Texas. The work will support and enable economic growth in Southeast Texas as well as enhance reliability for our existing and future customers.



We power life.

What is the purpose and need of the project?

The primary purpose of the project is to meet the area's growing power demands in Walker County spurred by residential and business development. To accomplish this, a new distribution substation, to be called Texas Substation, is needed to provide the additional capacity and distribution feeder delivery system to integrate into the existing distribution system in the area. The location of Texas Substation is determined by the existing distribution system and available suitable property and is proposed to be located along Interstate Highway 45 between Huntsville and New Waverly in southeast Walker County. The connecting transmission line would cut-in and extend ETI's existing Lewis Creek to Goree 138 kV Transmission Line (L-487) to the proposed new Texas Substation.

Transmission line

Entergy Texas plans to construct and operate a single pole, double-circuit 138-Kilovolt (kV) transmission line from the Lewis Creek to Goree (L-487) 138-kV transmission line, in Walker County, Texas to the new Texas Substation to be located along Interstate Highway 5 between Huntsville and New Waverly, Texas. The new transmission line could be approximately 3-5 miles in length depending on the route ultimately approved by the Public Utility Commission of Texas.

Structure type - Typically single pole, double circuit concrete or steel

Structure height - 80 to 130 feet

Minimum ground clearance - 26 to 35 feet

Right-of-way width - 100 feet

Average span length - 500 to 800 feet

Structures per mile - 8 to 10 structures

Structure diameter - 36 to 60 inches at ground level

Structure color - Gray

Texas Substation

The work at the new Texas Substation will be new construction on property acquired by Entergy.

A 138/13.8-kV substation will be required to facilitate installing the proposed 138-kV line as well as the distribution feeders that will provide power to the area. One 40 Megavolt Ampere power transformer will be installed to facilitate connecting the new 138-kV line to the distribution network. The substation will include space to add an additional 40-MVA distribution transformer to facilitate continued growth in the area.

Structure type - Tubular Steel (Low Profile)

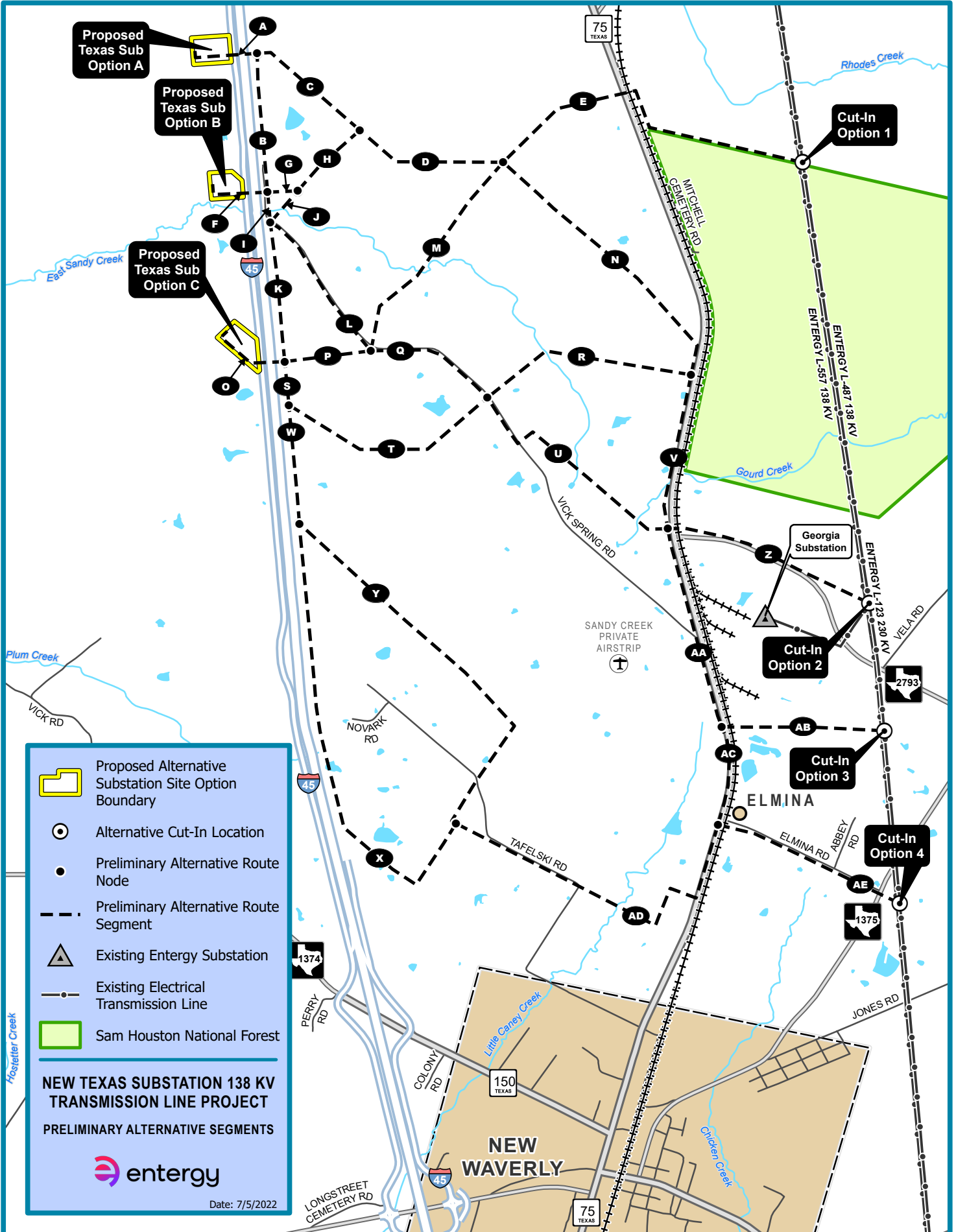
Structure height - 8 to 75 feet

Structure color - Gray

Security - 7-foot chain link fence

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All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas (PUCT)



If approved, only one route (consisting of multiple route segments) from a "Cut-in" option to an "Alternative Substation Site" option will be selected by the PUCT. For a more detailed map, please see the project website:

Texas substation and transmission line project evaluation criteria

Land Use

- 01 Length of alternative route
- 02 Number of habitable structures¹ within 300 feet of the route centerline
- 03 Length of route utilizing existing electric facility right-of-way (ROW) (transmission)
- 04 Length of route utilizing existing electric facility ROW² (distribution)
- 05 Length of route parallel and adjacent to existing electric facility ROW (transmission)
- 06 Length of route parallel and adjacent to existing electric facility ROW (distribution)
- 07 Length of route parallel and adjacent to other existing compatible ROW (roads, highways, railway, or telephone utility ROW, etc.)
- 08 Length of route parallel and adjacent to apparent property lines³ (or other natural or cultural features)
- 09 Sum of evaluation criteria 3, 4, 5, 6 and 7
- 10 Percent of evaluation criteria 3, 4, 5, 6, and 7
- 11 Length of route parallel to pipeline ROW
- 12 Length of route across parks/recreational areas⁴
- 13 Number of additional parks/recreational areas⁴ within 1,000 feet of the route centerline
- 14 Length of route across cropland
- 15 Length of route across pasture/rangeland
- 16 Length of route across land irrigated by traveling systems (rolling or pivot type)
- 17 Length of route across gravel pits, mines, or quarries
- 18 Number of pipeline crossings
- 19 Number of electric transmission line crossings
- 20 Number of railroad crossings
- 21 Number of Interstate (IH), US Highway (US Hwy), and State Highway (SH) crossings
- 22 Number of Farm-to-Market (FM) or Ranch-to-Market (RM) road crossings
- 23 Number of private use airstrips within 10,000 feet of the route centerline
- 24 Number of heliports within 5,000 feet of the route centerline
- 25 Number of FAA registered airports⁵ (runways >3,200 feet) within 20,000 feet of the route centerline
- 26 Number of FAA registered airports⁵ (runways <3,200 feet) within 10,000 feet of the route centerline
- 27 Number of commercial Amplitude Modulation radio (AM radio) transmitters within 10,000 feet of the route centerline
- 28 Number of Frequency Modulation radio (FM radio) transmitters, microwave towers, etc. within 2,000 feet of the route centerline
- 29 Number of existing water wells within 200 feet of the route centerline
- 30 Number of oil and gas wells within 200 feet of the route centerline

Aesthetics

- 31 Estimated length of route within foreground visual zone⁶ of IH, US Hwy, and SH
- 32 Estimated length of route within foreground visual zone⁶ of FM/RM roads
- 33 Estimated length of route within foreground visual zone⁶ of parks/recreational areas⁴

Ecology

- 34 Length of route across upland forest
- 35 Length of route across bottomland/riparian woodlands
- 36 Acreage of National Wetland Inventory (NWI) mapped forested or scrub/shrub wetlands
- 37 Acreage of NWI mapped emergent wetlands
- 38 Length of route across known occupied habitat of federally listed endangered or threatened species
- 39 Length of route across open water (lakes, ponds, etc.)
- 40 Number of stream crossings
- 41 Length of route parallel (within 100 feet) to streams
- 42 Length of route across Federal Emergency Management Agency mapped 100-year floodplains

Cultural Resources

- 43 Number of cemeteries within 1,000 feet of the route centerline
- 44 Number of recorded historic or prehistoric sites crossed by route
- 45 Number of additional recorded historic or prehistoric sites within 1,000 feet of route centerline
- 46 Number of National Register of Historic Places listed resources crossed by route
- 47 Number of additional National Register of Historic Places listed resources within 1,000 feet of route centerline
- 48 Length of route across areas with high potential for archeological sites

1 - Single-family and multi-family dwellings, and related structures, etc., mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, schools or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerline of a transmission project of 230 kV or less. Due to the potential horizontal inaccuracies of the aerial photography and data utilized, all habitable structures within 310 feet have been identified.

2 - Includes instances of proposed under/overbuilding existing distribution lines and may require the expansion of the existing distribution ROW utilized.

3 - Property lines created by existing roads, highway, or railroad ROW are not "double-counted" in the length of route parallel to property lines criteria.

4 - Defined as parks and recreational areas owned by a governmental body or an organized group, club, or church.

5 - As listed in the Chart Supplement South Central United States (FAA 2022b formerly known as the Airport/Facility Directory South Central United States), FAA 2022a, and TxDOT 2022a.

6 - One-half mile, unobstructed.