

Cypress to Legend 500 kV Transmission Line Project evaluation criteria



Land use

- 01 Length of alternative route
- 02 Number of habitable structures¹ within 500 feet of the route centerline
- 03 Length of route utilizing existing electric facility right-of-way (ROW)
- 04 Length of route parallel to existing electric facility ROW
- 05 Length of route parallel to other existing compatible ROW (roads, highways, railway, or telephone utility ROW, etc.)
- 06 Length of route parallel to apparent property lines² (or other natural or cultural features)
- 07 Sum of evaluation criteria 3, 4, 5 and 6
- 08 Percent of evaluation criteria 3, 4, 5 and 6
- 09 Length of route parallel to pipeline ROW
- 10 Length of route across parks/recreational areas³
- 11 Number of additional parks/recreational areas³ within 1,000 feet of the route centerline
- 12 Length of route across National Park Service Land
- 13 Length of route across cropland
- 14 Length of route across pasture/rangeland
- 15 Length of route across land irrigated by traveling systems (rolling or pivot type)
- 16 Length of route across gravel pits, mines, or quarries
- 17 Number of pipeline crossings
- 18 Number of electric transmission line crossings
- 19 Number of Interstate (IH), US Highway (US Hwy), and State Highway (SH) crossings
- 20 Number of Farm-to-Market (FM) or Ranch-to-Market (RM) road crossings
- 21 Number of private use airstrips within 10,000 feet of the route centerline
- 22 Number of heliports within 5,000 feet of the route centerline
- 23 Number of FAA registered airports⁴ (runways >3,200 feet) within 20,000 feet of the route centerline
- 24 Number of FAA registered airports⁴ (runways <3,200 feet) within 10,000 feet of the route centerline
- 25 Number of commercial Amplitude Modulation (AM) radio transmitters within 10,000 feet of the route centerline
- 26 Number of Frequency Modulation radio (FM radio), microwave towers, etc. within 2,000 feet of the route centerline
- 27 Number of existing water wells within 200 feet of the route centerline
- 28 Number of oil and gas wells within 200 feet of the route centerline
- 29 Length of route across Wildlife Management Areas

Aesthetics

- 30 Estimated length of route within foreground visual zone⁵ of US, Interstate, and State highways
- 31 Estimated length of route within foreground visual zone⁵ of FM/RM roads
- 32 Estimated length of route within foreground visual zone⁶ of parks/recreational areas³

Ecology

- 33 Length of route across bottomland/riparian forest
- 34 Length of route across upland forest
- 35 Acreage of route across National Wetland Inventory (NWI) mapped forested or scrub/shrub wetlands
- 36 Acreage of route across NWI mapped emergent wetlands
- 37 Length of route across known critical habitat of federally-listed threatened or endangered species
- 38 Length of route across open water (lakes, ponds, etc.)
- 39 Length of route across known occupied red-cockaded woodpecker cluster habitat
- 40 Length of route across Coastal Management Zone
- 41 Number of stream/canal crossings
- 42 Number of navigable waterway crossings
- 43 Length of route parallel (within 100 feet) to natural streams or rivers
- 44 Length of route across FEMA mapped 100-year floodplains

Cultural resources

- 45 Number of cemeteries within 1,000 feet of the route centerline
- 46 Number of recorded historic or archaeological resources crossed by route
- 47 Number of additional recorded historic or archaeological resources within 1,000 feet of route centerline
- 48 Number of resources determined eligible for or listed on the National Register of Historic Places crossed by route
- 49 Number of additional resources determined eligible for or listed on the National Register of Historic Places within 1,000 feet of route centerline
- 50 Length of route across high archaeological/historical site potential

Cypress to Legend 500 kV Transmission Line Project

The Entergy Texas Cypress to Legend 500 kilovolt (kV) Transmission Line Project (Project) consists of a new 500 kV single-circuit transmission line that will be routing from the existing Cypress Substation in Hardin County and extend the transmission line to the new Legend 500 kV Substation in Jefferson County. The existing Cypress Substation is located approximately 2.8 miles southeast of the intersection of Texas State Highway (SH) 327 and United States Highway 287. The new Legend 500 kV Substation is to be located approximately 1.5 miles southwest of the intersection of SH 73 and SH 82. The new transmission line could be approximately 35 miles in length and follow a path through Hardin and Jefferson Counties until it reaches the new Legend 500 kV Substation, depending on the route ultimately approved by the Public Utility Commission of Texas (PUCT).



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 500 feet of the centerline of a transmission project of 230 kV or more.

² Apparent Property lines created by existing roads, highway, or railroad ROW are not "double-counted" in the length of route parallel to apparent property lines criteria.

³ Defined as parks and recreational areas owned by a governmental body or an organized group, club, or church within 1,000 feet of the centerline of the project.

⁴ As listed in the Chart Supplement South Central U.S. (FAA 2023b formerly known as the Airport/Facility Directory South Central U.S.), FAA 2023a.

⁵ One-half mile, unobstructed. Lengths of ROW within the foreground visual zone of Interstates, US and state highway criteria are not "double-counted" in the length of ROW within the foreground visual zone of FM roads criteria.

⁶ One-half mile, unobstructed. Lengths of ROW within the foreground visual zone of parks/recreational areas may overlap with the total length of ROW within the foreground visual zone of interstates, US and state highway criteria and/or with the total length of ROW within the foreground visual zone of FM roads criteria.

What is the purpose and need of the project?

The primary purpose of the Project is to provide electric service to support the industrial growth in the Port Arthur area in Jefferson County, Texas and to provide greater reliability to the east Texas region. To accomplish this, a new substation, to be called “Legend 500 kV Substation,” is needed to support the requested load capacity.

The proposed project will require the following scopes of work:

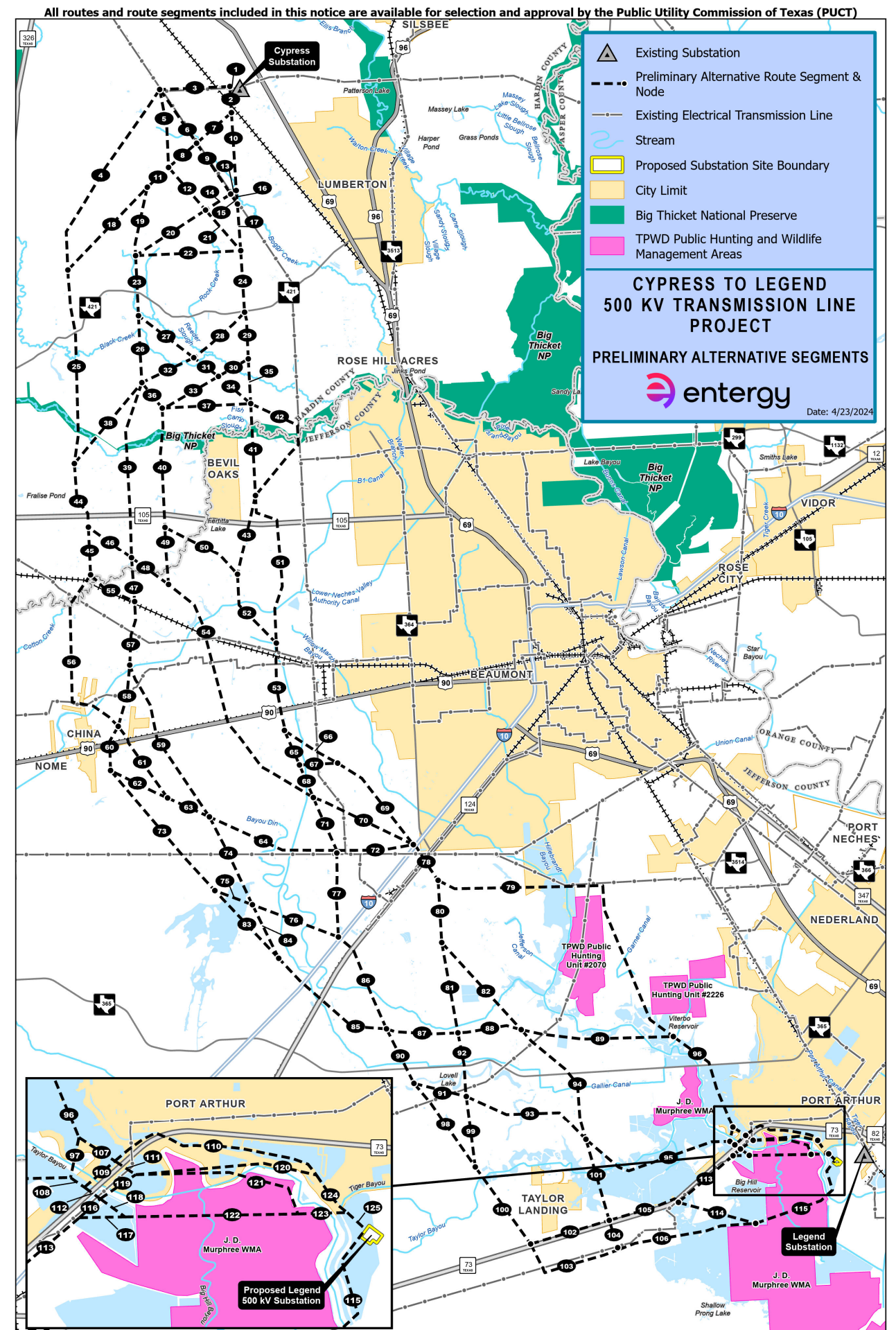
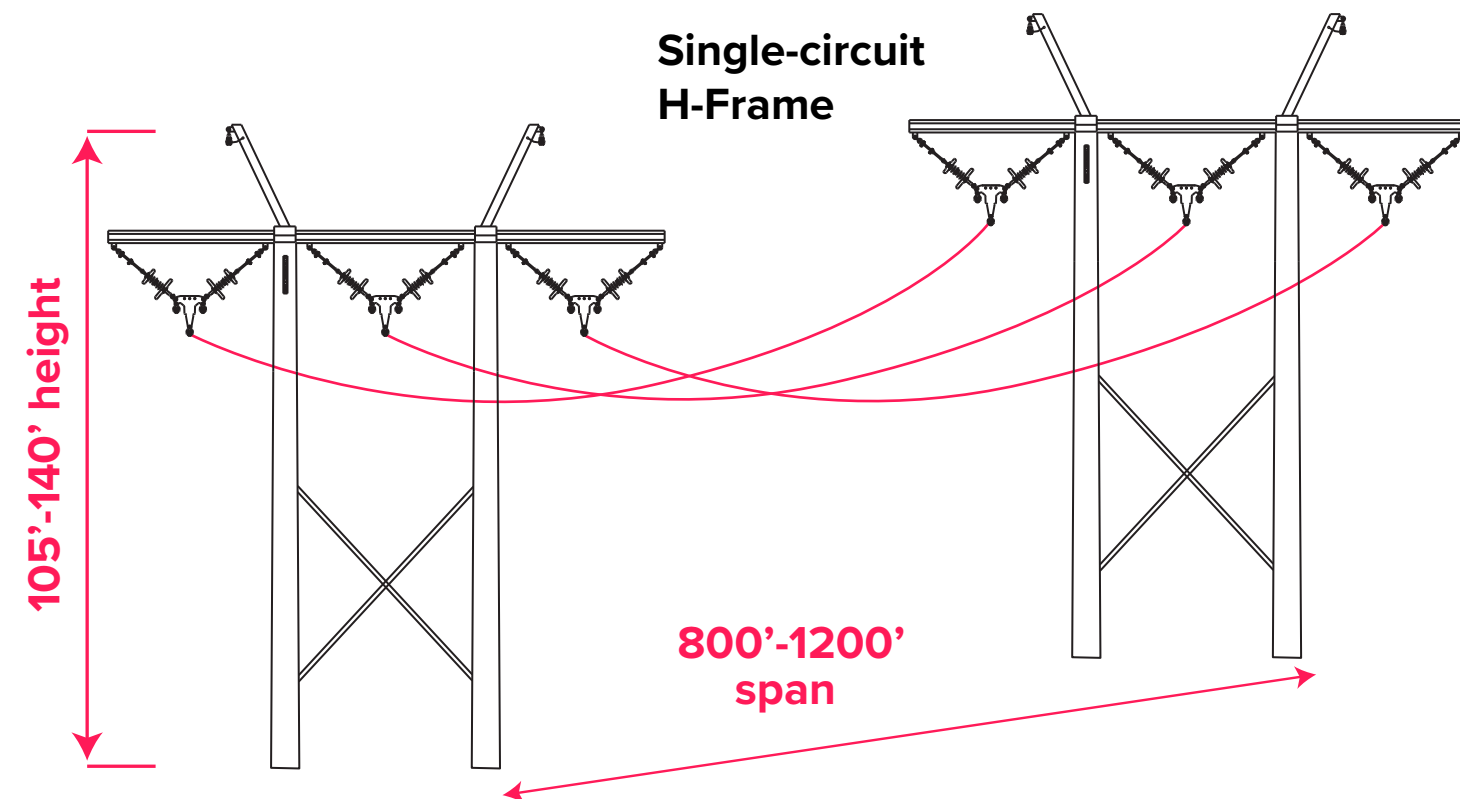
1) Design and build the new Legend 500 kV Substation:

The new Legend 500 kV Substation will be a new 500/230 kV substation that will facilitate the installation of the proposed new 500 kV line extension.

2) Design and build the new Cypress to Legend 500 kV Transmission Line:

The connecting transmission line will be a new H-frame type structure, single-circuit 500 kV transmission line that extend from ETI’s existing Cypress Substation and connect into the new Legend 500 kV Substation.

Typical Structures



If approved, only one route (consisting of multiple route segments) will be selected by the PUCT.
For a more detailed map, please see the project website: www.entergy-texas.com/transmission/cypress-legend