

Frequently asked questions

Cypress to Legend 500 kV Transmission Line Project

Entergy Texas, Inc.

What is Entergy Texas, Inc.?

Entergy Texas is an electric utility company that provides service to approximately 512,000 customers in 27 counties.

What is the 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).

The study area and approximate locations of the proposed end points are shown on the map on the website https://www.entergy-texas.com/transmission/cypress-legend.

Why is the Cypress to Legend 500 kV Transmission Line Project needed?

The primary purpose of the Project is to provide electric service to support the load growth in Hardin, Orange, and Jefferson Counties in Southeast Texas. The new line will provide greater reliability to the Southeast Texas region by adding a new transmission source into the growing area.

Who ultimately approves if and where new lines are needed?

The PUCT ultimately decides if new lines are required to supply electric service. The PUCT also decides the route of new transmission lines will take to connect the remote ends. The PUCT makes its decision based on Entergy Texas' application to amend its Certificate of Convenience and Necessity (CCN), which includes a routing study conducted by a third-party consulting firm, POWER Engineers, Inc. (POWER) and the public's input as it relates to the Project, including siting of the new electric facilities.



How does electricity get to homes?

Electric power is generated and travels through a network of high-voltage transmission lines and voltage transformation equipment connected at various voltage levels. At Entergy Texas, those voltage levels range from 69 kV to 500 kV and include those at 138 kV and 230 kV. The voltage is then reduced, or "stepped down," to a distribution-level voltage, typically 13 kV or 35 kV, through a transformer at a substation. The electricity is then distributed out of the substation along these lower voltage distribution lines, ultimately supplying the electrical power to homes, businesses, and industrial customers.

How does Entergy Texas identify and consider routes for the transmission line?

Entergy Texas and its third-party routing consultant, POWER develop a study area that includes the remote end points of the transmission line – in this case the new Legend 500 kV Substation and the existing Cypress Substation. POWER gathers data, maps, aerial photos and input from federal and state agencies and local officials. POWER also conducts field reconnaissance from public access points like roads and highways. Using this information, POWER identifies environmental and land use constraints such as subdivisions, parks and known cultural resource sites within the study area. Several preliminary route segments connecting the end points are identified and drawn to avoid these constraints as much as practical, realizing it is not always reasonable or feasible to avoid all constraints. These preliminary route segments are then presented to the public at an open house. As the public input process continues, route segments may be modified, eliminated, or added. Ultimately, Entergy Texas staff will evaluate the routes using factors that include public input, human/natural/cultural resource impacts, engineering, construction, operation and maintenance issues, and cost. Under this process, Entergy Texas staff recommends several alternative routes connecting the project end points. These alternative routes are then included in Entergy Texas' CCN application that will be filed with the PUCT. Once the CCN application is filed, all routes and route segments are available for selection and approval by the PUCT. The PUCT will make the final decision whether to approve Entergy Texas' application and will select the route on which the transmission line and its facilities will be constructed.

What will the transmission line structures look like?

The Project will use predominately steel structures. Typical transmission structures supporting 500 kV lines will be approximately 105 to 140 feet above the ground with span lengths of approximately 800 to 1200 feet between structures. A diagram of typical transmission structures will be presented on display boards at the open house.



What are the next steps for this project?

After the open house, Entergy Texas and POWER will evaluate all public comments and, if necessary, conduct additional engineering and environmental analysis of the preliminary alternative route segments. Some of the preliminary alternative route segments may be eliminated or modified. Others may be added based on public input and additional analysis. Entergy Texas will identify and evaluate, in detail, a set of primary alternative routes made up of the various alternative route segments. POWER will prepare an Environmental Assessment and Alternative Route Analysis Report (sometimes called an EA or routing study) for Entergy Texas to review. Entergy Texas will prepare the CCN application and submit it to the PUCT, which will include the EA. Upon submitting the CCN application (currently scheduled for next year), Entergy Texas will mail letters to landowners who are owners of land located within 500 feet of any proposed route, explaining how they can participate in the PUCT CCN proceeding. Public notifications regarding the CCN filing will also be published in newspapers in the affected areas. If the PUCT approves Entergy Texas' application, final notices will be sent to directly affected landowners who received notice of Entergy Texas' application advising them of the selected route, together with the PUCT's Final Order. The PUCT should reach a decision on the CCN application within approximately six months after Entergy Texas files its application.

When will this 500 kV transmission line and new substation be in operation?

If approved by the PUCT, the new transmission line is scheduled to be operational by December 2028.

Anyone with questions about this Project, please contact

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