Frequently asked questions

Southline to Jacinto 138 kV Transmission Line Project

Entergy Texas, Inc.

What is Entergy Texas?

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

What is the Southline to Jacinto 138 kV Transmission Line Project?

The Entergy Texas Southline to Jacinto 138 kilovolt (kV) Transmission Line Project (Project) consists of a new 138 kV single-circuit transmission line that will be routed from the Entergy Texas-owned existing Southline Substation to the existing Entergy Texas-owned Jacinto Substation, both located in Liberty County. The existing Southline Substation is located approximately two miles northwest of the intersection of United States Highway (US) 59 and State Highway 105. The existing Jacinto Substation is located approximately two miles north-northeast of the intersection of US 59 and Farm-to-Market Road 2025. The new transmission line could be approximately 6 to 10 miles in length and follow a path through Liberty and San Jacinto Counties, 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/southline-jacinto.

Why is the Southline to Jacinto 138 kV Transmission Line Project needed?

The primary purpose of the Project is to address potential contingent low voltage and thermal overloads as well as benefit load serving capability in Liberty and San Jacinto counties driven by commercial and residential growth in the area. To accomplish this, a new transmission line, to be called “Southline to Jacinto”, is needed to provide electric service. The existing Southline Substation is located approximately two miles northwest of the intersection of US 59 and SH 105. The existing Jacinto substation is located approximately two miles north-northeast of the intersection of US 59 and Farm-to-Market Road (FM) 2025.

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, businesses, and industrial customers?

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 existing Southline Substation and the existing Jacinto 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 concrete or steel structures. Typical transmission structures supporting 138 kV lines will be approximately 80 to 130 feet above the ground with span lengths of approximately 500 to 800 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 the second quarter 2025), Entergy Texas will mail letters to landowners who are owners of land located within 300 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 138 kV transmission line be in operation?

If approved by the PUCT, the new transmission line is scheduled to be operational by June 2027.

Anyone with questions about this Project, please contact Brad Coleman at 409-347-5125 or email at southline-jacinto@entergy.com.