Frequently asked questions

Falcon 138 kV Transmission Line and Substation Project

Entergy Texas, Inc.

What is Entergy Texas, Inc.?

Entergy Texas, Inc. (Entergy Texas) provides electricity to approximately 499,000 customers in 27 counties. Entergy Texas is a subsidiary of Entergy Corporation, a Fortune 500 company headquartered in New Orleans.

What is the Falcon 138kV Transmission Line and Substation Project?

Entergy Texas proposes to add new electric transmission infrastructure in Montgomery and/or Liberty Counties. Entergy Texas is planning to construct a new single-pole double-circuit 138 kilovolt (kV) electric transmission line approximately 4-7 miles in length (depending on the final route) that would connect the new Falcon Substation to the existing Entergy Texas Jacinto to Splendora 138 kV Transmission Line (L-871) or the Splendora to Apollo 138 kV Transmission Line (L-571) (the "Project"). The Falcon Substation is planned to be located approximately one mile east of the intersection of Farm-to-Market Roads 1010 and 2090 in Liberty County. The study area and approximate locations of the proposed end points and existing transmission line facilities are shown on the map on the website https://www.entergy-texas.com/transmission/falcon/.

The proposed single-pole double-circuit transmission line would be erected utilizing either concrete or steel predominately single-pole structures within a right-of-way that would be up to 100 feet wide (which will consist of approximately 50 feet on either side of the centerline of the proposed transmission facilities, some of which could overlap with other compatible rights-of-way), depending on the final location.

Why is the Falcon 138kV Transmission Line and Substation project needed?

The primary purpose of the Project is to meet the area's growing power demands in Liberty and Montgomery Counties spurred by residential and business development. To accomplish this, a new distribution substation, to be called "Falcon 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 Falcon Substation is determined by the existing distribution system and available suitable property and is proposed to be located east of the intersection of Farm-to-Market Roads 1010 and 2090 in Liberty County. The connecting transmission line would cut-in and extend from either Entergy Texas's existing Jacinto to Splendora 138 kV transmission line (L-871) or the Splendora to Apollo 138 kV transmission line (L-571) to the proposed new Falcon Substation.

Who ultimately approves if and where new lines are needed?

The Public Utility Commission of Texas (PUCT) ultimately decides if new lines are required to supply electric service. The PUCT also decides the route new transmission lines will take to connect the remote ends. The PUCT makes its decision based on Entergy Texas's 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 and businesses.

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 Falcon Substation and either the existing Jacinto to Splendora 138 kV Transmission Line (L-871) or the Splendora to Apollo 138 kV Transmission Line (L-571). 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, however 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 presents several alternative routes connecting the project end points. These alternative routes are then included in Entergy Texas's 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's 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 either steel or concrete, predominately single-pole double-circuit 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 2024), Entergy Texas will mail letters to 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's application, final notices will be sent to directly affected landowners who received notice of Entergy Texas's 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 a year after Entergy Texas files its application.

When will this 138kV transmission line and new substation be in operation?

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

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