

Frequently asked questions SETEX Area Reliability Project

Entergy Texas, Inc.

What is Entergy Texas, Inc.?

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

What is the SETEX Area Reliability Project?

ETI is planning to construct a new single-circuit 500 kilovolt (kV) transmission line approximately 130 miles in length (depending on the route ultimately approved by the Public Utility Commission of Texas (PUCT)) in Jasper, Montgomery, Newton, Polk, San Jacinto, Trinity, Tyler, and Walker Counties (Project).

The new transmission line will connect the proposed Babel 500 kV Switching Station to the proposed Running Bear Substation. The proposed Babel 500 kV Switching Station will be constructed at one of three potential locations currently under consideration that will connect into the existing Layfield to Hartburg 500 kV transmission line south of Toledo Bend Reservoir in Newton County.

The proposed Running Bear Substation will be constructed at one of multiple locations currently under consideration that will connect into either ETI's existing Lewis Creek facilities along Longstreet Road between Lake Conroe and Interstate Highway 45 or ETI's existing transmission facilities east of Willis between Farm-to-Market Road 1097 and County Line Road in Montgomery County.

The transmission line will typically utilize steel structures centered within a right-of-way that would be up to 225 feet wide.

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/setex/.

Why is the SETEX Area Reliability Project needed?

During the 2023 Midcontinent Independent System Operator, Inc. (MISO) Transmission Expansion Plan (MTEP23) process, MISO identified this Project as a Baseline Reliability Project (BRP) which is required to comply with Electric Reliability Organization (i.e., the North American Electric Reliability Corporation or NERC) reliability standards. The Project also meets the requirements detailed in Entergy's Local Planning Criteria. The Entergy Local Planning Criteria details the load serving capability criteria for constrained regions of the system, including existing load pockets such as ETI's Western Region. Finally, the Project will increase operational flexibility, help meet the growing power demands of Southeast Texas throughout ETI's Western Region and broader service territory, and increase reliability and resiliency during extreme events.

ETI's historically constrained Western Region load pocket has grown by approximately 5 percent per year over the last 5 years, and the Houston Metro area has swiftly expanded into ETI's service territory. While transmission upgrades have improved load serving capability over the years, the area remains constrained as growth in the region continues to increase. This Project will provide ETI with much needed operational flexibility and help address historical and ongoing load growth. By adding a new source of transmission to the constrained Western Region, the Project will also improve load serving capability and resilience during extreme events, such as Winter Storm Uri



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 ETI'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 ETI, 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?

ETI 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 Babel Switching Station and Running Bear Station. 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, ETI 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, ETI staff recommends several alternative routes connecting 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 ETI'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 predominately steel single-circuit structures. Typical transmission structures supporting 500 kV lines will be approximately 100 to 140 feet above the ground with span lengths of approximately 800 to 1,200 feet between structures. A diagram of typical transmission structures will be presented on display boards at the open houses.



What are the next steps for this project?

After the open houses, ETI 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. ETI 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 ETI to review. ETI 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 first quarter 2025), ETI 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 ETI's application, final notices will be sent to directly affected landowners who received notice of ETI'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 six months after ETI files its application.

When will this 500 kV transmission line be in operation?

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

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