Purpose and need

SETEX Area Reliability Project

What is the SETEX Area Reliability Project?

Entergy Texas, Inc. (Entergy Texas or 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 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.

What is the purpose and need of the SETEX Area Reliability Project?

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.

The Proposed Project will require the following scopes of work:

- 1) Design and build the new Babel 500 kV Switching Station: Construct a new 500 kV Six Breaker Ring Substation that will tap the existing Layfield to Hartburg 500 kV transmission line.
- **2) Design and build the new Running Bear 500 kV Substation:** Construct a new 500/230/138 kV Substation near ETI's existing Lewis Creek generation and transmission facilities or ETI's existing transmission facilities east of Willis, TX.
- 3) Design and build the new Babel to Running Bear 500 kV Transmission Line: The new transmission line will be a new single-circuit 500 kV transmission line that would connect the proposed Babel and Running Bear stations.

