

PURPOSE AND NEED



WE POWER LIFE

What is the Castle 230kV Transmission Line and Substation Project?

The Castle project consists of a new 230kV single pole/double circuit transmission line that will connect to the existing Entergy Texas, Inc. (ETI) Grimes to Ponderosa 230 kV Transmission Line (L-136) in Montgomery & Grimes County. The new transmission line will follow a path through Montgomery and Grimes counties until it reaches the new Castle Distribution Substation. The Castle Substation is planned to be located within the vicinity of Farm-to-Market (FM) 1774 between Plantersville and Todd Mission in Grimes County. Depending on the route ultimately approved by the Public Utility Commission of Texas (PUCT), the new transmission line will be approximately seven miles long.

What is the purpose and need of the Castle 230kV Transmission Line and Substation Project?

The primary purpose of the Castle 230kV Transmission Line and Substation Project is to meet the area's growing power demands in Montgomery and Grimes counties spurred by residential and business development. Once the proposed project is completed, the transmission line and substation will provide an additional source of power for the growing developments around the expansion of the Hwy 249. This new source of power will help ensure reliable service to meet the local power needs by providing a distribution source to support the area's load growth. The Castle project will be designed to allow for the future economic development in the area. To accomplish this a new distribution substation, Castle 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 Castle Substation is determined by the existing distribution system and available suitable property. The new substation is proposed to be located along FM 1774 in south Grimes County. The connecting transmission line will create a spur off the existing Grimes to Ponderosa 230 kV Transmission Line (L-136), in the vicinity between State Highway 105 and FM 149 and connect into Castle Substation.

The Castle 230kV Transmission Line and Substation Project will require the following scopes of work:

(1) Design and build the new Castle 230kV/ 13.2kV Substation:

The Castle Substation will be new construction on property acquired by ETI. A 230kV substation is required to facilitate the installation of the proposed new 230kV line as well as the new distribution feeders that will provide power to the area's homes and businesses. One 50MVA Distribution Transformer will be installed to facilitate connecting the new 230kV line to the distribution network.

(2) Design and build the new Castle 230kV Transmission Loop (L822):

The connecting transmission line will be a new single pole, double-circuit 230kV transmission line from a point on the existing Grimes to Ponderosa 230 kV Transmission Line (L-136), in the vicinity between State Highway 105 and Farm-to-Market 149 and connect into Castle Substation.