



Public Utility Commission of Texas
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PUCT Approves Plan for the First Extra High Voltage Transmission Lines in ERCOT Region

New Lines to Transport Power to the Energy-Rich Permian Basin

AUSTIN, Texas - In a landmark decision, the Public Utility Commission of Texas (PUCT) today approved a plan to build the Electric Reliability Council of Texas (ERCOT) region's first extra high voltage transmission lines to meet the Permian Basin's rapidly growing power needs.

"The PUCT is fully committed to building an ERCOT grid that will serve Texans reliably for decades to come," PUCT Chairman Thomas Gleeson said. "Extra high voltage lines are more efficient and strengthen reliability. Because each line can carry more power, fewer lines are necessary to serve the needs of the Permian Basin Region, meaning less disruption to Texas landowners, natural habitats, and landscapes. Our priority now is ensuring utilities execute these projects quickly and at the lowest possible cost to Texas consumers."

House Bill 5066, passed by the Texas Legislature in 2023 and signed into law by Gov. Greg Abbott, required the PUCT to approve an electric reliability plan for the Permian Basin region to support the on-going expansion and electrification of Texas' oil and gas industry and the growing electricity needs of West Texas communities. That plan was [approved in Oct. 2024](#). The next step was determining whether to build it out with new, more efficient extra high voltage (765 kilovolts) transmission lines or the standard 345-kilovolt transmission lines currently in use throughout the ERCOT grid.

The Permian Basin reliability plan is the first step in a [broader effort mandated by the Legislature and Gov. Abbott](#) to evaluate transmission and distribution systems across the ERCOT grid and identify where improvements are needed to support the state's rapid growth and ensure long-term electric reliability.

The PUCT's approval of the Permian Basin reliability plan follows a full analysis of the costs, equipment supply chains, and project completion timelines of both voltage options. Additionally, the PUCT and ERCOT hosted six workshops to gather input from members of the public, equipment manufacturers, and the transmission service providers (TSP) who will build and operate the new lines.

ERCOT and the TSPs estimate the extra high voltage plan could cost 22% more than the lower-voltage alternative; however, it will provide many long-term benefits. Higher voltage lines can carry more power and meet higher levels of demand as the state continues to grow, reduce expensive congestion on existing transmission lines, and could save money in the long-term by avoiding the need to build new transmission lines to catch up to future demand.



About the Public Utility Commission of Texas

Our mission is to serve Texans by regulating the state's electric, telecommunication, and water and sewer utilities, implementing respective legislation, and offering customer assistance in resolving consumer complaints. Since its founding in 1975, the Commission has a long and proud history of service to Texas, protecting customers, fostering competition, and promoting high quality infrastructure. To learn more, please visit <https://www.puc.texas.gov>.