

Transmission improvements underway to address unprecedented growth in Far West Texas

In the past year, electricity demand in Far West Texas has increased by nearly 500 megawatts (MW) due to oil and gas activity. On June 1, 2018, load exceeded 3,460 MW for the first time in this region, and ERCOT anticipates this upward trend will continue. The strong load growth is concentrated in Culberson, Reeves, Loving, Winkler and Ward counties. This is an area served by transmission lines that form a loop known as the Culberson Loop.

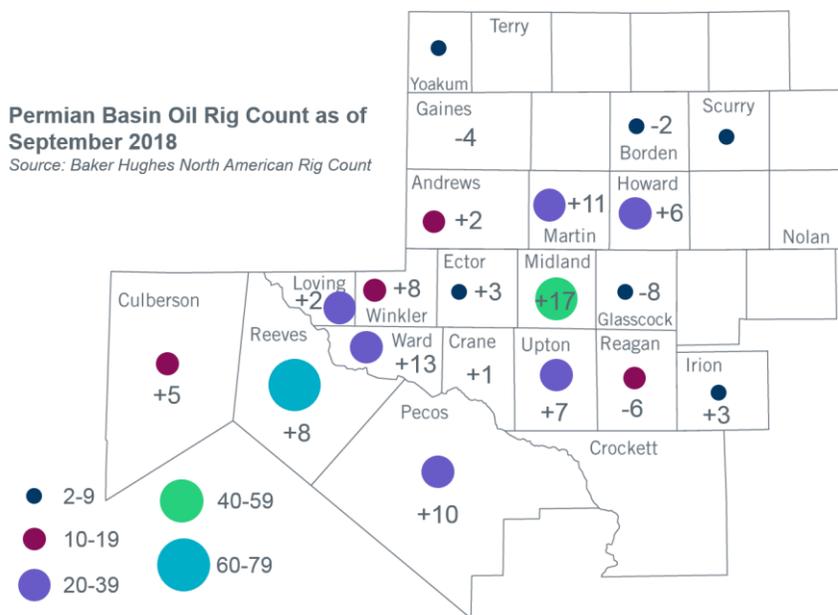
A number of transmission additions and upgrades have taken place in West Texas over the past five years, but more transmission is needed to keep up with the increased load. In 2016 and 2017, ERCOT endorsed nearly \$600 million of major transmission projects to serve this growing area. In June 2018, the ERCOT Board endorsed two additional projects that will allow ERCOT to reliably serve load, while also reducing congestion in the Far West Texas region.

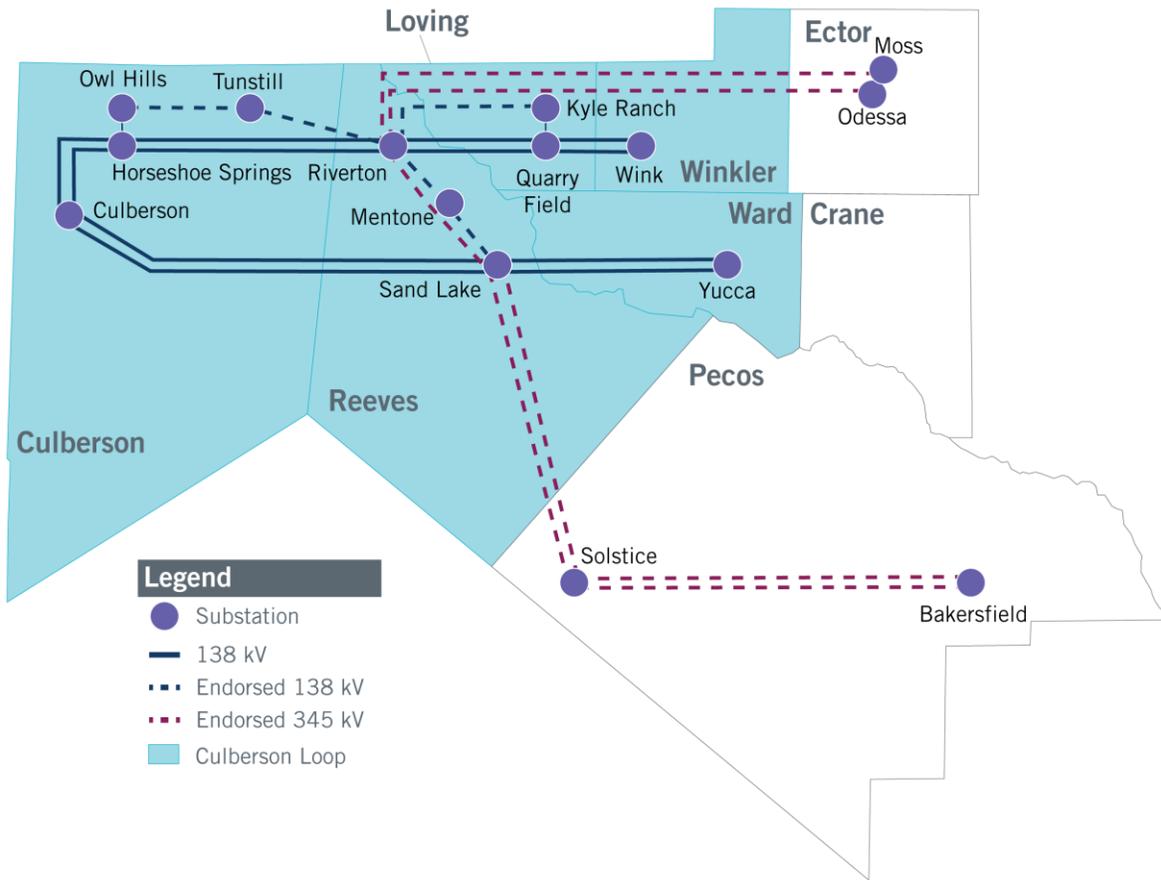
The annual growth rate in peak demand from 2012 through 2017 in West Texas was 8%, and is expected to continue at this rate through 2023. This far exceeds ERCOT's annual system-wide load growth rate of 1% during the same time. ERCOT's annual system-wide load growth rate is expected to increase to 2% from 2018 through 2023.

Transmission improvements

Several transmission projects are underway to address congestion resulting from the significant load growth, especially in the area served by the Culberson Loop. Highlighted projects include four new 345-kV power lines that will create a double-circuit loop, as well as three new 138-kV power lines that are double-circuit capable. Together, these lines will span approximately 272 miles and are expected to help support customer demand in the area served by the Culberson Loop.

Other projects include making improvements to several existing 69-kV and 138-kV lines to enhance their load serving capabilities and adding dynamic reactive devices at nearby substations to help support voltage.





Transmission Improvement Project	ERCOT Endorsement	Anticipated Service Dates
Line 69H Rebuild and 138-kV Conversion Project	October 2016	June 2018
Permian Basin-Solstice 138-kV line rebuild	October 2016	February 2019
Riverton-Sand Lake 138-kV line (new)	November 2016	May 2019
Far West Texas Project 1.0 (New Odessa-Riverton and Bakersfield-Solstice 345-kV lines)	June 2017	December 2020 / April 2021
Far West Dynamic Reactive Devices	June 2018	May 2019 / December 2019
Far West Texas Project 2.0 (New Riverton-Sand Lake-Solstice 345-kV line and Kyle Ranch-Riverton and Horseshoe Spring-Riverton 138-kV lines)	June 2018	December 2020