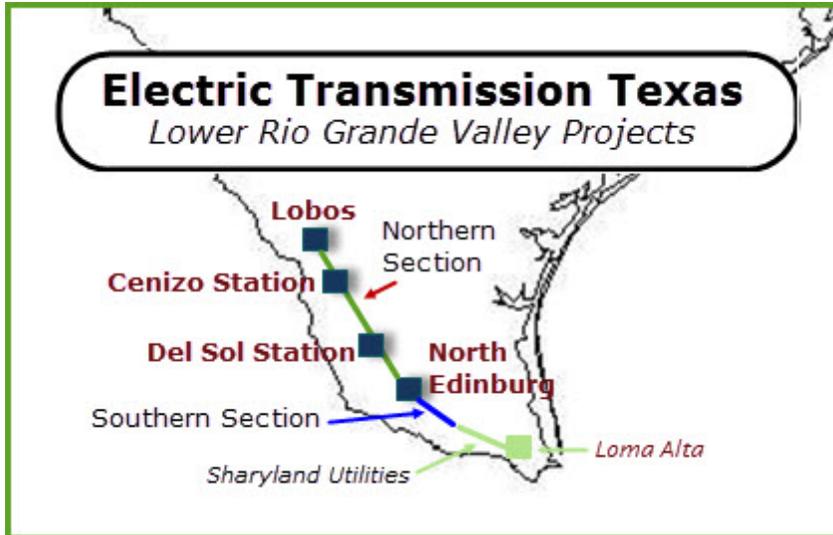


New ETT 345-kV lines begin delivering power to LRGV

Two new extra-high voltage transmission lines stretching more than 200 miles and recently finished by Electric Transmission Texas (ETT) began streaming much needed power to AEP customers in the Lower Rio Grande Valley before the summer peak.

“We encountered about everything during this job, from heavy rains to drilling into solid rock,” said Rich Haley, project manager of the Laredo-North Edinburg portion of the project.



A 156-mile, 345-kV line between Lobo Station near Laredo and North Edinburg Station went into service in late May (red line on map), a few days before completion of a companion line from North Edinburg Station south to the Hidalgo-Cameron county line (blue line), dubbed the Valley Loop. ETT built the northern half of the 100-mile Valley Loop with Sharyland Utilities taking the line downstream to Loma Alta Station (green line), owned by the Brownsville Public Utilities Board.

If you build it, they will come

Construction on the lines started in October 2014. Building the northern section involved acquiring more than 350 easements from 500 landowners with 190 easements and 140 permits required for the 50-mile southern portion. ETT picked up more jobs along the way. Last year it strung 28 miles of 345-kV conductor (energized at 138-kV) on the vacant side of towers already built for the 345-kV project between Lobo Station and AEP Texas' new Molina Station. The work completed a 138-kV transmission loop that bolstered service for Laredo.

Meanwhile, wind farms between Lobo and North Edinburg stations have requested connections to the new single-circuit 345-kV line. The AEP affiliate is investing \$14 million to deliver power from Javelina Wind Farm to the new Cenizo Station, south of Laredo; and \$21 million and \$20 million, respectively, for lines from the Duke Energy Renewables-owned Los Vientos III and IV wind farms (producing 400 megawatts) to the new Del Sol Station, near Rio Grande City.



ETT also invested some \$16 million in series compensation equipment at Del Sol and Cenizo (photo right during construction) stations to maintain acceptable voltage levels across long distances, reduce impedance on the lines, cut system losses and ensure reliability. General Electric, the manufacturer, installed the equipment that went into service in May

Considering the region’s meteorological history, ETT shortened the distance between towers along the southern stretch to add resilience to the line when it is battered by fierce storms and hurricanes from the Gulf of Mexico, explained Teresa Trotman, project manager of southern portion.

Powering the LRGV

The latest ETT investment represents a third 345-kV source entering the LRGV. Last November, AEP Transmission finished a historic energized re-conductoring of two 345-kV lines between Corpus Christi and the LRGV.

“These 345-kilovolt lines will meet the demand of customers in South Texas for many years to come,” said Kip Fox, president of ETT. “As planned, they are supporting growth in the Valley, and delivering electricity produced by wind farms.”

The estimated \$500 million project is ETT’s largest investment since completion of its portion of the Texas Competitive Renewable Energy Zone (CREZ) program in 2013. The transmission-only company is a joint venture of subsidiaries of AEP and Berkshire Hathaway Energy Company.