

# Addressing Electric Reliability

## Risks in the Lower Rio Grande Valley



### The Valley reliability challenge

The Electric Reliability Council of Texas (ERCOT) is working closely with transmission providers in the Lower Rio Grande Valley to address electric reliability concerns associated with growth in the region.

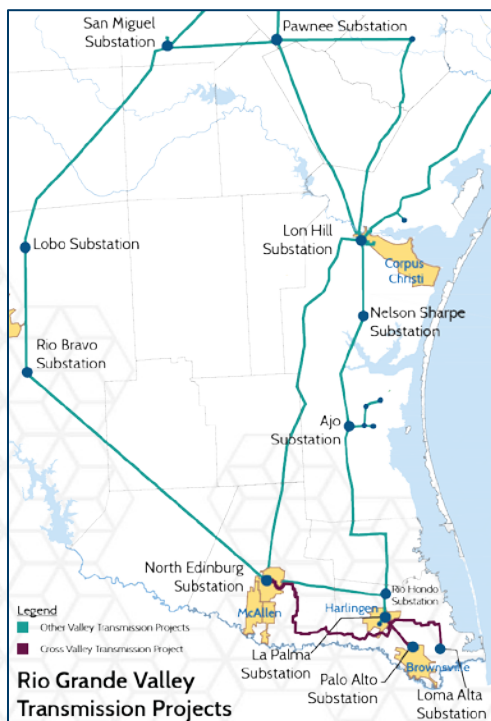
Because there is very limited electric generation and transmission infrastructure serving this area of South Texas, the Valley sometimes experiences a high risk of rotating outages, especially on extremely cold or hot days. These conditions can affect the Valley even when the remainder of the ERCOT grid remains in normal operations, particularly if generation units or transmission lines are out of service.

Two large electric transmission projects are scheduled for completion in 2016 to help address this issue, but more work will be needed to keep up with growing demand for electricity in the Valley. Meanwhile, ERCOT is keeping a close eye on the region to maintain reliability and protect the grid during extreme weather conditions or unexpected outages. Transmission providers also are coordinating with ERCOT to minimize reliability risks during construction of these projects.

### Providing electricity for a growing region

The peak demand for power in the Valley is more than 2,300 megawatts (MW) and is expected to grow to 2,600 MW by summer 2015 and more than 2,900 MW by 2020.

Currently, about 2,300 MW of electric generation capacity is available within the Valley region, including about 600 MW of wind power. Two high-voltage transmission lines provide 1,100-1,500 MW of transmission capacity to import additional power into the region, along with a 170 MW direct current tie that could send power to or from the electric grid in Mexico. Generation and transmission capacity totals assume all facilities are in service and operating safely. About 3,200 MW of additional generation is currently under study in the region, although only a fraction of that total likely will be built. Meanwhile, one company has announced plans to send about 500 MW of existing generation to Mexico in coming years.



More than \$1.3 billion in transmission improvements are under way by Electric Transmission Texas and Sharyland Utilities to improve the electric grid that delivers power to the Lower Rio Grande Valley region.

- The Lower Rio Grande Valley project will upgrade and increase capacity of facilities that import power into the Valley from the Corpus Christi area and will provide a new circuit into the Valley from the Laredo area.
- The Cross Valley project will provide a new circuit connecting facilities in Hidalgo County to the facilities at the Brownsville Ship Channel.

The ERCOT Regional Planning Group is evaluating the need for additional improvements and how quickly those improvements will be needed to keep up with growth in the region.