

Generation resource retirements in the ERCOT region

In fall 2017, generation owners in the ERCOT region announced plans to retire or indefinitely suspend operations of more than 4,000 MW of generation resource capacity by early 2018. Upon receiving notice of these plans, ERCOT performed studies to determine whether those specific units were needed for transmission system reliability in their respective areas. Results indicated none of the units will be required for transmission system reliability, based on the criteria identified in ERCOT Protocols and other guiding documents.

Managing a changing market

While these pending retirements will result in a decrease in available operating reserves, ERCOT expects to have sufficient generation available for anticipated needs in the upcoming winter and spring seasons. The grid operator will provide a seasonal assessment prior to the summer operating season.

The ERCOT grid is undergoing significant change, and new technologies are changing the role that some older generation resources play in grid and market operations. In general, lower natural gas prices, a significant component of the marginal price of electricity in the competitive wholesale market, have been reducing revenues for all resources in recent years. Additionally, the continued development of wind and solar resources, as well as small natural gas facilities that can respond quickly to changing grid and market conditions, affect how some resources operate in the market.

The planned retirements that have been announced are mostly older power plants that have been operating since the 1960s and 1970s. A newer plant retirement was associated with an industrial facility that has discontinued operations.

Continuing investments and interest in ERCOT market

While some older units are being retired, generation providers also continue to add new resources to the ERCOT system. As of Nov. 30, more than 47,000 MW of new generation projects were under study, and more than 20,000 MW of new projects have interconnection agreements. These include nearly 10,000 MW of proposed gas-fired generation projects, nearly 2,000 MW of utility-scale solar and more than 8,600 MW of wind generation projects.

Reserve margins and future reliability

The ERCOT market has seen cycles of retirements and new investments in the past, so these types of shifts are not without precedent. Planning reserve margins fluctuate over time and likely will continue to do so as the market responds to changing conditions.

The Public Utility Commission of Texas (PUC) has directed ERCOT to study and consider the appropriate level of reserves needed to maintain reliability while minimizing costs in ERCOT's unique energy-only market. ERCOT will provide an updated study of the economically optimal reserve margin (EORM) by late 2018.

As the electric grid operator for most of Texas, ERCOT has the tools necessary to maintain grid reliability in a broad range of situations. Although a reduction in available generation capacity increases the likelihood for tight operating reserves on some days, operational reliability each day is the result of activities in the control room and market, availability of transmission and generation resources and other factors.