

## ERCOT system performs well during summer of 2018

At the request of the Public Utility Commission of Texas (PUC), ERCOT has filed a 2018 summer performance update (PUC Project [#48551](#)). The ERCOT region experienced record-setting levels of demand on the system during the summer of 2018, and there was sufficient generation to meet the demand.

ERCOT set a new system-wide peak demand record on July 19, 2018, when demand reached 73,308 MW between 4 and 5 p.m. This is more than 2,000 MW higher than the previous system-wide record set in August 2016. The grid operator also set a new system-wide weekend peak demand record on July 22, 2018, topping out at 71,445 MW between 5 and 6 p.m.

Overall, June through August of 2018 was recorded as the fifth hottest summer on record for the state of Texas, but there was only one period of extremely high, sustained temperatures, from July 18 – 23. During this hot weather event – and throughout the rest of the summer – generation resources remained at a high level of availability, and ERCOT had sufficient operating reserves to meet the demand on the system.

Despite [lower planning reserves going into the summer](#) (11% reserve margin) compared to the past several years, the grid operator did not initiate any Energy Emergency Alerts or request conservation.

### Summer preparations with market participants

To help prepare for the summer, ERCOT and the PUC met with market segments to encourage enhanced preparations for summer operations. ERCOT also added some restrictions regarding planned transmission outages during the summer months and met with gas pipeline companies to reduce the potential for generation unavailability due to gas pipeline outages.

### Excellent market response and lower than normal generation outages

The ERCOT market is designed to provide financial incentives to encourage market participants to respond appropriately when operating conditions are tight. In summer 2018, the ERCOT wholesale market performed as expected. Generators responded to higher price signals and made their units available during peak demand periods.

Generation outages during peak demand were roughly half of what was forecasted in the final summer [Seasonal Assessment of Resource Adequacy](#) (SARA) report released on April 30, 2018. On July 19, when ERCOT set its new system-wide peak demand record, generation outages and de-rates totaled only 2,075 MW during peak.

ERCOT also had fewer Reliability Unit Commitments in summer 2018 relative to 2017, primarily due to the strong response from market participants to make their generation units available during tight system conditions.

Weekends typically see lower peak demands; however, the tightest operating conditions of the 2018 summer season occurred on Saturday, August 18, when two large generators tripped. One of those trips took place just prior to the day's peak. In response, ERCOT deployed its operating reserves to meet the demand with no reliability concerns.

## Performance of renewables during peak

Wind and solar performance was in line with ERCOT's expectations from the final summer SARA report. During peak on July 19, approximately 4,229 MW of the electricity being produced in the ERCOT region came from wind power, while 1,136 MW came from utility-scale solar.

## Pricing outcomes

The ERCOT market experienced periods of high system-wide Settlement Point Prices in the Day-Ahead Market and the Real-Time Market between June and August 2018. However, prices did not reach the same sustained levels observed in the summer of 2011.

- In general, average system-wide wholesale prices in the Real-Time Market ranged from \$33/MWh to \$47/MWh between June and August.
- The highest system-wide price for a single settlement interval in the Real-Time Market was \$3,125/MWh on June 5.
- During the July hot weather event (July 18 – 23), the highest system-wide price for a single settlement interval occurred on July 18, when wholesale prices reached \$2,169/MWh.
- The highest system-wide price for a single settlement interval in the Day-Ahead Market was \$2,062/MWh on July 23.

## Summer peak demand records

