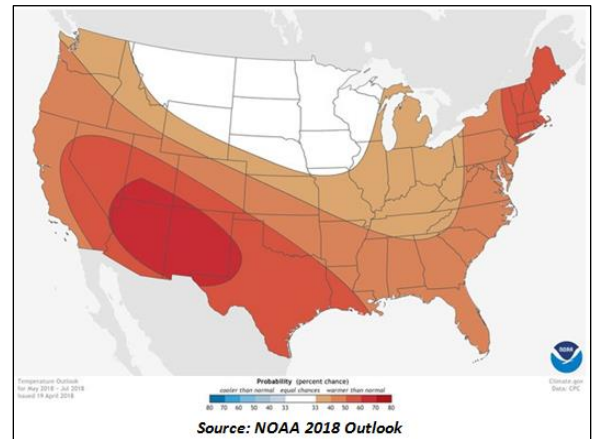


## ERCOT Hits New Summer Peak Demand without Major Outages

### What has changed?

Summer 2018 was expected to be unusually hot, especially in the southwest. This led to concerns that the Electric Reliability Council of Texas (ERCOT), the independent system operator (ISO) covering most of the state and serving 90 percent of load, would face particular stress on normal operations.<sup>1</sup> ERCOT projected that the ISO's peak hourly load would reach nearly 72.8 GW, more than 2 percent higher than the record set in 2016.<sup>2</sup>

In December, ERCOT projected that its reserve margin<sup>3</sup> would be 9.3 percent in summer 2018, significantly below the ISO's 13.75 percent target, and a steep decline from 2017's comfortable 18 percent margin. In addition to high projected demand, this expected shortfall was driven on the supply side by the retirement of about 4.5 GW of coal capacity, and construction delays for 2.1 GW of new generating capacity.



Although ERCOT's reserve projections improved in April with the addition of 525 MW of natural gas capacity from projects that had previously been out of service, at 10.9 percent the margin was still below target. Even with these additional resources, ERCOT warned that rotating outages were still a possibility under extreme conditions, but that the ISO also had significant non-generating resources, including roughly 2.3 GW of load-control capacity, as well as ancillary services and contracted emergency response service capacity to maintain reserves if needed.<sup>4</sup>

ERCOT is not subject to regulation by the Federal Energy Regulatory Commission (FERC) because it is entirely within the state of Texas. However, FERC does include ERCOT in its reliability assessments, and in May, FERC Chairman Kevin McIntyre said the commission would keep an eye on ERCOT to see how the ISO managed any major reliability issues over the summer.<sup>5</sup> The North American Electric Reliability Corporation (NERC) also raised concerns that ERCOT had seen a significant drop in its reserve margin and was the only NERC assessment area to not meet its reserve target this year.<sup>6</sup>

<sup>1</sup> Brooks, Michael, "FERC Keeps Eye on ERCOT, CAISO as Hot Summer Approaches," RTO Insider, May 7, 2018, available at: <https://www.rtoinsider.com/ferc-ercot-caiso-summer-reliability-assessment-92716/>.

<sup>2</sup> ERCOT News Release, "ERCOT expects record-breaking peak demand this summer," April 30, 2018, available at: <http://www.ercot.com/news/releases/show/155101>

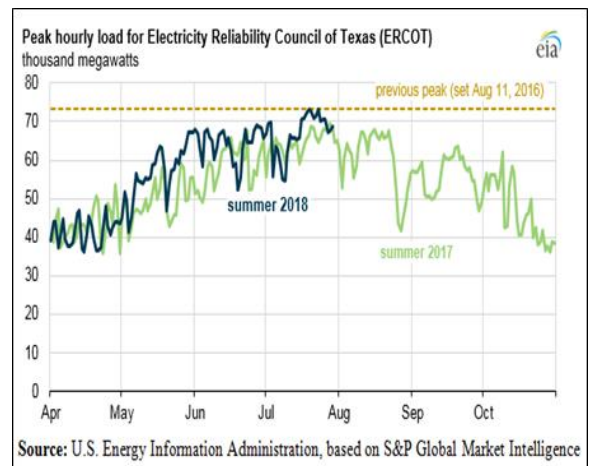
<sup>3</sup> "Reserve margins reflect the amount of excess available generating capacity as a percentage of total capacity at projected peak system demand." Bowers, Richard, "Today in Energy: Electric Reliability Council of Texas surpassed all-time peak hourly load in July," July 31, 2018, available at: <https://www.eia.gov/todayinenergy/detail.php?id=36775&src=email>.

<sup>4</sup> Kleckner, Tom, "ERCOT Gains Additional Capacity to Meet Summer Demand," RTO Insider, May 1, 2018, available at: <https://www.rtoinsider.com/ercot-summer-peak-planning-reserve-margin-91676/>.

<sup>5</sup> Brooks.

<sup>6</sup> Kleckner, Tom, "ERCOT Gains Additional Capacity to Meet Summer Demand."

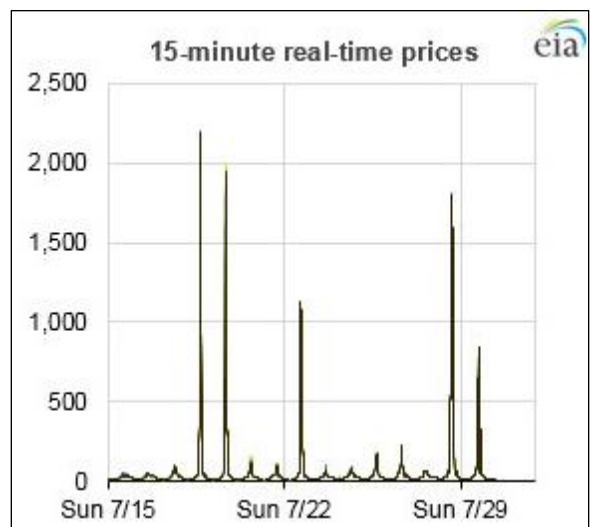
Ultimately, ERCOT’s peak hourly load surpassed the 2016 record during 14 one-hour periods from July 18-24, exceeding the projected peak on four of these periods and setting a new record of more than 73.2 GW from 4-5pm on July 19. The market was able to meet these peaks without any widespread outages on the system. ERCOT does not have a capacity market, but instead allows very high prices when demand spikes, up to a cap of \$9,000/MWh. In July, real-time prices spiked on five days, ranging from about \$800/MWh to a high of \$2,160/MWh.<sup>7</sup> Wind power had been projected to contribute a daily average output of 4.1 GW, but actually averaged 6.6 GW in July, helping to ease the burden on fossil generation. Forward contracts for August, which had reached \$239/MWh in May, fell back below \$100/MWh with cooler temperatures expected.



ERCOT CEO Bill Magness told his board of directors “The fleet performed well, and everyone in the market was very aware of what was coming and what we needed to do. It was a good testament to how the participants in the market can perform and how they worked in a stressed situation.” But, he warned “We have a lot more August and September to go.”<sup>8</sup>

### What is the impact on cooperatives?

ERCOT’s members include 33 distribution co-ops and five G&Ts, serving nearly 1.6 million member-consumers. These co-ops depend on the ERCOT market to keep wholesale power affordable and reliable even on the hottest days, and as market participants they do their part to help preserve system stability, including through their demand-response programs which help balance the system at peak periods.



### What do cooperatives need to know or do about it?

Summer reliability challenges are not going away. ERCOT expects its summer reserve margins to remain fairly steady in the 10.9 percent to 12.3 percent range through 2022, still below target, but similar to 2018. Looking out to 2023, however, the margin is projected to fall to 8.9 percent in 2023.<sup>9</sup> Co-ops in ERCOT should continue their engagement with the ISO and keep an eye on reserve margins assessments.

### Contact for Questions:

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<sup>7</sup> Bowers.

<sup>8</sup> Kleckner, Tom, “Plentiful Generation Helps ERCOT Meet Extreme Demand,” RTO Insider, August 7, 2018, available at: <https://www.rtoinsider.com/ercot-demand-dan-woodfin-97727/>.

<sup>9</sup> ERCOT News Release.