

SUMMARY

At its highest point, approximately 48.6% of the Electric Reliability Council of Texas' (ERCOT's) power generation was forced out due to extreme weather conditions. This caused a critical supply shortage just as demand ramped up, creating emergency conditions that forced the grid operator to initiate rolling outages throughout the week of February 15.

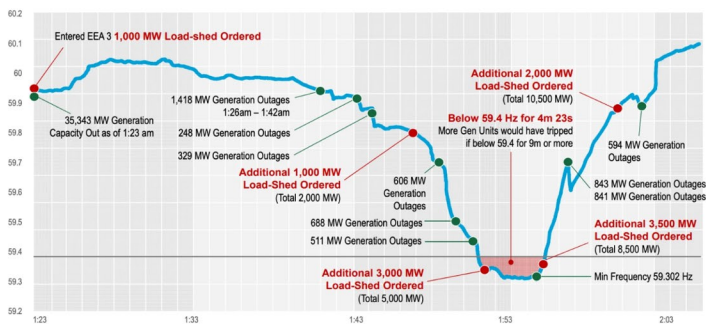
WHAT CAUSED THE OUTAGE?

As early as November, ERCOT officials were warned that a cold snap could hit the south-central U.S. during the 2020/2021 winter season. In early February, the grid operator began issuing formal notices of incoming weather.

By 8:30 AM on Sunday, February 14, ERCOT was calling for energy conservation; at 5:19 PM freezing precipitation forced transmission outages, and by 7:06 PM ERCOT hit a new winter peak of 69,222 MW — well above the 57,699 MW winter peak initially predicted by ERCOT in its September resource adequacy assessment.

Meanwhile, capacity reserves dipped below 3,000 MW, then 2,300 MW, then 1,750 MW throughout Sunday night and early Monday morning as extreme cold led to supply constraints. The rapid decrease in available generation caused frequency to reach a dangerously low 59.302 hertz. A safely operating system should sit around 60 hertz, and can't fall below 59.4 hertz for more than nine minutes. If it does, generation will start tripping offline and the grid is at risk for total blackout.

Rapid Decrease in Generation Causes Frequency Drop



WHO'S TO BLAME?

Gas plants were the largest contributors to the February outages. Of the 52,277 MW of power that tripped offline at peak, around 26,000 MW were gas, according to the grid operator. While some officials attempted to blame an over-reliance on renewables like wind and solar, these were not the culprits.

Still, with legislative hearings underway, there remains uncertainty. Power generators say the problem was largely caused by the gas supply side, while the gas industry and its regulators claim the issues stemmed from the electric sector. Several ERCOT board members have resigned, along with the Chair of the Public Utilities Commission of Texas.

It will be quite some time before an official report is published with definitive facts and findings.

HOW YOUR FACILITY WAS AFFECTED

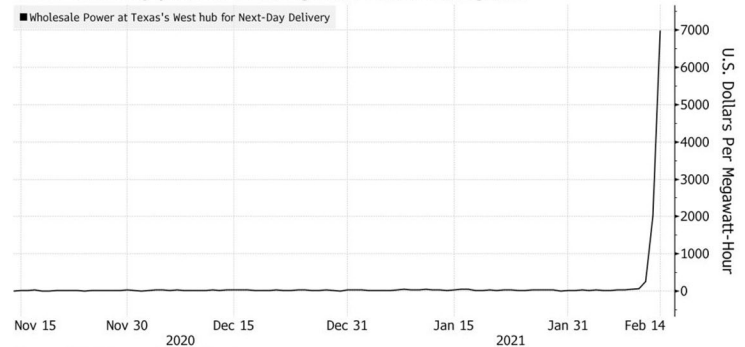
RISING ENERGY PRICES

A spike in demand and a constrained supply of electricity led to "skyrocketing" energy bills after regulators ordered ERCOT to bring electricity prices to the cap of \$9,000/MWh to reflect scarcity conditions.

Commercial customers that competitively procure their energy supply in Texas' open market have the option to contractually "lock in" a fixed price. Alternatively, customers can let their price vary with the market to capture market dips. This strategy, which is geared toward customers with a strong risk tolerance, also exposes them to market upticks. In February, those upticks were unprecedented.

A Power Surge

Texas electricity prices are soaring amid record-setting cold



NATURAL GAS SHORTAGES

Because the severe winter weather was not limited to Texas alone, natural gas consumption spiked across the Midwest, resulting in low supplies of gas nationwide. Natural gas infrastructure used to bring gas to regions like California was frozen, resulting in supply shortages for countless customers.

THE TAKEAWAY

ECOM-ENERGY CAN HELP

The surge in TX power prices should encourage facilities everywhere to reassess their risk tolerance. Are you exposed to market upticks like these? Ecom-Energy can help quantify the cost of these potential upticks to help leadership achieve the right mix of budget certainty and savings maximization. This will ensure your energy procurement strategy is in line with your organization's risk tolerance.

In addition, the natural gas shortages that threatened regions like Southern California highlight the need to have a proactive energy manager keeping an eye on the market at all times. Ecom-Energy serves as the eyes and ears for all our customers!