

# *In Summer Heat, 'Artificial Shortages' in Texas Grid May Have Cost \$8 Billion*

Electricity prices soared even when supply was ample, an independent monitor said. The state's market operator said it was intentional.



**By J. David Goodman**  
Reporting from Houston

Sept. 26, 2023, 5:02 a.m. ET

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When VJ Arizpe installed solar panels connected to batteries at his home in Houston last year, he did so to avoid the kind of power outages that had plunged much of Texas into darkness in the middle of a winter storm in February 2021.

The new equipment allowed him to sell back extra power to the grid, but he had no idea just how profitable it would become in the summer heat as the price of power in the state's electricity market spiked over and over again.

"This summer, it was constant," Mr. Arizpe, an architectural photographer, said. "I think my best month, I netted about \$250, and that's after paying for running three A/C units. Last summer, I paid \$600 a month. Now I'm making \$250."

The crushing heat created demand in Texas beyond all previous records. Wholesale electricity prices were high on many days because it was just so hot. But many other times this summer, the cost of electricity soared during periods when supply was ample and prices should have been low, according to energy traders, consultants and analysts.

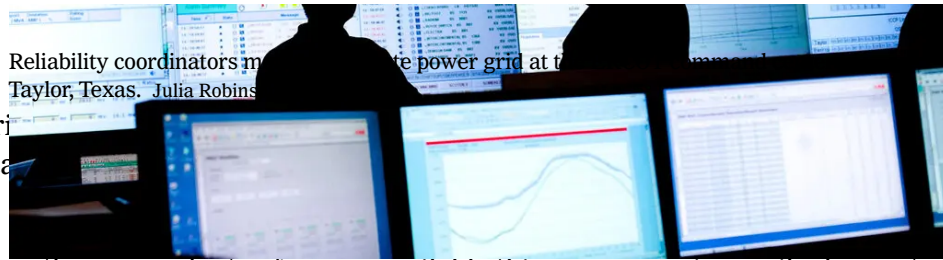
The price spikes were extremely costly, an analysis by the state's independent market monitor found: about \$8 billion over three months.

And it was by design.

Unbeknown to most Texans, the operator in charge of the Texas electricity market made a change this spring aimed at making the grid more reliable and less prone to the sorts of catastrophic blackouts that occurred in 2021. It involved the introduction, in June, of an additional mechanism to help prevent blackouts by paying power generators to keep a certain amount of capacity available in reserve.

Energy experts and analysts said the state's market operator, the Electric Reliability Council of Texas, or ERCOT, essentially withheld electricity supply from the market to create the reserve, which had the effect of pushing up prices.





As climate change brought on by the pandemic has been at its most precarious, the grid has precipitously declined.

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But even at times when there was plenty of power available this summer, prices spiked repeatedly.

The council was essentially creating “artificial shortages” with its new reserve mechanism, and the result was that prices increased precipitously on a regular basis, the independent market monitor, Carrie Bivens, wrote in her analysis. The real-time cost of power surged near or at the market’s mandatory ceiling of \$5,000 per megawatt-hour at times when, under similar conditions in past years, it would have been less than \$100.

There have been some likely winners: power companies, people with solar panels who can sell their power back at times of high prices and cryptocurrency miners, who are able to shut down periodically and take advantage of market fluctuations. One cryptocurrency company, Riot Platforms, reported making more than \$7 million in energy credits in August, up from \$200,000 the same month last year.

The losers are likely to be most ordinary Texans, who could soon see higher energy costs, analysts said.

“These price spikes were big,” said Ron McNamara, an economist who helped set the rules for the electricity market in the Midwest. He said the summer’s wholesale prices in Texas had not yet affected most ordinary consumers, who have fixed-rate retail contracts — but would in the future.

“I’m now paying the most expensive price for power since I moved here,” said Mr. McNamara, who signed a new, higher electricity contract in August. “Why?”

The implementation of the new reserve program grew out of the backlash over the 2021 winter storm, when the power grid failed to handle freezing conditions. The resulting blackouts killed more than 200 people statewide. In the aftermath, Gov. Greg Abbott pushed for changes to prevent future failures.

The Texas grid has long had ways of providing extra electricity to the grid quickly in the event of an emergency. The new approach to holding back power from the market was the first new reserve mechanism of its kind introduced in the market in two decades. It launched in mid-June. Days later, the price spikes were evident.

Mr. Arizpe, 43, said he was monitoring the app for his Tesla solar and battery system when, on June 20, he noticed a huge jump in the prices he was getting. He shared a screen shot from the day, showing a price curve rising nearly vertically. He ultimately made about \$50 on the day.

“ERCOT’s inability to keep a consistent grid has been really lucrative for me,” Mr. Arizpe said.

Ms. Bivens, the independent market monitor, also focused on June 20 in her analysis of the impact of the new grid changes. It was a day when prices were high even though the grid had a large amount of reserve energy. The unusual spike in prices was the result of the mandatory reserves, she found, and not because of any strain on the grid from extreme heat or other factors.



A new system allowed VJ Arizpe to sell back extra power to the grid, but he had no idea just how profitable it would become. Annie Mulligan for The New York Times

A spokeswoman for ERCOT said in a statement that the market behavior over the summer had been “both desirable and intentional,” explaining that it reflected “the most effective way” of meeting both the electricity demand and the council’s plan for having energy ready in reserve. The chief executive for ERCOT, Pablo Vegas, was not available for an interview.

Mr. Vegas defended the approach to the Houston Chronicle: “I don’t think it’s fair to put at the feet of E.C.R.S. all of the higher cost from the summer,” he said, referring to the new program, known as the ERCOT Contingency Reserve Service.

But critics saw little benefit to reliability from the change. “This is a huge transfer of wealth,” said Tyron Slocum, who follows energy markets for Public Citizen, a nonprofit consumer advocacy group. “It’s going to end up in user rates at some point.”

Demand for electricity has been soaring in Texas, a result of population growth, record-breaking summer heat and the increase in energy-intensive industrial production, particularly cryptocurrency mining. Before the summer began, ERCOT underestimated the demand by a significant margin, expecting a high of about 82 gigawatts. Instead, it peaked at more than 85 gigawatts.

Amid the searing heat, ERCOT called for consumers to conserve energy on 11 different days. On one day in August, the mayor of San Antonio held a news conference warning of possible rolling blackouts. In September, the grid found itself in an emergency situation not seen since 2021.

The market is designed to create high prices at such moments, an incentive for power generators to turn on whatever they have.

“The philosophy in ERCOT was that the prices would get so high that everyone would rush to meet them,” said Robert McCullough, an energy consultant.

But strained supplies during periods of intense heat are different from artificially created shortages that cause prices to rise even when there is no power emergency, critics said.

A recent surge of solar power development in Texas has helped the state weather the summer’s extreme heat, providing power through the afternoon’s peak demand.

“From a reliability standpoint, I think Texas did great this summer,” but not because of the new reserve requirements introduced in June, said Katie Coleman, a lawyer and energy consultant for the Texas Association of Manufacturers. “I do not think that E.C.R.S. made a material difference this summer,” she said, except to add costs.

But there have been some signs of a broader impact of the pricing surge. A survey of Texas manufacturers by the Federal Reserve Bank of Dallas, released last month, found a decline in manufacturing activity, with 25 percent citing higher utility prices as the reason, and nearly 40 percent blaming the heat.

Adam Sinn, an energy trader, said driving prices up to respond to scarcity — especially when there is no real shortage — can have negative effects, such as encouraging reserve power that runs on diesel to turn on more frequently, which is “not great for the environment.”

The situation over the summer is providing a “windfall” to electricity generators, including many solar companies, said Ed Hirs, an economist and energy fellow at the University of Houston. But those who gain the most will not be apparent for some time because such transactions are not immediately made public, said Mr. Hirs, a critic of the Texas electricity market.

“We’re not going to see it for a while,” he said. “There’s no transparency.”

**J. David Goodman** is the Houston bureau chief, covering Texas. He has written about government, criminal justice and the role of money in politics for The Times since 2012. More about J. David Goodman