Energy & Science

Gas Sellers Reaped $11 Billion Windfall During Texas Freeze

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- Natural gas producers reduced output days before power cuts
- Millions face prospect of higher gas prices for years to come

The official autopsy of the great Texas winter blackout of February 2021 quickly established a clear timeline of events: Electric utilities cut off power to customers and distributors as well as natural gas producers, which in turn triggered a negative feedback loop that sunk the state deeper and deeper into frigid darkness.

It's now becoming clear that while millions of Texans endured days of power cuts, the state's gas producers contributed to fuel shortages, allowing pipelines and traders to profit handsomely off them.

Interviews with energy executives and an analysis of public records by Bloomberg News show that natural gas producers in the Permian

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shale basin began to drastically reduce output days before power companies cut them off. As the flow of gas cratered, everyone scrambled to secure enough supply, sparking one of the wildest price surges in history. Power producers were forced to pay top dollar in the spot market for whatever gas they could find. Soon customers will be saddled with the bill.

And it's a big one: The total comes to about $11.1 billion for a storm that lasted for just five days, according to estimates by BloombergNEF analysts Jade Patterson and Nakul Nair. The cost of gas for power generation alone was about $8.1 billion, or 75 times normal levels. A further $3 billion was spent by utilities providing gas for cooking, heating and fireplaces. The BNEF estimate is based on spot prices at major hubs assessed by S&P Global Platts rather than private contracts, so is likely an upper limit of the total cost.

Millions of Texans are now faced with the prospect of paying higher gas prices for years as utilities seek to spread the cost over a decade or more. Texas lawmakers have set aside $10 billion to help natural gas utilities cover their natural gas costs from the storm through low-interest, state-backed bonds.

A special legislative session convened Thursday but the agenda did not include any measures to fix the power grid. This week, Governor Greg Abbott appeared to double down on his early assessment that wind and solar were prime culprits of the freeze. Even though gas failed in its role as a reliable backup fuel during the freeze, Abbott pushed regulators in a letter to strengthen incentives for fossil fuel and nuclear generators while increasing "reliability costs" for intermittent renewable power sources.

What Abbott didn't mention was the massive windfall key industry players made during the freeze. Energy Transfer posted its highest quarterly net income on record, more than three times its previous best quarter.

This is “the most massive wealth transfer in Texas history,” said Ron Nirenberg, mayor of San Antonio. “Energy market participants took full advantage of the declared disaster, or did not take the appropriate steps to stop the exorbitant and unconscionable prices.”

Energy Transfer said years of investment meant it was able to keep its pipelines running and sell gas from storage, providing critical supplies when others could not. Its prices were fully negotiated and set by the market, the company said.

Multiple Systemic Failures

At its peak, Winter Storm Uri left the Texas grid nearly 50% short of the power it needed, causing widespread blackouts 500 times worse than those affecting California during the wildfires of 2020. Multiple parts of the system were to blame: regulators failed to predict the severity of the low temperatures, power producers underestimated demand, wind turbines froze and coal and nuclear plants tripped offline.

But the largest point of failure was generators powered by natural gas, according to the Electric Reliability Council of Texas. Most of it was attributed to weather-related breakdowns and idled plants. Some producers shut in their wells as a preventative measure; massive amounts of water are used in fracking and operators feared the cold weather would freeze wells, pipes and roads.

Gas Failure

Half of the drop in Texas gas production was before the first power cut

Source: Bloomberg data

As the cold weather swept through west Texas, the state's gas production tumbled by some 11 billion cubic feet over nine straight days from Feb. 9. Crucially, 52% of the drop in volume came before ERCOT's first power cut in the early hours of Feb. 15, according to data compiled by BloombergNEF.

On Feb. 11, two pipeline companies, Targa Midstream Services LLC and DCP Midstream LP, were forced to shut gas-processing facilities due to freezing weather, according to filings with the Texas Commission on Environmental Quality. Immediately, prices skyrocketed.

The following day, Vistra Corp., the largest retail power provider in the country, received multiple force majeure notices from gas suppliers, explaining they would not be able to fulfill their contractual obligations to supply the required volumes of gas. In total, 70% of the force majeures sent to Vistra from suppliers affected gas deliveries before ERCOT's first power cut. Refineries, petrochemical plants and gas export facilities began showing natural gas supply problems around this time, TCEQ data show.

On the evening of Feb. 12, Christi Craddick, the chairman of the Texas Railroad Commission, the state's oil and gas regulator, held an emergency meeting. They amended the rules to give electricity generation serving "human needs" higher priority than industrial users. The move was necessary, but for many power producers it came too late.

By Sunday Feb. 14, the cold weather spread across the southern U.S. Natural gas hit $300 per million British thermal units in Texas, about 100 times regular levels, and a record $600 in Oklahoma. Traders began drawing comparisons to the records set on the Midwest grid in 1998, and to the California energy crisis that caused widespread blackouts in the early 2000s.

It was only on Monday, Feb. 15, that the first ERCOT power cuts came into effect.

Vast Excess to Supply Crunch

Texas usually produces far more gas than it can handle. It became infamous during the shale boom for releasing vast quantities of natural gas into the atmosphere, a practice known as flaring.

That's what makes February's gas supply crunch all the more remarkable. Usually, gas is cheap in Texas and trades up and down by cents on the dollar each day. Power providers secure the fuel through a mixture of contracted supplies of physical gas and financial contracts like swaps and hedges. Gas utilities are more reliant on more volatile spot prices.

But as gas production tumbled and providers canceled contracts, power companies were losing supplies by the hour. That forced them into the spot market, handing sellers the power to charge almost any price they wanted, according to power executives, who spoke on the condition of anonymity. They scrambled to find replacement supplies at prices trading at the 9,000 a megawatt-hour price cap for days.

The executives expressed dismay that gas producers can shut-in wells and sellers can effectively pull out of contracts without penalty, while power generators have a public duty to keep the lights on -- or at least try to.

The Texas Oil & Gas Association defended the long-term availability of gas, saying, "With proper planning, Texas has ample natural gas to meet our energy needs even during extreme circumstances."

Pipeline Profits

The impact of gas shortages on skyrocketing prices was compounded by Texas's pipeline system, which is controlled by just a few key players -- among them Energy Transfer and Kinder Morgan, the same companies that made the biggest-known profits from the freeze.

Energy Transfer and Kinder Morgan both pointed to their ability to draw gas from their storage facilities as a reason why they were able to supply gas when others providers had none. Energy Transfer said its peak draw was enough to power 3 million homes.

The U.S. has the most interconnected gas network in the world. Interstate pipelines are federally regulated, have transparent pricing and customers can view physical flows at multiple points. By contrast, intrastate pipelines have long been a black box to customers in Texas. They have no public price disclosures, and are only lightly regulated by Craddick's Railroad Commission.

Usually, given how cheap gas is, this isn't a problem. But during the Texas freeze, the market went haywire. One power executive described finding gas at a major hub trading at about $50 per million British thermal units. But once marketers charged delivery costs through the intrastate pipeline, the total price ended up six times higher. Another executive described how gas put into storage at $2 to $3 per million British thermal units was being offered for sale in the $200 to $300 range.

Winners and Losers

Texas freeze was a bounty for gas trading while utilities paid the price

Source: Company filings, *Citigroup estimate

Furthermore, intrastate pipeline operators are not required to publish physical flows, putting customers at a massive disadvantage when it came to setting prices.

"If you're producing half as much gas as normal but selling at 70 to 100 times the price, then that math is working for you," said one executive who declined to be named. "You just had the greatest week in the history of the gas market."

CPS Energy, the biggest utility in San Antonio, was blunt in its assessment.

“Egregious natural price gouging,” CEO Paula Gold-Williams said of Energy Transfer, the biggest winner to date. CPS claims the pipeline operator generated two years’ worth of profits in the first quarter of 2021 and is suing to reclaim some of the $1 billion it lost during the storm.

In an emailed statement, Energy Transfer co-CEO Tom Long rejected CPS’s characterization. “They are trying to divert the spotlight from their reckless and incompetent actions in order to avoid paying their bills,” he said. Long cited what he called “miscalculations of the severity of the storm and their lack of competent planning,” saying his company provided natural gas and electricity “at the prevailing market prices.”

CPS’s chief financial officer, chief operating officer and legal staff have all announced their departures from the utility since the storm.

“These unlawful profits will come from the pockets of everyday San Antonians and Texans unless we do something about it,” Gold Williams said. Lawsuits related to the freeze now number in the hundreds.

Whether to Winterize

Fixing Texas’s power grid is dependent on lawmakers in Austin, who just wrapped their session. They passed a series of reforms designed to address the calamity with much of the focus on winterizing power plants and allowing utilities to securitize excess costs by selling bonds. Simple fixes like adding gas producers to the list of critical infrastructure that should not have their power cut off were also passed.

But the bigger question is how much new equipment should be installed to prevent freezing. The gas industry successfully lobbied hard against mandates that would require all of its facilities to weatherize, saying that it would be costly and could threaten their economic viability. The industry claims that the vast majority of its production, about 80%, isn’t used for power generation.

Power generators want more. They say the whole gas system from wells to lines should be required to weatherize, to prevent the risk of future blackouts.

"At least a quarter of the blackouts could have been averted if the fuel supply had held up," said Daniel Cohan, associate professor of environmental engineering at Rice University in Houston. "If we only winterize gas power plants without winterizing gas supply, my fear is we're going to have inadequate fuel supply in the future."

Holly Ferguson, whose mother died of hypothermia during the freeze, faults not just the assisted living facility for not having enough generators, but also the energy companies for their failures leading to the disaster.

"People died," she said. "And even though gas companies made billions of dollars, they still don't want to weatherize, and it's infuriating."

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