Hitting the jackpot at Texans’ expense

Better regulation of natural gas producers would help ensure reliable electricity

Texas’ electric grid is only as reliable as its fuel supply, writes former ERCOT board member Peter Cramton. Above, a man carried a case of drinking water to residents of an apartment complex that was without power and water during February’s freeze. (Smiley N. Pool/Staff Photographer)

By PETER CRAMTON

This op-ed is part of a series published by The Dallas Morning News Opinion section to explore ideas and policies for strengthening electric reliability. Find the full series at dallasnews.com.

Millions of Texans went without electricity for days in the cold. Winter Storm Uri left 111 dead. Property damage totaled $130 billion. Yet, many natural gas producers reaped tens of billions in windfall profits in four freezing February days.
“Obviously, this week is like hitting the jackpot,” said Roland Burns, chief financial officer of Comstock Resources, on the final day of the storm. Gas prices soared two hundredfold as power generators struggled to keep their gas-fueled power plants running.

Like other power systems, the Texas grid relies on gas-fueled electricity during a sustained power shortage. Most of these gas-fueled plants are combined-cycle units that are highly efficient and flexible. In an August heat wave, the fuel is inexpensive and readily available via a network of pipelines.

But starting on Feb. 11, the storm exposed every Texas county and much of the Midwest to frigid temperatures. Gas field equipment froze, and gas production began falling on Feb. 12, according to the Energy Information Administration, ultimately dropping 45%. Outages from gas-fueled power plants were double what planning models forecasted in the extreme-storm scenario. (Renewable resources, wind plus solar, performed better than expected during the storm.)

With a deep drop in electricity supply and a sharp increase in demand, the system operator, the Electric Reliability Council of Texas, could not balance supply and demand without ordering controlled outages of about one-third of the system to prevent a catastrophic blackout. Those power cuts exacerbated gas delivery failures to many power plants.

The failure of gas-fueled power was the proximate cause of the Texas electricity crisis. Had the gas supply been reliable, the electricity shortage would have been far less severe. There were other causes of the crisis, which I discuss in a research paper. But the gas supply failure was key.

One generating company executive told me his company had winterized its plants and bought all the natural gas available, but even as prices rose from the usual $3 per million British thermal units to 200 times higher, the company couldn’t get enough fuel to run at capacity. He switched some units to fuel oil. Fuel oil is an excellent backup for a few hours, but running a gas plant with fuel oil for multiple days has many challenges. Despite having more than 50 trucks scheduled to deliver fuel oil each day, the trucks couldn’t get to the plants when the snow and ice arrived.

Electricity reliability and natural gas availability are closely linked. The grid won’t be reliable if gas delivery fails. Something must change. A lesson for Texas and markets worldwide: Fix your gas market rules.

Fixing the Texas gas market is no easy task. Its regulator, the Texas Railroad Commission, is a textbook example of regulatory capture. For decades, the commission has operated as an advocate for the oil and gas industry. This cozy relationship contributed to the Texas disaster because the lack of gas field and pipeline preparation for cold was a major cause of the electricity outages — and one that better regulation would have avoided.

But under existing law, it isn’t the Railroad Commission’s job to ensure gas production and delivery reliability. That won’t change unless the Texas Legislature writes a new statute that spells out that role or, even better, puts gas regulation with the Public Utility Commission. Then electricity and gas would be regulated by the same entity focused on providing reliable electricity and gas at the least cost, under market rules that aim to protect customers and the public interest.

Gas production and pipelines also failed in the 2011 freeze. Gas owners could have winterized their facilities, but many chose not to. They could have registered their equipment as critical facilities to keep their power on, but many didn’t do that either. In her prepared testimony on March 24 before the House Energy and Commerce Committee, Railroad Commission Chairman Christi Craddick said, “When wellhead operations faced freezing conditions, power supply was
cut and outages caused a domino effect of problems. Any issues of frozen equipment or delays in process restoration could have been avoided had the production facilities not been shut down by power outages.”

Why did gas suppliers not fill out the simple form to register as critical facilities and avoid a power shutoff? Maybe it was simply due to negligence. But the electricity outage in freezing weather reduced supply precisely when gas was needed most. Some gas suppliers hit the Uri jackpot because the price increase (two hundredfold) more than compensated for the total quantity reduction (45%).

Gas-fueled generators will provide much of the system’s electricity during shortages for many years to come. If regulation fails to make gas delivery reliable, then Texans should dread future arctic storms and the electricity disruptions they will bring. An electricity system is only as reliable as its fuel supply.

*Peter Cramton is a professor of economics at the University of Cologne and the University of Maryland (emeritus since 2018). He was vice chair and an independent director of the ERCOT board before resigning on Feb. 24. He wrote this column for The Dallas Morning News.*
Natural gas producers hit the jackpot during the power outages, but they failed Texas

The electrical grid is only as reliable as its fuel supply.

A man walks home with a case of drinking water distributed at the Literacy Achieves nonprofit in Vickery Meadows to nearby residents living without water after a winter storm brought snow and continued freezing temperatures to North Texas on Thursday, Feb. 18, 2021, in Dallas. (Smiley N. Pool/The Dallas Morning News)

By Peter Cramton

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