



309 East 11th St., Suite 2 • Austin, Texas 78701 • 512.477.1155 • www.citizen.org

VALENTINE'S DAY 2021 TEXAS FREEZE AND BLACKOUTS

THE FACTS:

- During the recent week-long freeze and snowstorm in Texas, ERCOT experienced widespread failure of generation and extraordinarily high electric demand, such that millions of Texans were left without power.
- Transmission and distribution utilities failed to manage these outages and the burden of “rolling blackouts” was not distributed equitably.
- Increasingly common weather extremes are the result of climate change, including the [polar vortex](#). Texas experiences more [billion dollar weather disasters](#) than any other state.
- On Monday, February 15, at least 30 gigawatts (GW) of electricity generation failed, including 26 GW of coal, gas, and nuclear (thermal) sources and 4 GW of wind. The historic freeze set records for energy demand, with 69 GW of demand exceeding the usual amount of 57 GW and even the most extreme predictions of 62 GW.
- Thermal sources are not the reliable base load fossil fuel proponents claim.
- Generators failed to weatherize their facilities to ensure operation in freezing conditions and the PUC failed to authorize ERCOT to require weatherization.
- The natural gas extraction industry failed to weatherize gas extraction, processing and transportation infrastructure. Natural gas [production froze](#), and so did the pipelines that transport the gas. Once offline, natural gas power plants were not prepared to restart in below-freezing conditions.
- Attacks on wind were politically motivated and not based in fact. Wind represented barely more than 10% of outages (4 GW of a total of over 30GW). Wind and solar sources exceeded expectations in the days after the disaster.
- The ERCOT market failed to deploy all technically available generation before blackouts had to be implemented.
- The Energy Efficiency Resource Standard, adopted in 2011, is only [0.4% of average peak demand](#). Texas has the lowest EE goal of the 26 states that have established goals, we achieve about 0.2% reduction in energy use each year (see [p. 177](#)).

RECOMMENDATIONS:

In order to provide affordable, reliable and fair access to electricity, Texas must:

- Investigate and prosecute any manipulation of the natural gas and/or electric markets
- Manage electric demand by investing in energy efficiency and demand response
- Use smart meters and local renewable energy and energy storage to ensure all communities are fairly served when electric supply can't meet demand
- Ensure energy is available during extreme events
- Protect consumers from unaffordable bills

For more information: Adrian Shelley, Texas office director, 713-702-8063, ashelley@citizen.org.
Kaiba White, Energy Policy and Outreach Specialist, 607-339-9854, kwhite@citizen.org.



309 East 11th St., Suite 2 • Austin, Texas 78701 • 512.477.1155 • www.citizen.org

Accountability:

- History shows that market manipulation is common when energy systems are in crisis. Texas officials must ensure federal regulators fully investigate to uncover any manipulation.

Manage Electricity Demand:

- Weatherize homes and businesses. Increase energy efficiency goals for transmission & distribution Utilities (see SB 243).
- Expand demand response programs to reduce energy use when demand is high.
- Raise the \$50 million annual cap on ERCOT's ability to purchase Emergency Response Services (generation and demand response/load reduction).
- Expand ERCOT's access to Emergency Response Services for residential customers (residential demand response/load reduction).

Serve All Communities Fairly:

- Establish a market mechanism and incentives that will enable deployment of distributed solar and batteries that can be aggregated and managed to support the grid and serve as backup power for critical infrastructure (water systems, shelters, food pantries, grocery stores, fire stations, hospitals).
- Manage outages and rolling blackouts fairly:
 - The PUC should establish criteria for the transmission and distribution utilities to use to identify critical infrastructure.
 - The PUC should require transmission and distribution utilities to use smart/advanced meters to deliver power to critical infrastructure while removing other customers on the same feeder or circuit. This would allow for rolling blackouts (where customers intermittently have power) instead of prolonged blackouts (that last for days).

Electricity Availability:

- Reduce grid congestion with a combination of energy storage and transmission lines
- Set reasonable requirements for weatherization of electric generators and their fuel supplies. Requirements should account for both extreme heat and extreme cold.
- Expand interconnection to neighboring electric grids.

Consumer Protection:

- The PUC should ban variable rate plans that expose residential customers to the significant price variation of the wholesale electric market.
- The PUC should reconsider if the \$9,000 per megawatt-hour ERCOT market cap is appropriate or if a lower price cap would incent operation of generation without exposing customers and retail electric utility to as significant price hikes.