

HOUSE ENERGY AND COMMERCE COMMITTEE:  
OVERSIGHT AND INVESTIGATIONS SUBCOMMITTEE

**March 24, 2021 Hearing: “Power Struggle: Examining the 2021 Texas Grid Failure”**

Statement by Bill Magness, President and Chief Executive Officer, ERCOT

CHAIRWOMAN DEGETTE, RANKING MEMBER GRIFFITH, DISTINGUISHED MEMBERS OF THE SUBCOMMITTEE: My name is Bill Magness, currently President and Chief Executive officer of the Electric Reliability Council of Texas, commonly known as ERCOT.

Last month’s winter storms had a devastating impact on Texas. The extended disruption of electric service to millions of Texans during this extreme cold weather event resulted in impacts to the health and safety of many. Texans suffered enormously during the winter storm. We can’t afford for it to happen again, and ERCOT is committed to working on solutions to the problems we identify that led to the February outages.

Let me give you a bit of background to explain ERCOT’s role in the provision of electric power in Texas. We manage the flow of electric power to more than 26 million Texas customers -- representing about 90 percent of the state’s electric load, and 75% of the land mass of Texas. ERCOT does not own power plants, we don’t own poles and wires. We are the grid operator; like air traffic control for the grid. We are also the settlement agent for the market; we do the bookkeeping and billing, but we don’t participate in the financial side of our market. Our #1 job is to see that supply and demand on the grid are in balance at all times.

As the independent system operator for the region, ERCOT schedules power on an electric grid that connects more than 46,500 miles of transmission lines and 680+ generation units. It also performs financial settlement for the competitive wholesale bulk-power market and administers retail switching for 8 million premises in competitive choice areas. ERCOT is a membership-based 501(c)(4) nonprofit corporation, governed by a board of directors and subject to oversight by the Public Utility Commission of Texas and the Texas Legislature. Its members include consumers, cooperatives, generators, power marketers, retail electric providers, investor-owned electric utilities, transmission and distribution providers and municipally owned electric utilities. ERCOT is not a policy-making body. We implement the policies adopted by the Public Utility Commission of Texas and the Texas Legislature, and we operate under reliability rules adopted by the North American Electric Reliability Corporation (NERC). Generators produce power from a variety of sources, such as gas, coal, wind, solar and nuclear. These are private and public entities subject to regulation by various state and federal agencies. Transmission and distribution providers own the wires, and transport the power to consumers, subject to their own sets of state and federal regulation.

24 hours a day, 7 days a week, ERCOT monitors the entirety of the system to make sure that when transmission lines go down, that we can work around them; we talk to generators,

instructing them to bring load on or back it down as needed; we oversee the scheduling of maintenance; and more. This work is done with one purpose—to maintain the 60 Hz frequency that is needed to ensure the stability of the grid. It is a constant balancing act to manage supply and demand to ensure a stable frequency.

During the week of February 15, the Texas electric market experienced more demand than available supply. At its worst, this storm took out 48.6% of the generation available to ERCOT. We always keep reserves, but when there is record demand and half of the available generation is lost, there's going to be a problem. As supply quickly diminished, the frequency of the grid dipped perilously low. Many generators stayed off for days and this left the system unable to serve that high demand. We used the last tool in our toolkit – calling for load shed, customer outages – to manage the stability of the grid.

This crisis required ERCOT, using procedures established for such emergencies, to call on transmission providers to use controlled load shedding to balance the system and prevent a devastating blackout of the entire electric grid. Avoiding a complete blackout is critical. Were it to occur, the Texas grid could be down for several days or weeks, while the damage to the electrical grid was repaired and the power restored in a phased and highly controlled process. The costs of restoration of the system, the economic loss to Texas, and the personal costs to the wellbeing of Texas citizens would be unfathomable. As terrible as the consequences of the controlled outages in February were, if we had not stopped a blackout, power could have been out for 90% of Texans for weeks. The steps we took were difficult, but they had to be taken. And when power was able to be fully restored, the Texas electric delivery system returned immediately to pre-emergency conditions.

That's why, when demand for power exceeds supply, ERCOT must issue directives to all electric transmission providers to shed load, i.e., to institute measures to reduce power consumption. In severe cases, these directives require the transmission providers to implement rolling blackouts as occurred the week of February 15. These rolling blackouts are managed by the transmission providers according to plans and protocols determined by the transmission providers themselves, who know their local areas better than ERCOT could. ERCOT issues the directive to reduce power consumption under a predetermined formula necessary to maintain the integrity of the grid and avoid a catastrophic blackout. Based on their plans and protocols, it is the transmission providers who decide whose power stays on and whose is interrupted.

The Texas Legislature and our Texas Public Utility Commission are currently engaged in an effort to determine what changes in law and regulations are needed in order to avoid a repeat of the events of the week of February 15. Bills are moving in the Texas House and Senate, under an emergency declaration from Governor Abbott, that take on the key issues – winter preparedness, public safety communications, and the various grid and market issues brought to light by the storm.

We at ERCOT are working day and night to provide policymakers with the information they need to ensure that Texas electric suppliers maintain the necessary capacity and resiliency to meet the demand created by unprecedented winter weather events. Within the next few days we anticipate completion of a survey sent to all power generators and suppliers requesting

information on when, where and why the power supply failed during the week of February 15<sup>th</sup>. This information will be helpful to the Texas Legislature and policymakers in seeking solutions. We look forward to working with our stakeholders and state leaders to implement improvements to Texas' grid resiliency and the ERCOT wholesale market.