SENATE ENERGY COMMITTEE HEARING ON RESIILIENCY – MARCH 11, 2021
Statement by Bill Magness, President and Chief Executive Officer, ERCOT

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.

We all know that it is very hard to maintain civilization in the modern way that we live without electricity service. What we do every day at ERCOT is intended to keep that service flowing. Decisions are made to ensure that, despite challenging circumstances, we continue to have a system to run. Today, we are experiencing electricity service in Texas in the background of our lives—it’s flowing, it’s warming, it’s powering our commerce. If we hadn’t made the decisions we made during the week of February 15th, we may still be talking about how to get the power back on.

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. 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. ERCOT’s role is to serve in a capacity similar to that of an air traffic controller. We oversee the electric grid that powers about 90% of the people and about 75% of the land mass in the state of Texas. Generators produce power from a variety of sources, such as gas, coal, wind, solar and nuclear. That generation is connected by about 46,500 miles of transmission lines that crisscross the ERCOT region. 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. ERCOT does not own generation or operate generation. We do not own transmission lines. We are the people and the software that manage the whole enterprise.

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. This crisis required ERCOT 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.

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. ERCOT issues the directive to reduce power consumption under a predetermined equitable formula necessary to maintain the integrity of the grid and avoid a catastrophic blackout.

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. 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. ERCOT is committed to doing our part in achieving this goal.

We look forward to working with our stakeholders and state leaders to implement improvements to Texas’ grid resiliency and the ERCOT wholesale market.

/s/ Bill Magness
ERCOT President and CEO