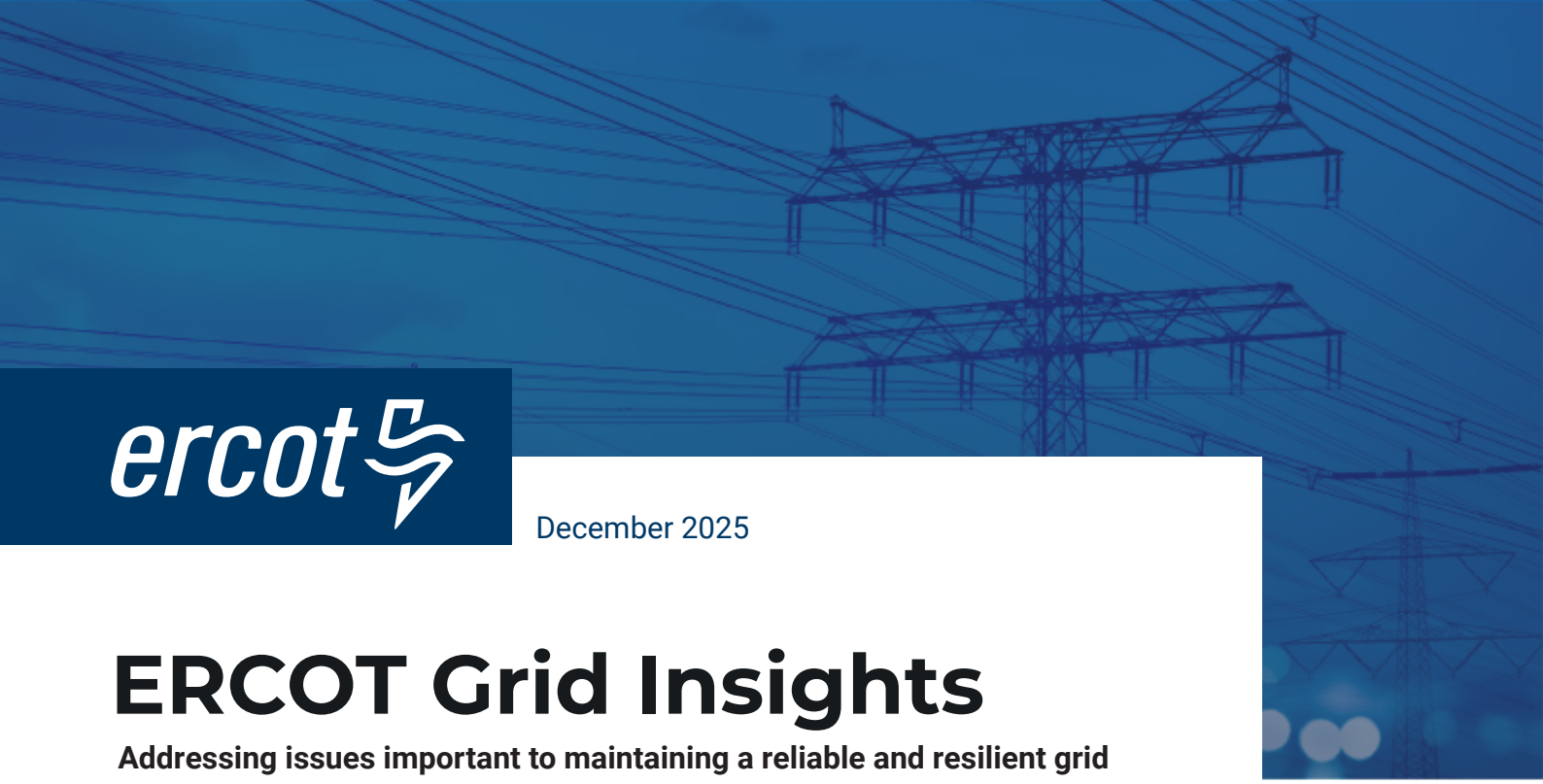

December 2025

ERCOT Grid Insights

Addressing issues important to maintaining a reliable and resilient grid

ERCOT GRID CONDITIONS NOTIFICATIONS

In this issue: An overview of key notifications ERCOT uses to keep Texans informed on real-time grid conditions in advance of significant weather with periods of high demand on the grid including during emergency operations. ERCOT uses three key notification types to inform the public on grid conditions, including Texas Advisory and Notification System (TXANS), Energy Emergency Alerts (EEAs), and Operations Messages from the ERCOT Control Room. With Texas continuing to grow at an incredible rate with more demand on the grid, these notification tools serve as important communication channels to help all Texans prepare and respond effectively. They provide timely updates on grid reliability, provide details on conservation requests when demand is high, and explain operational steps ERCOT is taking to maintain stability.

TEXAS ADVISORY AND NOTIFICATION SYSTEM (TXANS)

What: Launched in May 2023, TXANS is a proactive communication tool that serves as an early notification system to deliver clear and reliable notifications ahead of significant weather conditions where high demand on the grid is possible. Keeping Texans informed earlier adds a new level of awareness of grid conditions and any public action that may be needed. TXANS notifications are also available in Spanish.

How it Works: There are three types of TXANS notifications:

- Weather Watch: An ERCOT Weather Watch is an early notification (approximately 3-5 days ahead) of forecasted significant weather and expected higher electricity demand. Grid conditions are expected to be normal during a Weather Watch, and ERCOT has enough supply to meet demand, but forecasted operational reserves may be lower. ERCOT continues to monitor conditions during a Weather Watch to determine if additional action by the public is needed.

Watch this video to learn more.

- Voluntary Conservation Notice: A Voluntary Conservation Notice is a call for Texans to voluntarily reduce energy usage during peak demand, if safe to do so. For any critical medical needs, ERCOT suggests notifying your local electric utility for more information. During a Voluntary Conservation Notice, ERCOT will deploy available tools to manage the grid reliably, continue to monitor conditions, and update Texans as needed. Energy-saving tips can be found on the TXANS webpage.
- Conservation Appeal: A Conservation Appeal is an elevated request for Texans to reduce energy consumption during peak demand periods, if safe to do so. ERCOT also requests that all government agencies (including city and county offices) implement energy reduction programs at their facilities. ERCOT will move to this level of notification if there is a potential for the grid to enter emergency operations due to lower reserves.

Grid Significance: ERCOT developed TXANS to provide greater transparency of grid operations and to raise awareness earlier of possible periods of higher demand, extreme weather, and tighter grid conditions. Energy conservation is a common tool used throughout the industry to support grid reliability. TXANS notifications do not replace Energy Emergency Alert (EEA) notices, which continue to be sent via the Emergency Alerts email distribution list. TXANS notifications do not indicate emergency grid conditions are expected.

ENERGY EMERGENCY ALERTS

What: When electric supply and demand can't be balanced with normal procedures, ERCOT will implement additional actions to avoid the need to enter emergency operations, including starting additional generation, reducing operating reserve levels, and deploying designated Demand Response programs. If operating reserves continue to drop, ERCOT begins emergency operations using three levels of Energy Emergency Alerts (EEAs). These levels provide access to resources only available during emergency conditions to protect the reliability of the electric system and prevent an uncontrolled system-wide outage. ERCOT currently has about 2,500 MW of additional capacity available when it enters emergency conditions.

How it Works: ERCOT begins emergency operations using three levels of Energy Emergency Alerts (EEAs) as shown below:

EEA LEVEL 1	EEA LEVEL 2	EEA LEVEL 3
If operating reserves drop below 2,500 MW and are not expected to recover within 30 minutes, ERCOT actions include:	**If operating reserves drop below 2,000 MW and are not expected to recover within 30 minutes, or frequency drops below 59.91 Hz for 15 minutes actions include:**	**If operating reserves drop below 1,500 MW, or the grid's frequency level drops below 59.8 Hz for any period of time, ERCOT actions include:**
Bringing any additional available generation online	Request energy conservation (if not already in effect) from public, including government and municipal agencies: # MW vary	Instructing transmission and distribution service providers/companies to reduce demand on the electric system, which occurs through the use of controlled outages – these outages impact all customer classes, including residential, commercial, and industrial
Increasing other generation supplies, including:	Reduce power by deploying remaining demand response programs, including:	
Importing available generation from neighboring electric grids: up to 1,220 MW	Deploying operating reserves carried by Load Resources (some large industrial customers who are paid to reduce their power): up to 1,423 MW	
Switchable generation that can serve multiple electric grids: up to 1,260 MW	Load management programs from transmission companies: 372 MW	
	Voltage reduction by transmission companies: 573 MW	

EEA levels and actions

Note: ERCOT's Grid Conditions meter displays the real-time current state of ERCOT grid condition levels. Some steps may occur simultaneously and do not include additional voluntary demand response programs, where electric service from other business and residential customers is interrupted during emergencies.

Grid Significance: The EEA system is designed to maintain the reliability of the electric grid. By closely monitoring demand and available reserves, acting early, and involving all Market Participants — including the public — ERCOT works to stabilize the grid and restore balanced power flow during periods of extreme stress.

ERCOT OPERATIONS MESSAGES

What: ERCOT issues various operational messages from the ERCOT Control Room as part of standard communications procedures.

How it Works: Proactive Operations Messages are sent to Market Participants (energy providers in the ERCOT Region) to ensure in advance that they are prepared for any upcoming grid conditions that ERCOT is expecting and inform them of any necessary actions that may need to be taken.

Grid Significance: Operations messages do not indicate that ERCOT is issuing an Energy Emergency Alert (EEA). These messages are a proactive step issued in anticipation of a possible future emergency condition, prompting ERCOT to identify necessary actions to address the expected grid conditions.

Additional Note: 1 MW of electricity is enough to serve about 250 residential customers during ERCOT peak hours.