



Reliability.
Innovation.
Growth.

2025

STATE OF THE GRID



About ERCOT

Founded in 1970, the Electric Reliability Council of Texas (ERCOT) is an independent, not-for-profit organization responsible for overseeing the reliable and safe transmission of electricity over the power grid serving most of Texas. As the Independent System Operator (ISO) since 1996, ERCOT has four primary responsibilities:

- Maintain system reliability
- Facilitate a competitive wholesale market
- Facilitate a competitive retail market
- Ensure open access to transmission

ERCOT manages the flow of electric power to more than 27 million Texas customers – representing about 90 percent of the state’s electric load. As the ISO for the region, ERCOT schedules power, performs financial settlement for the competitive wholesale bulk-power market, and administers retail switching for more than eight million premises in competitive choice areas.

ERCOT is a membership-based 501(c)(4) nonprofit corporation governed by a 12-member Board of Directors and subject to oversight by the Public Utility Commission of Texas (PUCT) and the Texas Legislature. Its members include consumers, cooperatives, generators, battery owners/operators, load resources, power marketers, retail electric providers, investor-owned electric utilities, transmission and distribution providers, and municipally owned electric utilities.

Table of Contents

- 02 Message from the Board of Directors
- 04 CEO Letter
- 06 By the Numbers
- 08 2025 Highlights
- 10 Operational Excellence
- 12 Grid Research, Innovation, and Transformation
- 14 Communication
- 16 Key Future Projects



Message from the ERCOT Board of Directors



As Texas electric demand continued its record growth, the Electric Reliability Council of Texas (ERCOT) reliably served our state throughout 2025. We fulfilled our core responsibilities of maintaining system reliability, facilitating competitive wholesale and retail markets, and ensuring open access to transmission.

Simultaneously, the organization continued its evolution to accommodate a rapidly changing electric grid. With average annual electric consumption increasing by 5 percent over multiple years, it is imperative that we evolve as well to anticipate the needs of tomorrow's Texas in every decision we make.

We approved and monitored a variety of changes and positive policy outcomes throughout the year that helped ensure a reliable, resilient, competitive, and cost-efficient electric grid. These included the implementation of Real-Time Co-optimization Plus Batteries, the continued expansion of the transmission grid to meet new demands, and improved integration of large loads into forecasting and operations. While additional work remains, we are committed to strong oversight, transparent governance, and consistent communication.

In addition, the Board approved new mission, vision, and values statements to guide ERCOT through the coming years of change. Our new vision is as bold as it is challenging: "To be the most reliable and innovative grid in the world." This statement reflects both the responsibility we bear and the standard to which we hold ourselves.

On behalf of our Board of Directors, we extend our sincere appreciation to our members, Market Participants, stakeholders, and ERCOT team members who keep the grid operating every day. It is your investments, time, and expertise that make us – and will keep us – strong. We appreciate and applaud your tireless work on behalf of hardworking Texans today, and the Texas of tomorrow.

With great respect,

Bill Flores
Chair
Bryan, Texas

Peggy Heeg
Vice Chair
Houston, Texas

ERCOT Board of Directors



First Row (left to right): Courtney Hjaltman, PUCT Commissioner - Austin; Dr. Linda Capuano - Houston; Bill Flores, Chair - Bryan; Pablo Vegas, President & CEO - Austin; Peggy Heeg, Vice Chair - Houston; John Swainson - Austin **Second Row**: Julie England - Flower Mound; Thomas Gleeson, PUCT Chair - Pflugerville; Bill Mohl - Bullard; Christopher A. Krummel - Houston; Kathleen McAllister - Austin; Benjamin Barkley, Public Counsel, Office of Public Utility Counsel - Austin

Our Guiding Principles

VISION

To be the most reliable and innovative grid in the world

MISSION

We ensure a reliable grid with competitive and cost-efficient electricity markets. We carry out our core functions by ensuring open transmission and distribution system access, reliability and adequacy of the grid, customer retail choice, and accurate accounting for energy.

VALUES

<p>Mission Driven We prioritize grid reliability and public service above all.</p>	<p>Grow People We invest in learning, development, and career growth.</p>	<p>Lead with Integrity We do what's right, even when it's inconvenient or hard.</p>	<p>Own It We take accountability for our work and follow through.</p>	<p>Better Together We collaborate across teams, functions, and roles.</p>
<p>Innovate with Purpose We embrace change and drive progress through innovation.</p>	<p>Stay Curious, Stay Ready We adapt, learn, and prepare for what's next.</p>	<p>Listen Well, Speak Up, and Respect Every Voice We build trust and inclusion through open, respectful communication. We listen to understand, speak with courage, and ensure every voice is welcomed and valued.</p>	<p>Celebrate the Win We recognize effort, progress, and excellence.</p>	



The state of the ERCOT market and electric grid is strong – reliable, innovative, and growing. It reflects disciplined execution by the ERCOT team, sustained investment from Market Participants, and thoughtful policy

leadership from the Texas Legislature, the Public Utility Commission of Texas (PUCT), and the ERCOT Board of Directors.

With this foundation and business-friendly policies that foster efficiency, rapid interconnection, and open transmission access, Texas continues to set the standard for reliable electric growth. Notably, ERCOT experienced the fastest electric demand growth among U.S. electricity grids between 2024 and 2025.

Here are some key areas of our success:

Reliability

Operational reliability remained strong as customers consumed more than 488 million megawatt-hours (MWh) of electricity in 2025 – about a 5.7 percent increase over 2024.

This contributes to an average annual energy growth rate of 5.0 percent from 2021-2025 – a sustained trajectory rarely seen in mature power markets.

Market Participants added more than 16,000 megawatts (MW) of power supply, primarily from energy storage and solar resources.

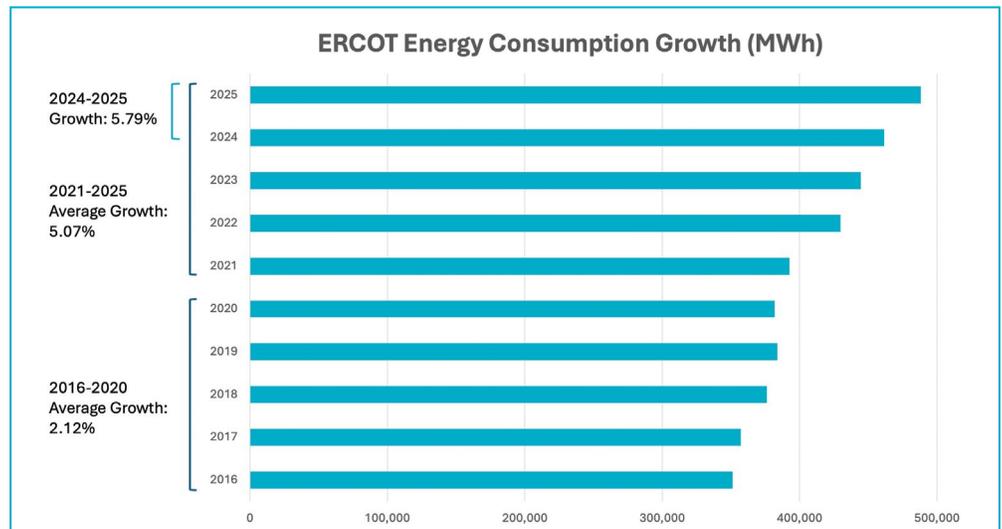
We also observed a notable uptick in interest from natural gas resources seeking grid connection, with approximately 8,800 MW of new gas-fired generation expected by the end of 2029, supported in part by incentives from the Texas Energy Fund.

Transmission line buildout also saw progress, with more than 500 miles of lines added or upgraded last year. With approval of all 765-kilovolt (kV) import paths identified in the 2024 Regional Transmission Plan and the Permian Basin Reliability Plan, Texas is positioning itself to move large quantities of power efficiently across regions to support continued growth.

Texas legislation also continues to shape reliability in meaningful ways. Improvements like load forecast standardization, large load interconnection standards, cost allocation, and net metering are strengthening the reliability framework, and we are working closely with the PUCT and stakeholders to ensure comprehensive implementation.

Innovation

One of our standout accomplishments in 2025 was the successful deployment of Real-Time Co-optimization Plus Batteries (RTC+B) – the most significant upgrade to the nodal market design since its inception in 2010.



RTC+B improves how we co-optimize energy and Ancillary Services in real time, enhancing operational efficiency, strengthening congestion management, and better integrating battery storage into system operations while preserving efficient price formation.

We also advanced our transformation efforts with ERCOT 4.0. This effort reflects our recognition that we are operating in a new paradigm defined by rapid load growth, increasing variability in the resource mix, and technology-driven operational change. It aligns planning, operations, market design, and workforce development to ensure we can deliver reliability in a grid that is larger, faster-moving, and more complex than at any point in our history.

Growth

In 2025, almost 61,000 MW was added to active generation interconnection requests – a 15.6 percent increase from 2024. This brings our total active requests to 450,306 MW as of January 2026.

Notably, more than 70 percent of future demand stems from a significant number of large interconnection requests, like data centers and crypto-mining operations. These facilities represent transformative economic investment for Texas, but they introduce planning and operational complexity due to their scale and load characteristics. We are actively working with the PUCT and stakeholders to refine planning frameworks and interconnection standards to accommodate this growth while preserving grid stability and market certainty.

On the supply side, the market is robust – having added almost 62,000 MW of new generation since 2021 – and we see generation continuing to increase across all resource types. However, the changing composition of the resource fleet presents new considerations.

Solar and battery resources provide important reliability benefits, but their variability and limited duration increase reliance on dispatchable generation during certain critical demand periods. Coupled with robust growth projections, future planning reserves are approaching recommended thresholds, underscoring the need for continued and balanced infrastructure investment to safeguard future grid reliability.

In addition, market risks increase as thermal power plants age and retire. Today, 40 percent of the thermal generation fleet in ERCOT is more than 30 years old. As these units age and eventually retire, we must ensure adequate dispatchable capacity replaces them – particularly in an environment where wholesale prices, adjusted for inflation, have been low during the last two years.

Conclusion

2025 marked a year of significant progress as we improved our market, invested in innovation, and reliably managed growth. At the same time, we are operating in a period of structural transition marked by accelerating demand, increasing system complexity, and a changing generation fleet. Our responsibility is to anticipate these shifts and ensure the market framework evolves appropriately to preserve reliability and efficiency for the long term. I remain confident that Texas policymakers, Market Participants, and the ERCOT team will continue to meet these challenges with the pragmatism and innovation that have defined our success to date.

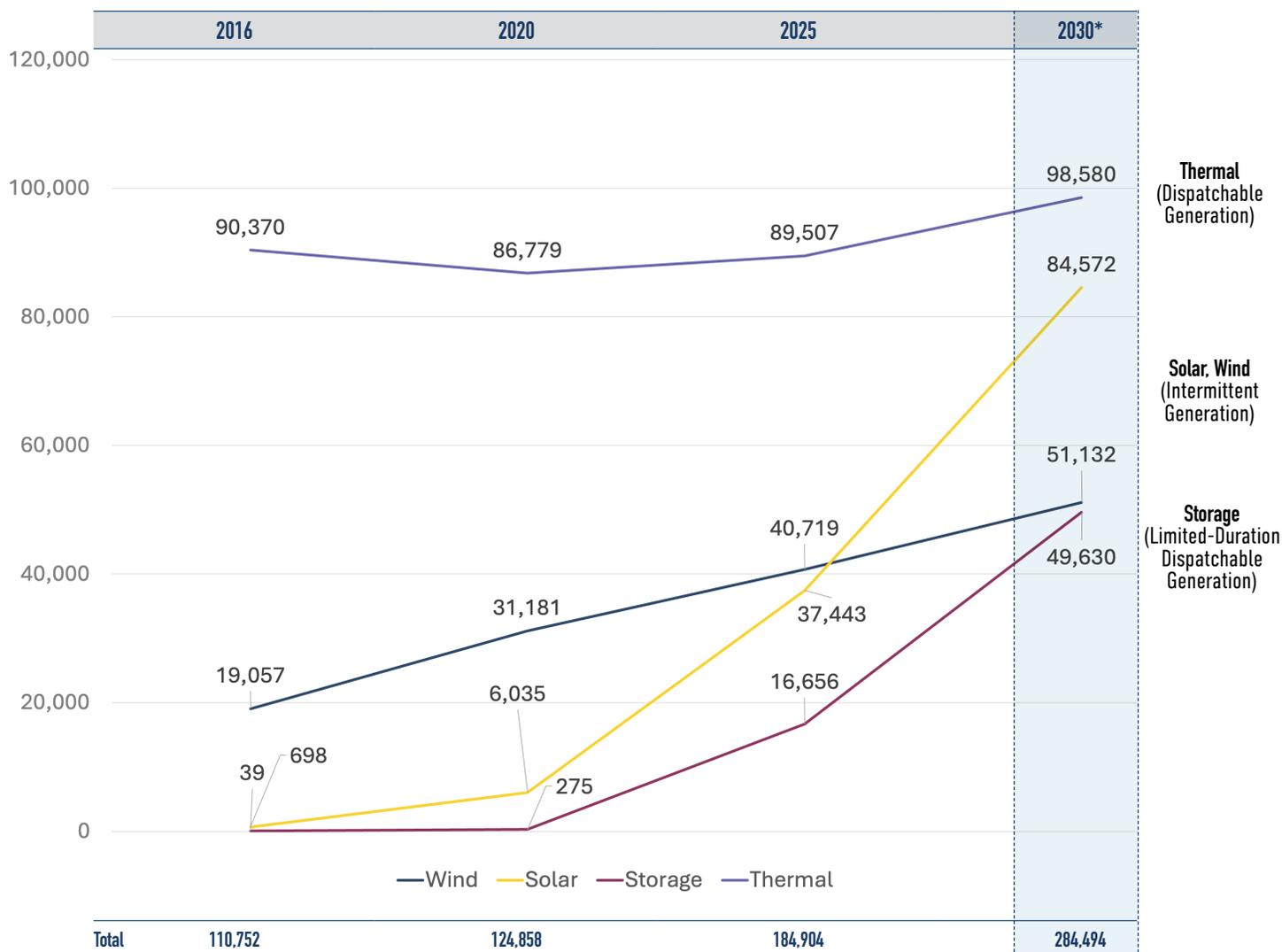
Sincerely,



Pablo Vegas
President and Chief Executive Officer

By the Numbers

SUPPLY: Fuel Mix Snapshot (MW Capacity)



DISPATCHABLE THERMAL GENERATION (NUMBERS ARE ROUNDED)

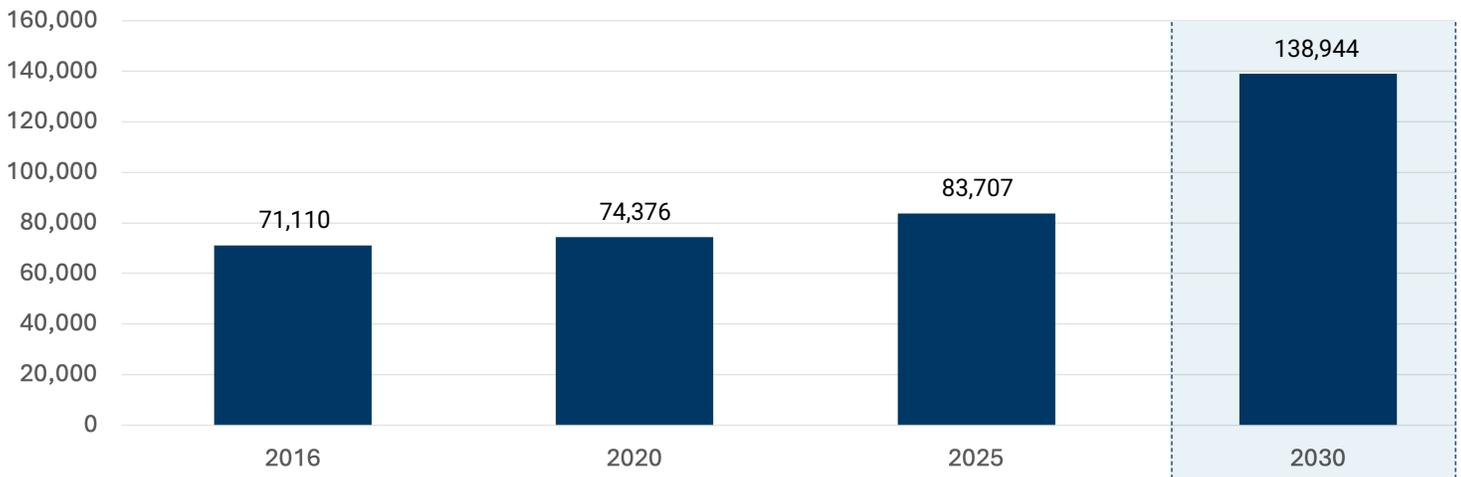
2016-2025			2030*
-10,227 MW of dispatchable thermal generation retired	9,365 MW of dispatchable thermal generation added	-862 MW of net new dispatchable thermal generation added	8,845 MW Texas Energy Fund (TEF) Projects in ERCOT Queue

Notes:

- Capacity totals are based on Installed Capacity Ratings for generating units. "Thermal" is made up of Natural Gas, Nuclear, Coal, Biomass, and Diesel.
- Totals include: 588 MW of Hydro in 2016 and 2022; 579 MW of Hydro in 2025 and 2030.
- Planned projects are added to installed capacity after approval for synchronization to ERCOT Grid.
- Totals include Private-Use Networks (PUNs), Distribution Generation Resources (DGRs), Settlement-Only Distribution Generators (SODGs), Unavailable Switchable Capacity, Extended Outage Units, and Seasonal Mothballed Units but not Indefinite Mothballed Units.

*2030 accounts for forecasted planned projects expected to be in-service between the start of 2026 to end of 2030 that have reached the signed interconnection agreement (SGIA) interconnection milestone from the December 2025 file of the Resource Capacity Trend Charts. Unconfirmed Retirements and Unconfirmed Fuel Conversion listed in the December 2025 CDR are also reflected in this snapshot. Includes January 2026 snapshot of all TEF Projects, even those without SGIA's.

DEMAND: Summer Peak Demand Snapshot (MW Demand)



FORECASTED DEMAND (MW)

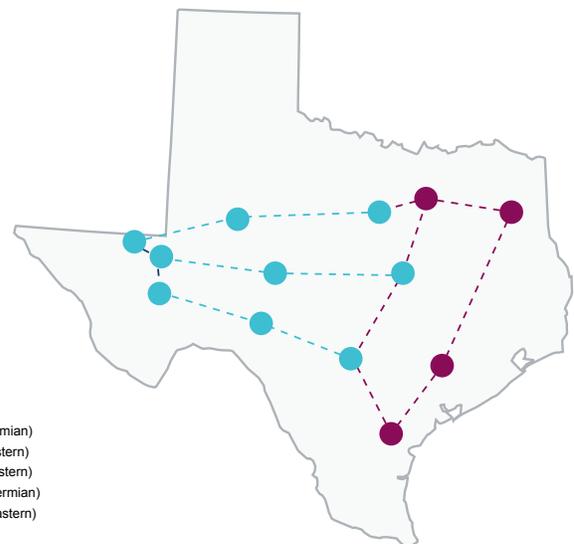
Summer Load and Resource Scenarios	2026	2027	2028	2029
Original Firm Peak Load	102,624	117,359	133,558	137,111
Firm Peak Load, including 50% of TSP* Officer Letter Loads	97,281	107,492	118,248	121,264
Firm Peak Load, including 25% of TSP* Officer Letter Loads	94,610	102,558	110,593	113,341

* Transmission Service Provider

Note: Future demand projections will be updated in Q2, 2026. Please see ercot.com for the latest information.

TRANSMISSION ADDITIONS & STRATEGIC TRANSMISSION EXPANSION PLAN

In 2025, Transmission Service Providers added or upgraded more than 540 miles of transmission lines. The Strategic Transmission Expansion Plan is expected to add more than 2,400 miles of 765-kV Extra-High Voltage (EHV) lines and 20 substations in coming years. These additions will help meet growing electric demand, decrease line losses, reduce Right-of-Way requirements, improve outage coordination capacity, and provide more flexibility for generation resource siting.



MAP LEGEND

- - - New 765-kV EHV Line (Permian)
- - - New 765-kV EHV Line (Eastern)
- - - New 765-kV EHV Line (Western)
- 765-kV EHV Substation (Permian)
- 765-kV EHV Substation (Eastern)

2025 Highlights

Real-Time Co-optimization Plus Batteries

This December 2025 market design change represents the most significant enhancement to the nodal market since 2010 and strengthens ERCOT’s ability to simultaneously optimize energy and Ancillary Services in real time. Delivered six months ahead of schedule, early results show measurable operational improvements, including automatic selection of the most cost-effective and reliability-supporting resources each day.

Key benefits include:

- Faster and more precise procurement of Ancillary Services;
- Enhanced congestion management by leveraging a broader range of resources to address transmission constraints;
- Better Ancillary Services oversight through real-time monitoring of resource capabilities, along with a framework to optimize the use of all resource types; and
- Improved real-time visibility into resource capabilities, enabling more effective deployment of both dispatchable and storage assets.

Strategic Transmission Expansion Plan

ERCOT is responding to unprecedented load growth and increasing regional transfer requirements by identifying efficient ways to expand Texas’ transmission network for future demand.

In January 2025, we submitted a comparison of the 2024 Regional Transmission Plan for the 345-kV network and the Texas 765-kV Strategic Transmission Expansion Plan to the PUCT. This analysis compared the reliability and economic benefits of building new 765-kV transmission lines versus only expanding the existing 345-kV infrastructure. Following the Commission’s approval in April, the region’s first 765-kV

transmission lines are now in a PUCT process to meet the state’s surging power needs. After a thorough stakeholder review, ERCOT’s Board of Directors endorsed two additional 765-kV transmission projects in December.

These new projects will allow electricity to move more reliably, efficiently, and cost-effectively over long distances, bringing power from resource-rich regions to major load centers like Dallas-Fort Worth, Houston, San Antonio, and Corpus Christi.

Large Load Interconnection Process

In February 2026, ERCOT’s Large Load Interconnection queue contained approximately 400 individual requests, totaling 239,000 MW, equivalent to 2.8 times the ERCOT record system peak.

To meet our obligation to assess these requests and maintain the reliability of the electric grid, we introduced new large load interconnection process enhancements in 2025. However, as the volume of large load applications continued to grow, additional improvements to ensure market certainty were identified through the stakeholder

ADDING NEW GENERATION

From 2021-2025, we synchronized approximately 62,000 MW of new generation projects to the electric grid.

Solar	~31,000
Battery Energy Storage	~16,000
Wind	~10,000
Thermal (Gas, Diesel)	~5,000
Total	~62,000

process and with the PUCT. We are now incorporating requirements from Senate Bill 6 (89th Texas Legislature) and developing a new Batch Study process. This process will group qualifying large loads for collective review, improving transmission capacity allocation, offering greater efficiency and predictability, and maintaining system reliability.

Weatherization and Inspections

We continue to ensure that generation and transmission assets owned by Market Participants comply with rigorous weatherization standards established by the PUCT. Our inspection teams, supported by contracted experts, conduct site visits at hundreds of locations each year, verify declarations of weather readiness from corporate officers, and host weatherization workshops twice a year.

Since inception in December 2021, the Weatherization Inspection Program successfully met and exceeded the PUCT rule requirements for inspection frequency. At the end of February 2026, we had completed 4,588 weatherization inspections of generation and transmission facilities.

Generation Facilities	Transmission Facilities	Total Weatherization Inspections
2,990	1,598	4,588



Operational Excellence

ERCOT manages both real-time operations and performs system planning to support the electric grid. In 2025, we focused on strengthening the operational, analytical, and organizational capabilities required to manage a larger and more complex electric system.

Organizational Improvements

ERCOT announced two major organizational improvements during the year:

Interconnection and Grid Analysis

The new Interconnection and Grid Analysis organization was established to support the rapid growth in both large load and generation interconnection activity. The group's responsibilities include generation interconnection, large load interconnection, stability analysis, and stability model validation. This structural alignment improves accountability, reduces study timelines, and strengthens analytical consistency across planning and operations.

Enterprise Data and Artificial Intelligence (AI)

The new Enterprise Data and AI organization accelerates responsible AI adoption across ERCOT and fully leverages the recently implemented Data Analytics and AI Platform. Their responsibilities include data governance, data product management, and data operations.

“By strengthening our data foundation, modernizing our interconnection processes, and aligning our teams around emerging technologies, we are building an organization that is more agile, analytically rigorous, and prepared to support Texas’ continued growth.”

— Pablo Vegas, ERCOT President and CEO

Market Participant Communications

While we do not own, operate, or maintain generation resources, transmission assets, or distribution lines, our operators coordinate the real-time activities of Market Participants much like air-traffic controllers manage complex flight systems. We remain in constant communication with Market Participants and direct their activities through real-time scheduling systems, market notices, and phone calls. Every year, we send more than 30 million dispatch instructions to Market Participant resources. Our rules also require backup systems in case regular communications are interrupted for any reason.

In 2025, more than 1,800 participants – including market and industry professionals, system operators, and shift engineers – took part in ERCOT’s emergency training, drills, and simulations designed to prepare for severe weather and grid-related events.

Operator Training

ERCOT helps ensure the reliable operation of the bulk power system by employing trained grid operators. These professionals undergo a variety of training programs and events to meet state and federal requirements for the continuous operation of the electric grid.

New Operator Training

We offer an extensive program for entry-level system operators that provides specialized training, one-on-one mentorship, and shadowing with seasoned operators on the control room floor.

Continuing Education

System operators and shift engineers are required to take a minimum of 85 continuing education hours each year. In 2025, we offered five cycles of continuing education for system operators. In addition, ERCOT provides a minimum of 30 hours of training, a minimum of 30 hours of simulations, and 200 hours of operating topics over a three-year period to meet North American Electric Reliability Corporation (NERC) standards.

Drills and Simulations

In addition to individual training, operators undergo regular drills and simulations on a variety of topics, including emergency procedures, severe weather, cyber and physical security, and event recovery planning. In 2025, ERCOT participated in GridEx VIII, North America’s largest grid security exercise, designed to stress-test our crisis response and recovery plans for cyber and physical threat scenarios.

Security and Cybersecurity

ERCOT constantly prepares for threats to the electric system. Whether the threat is cyber or physical, ERCOT continues to invest in trained staff and resources to help keep the electric grid safe. From system redundancies to controlled access, ERCOT has multiple layers of protective measures to safeguard its critical infrastructure. This layered cyber and physical security approach is known as a defense-in-depth strategy.

We comply with – and strive to exceed – federal cybersecurity and critical infrastructure protection standards enforced by NERC. These standards require bulk power system users, owners, and operators in the U.S. to address cyber risks and vulnerabilities by establishing controls to secure critical assets from physical and cyber sabotage, reporting security incidents, and establishing plans for recovery in the event of an emergency. ERCOT’s Critical Infrastructure Security Department leverages industry best practices, including the National Institute of Standards and Technology Cybersecurity Framework, to

continuously strengthen our policies, monitoring capabilities, and incident response protocols.

Critical Infrastructure

We continue to implement Texas’ Lone Star Infrastructure Protection Act, which is intended to reduce the risk of foreign influence over critical electric grid equipment and services. Under this framework, ERCOT Market Participants are restricted from using certain vendors or service providers if doing so would allow those vendors direct or remote access to, or control of, critical grid equipment and those vendors are tied to certain countries identified in Texas law (including China, Iran, Russia, and North Korea) or any other country later designated by the Governor as a threat.

To support compliance, Market Participants must keep ERCOT informed about their affiliates – meaning other companies that are part of the same corporate family (such as a parent company, subsidiaries, or sister companies under common ownership or control). Market Participants are required to provide this information and update it when it changes.

Texas Cybersecurity Monitor Program

As established by Texas law, ERCOT supports the PUCT Texas Cybersecurity Monitor Program by contracting for and funding an independent cybersecurity monitor. The monitor conducts cybersecurity outreach, communicates emerging threats and leading practices, reviews cybersecurity self-assessments, develops recommended practices, and reports to the PUCT regarding cybersecurity preparedness for monitored utilities.



Grid Research, Innovation, and Transformation

The Texas grid continues to evolve at an unprecedented pace, fueled by rapid load growth from sources like new data centers and industrial facilities. This growth is reshaping planning assumptions, operational models, and reliability risk profiles. Our Grid Research, Innovation, and Transformation (GRIT) initiative enables us to anticipate emerging challenges and drive innovation at the scale and speed needed to transform the grid in response to these changes.

Research

ERCOT engages in a wide range of research collaborations with academic institutions and industry organizations, including the Power Systems Engineering Research Center, Electric Power Research Institute, and Centre for Energy Advancement through Technological Innovation. We also work directly with leading universities like these to address specific research needs:

Applied Research Partnership Highlights

Grid Forming Controls and Power Quality: University of Texas at Austin

Our partnership with the University of Texas at Austin centers on modeling and analyzing next-generation grids with a high proportion of inverter-based resources and power electronic loads. The resulting case studies, simulations, and assessments will help us anticipate future challenges and develop effective solutions.

Large Load Modeling: Texas A&M University

In collaboration with the Texas A&M Engineering Experiment Station, we are creating dynamic models of large loads, such as data centers and crypto-mining operations, and examining how these loads respond during and after grid disturbances. Completing this research will allow us to make more accurate assumptions for grid studies and offer informed recommendations for optimal large load characteristics.

Innovation

We continue to drive cutting-edge solutions in several key areas, including advanced grid support, AI applications, probabilistic approaches to computing Ancillary Service requirements, large load voltage ride-through studies, and geomagnetic disturbance model validation.

Transformation

Our grid transformation strategy includes a wide range of internal initiatives aimed at preparing for future challenges. These efforts, from in-depth white papers to transformative projects, are paving the way for new tools and processes to assess grid reliability, the development of innovative market products, and recommendations for ERCOT protocol enhancements.

ERCOT Distribution Awareness Platform

In 2025, we conducted a meter data disaggregation study to advance load research and deepen our understanding of how customer energy consumption and distributed generation affect the power grid. Our primary goal was to obtain granular, disaggregated customer load profiles to allow us to better assess current demand response initiatives and develop new, innovative demand flexibility programs.

Partnerships and New Website

In 2025, we introduced the Research, Innovation, and Partnership Engagement program, along with new information designed to connect and engage industry stakeholders. Visit ercot.com/about/grit to explore our latest white papers and stay updated on our ongoing progress.

Innovation Summit

The second annual ERCOT Innovation Summit was a resounding success, drawing more than 800 attendees and highlighting the latest advancements shaping our industry. The summit provided a forum

for meaningful dialogue, knowledge sharing, and collaboration across the industry on emerging grid challenges and solutions.

Aggregated Distributed Energy Resource Pilot Program

The Aggregated Distributed Energy Resource pilot program allows aggregations of residential smart devices, like batteries, to provide energy and Ancillary Services and compete with other service providers, such as generators and large loads.

In 2025, the program changed to allow for larger aggregations of resources and new participation models. As a result, participation in the pilot program grew from three commercial resources registered to provide 15 MW of energy, 9 MW of Non-Spinning Reserves, and 9 MW of ERCOT Contingency Reserve Service, to seven commercial resources registered to

provide 108 MW of energy, 35 MW of Non-Spinning Reserves, and 50 MW of ERCOT Contingency Reserve Service. On average, these resources were available for dispatch in nearly 60 percent of ERCOT's real-time market intervals.

GRIT's mission is to lead the rapid evolution of the electric power grid with resilience and operational excellence. Through pioneering research, bold innovation, and collaborative partnerships, we are dedicated to building a reliable, adaptable, and future-ready grid.



Communication

In 2025, we prioritized effective communication with Texans, Market Participants, and other stakeholders in the following ways:

Speaker's Bureau

Throughout the year, we coordinated more than 170 speaking engagements with diverse groups across the state. These events provided valuable opportunities to educate citizens about grid operations, discuss legislative and policy advancements, and address questions related to the electric grid and its growth.

Consistent Information

We are committed to transparency by regularly sharing operational updates and other key information related to a reliable and resilient grid. Our digital communications include:

- **ERCOT Monthly Reports:** This monthly publication offers a concise summary of significant developments from the previous month, insights on the upcoming month, and a snapshot of additional important topics. 2025 marked the second complete year of this reporting initiative.
- **Grid Insights & Trending Topics:** These updates address current issues such as Ancillary Services, Real-Time Co-optimization Plus Batteries integration, and Weatherization.

Increased Social Media Presence to Reach More Texans

In 2025, ERCOT expanded digital engagement to improve transparency and public awareness of grid conditions and market developments.

Texas Advisory and Notification System (TXANS)

This opt-in public notification program helps raise awareness earlier about possible periods of high demand and tight grid conditions. Available in both English and Spanish, the program provides transparent communication with Texans about grid operations.



SOCIAL MEDIA METRICS

2.7 MILLION IMPRESSIONS
▲ 565% FROM 2021

159,543 ENGAGEMENTS
▲ 129% FROM 2021

36,250 POST LINK CLICKS
▲ 425% FROM 2021

8,545 NET AUDIENCE GROWTH
▲ 427% FROM 2021

620 TOTAL POSTS
▲ 684% FROM 2021

74,400 VIDEO VIEWS
▲ 28,081% FROM 2021

Energy Industry Collaboration

Natural gas facilities are crucial to the resilience of the ERCOT grid. We have partnered with the gas industry to continue collaborative relationships, ensuring the reliable operation of the power system.

Our efforts include monitoring for potential disruptions from operational flow orders or other pipeline issues and communicating with pipeline representatives to identify reliability concerns that could impact grid stability, including generation and load.

We also participate in the following formal efforts:

Texas Energy Reliability Council

The Texas Legislature created this council to ensure that the state’s energy and electric industries meet high-priority human needs and address critical infrastructure issues. The council, led by the Chief of the Texas Division of Emergency Management, includes leaders from ERCOT, the PUCT, the Railroad Commission of Texas, the Office of Public Utility Counsel, the Texas Commission on Environmental Quality, and the Texas Transportation Commission, along with appointees from the electric and gas industries.

Gas-Electric Coordination

Through the Gas-Electric Working Group, we bring ERCOT, stakeholders, and gas pipeline operators together to improve communication on issues like those above, current events, maintenance, critical infrastructure designations, and other topics of shared interest.

Critical Supply Chain and Infrastructure Map

We help maintain a map that shows the locations and connections of critical Texas power infrastructure. This confidential map is shared with state agencies and transmission and distribution providers that focus on protecting key assets during grid events.



Key Future Projects

These are some of the key future projects we are currently engaged in:

Dispatchable Reserve Reliability Service

This legislatively required new Ancillary Service will be designed to compensate dispatchable generators for being available to address uncertainty in load and generation forecasts. While still in development, multiple options are being reviewed that would comply with state law and provide the most reliability benefits under both moderate-load and high-load growth scenarios.

Large Load Batch Study Process

ERCOT is managing an unprecedented level of interest from large loads (≥ 75 MW) seeking to connect to the grid. To help provide certainty for developers, ERCOT is transitioning toward a Batch Study process for large load interconnection requests in which ERCOT will study all proposed large loads meeting the study standard as a group.

The Batch Study process allows ERCOT to:

- Assess cumulative impacts on the transmission system;
- Identify shared infrastructure needs;
- Improve coordination with Transmission Service Providers; and
- Better align interconnection decisions with system-wide reliability considerations.



“ERCOT is the best market in the country to react quickly to large load growth potential. We are diligently working with the PUCT and stakeholders to implement new laws related to these loads and to integrate them reliably.”

– Chad Seely, SVP, Regulatory Policy,
General Counsel & Chief Compliance Officer

ERCOT is actively engaging stakeholders for input throughout the Batch Study process, including working with Technical Advisory Committee leadership to schedule additional workshops and special meetings during 2026.

Permian Basin Reliability Plan

Forecasts show that electricity demand in the Permian Basin will reach approximately 26 GW by 2038, which is about the size of current demand in the Dallas-Fort Worth Metroplex.

As a result of this anticipated electric demand here and throughout the state, the Texas Legislature and the PUCT instructed ERCOT to create a transmission reliability plan for the Permian Basin region. This plan focuses on extending transmission service to additional mineral resource areas, increasing capacity to

meet future demand, and reducing interconnection times for areas without transmission access.

We submitted this plan to the PUCT for review in July 2024. Local projects were approved in September 2024, and the transmission paths required to import power into the region were approved in April 2025. The Commission is expected to review transmission route proposals in 2026. Following these decisions, construction will begin, with completion expected in 2030.

Reliability Standard Assessment

We supported the PUCT in developing ERCOT's first empirical Reliability Standard. In 2026, we will conduct an inaugural probability-based assessment to evaluate the grid's compliance with this standard and use the data to inform market or operational changes needed to remain

in compliance. Moving forward, this assessment will be repeated every three years.

PUCT Rulemaking Projects

ERCOT is supporting these and other PUCT rulemaking projects that will affect market planning and operations:

- Evaluation of Transmission Cost Recovery;
- Large Load Forecasting Criteria;
- Large Load Interconnection Standards;
- Net Metering;
- Net Metering Arrangements Involving a Large Load Co-Located with an Existing Generation Resource; and
- Reliability Service to Competitively Procure Demand Reductions from Large Loads.





ercot.com