

TXOGA

TEXAS OIL & GAS ASSOCIATION | SINCE 1919



TEXAS ELECTRICITY
POWER PULSE

January 26, 2026

TOP 5 FACTS FOR Q4 2025

- 1. ERCOT load growth remains strong and broad-based.** Total Q4 electricity demand rose ~6% year over year and has grown ~5.2% annually since 2020, with average load increasing faster than peak-hour demand—indicating sustained energy demand rather than isolated peak stress
- 2. Natural gas anchors system reliability.** Natural gas supplied ~40% of ERCOT generation in Q4 2025 and provided at least half of total generation in ~92% of hours, underscoring the continued importance of dispatchable resources as renewables expand
- 3. Renewable generation continues to grow rapidly—but does not displace dispatchable supply.** Wind and solar output increased materially, with solar generation up over 30% year over year; however, dispatchable resources continued to anchor reliability across most hours
- 4. Wholesale prices shifted higher, reflecting a system operating closer to the margin.** Average hub LMPs increased ~28% year over year, with gains evident across the 25th, 50th, and 75th percentiles, signaling higher baseline prices driven by structural system conditions rather than episodic stress events
- 5. Price volatility shifted from extremes to normal operations.** Core price dispersion widened meaningfully in Q4 2025, while extreme scarcity pricing declined, with no prices above \$500/MWh—indicating a tighter but more stable market overall

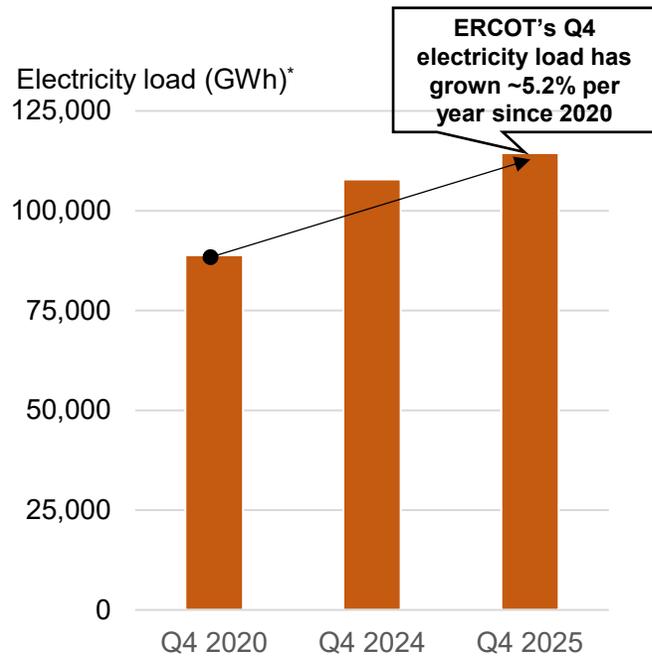
Quarterly highlights underscore natural gas' central role in reliability and affordability

ERCOT's broad-based load growth has been accompanied by higher forecast error

- Day-ahead forecast errors widened in Q4 2025, increasing committed resources and operational complexity during normal operations without driving scarcity pricing

ERCOT Electricity Load *

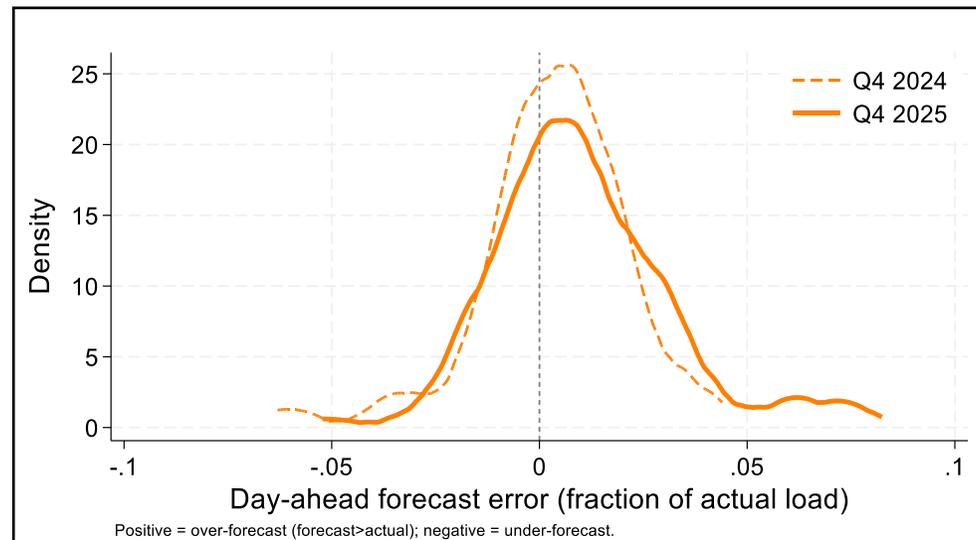
ERCOT's Q4 electricity load has grown ~5.2% per year since 2020, reflecting sustained increases in average demand rather than isolated peak events



In Q4 2025, ERCOT's electricity demand averaged ~52 GW, up from ~40 GW in 2020

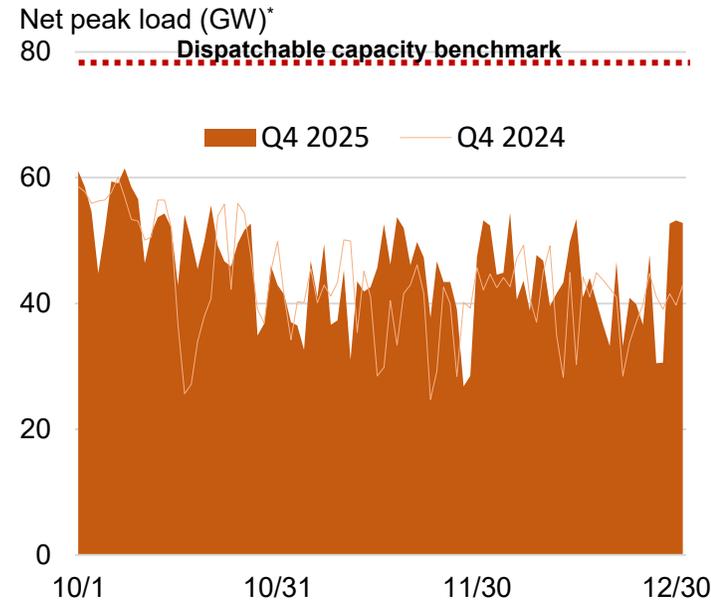
ERCOT Day-Ahead Forecast Error Distributions

- Greater day-ahead overforecasting led to higher unit commitments and ancillary service procurement, increasing committed resources, uplift, and operational complexity during normal operations, without materially increasing scarcity events
- The mean hourly error rose to ~1%, and the maximum nearly doubled to 8.2%.



ERCOT Net Peak Load – Q4 2025 vs. Q4 2024*

The maximum net peak load in Q4 2025 rose 1.4 GW (2.4% y/y), yet remained well below available dispatchable capacity—indicating rising demand without binding capacity constraints



ERCOT's net peaks of 61.5 GW (Q4 2025) and 60.1 GW (Q4 2024) represent the firm capacity the grid must maintain to ensure reliability

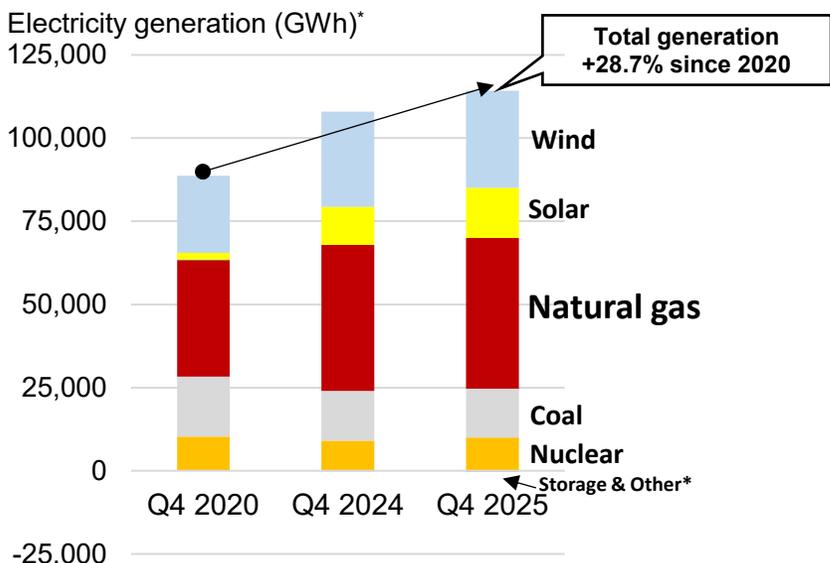
*Load = total ERCOT electricity demand (including losses and limited interchange) **Net peak load = demand minus wind and solar output in the peak hour
sources: ERCOT; EIA Form 930; TXOGA analysis

Dispatchable Resources Anchor ERCOT Reliability as Demand Rises

- *Natural gas generation continues to support reliability and price stability as wind and solar expand*
- *Q4 2025 reinforces that ERCOT's challenge is not peak scarcity, but operating a tighter, more complex system under sustained load growth — a role increasingly borne by dispatchable resources, particularly natural gas*

ERCOT Power Generation Mix

Natural gas supplied 39.7% of ERCOT's generation in Q4 2025—more than wind and solar combined. Total ERCOT generation has risen 29% since 2020, led by growth in wind, solar, and natural gas



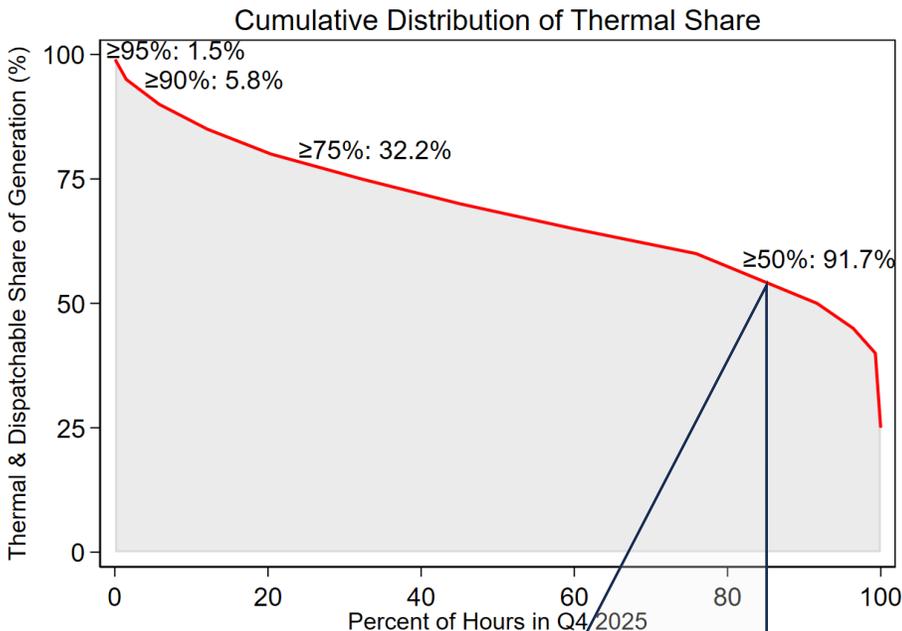
* ERCOT's generation averaged ~52 GW in Q4 2025, up from ~40 GW in 2020.

* Storage is reported on a net energy basis in ERCOT operational summaries and may appear negative when charging exceeds discharging over the period

sources: ERCOT; EIA; TXOGA analysis

Dispatchable Resources Underpin Reliability

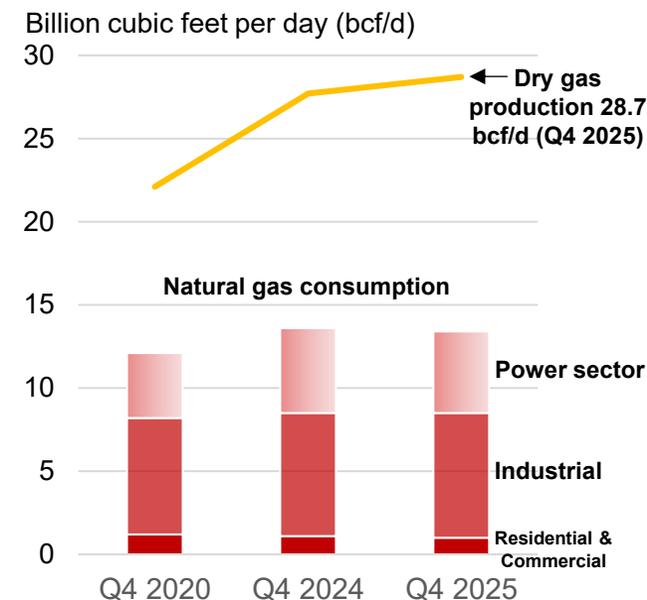
Dispatchable resources supplied $\geq 50\%$ of ERCOT's power in 92% of hours during Q4 2025



Each point shows the share of total ERCOT generation supplied by dispatchable resources. The farther right, the greater the share of time these resources met at least half of ERCOT's demand—**91.7% of hours in Q4 2025**, unchanged from Q3 2025

Texas Natural Gas Consumption and Production

Texas produced nearly six times more natural gas in Q4 than ERCOT's power sector consumed, supporting reliable supply and competitive prices



In Q4 2025, based on TXOGA estimates, Texas dry natural gas production averaged 28.7 Bcf/d. Total in-state consumption was 13.4 Bcf/d, including 7.5 Bcf/d by industrial users and 4.8 Bcf/d for power generation—a 10.7% increase since 2020, reflecting sustained growth in dispatchable resources and industrial demand

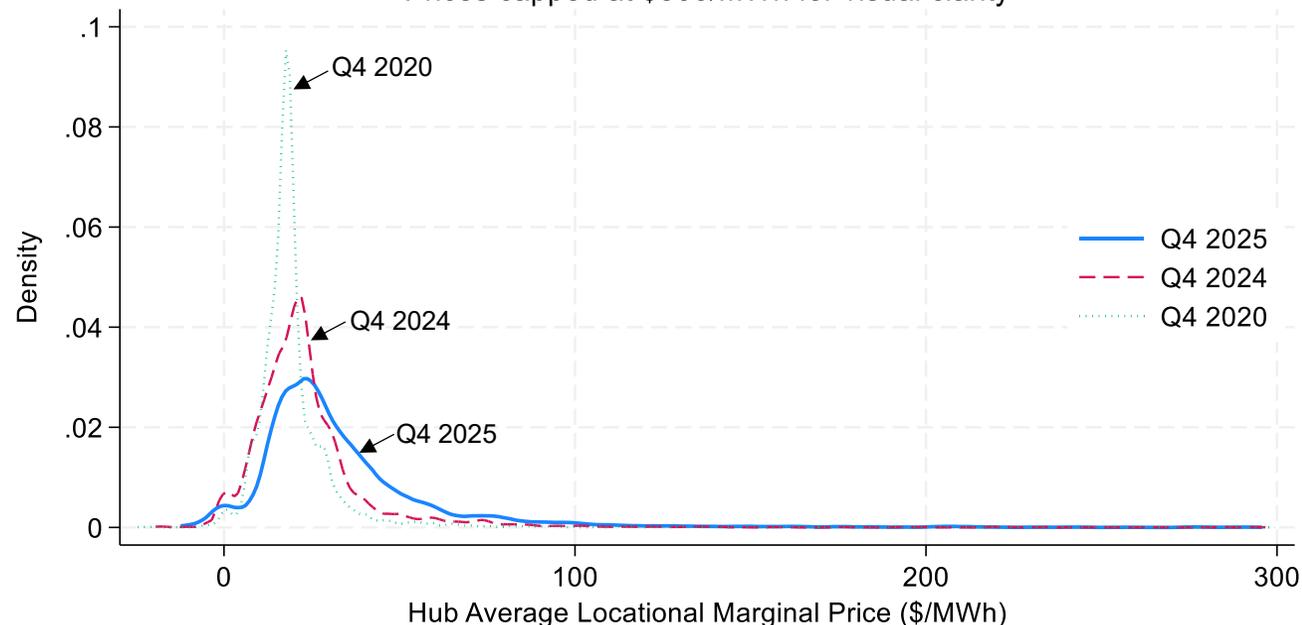
ERCOT LMPs in Q4 2025: Higher Baseline Prices, Wider Core Dispersion

Prices were higher and more variable during normal operations, while extreme scarcity volatility declined relative to prior stress years

- **Baseline prices shifted materially higher in Q4 2025.** Average hub prices rose 28% year-over-year and 7% annually since 2020, with comparable gains across the median and upper quartiles
 - **Core price dispersion widened meaningfully in 2025.** The interquartile range increased to \$21.6/MWh, up 59% from Q4 2024 and more than triple Q4 2020, indicating greater day-to-day variability in non-scarcity prices
 - **Higher prices were broad-based rather than driven by isolated hours.** Gains are evident across the 25th, 50th, and 75th percentiles, consistent with structural shifts in system conditions rather than episodic stress events
 - **Despite wider core dispersion, extreme tail risk declined in 2025.** Q4 2025 saw no prices above \$500/MWh and materially fewer scarcity events than Q4 2024 or Q4 2020, indicating a tighter but more stable market overall
 - **Why this matters:** Higher baseline prices reflect reduced operational slack during normal operations, while reduced tail volatility suggests improved resilience outside extreme stress events
- These pricing patterns are consistent with a system operating closer to the margin more often, under normal operating conditions

ERCOT LMP Distribution (Core Range) — Q4 Comparison

Prices capped at \$300/MWh for visual clarity



Extreme scarcity prices excluded from visualization only

Core distribution statistics (excludes extreme scarcity hours)

Quarter	Mean	25th Percentile	Median	75th Percentile	Interquartile Range
Q4 2025	\$ 34.07	\$ 18.60	\$ 26.96	\$ 40.10	\$ 21.60
Q4 2024	\$ 26.56	\$ 14.40	\$ 20.92	\$ 27.90	\$ 13.60
Q4 2020	\$ 24.00	\$ 14.60	\$ 17.95	\$ 21.70	\$ 7.20

Changes	Mean	25th Percentile	Median	75th Percentile	Interquartile Range
Q4 2025 vs. Q4 2024	28.3%	29.2%	28.9%	43.7%	58.8%
Q4 2025 vs. Q4 2020 CAGR	7.3%	5.0%	8.5%	13.1%	24.6%

ERCOT Q4 2025 System Conditions: Load Growth, Generation Mix, and Texas Natural Gas Production

Strong load growth coincided with changes in generation mix and continued reliance on natural gas

Quarterly averages and totals; values rounded

1. System load and average power					Changes	
Metric	Unit	Q4 2020	Q4 2024	Q4 2025	% (2024-2025)	Avg annual change since 2020 %
Total electricity load	GWh	88,874	107,871	114,457	6.1	5.2
Average hourly load	GW	40.3	48.9	51.8	6.1	5.2
Maximum hourly load	GW	63.1	72.8	75.9	4.3	3.8
Minimum hourly load	GW	29.9	38.2	38.6	1.0	5.2
Hourly load variation (std. dev.)	GW	5.7	6.6	6.9	4.7	3.7

2. Generation mix (Quarterly Totals, GWh)					Changes	
Source		Q4 2020	Q4 2024	Q4 2025	% (2024-2025)	Avg annual change since 2020 %
Nuclear		10,308	9,011	9,942	10.3	-0.7
Coal		17,954	15,028	14,742	-1.9	-3.9
Natural gas		35,072	43,835	45,264	3.3	5.2
Wind		23,218	28,647	29,201	1.9	4.7
Solar		1,986	11,418	15,120	32.4	50.1
Storage & other		139	-54	-185		
Total Generation		88,677	107,885	114,084	5.7	5.2

3. Natural gas production and consumption (billion cubic feet per day, bcf/d)					Changes	
Production		Q4 2020	Q4 2024	Q4 2025	% (2024-2025)	Avg annual change since 2020 %
Marketed natural gas		25.8	33.9	34.8	2.7	6.2
Dry natural gas		22.1	27.7	28.7	3.6	5.4
Consumption						
Power		3.9	5.1	4.9	-3.9	4.7
Industrial		7.0	7.4	7.5	1.4	1.4
Residential and Commercial		1.2	1.1	1.0	-9.1	-3.6
Total		12.1	13.6	13.4	-1.5	2.1

Since 2020, average Q4 load growth (5.2% CAGR) has outpaced peak-hour growth (3.8%), indicating that recent system stress reflects sustained energy demand rather than isolated peak events

Notes:

Load = total ERCOT demand (includes losses and limited interchange).

Net generation = energy produced within ERCOT.
Units: GWh for energy; GW for power.

Storage is reported on a net energy basis in ERCOT operational summaries and may appear negative when charging exceeds discharging over the period

Minor rounding differences may occur

Next update: April 2026 (Q1 2026 data)

For media inquiries or data requests, please contact the TXOGA Communications or Economics teams.