



TEXAS RE

Summer Outlook

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Senior Reliability Engineer

May 26, 2026

Antitrust Admonition

Because this event brings together market participants who may be viewed as actual or potential competitors, we must be mindful to conduct it in a manner that is consistent with the antitrust and competition laws. Participants should not disclose non-public, proprietary, or competitively sensitive information.

Attendees should exercise independent judgment and avoid even the appearance of discussions of agreements or concerted actions that may be viewed as restraining competition. Any questions on Texas RE's Antitrust Compliance Corporate Policy may be directed to Texas RE's General Counsel.



June 3, 2026

2025 Texas
Interconnection
Reliability
Performance



June 23, 2026

Integration of
Large Loads



June 30, 2026

Regional Risk Series:
Supply Chain



August 19, 2026

Winter
Weatherization
Workshop



September 16, 2026

Q3 MRC and Board
Meetings



November 4, 2026

Fall Standards,
Security, &
Reliability
Workshop

Upcoming ERO Enterprise Events

 NPCC NERCThe logo for the Southeastern Electric Reliability Council (SERC), featuring a stylized 'S' followed by the letters 'SERC'.

Date	Event
June 22, 2026	<u>Technical Talk with RF</u>
June 23, 2026	<u>WECC Reliability Fundamentals</u>
July 29, 2026	<u>SERC IBR Seminar #3</u>

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**Recent
Trends**

**Takeaways
from Last
Summer**

**2026
Summer
Outlook**

**Demand
Growth**

**Capacity
Reserves**

Peak Hour

Risk Hour

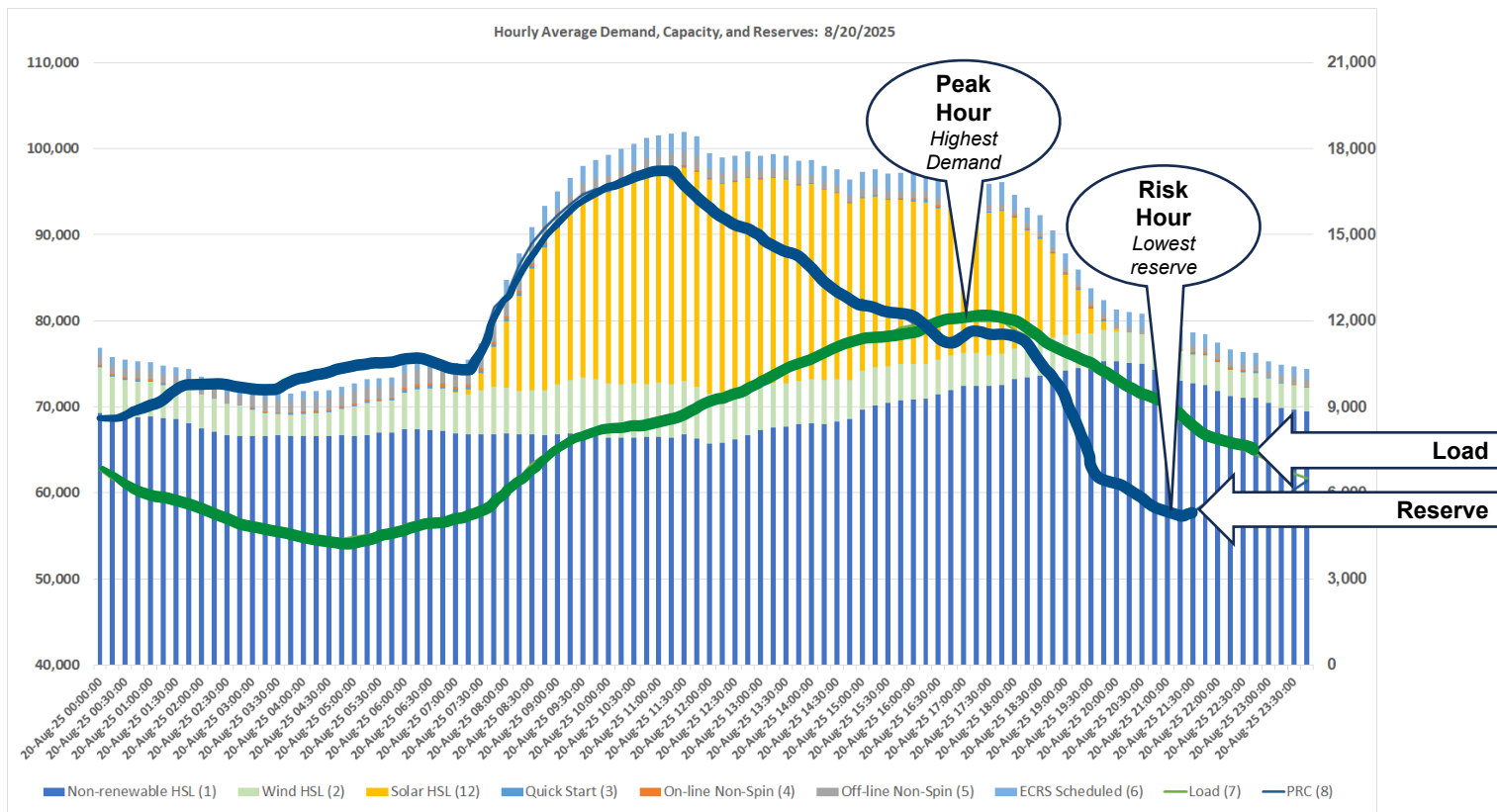
**2026
Summer
Reliability
Risk Map**

**Operational
Challenges**



Recent Trends - Peak Hour vs Risk Hour

Example – ERCOT Interconnection, 8/20/2025



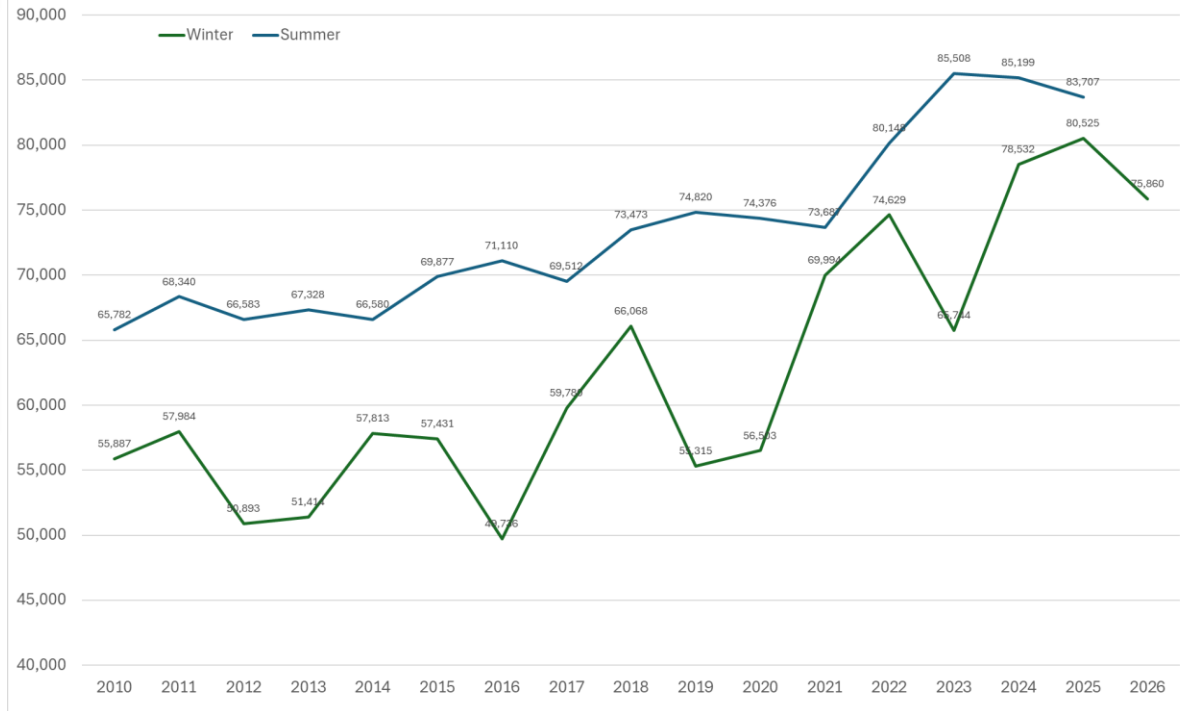
Summer Demand

- 13.6% increase in summer peak demand from 2021 to 2025
- All-time hourly peak demand record was set on August 10, 2023: 85,508 MW

Generation

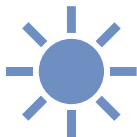
- Maximum solar generation
 - May 13, 2026: 34,427 MW
- Maximum wind generation
 - May 18, 2026: 28,928 MW
- Maximum renewable generation
 - May 14, 2026: 47,919 MW

Summer vs Winter Peak Demand for ERCOT Interconnection





Mild and Wet
Summer



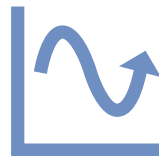
Despite lower
temperatures, load
levels remained high



Online and offline
reserves were
greater than recent
summers



Energy storage
resources discharged
around solar ramp
down and charged
during the night and
high solar generation



Demand Response
during peak hours ~
crypto-mining (3 GW)
and the maximum four
coincident peak
reduction (1.5 GW)

Takeaways from Last Summer – System Operation

Increased energy storage capacity contributed to higher ancillary services

High forced thermal outages led to larger discharge of energy storage resources in the evenings

Real-time congestion during periods of either excessively high or low wind generation output

Milder weather paired with solar growth outpacing large load additions helped make the daytime hours uneventful

Operations and market outcomes met reliability needs with no energy emergency events



Large influx of BPS resources outpaced demand and is boosting reserves



Strong load growth continues in nearly all assessment areas



Large computational and other large loads pose operational challenges



The overlap of early summer heat and spring maintenance outages may impact the shoulder season and early summer



Impacts of wind drought (i.e. low wind periods) may pose a risk to reliability



Courtesy: [NERC 2026 SRA](#)

2026 Summer Outlook – ERCOT Interconnection



Above normal temperatures and drought conditions



Growing demand include voltage sensitive large loads



Robust growth in resources (12%) mainly in solar and energy storage



Sufficient operating reserves under normal conditions



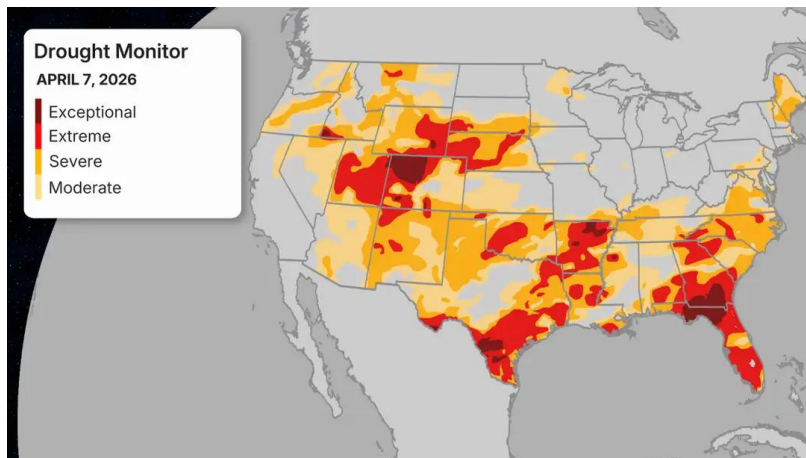
Low risk of energy emergency in early evening hours



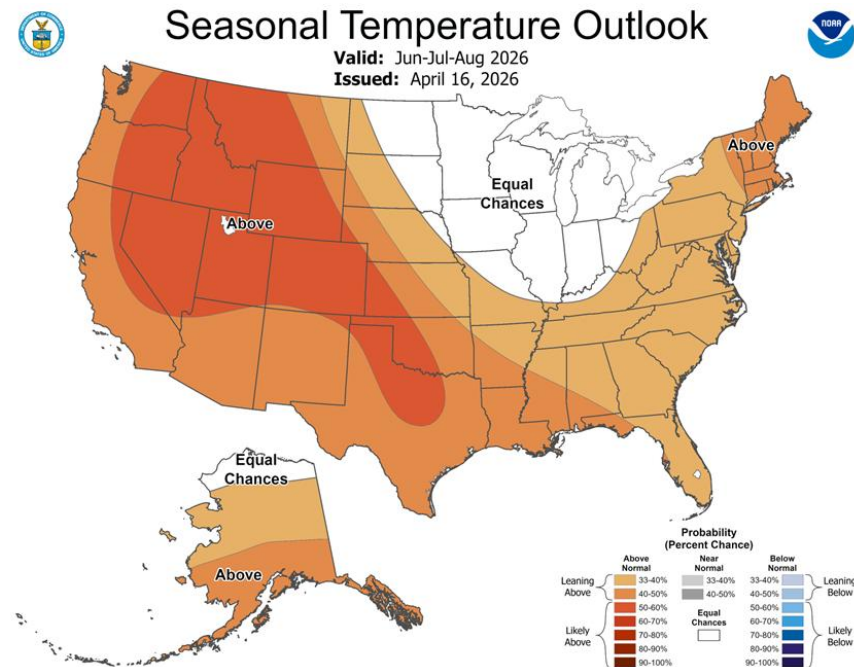
Large load and Far West Texas operational challenges

Above average temperatures is likely

Drought conditions can contribute to high temperatures that impact generation and transmission

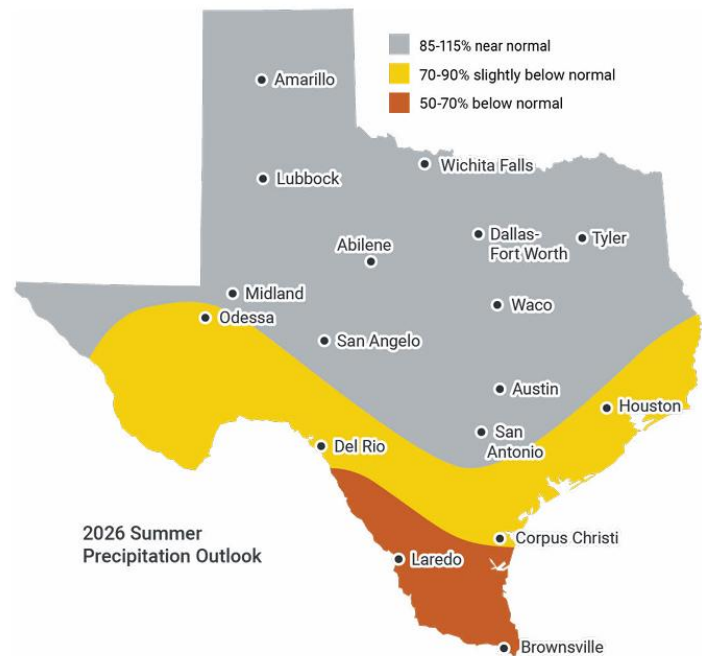
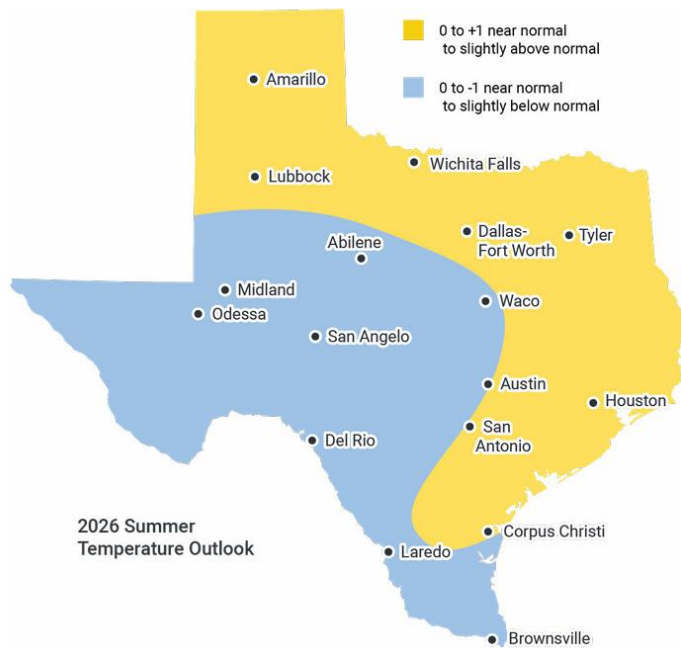


Source: [Summer Outlook: Cooler Northeast, Hot West From El Niño | Weather.com](#)



Source: [Climate Prediction Center - Seasonal Outlook](#)

2026 Summer Outlook – ERCOT Weather Forecast

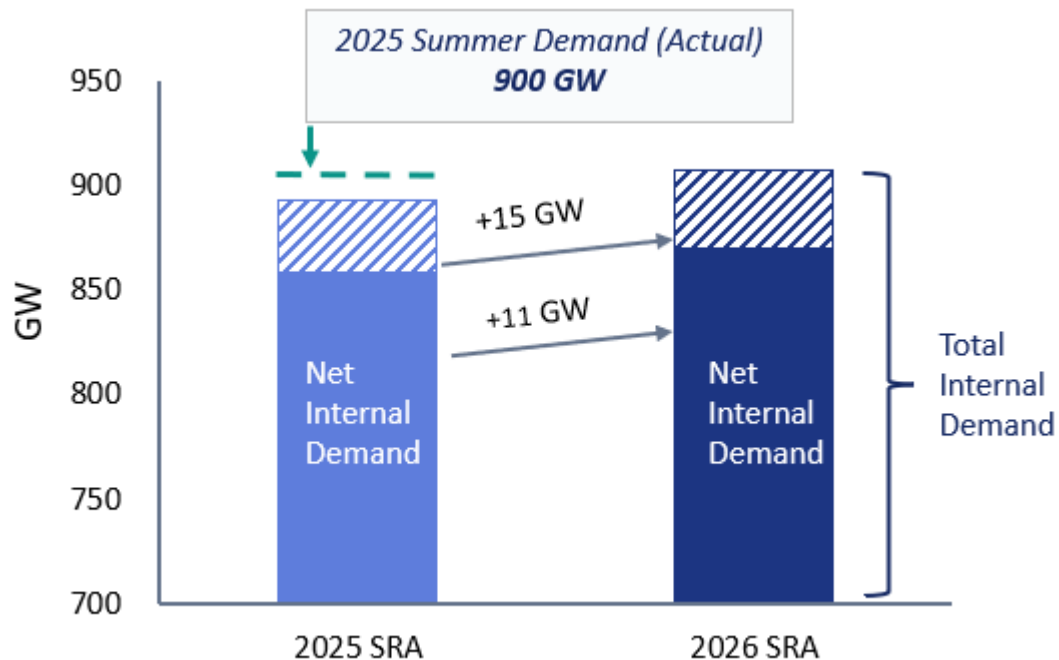


Source: [2026 Summer Weather Outlook \(June - September\)](#)

Demand Growth

Net aggregated peak demand across all assessment areas has increased by over 11 GW since 2025.

Strong load growth from data centers and large loads has greatly contributed to this growth.

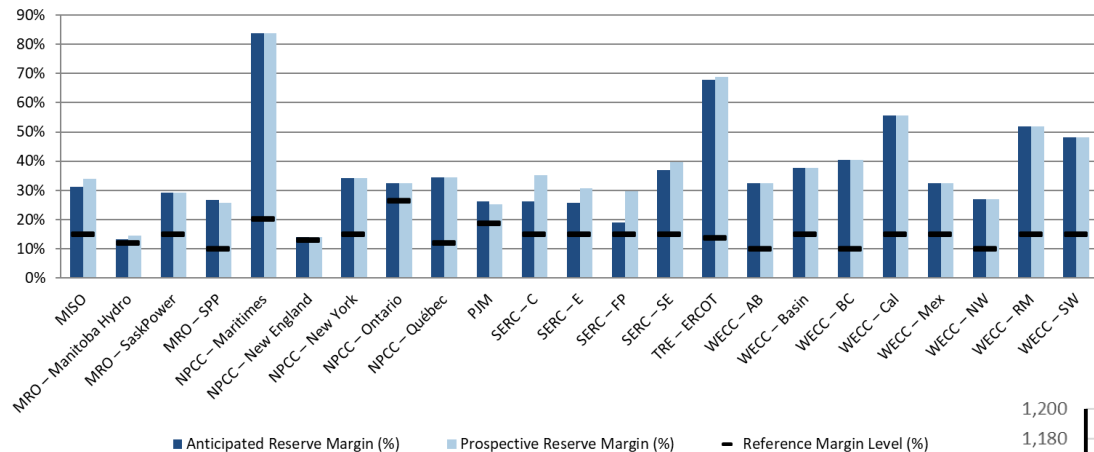


Courtesy: [NERC 2026 SRA](#)

Historical and Future Projected Demand Data for ERCOT Interconnection

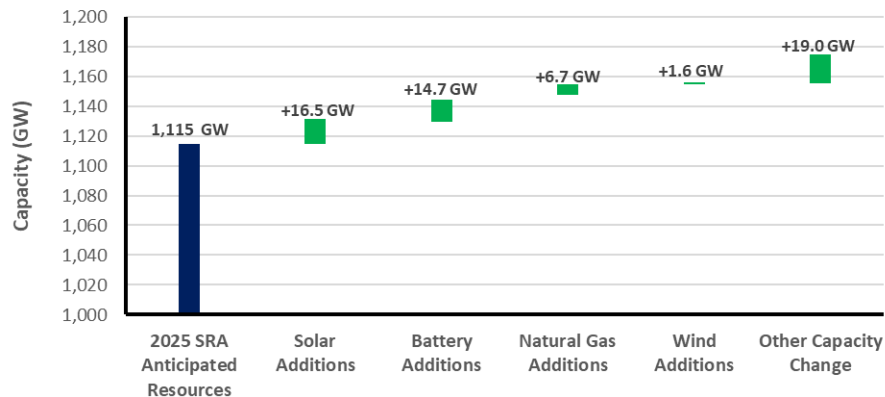
Year	Actual Summer Peak	Demand Forecast		Weather Forecast
		50/50	90/10	As of April of Assessment Year
2023	85,508	82,307	85,696	
2024	85,245	84,818	85,751	

Year	Actual Summer Peak	Demand Forecast		Weather Forecast
		50/50	90/10	As of April of Assessment Year
2025	83,876	85,151	91,346	
2026		83,224	90,387	



Resource additions over the past year have outpaced demand growth, contributing to higher reserves.

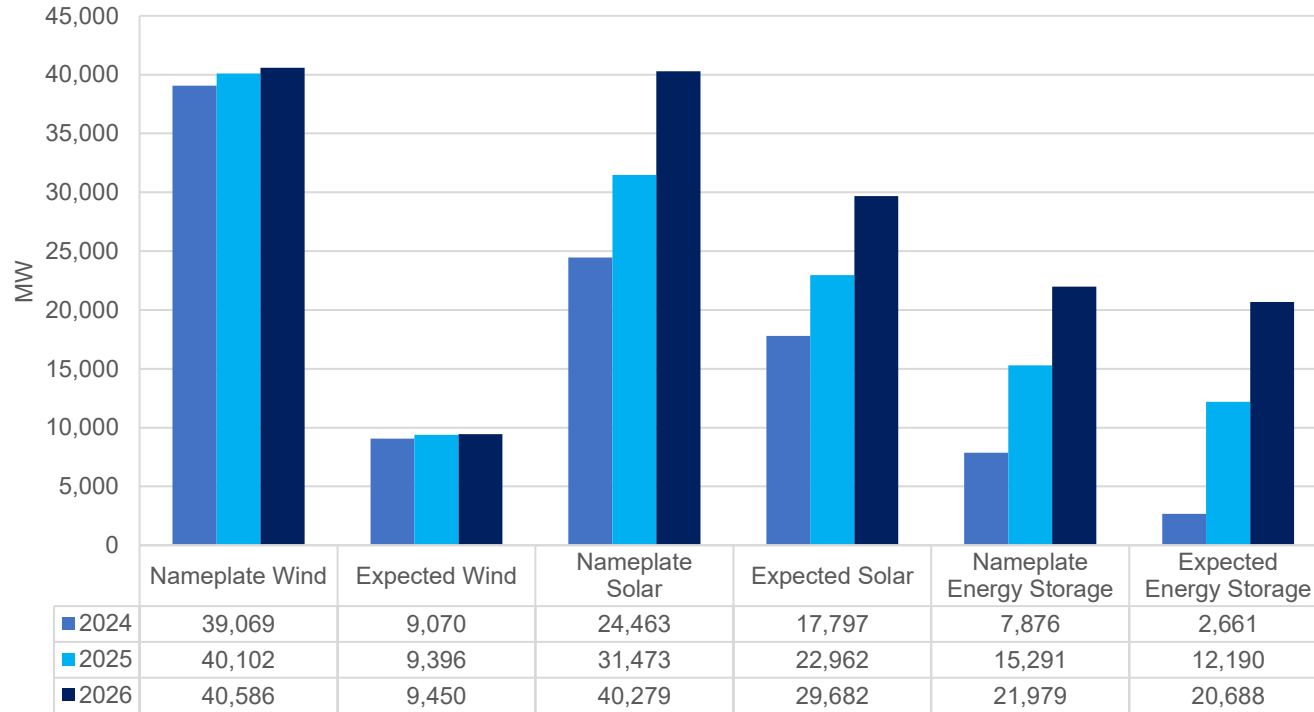
Bulk Power System (BPS) resources jumped by over 58.5 GW with the addition of solar PV and battery resources and some new natural gas-fired generators.



Courtesy: [NERC 2026 SRA](#)

Peak Hour Contribution from Inverter-Based Resources (IBRs) – ERCOT Interconnection

Peak Hour IBR Contribution Projection for 2026 vs Previous Summers

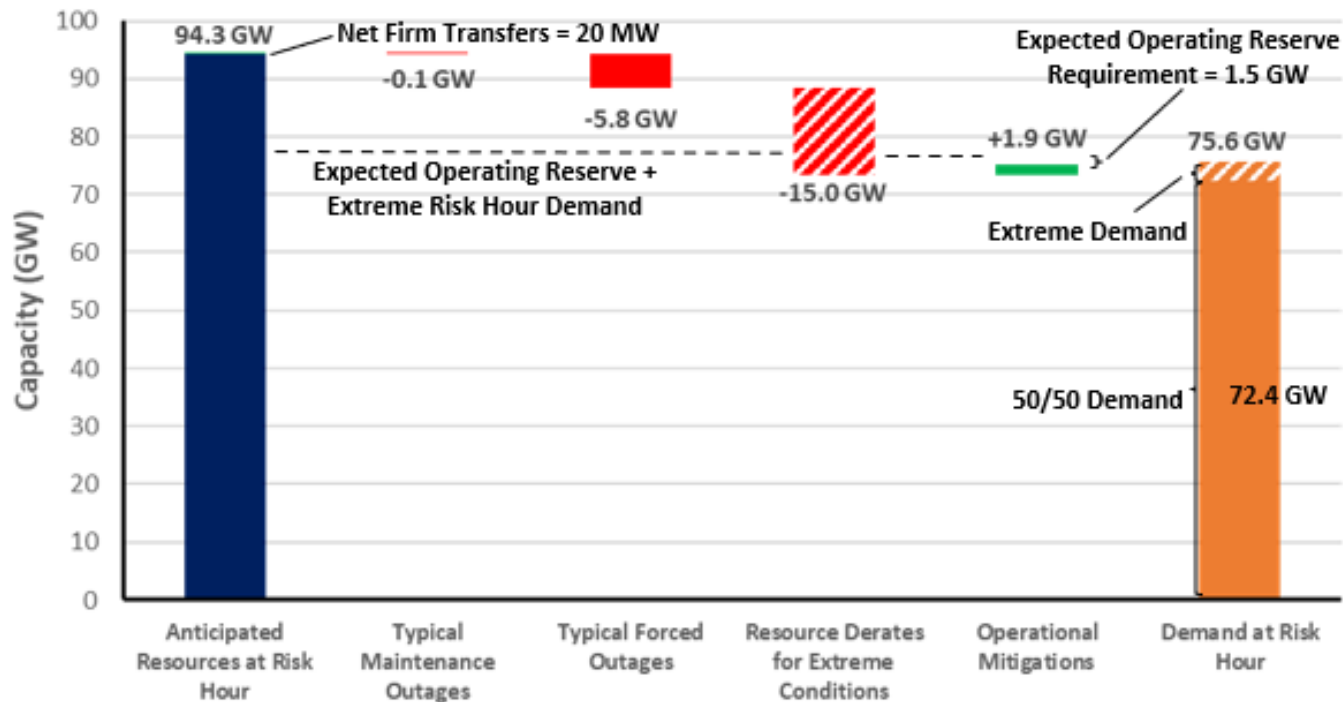


Peak Hour Demand vs. Resources Projection – ERCOT Interconnection

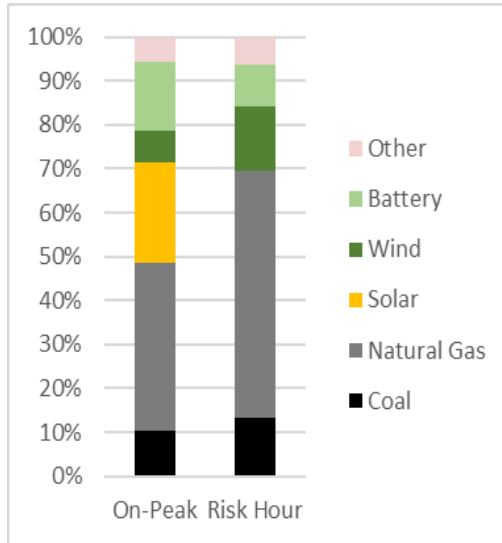
Texas RE-ERCOT			
Demand, Resource, and Reserve Margins	2025 SRA	2026 SRA	2025 vs. 2026 SRA
Demand Projections	MW	MW	Net Change (%)
Total Internal Demand (50/50)	85,151	83,224	-2.3%
Demand Response: Available	3,292	5,100	54.9%
Net Internal Demand	81,859	78,124	-4.6%
Resource Projections	MW	MW	Net Change (%)
Existing-Certain Capacity	112,321	125,975	12.2%
Tier 1 Planned Capacity	4,854	5,189	6.9%
Net Firm Capacity Transfers	20	20	0.0%
Anticipated Resources	117,195	131,184	11.9%
Existing-Other Capacity	0	0	-
Prospective Resources	117,770	131,903	12.0%
Reserve Margins	Percent (%)	Percent (%)	Annual Difference
Anticipated Reserve Margin	43.2%	67.9%	24.8
Prospective Reserve Margin	43.9%	68.8%	25.0
Reference Margin Level	13.75%	13.75%	0.0

Courtesy: [NERC 2026 SRA](#)

Risk Hour Scenario (9:00 p.m. Local Time) – ERCOT Interconnection



ON-PEAK VS RISK HOUR FUEL MIX



Courtesy: [NERC 2026 SRA](#)

Summer Risk Hour Analysis – ERCOT Interconnection

Hour Ending (CDT)	Chance of Normal System Conditions Probability of CAFOR being above 3,000 MW	EMERGENCY LEVEL	
		Chance of an Energy Emergency Alert Probability of CAFOR being less than 2,500 MW	Chance of Ordering Controlled Outages Probability of CAFOR being less than 1,500 MW
1 a.m.	100.00%	0.00%	0.00%
2 a.m.	100.00%	0.00%	0.00%
3 a.m.	100.00%	0.00%	0.00%
4 a.m.	100.00%	0.00%	0.00%
5 a.m.	100.00%	0.00%	0.00%
6 a.m.	100.00%	0.00%	0.00%
7 a.m.	100.00%	0.00%	0.00%
8 a.m.	100.00%	0.00%	0.00%
9 a.m.	100.00%	0.00%	0.00%
10 a.m.	100.00%	0.00%	0.00%
11 a.m.	100.00%	0.00%	0.00%
12 p.m.	100.00%	0.00%	0.00%
1 p.m.	100.00%	0.00%	0.00%
2 p.m.	100.00%	0.00%	0.00%
3 p.m.	100.00%	0.00%	0.00%
4 p.m.	100.00%	0.00%	0.00%
5 p.m.	100.00%	0.00%	0.00%
6 p.m.	100.00%	0.00%	0.00%
7 p.m.	100.00%	0.00%	0.00%
8 p.m.	100.00%	0.00%	0.00%
9 p.m.	98.40%	0.43%	0.24%
10 p.m.	99.29%	0.06%	0.00%
11 p.m.	99.64%	0.03%	0.01%
12 a.m.	99.88%	0.01%	0.00%

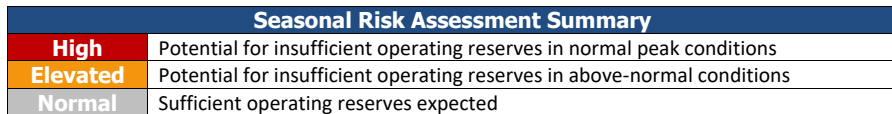
Note: Probabilities are not additive.

Risk hour of 9:00 p.m. local time is driven by the down ramp of solar generation and continued elevated loads

The probability of an EEA is 0.43%, down from 3.1% in the previous SRA due to continued robust growth in battery energy storage capacity

This does not account for regional constraints in Far West Texas

Courtesy: [NERC 2026 SRA](#)



Risk scenarios include extreme demand, historical high generator outages, and low wind and solar scenarios

Courtesy: [NERC 2026 SRA](#)

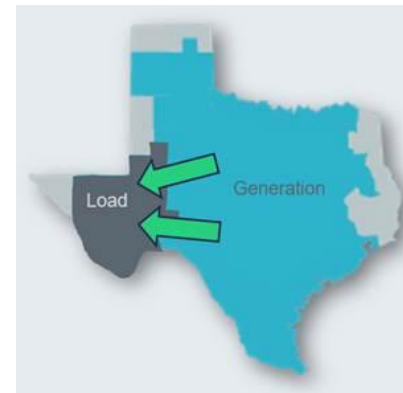
Operational Challenges and Mitigation – ERCOT Interconnection

❑ Operational challenges could arise in Far West Texas during periods of high demand combined with no solar generation and low wind output. This may cause transmission constraints in the region.

- Price-responsive demand is expected to help reduce transmission congestion and maintain balance with supply during tight conditions.
- In September 2025, two new thermal cascading Interconnection Reliability Operating Limits (IROLs) became effective in the far west region of ERCOT's footprint: a far west north IROL constraint and a far west south IROL constraint.
- ERCOT incorporated dynamic line ratings that account for solar irradiance along with ambient temperatures.
- Operating procedures that include involuntary load curtailment are in place to maintain System Operating Limits when needed.

❑ Newly interconnected large loads (mainly data centers and crypto-mining facilities) may cause grid stability problems due to tripping.

- ERCOT has implemented mandatory ride-through capabilities and requires dynamic model submissions, among other solutions





Above average temperature and dry weather is likely



Modest load growth and significant IBR growth since 2025



Under expected peak conditions, the ERCOT system has enough reserves



Risk of emergency conditions during evening when solar ramps down but load remains high



ERCOT probability of EEA at the risk hour expected to fall from 3% (2025) to 0.4% (2026)



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Questions?