



MARKET FORECAST: BOOM!

Capacity, A Fireside Chat

February 2026

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FIRESIDE CHAT

DISCUSSION ITEMS

01

**CURRENT
CAPACITY
SITUATION**

02

**FERC & RTO -
ELECTRIC UTILITY -
BIG TECH
RESPONSE**

03

**HOW DOES THIS
END?**

04

Q & A



CURRENT CAPACITY SITUATION

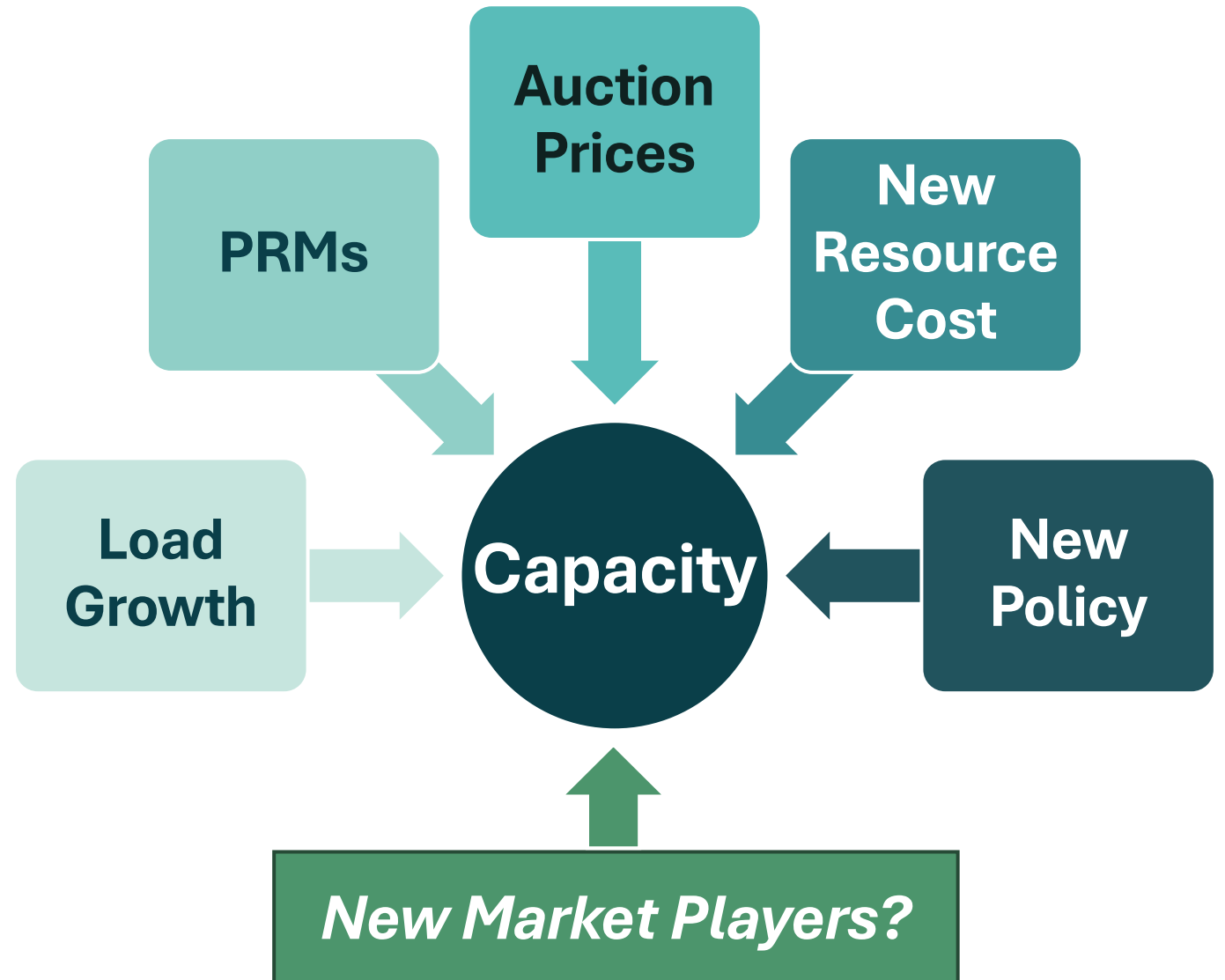
*Electricity is no longer a luxury,
it is a definite necessity*
- Franklin D. Roosevelt

CURRENT CAPACITY SITUATION?

| Why is it important to have capacity?

| What creates a “good” capacity situation?

| How do you measure a “good” or “bad” capacity situation?



PROJECTED LOAD GROWTH

1. Data Centers / AI Facilities
2. Beneficial Electrification
3. Manufacturing & Economic Growth

IRP Energy Projections (MWh)

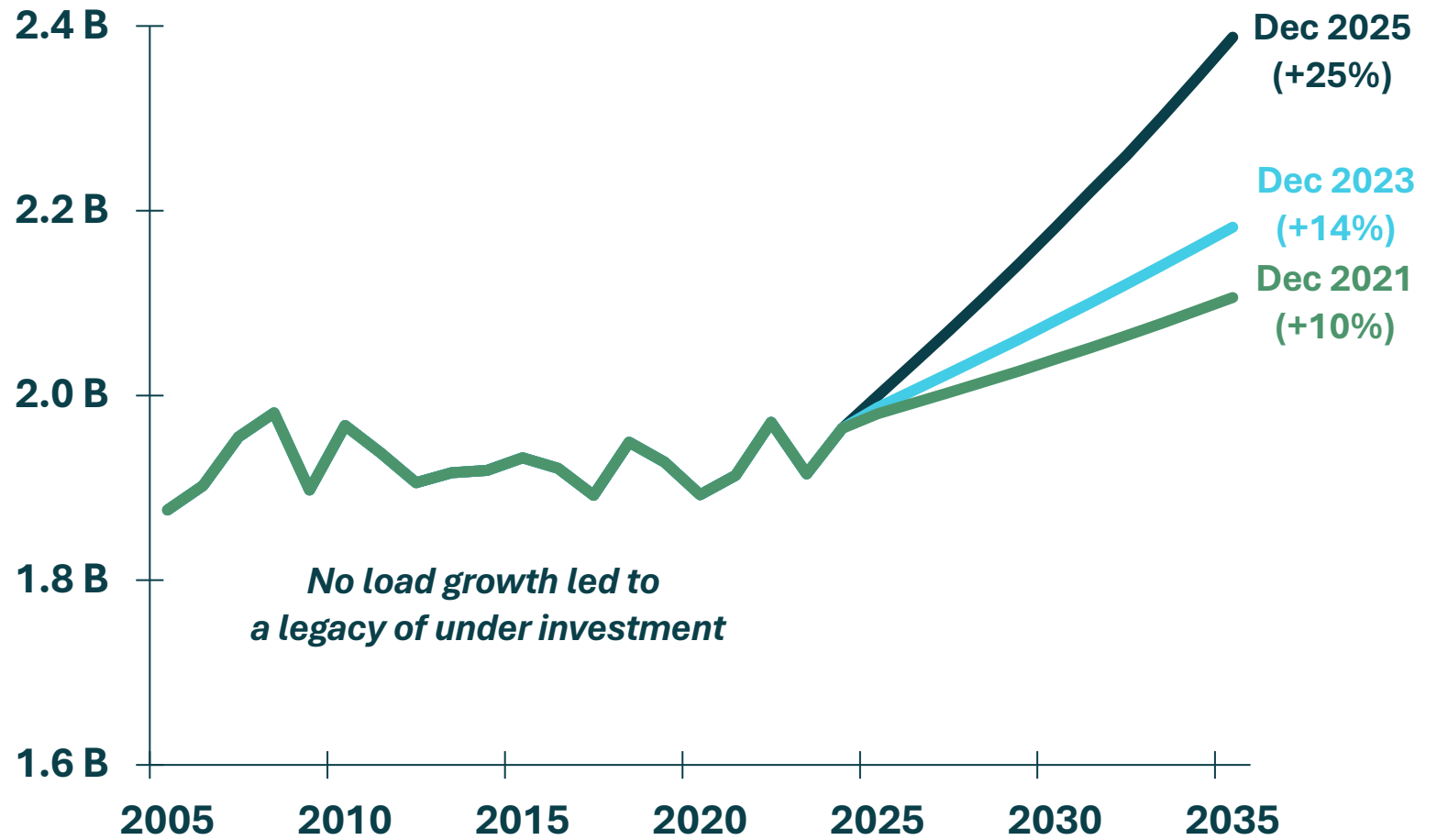


Chart includes projections from 132 IRPs, covering 47% of electricity delivered to US customers.

% change refers to years 2023 to 2035.

The State of Utility Planning, 2025 Q4 - RMI

RESERVE MARGINS

NERC Warns of ‘Worsening’ RTO Insider Resource Adequacy Through 2035

LTRA Finds Most Assessment Areas at Risk of Shortfalls

NERC’s 2025 LTRA concludes multiple regions are at “high risk” of energy shortfalls in “extreme weather conditions” by 2030

Combination of load growth, “weather dependent resources”, and shift to winter peaks

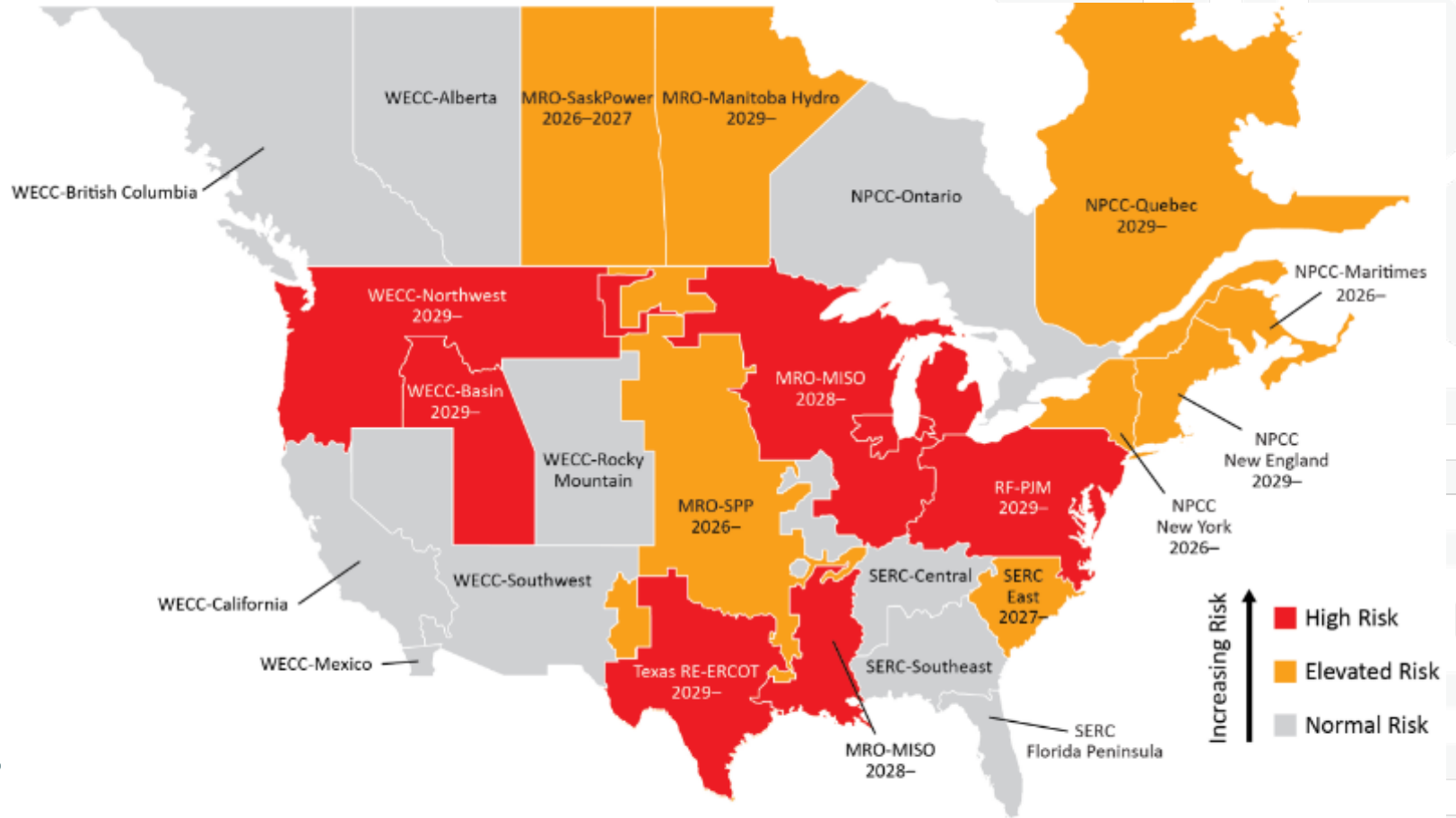


Figure 1: Risk Area Summary 2026–2030

Shows highest risk classification that occurs in the first 5 years and states initial year of occurrence

2025 Long-Term Reliability Assessment

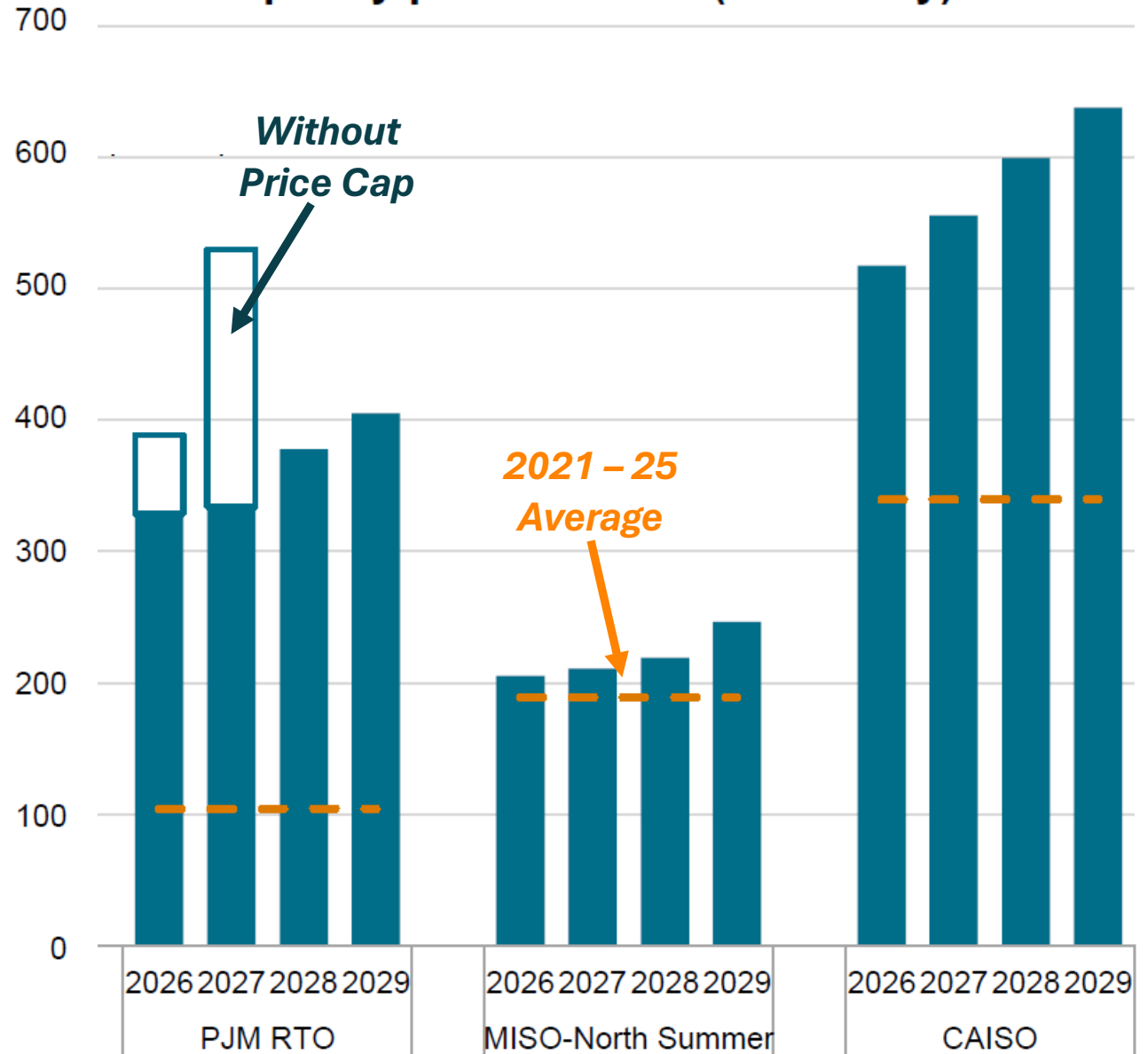
CAPACITY PRICES

Numerous “bilateral” capacity transactions occur annually, BUT without price transparency

Recent RTO capacity auctions clearing at higher prices, signaling “higher demand” for capacity

Outlook for immediate future is higher capacity prices

Capacity price outlook (\$/MW-day)

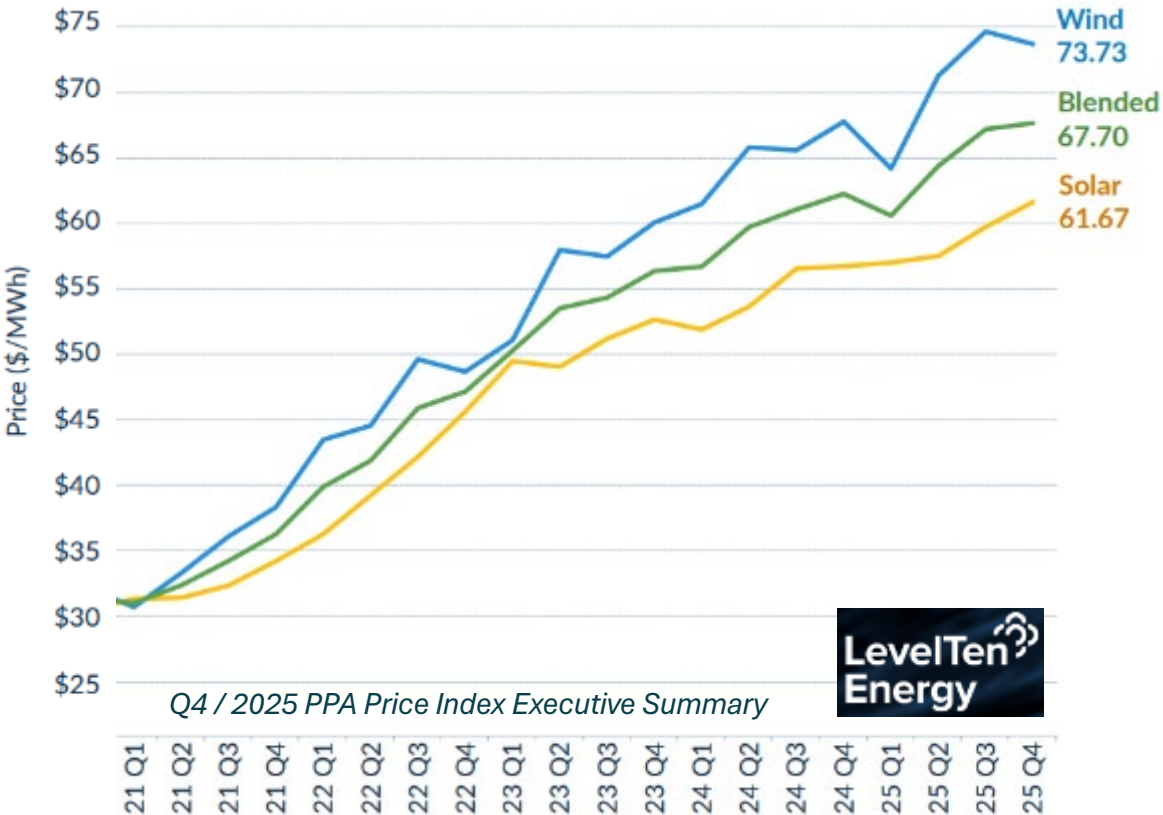


Data compiled December 2025.
RTO = regional transmission organization.
Sources: S&P Global Energy; PJM.

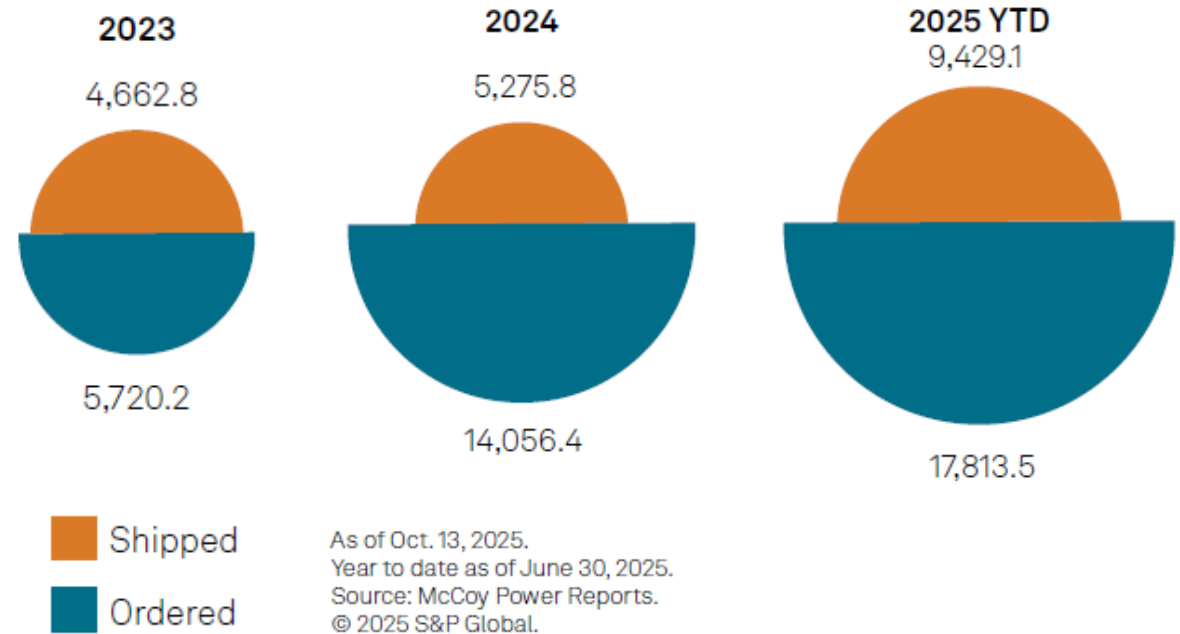
COST OF NEW GENERATION



USA Market Average PPA Prices



US gas turbine orders (MW)



RTO POLICY: WESTERN RESOURCE ADEQUACY PROGRAM (WRAP)

| What is WRAP?

- WPP's resource adequacy program with market rules for capacity obligations and accreditation
- Provides capacity reserve exchange

| Initially, 23 members

| Binding RA commitments for Winter 2027 /28 (after initial delay)



RTO POLICY: WESTERN RESOURCE ADEQUACY PROGRAM (WRAP)



APS, others plan 1-year delay in fines for Western Resource Adequacy Program capacity shortfalls

Supply chain problems, unexpected load growth and extreme weather are challenging efforts to ensure adequate power supplies in the West, according to Avista, Calpine and other program participants.

Published April 23, 2024



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NV Energy has notified the Public Utilities Commission of Nevada that it plans to leave the Western Power Pool's Western Resource Adequacy Program (WRAP).

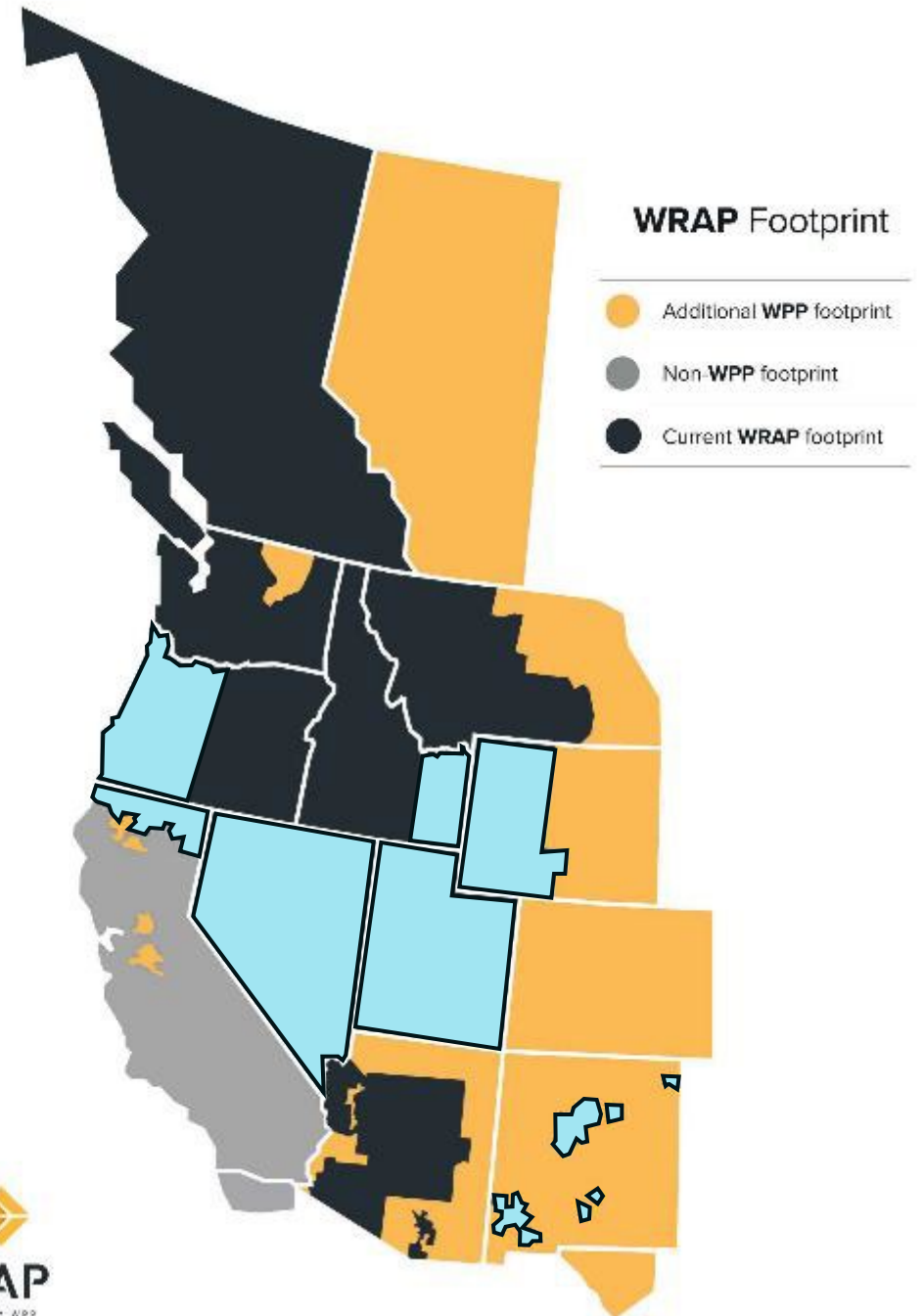
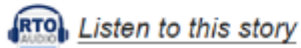


A Half-Dozen Utilities Leave WRAP Under Imminent Deadline

by Ayla Burnett Oct 30, 2025 | Updated Nov 3, 2025

WRAP Wins Commitments from 16 Entities

Final Group Consists Heavily of Future Markets+ Participants



LEGISLATION / REGULATION



UTILITY DIVE Deep Dive Opinion Library Events Press Releases Topics

House lawmakers press FERC on affordability, reliability and gas

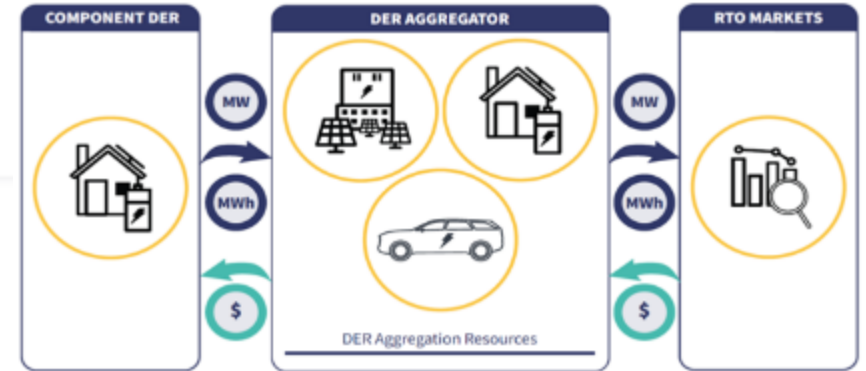
Commissioners cited inadequate transmission infrastructure as a major concern.

Published Feb. 4, 2026

Ethan Howland
Senior Reporter

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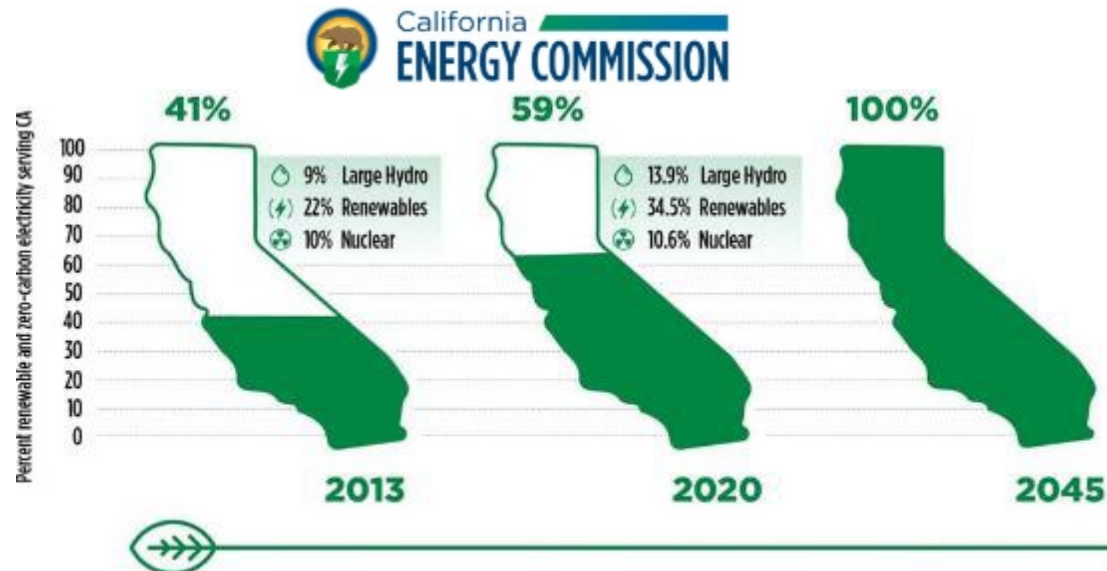
FERC Order No. 2222



The New York Times

Trump Wants to Halt Almost All Coal Plant Shutdowns. It Could Get Messy.

Even as administration officials vowed this week to head off scheduled retirements, some aging plants are now breaking, and costs could run to the billions.




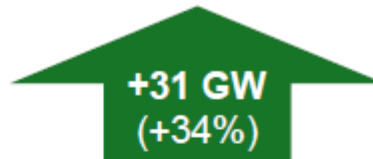
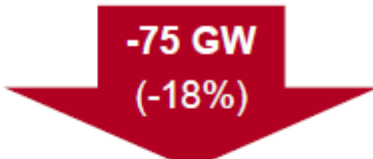
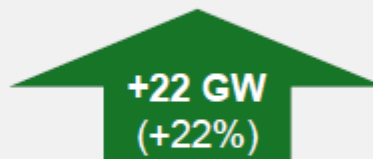

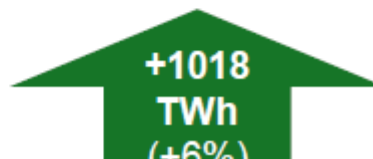
RECENT IMPACTS ON FUTURE INVESTMENTS

Change in tax credits means reduced solar / wind investments, however, BESS outlook is still strong

Favorable regulatory outlook for natural gas generation

Summary of major near-term changes to the US Power Market Outlook, May 2025 vs. December 2025

S&P Global Energy

	Next decade 2026-3035		Next decade 2026-3035
Net on-grid energy demand	 <p>-52 TWh (-6%)</p>	Natural gas-fired capacity additions (includes coal-to-gas conversions)	 <p>+31 GW (+34%)</p>
Solar PV capacity additions (includes grid-facing and BTM solar)	 <p>-75 GW (-18%)</p>	Battery capacity additions	 <p>+22 GW (+22%)</p>
Wind capacity additions (includes onshore and offshore)	 <p>-43 GW (-29%)</p>	Gas generation (cumulative over the period)	 <p>+1018 TWh (+6%)</p>

Data compiled December 2025.

OBBBA = One Big Beautiful Bill Act, US President Donald Trump's budget bill.



FERC / RTO RESPONSE

The most terrifying words in the English language are: I'm from the government and I'm here to help
-Ronald Reagan

RTO / ISO MARKET POLICY

Which Lever To Pull?



| **RTOs only administer markets (e.g. energy, capacity, ancillaries), ensure grid access, and manage reliability**

- Cannot tell utilities, regulators, or generation developers what resources to build

| **Only have 2 levers to pull for managing resource capacity:**

1. Planning reserve margin requirements
2. Resource capacity accreditation

RESERVE MARGINS

Planning reserve margins [PRM] change based on load growth and capacity resource additions

Normal for PRMs to decline over time due to expected resource retirements and load growth – BUT ...

- How much load growth?
- What new resources?

2025 Long-Term Reliability Assessment

Figure 2: MISO Winter Planning Reserve Margins

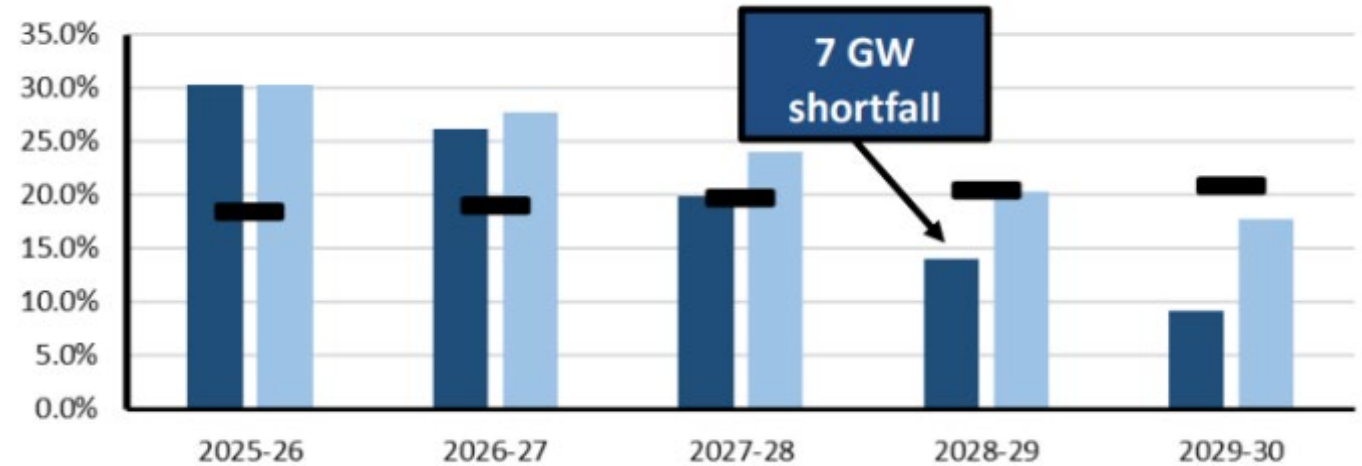
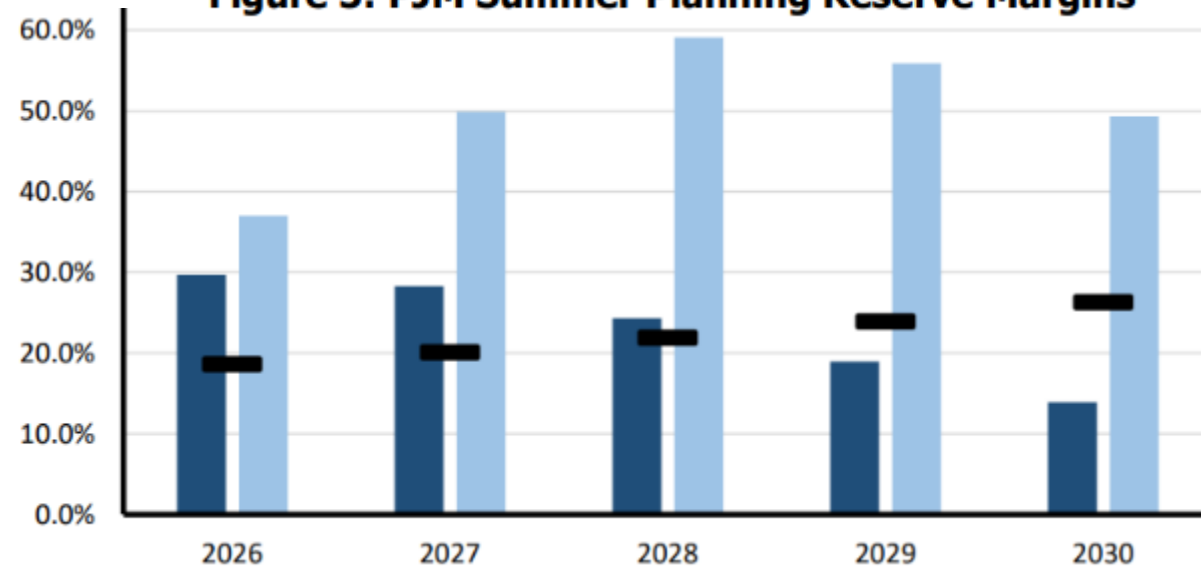


Figure 3: PJM Summer Planning Reserve Margins



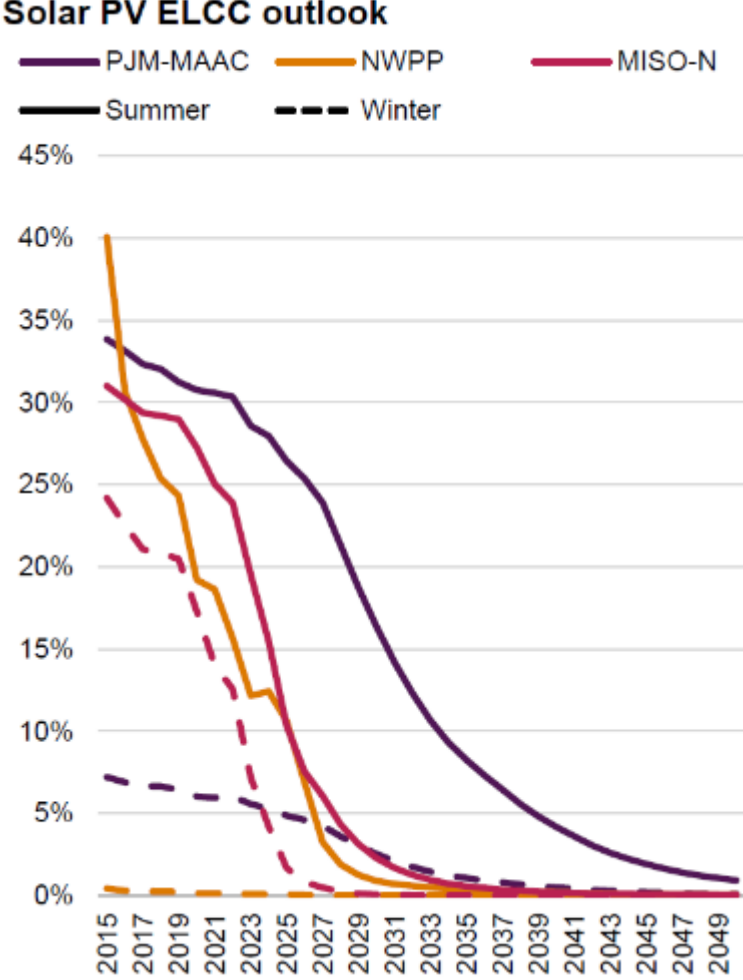
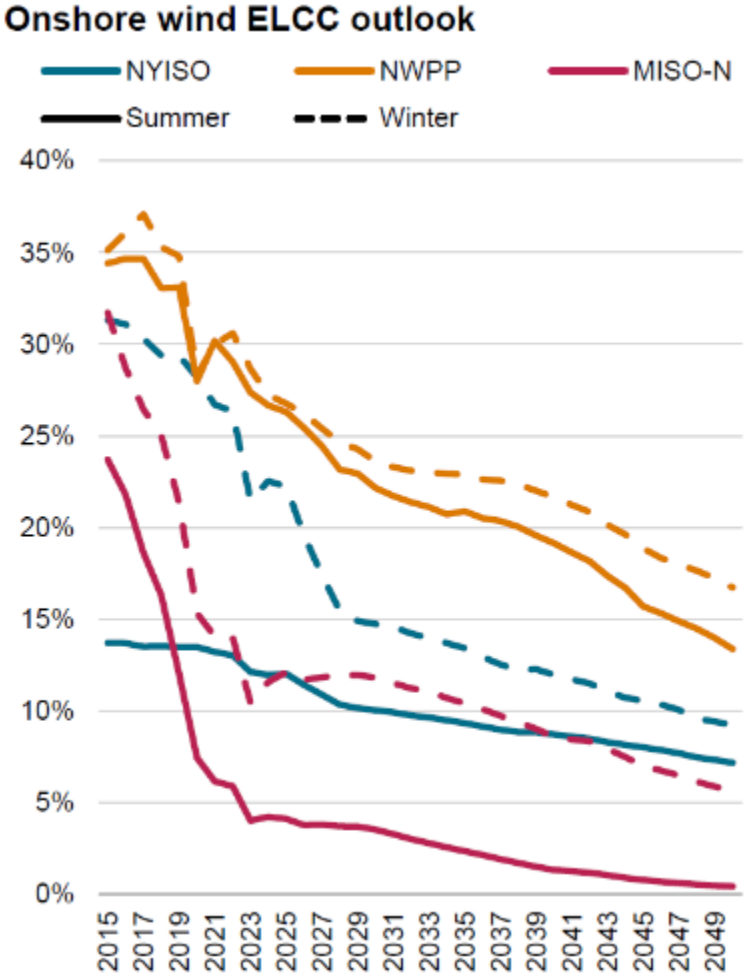
■ Anticipated Reserve Margin (%) ■ Prospective Reserve Margin (%) ■ Reference Margin Level (%)

CAPACITY ACCREDITATION

RTOs introduced “Effective Load Carrying Capability” (ELCC) methodologies for determining capacity accreditation

Most RTOs have introduced “seasonal” accreditations

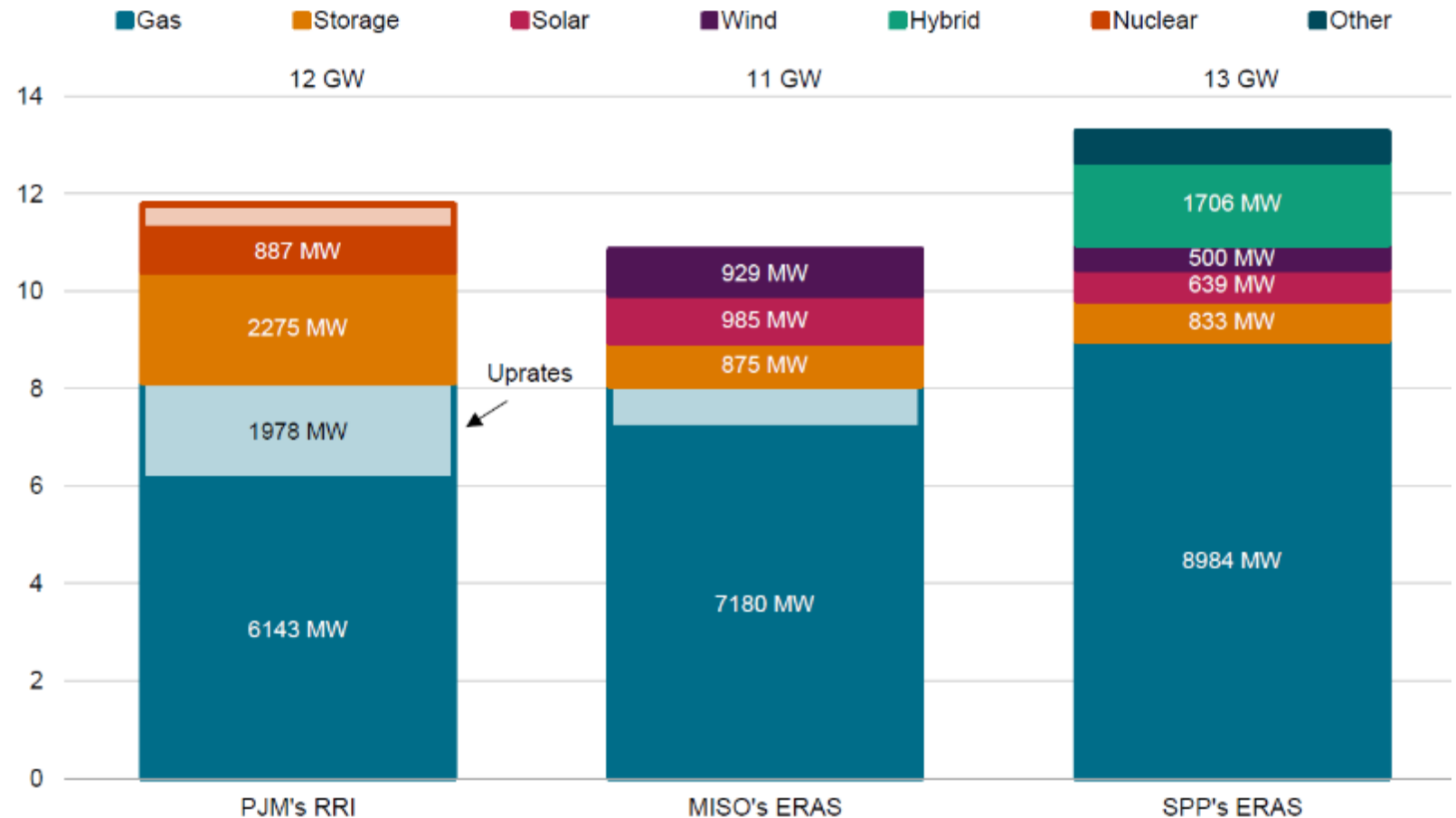
Adding more scrutiny on resource availability during “critical periods”



Data compiled December 2025.
ELCCs depicted are marginal.
Source: S&P Global Energy.

EXPEDITED INTERCONNECTION PROGRAMS

Resource mix in expedited interconnection programs (GW)



FERC approved expedited GIA procedures for MISO, PJM, and SPP

Moved “Shovel Ready” projects to front of the line

Dominated by gas-fired generation

Data compiled December 2025.

RRI = Reliability Resource Initiative; ERAS = Expedited Resource Addition Study.

MISO's ERAS projects include study cycles 1 and 2.

See [Interconnection queues 2025 – natural gas skyrockets despite shrinking queues](#).

Source: S&P Global Energy; PJM; MISO; SPP.

FERC ORDER FOR PJM

FERC members raise alarms about PJM failure to meet reliability target

PJM says several factors could close the capacity shortfall, including a new load forecast next month that could be significantly lower than the last due to stricter vetting of potential large loads.

Published Dec. 19, 2025

Ethan Howland
Senior Reporter

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| PJM must provide transmission customers serving co-located load with three new transmission service options (in addition to existing NITS):

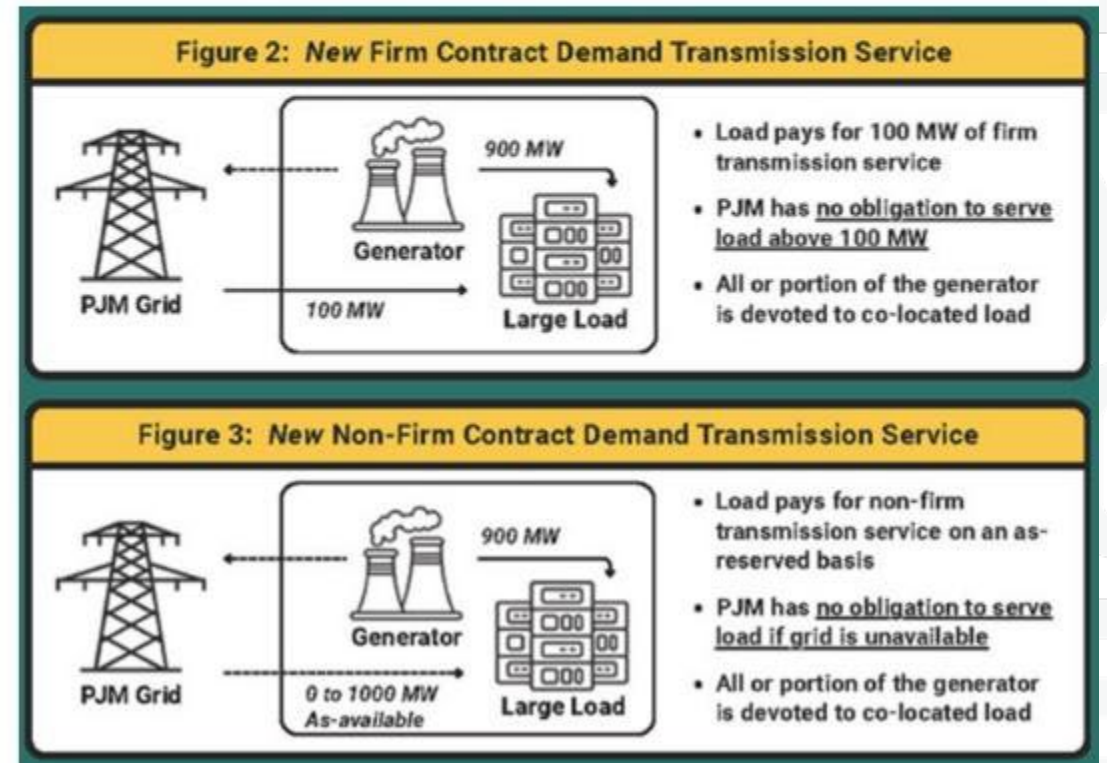
- Interim, Non-Firm Transmission Service;
- Firm Contract Demand transmission service;
- Non-Firm Contract Demand transmission service



HEADLINES


FACT SHEET | FERC Directs Nation's Largest Grid Operator to Create New Rules to Embrace Innovation and Protect Consumers

12/19/2025



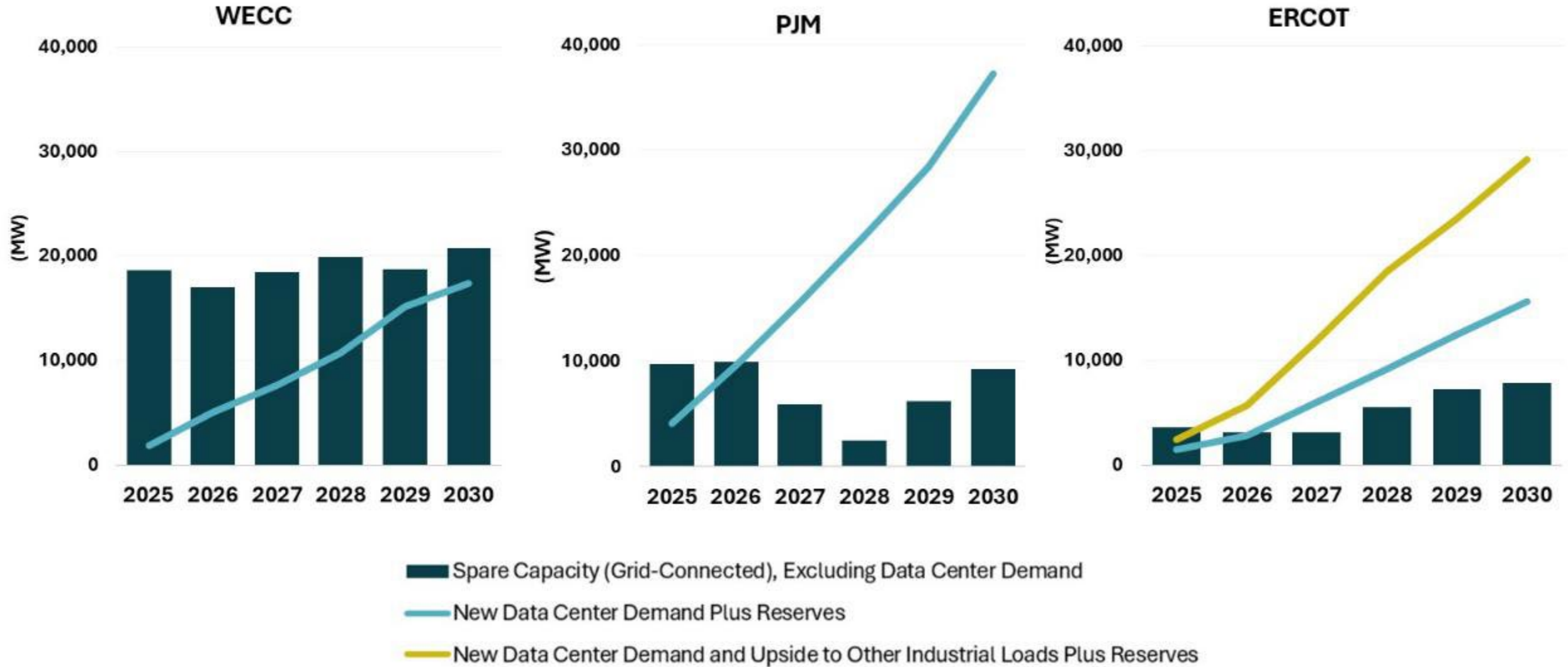
| A chart produced by FERC Commissioner David Rosner explaining the new transmission service options available for co-located load customers | Office of FERC Commissioner David Rosner

ELECTRIC UTILITY RESPONSE



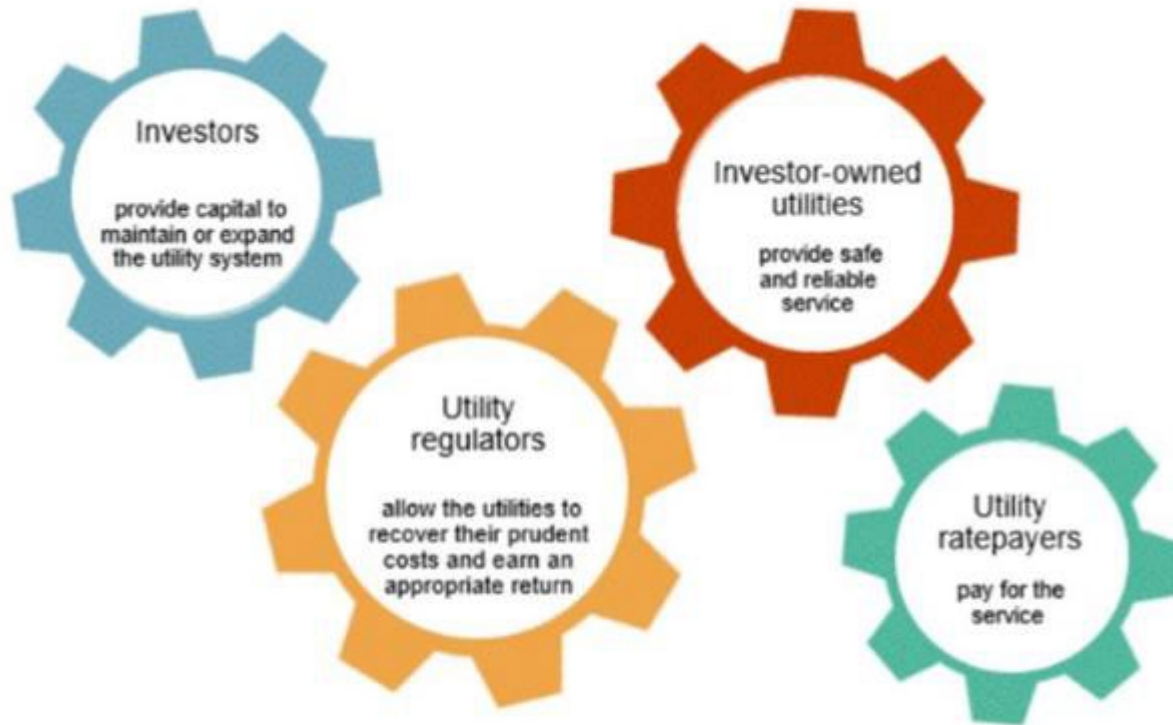
The most dangerous phrase in the English language is “we’ve always done it this way”
– US Navy Rear Admiral Grace Hopper

LARGE LOAD GROWTH BY REGION



MANAGING CHANGE

Regulatory Compact



Source: Regulatory Research Associates, a group within S&P Global Commodity Insights

S&P Global
Commodity Insights

| **IOUs and some cooperatives & public power utilities, require state regulatory approval for new generation resources. Typical “new build” process involves:**

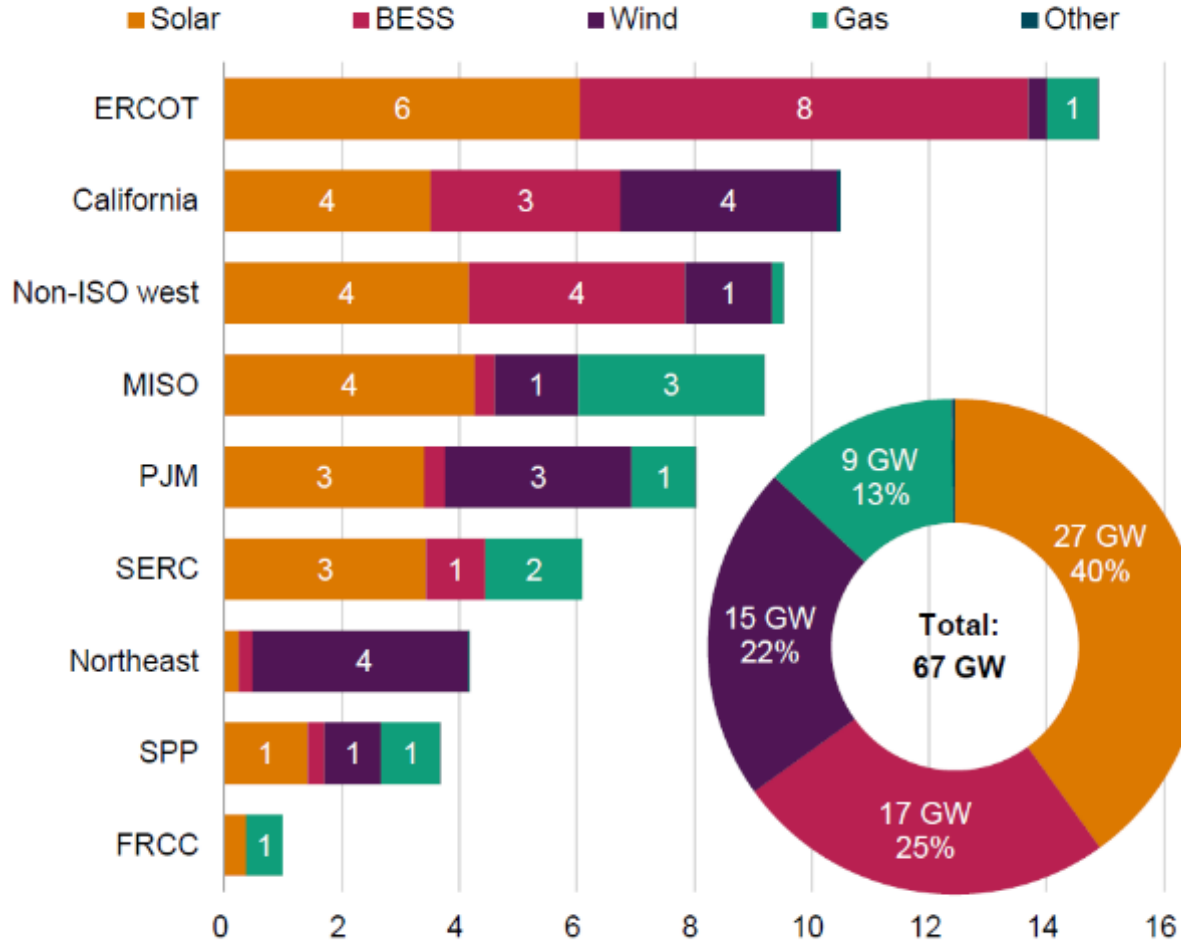
- Strategic Planning (identify need)
- RFP (competitive solicitation)
- Engineer / Develop / Construct

| **Monopoly requires obligation to serve with prudent investments**

- Not built for speed / innovation / risk

UTILITY OPTIONS

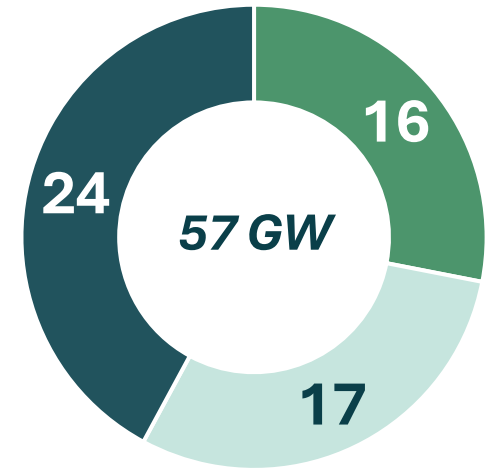
US power supply under construction by region (GW)



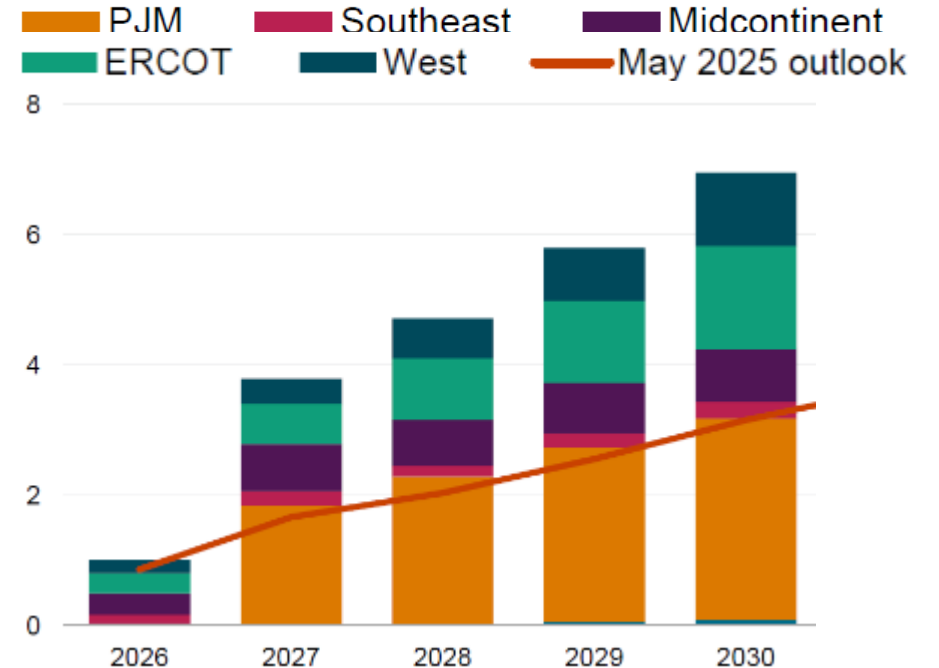
Data compiled November 2025.
 BESS = battery energy storage system.
 Wind includes onshore and offshore wind. Solar includes only grid-facing, not BTM.
 Sources: S&P Global Energy; EIA.

Coal Retirements


- Committed
- Conversion
- Potential



Cumulative demand response growth (GW)



Data compiled December 2025.
 Source: S&P Global Energy.



BIG TECH RESPONSE

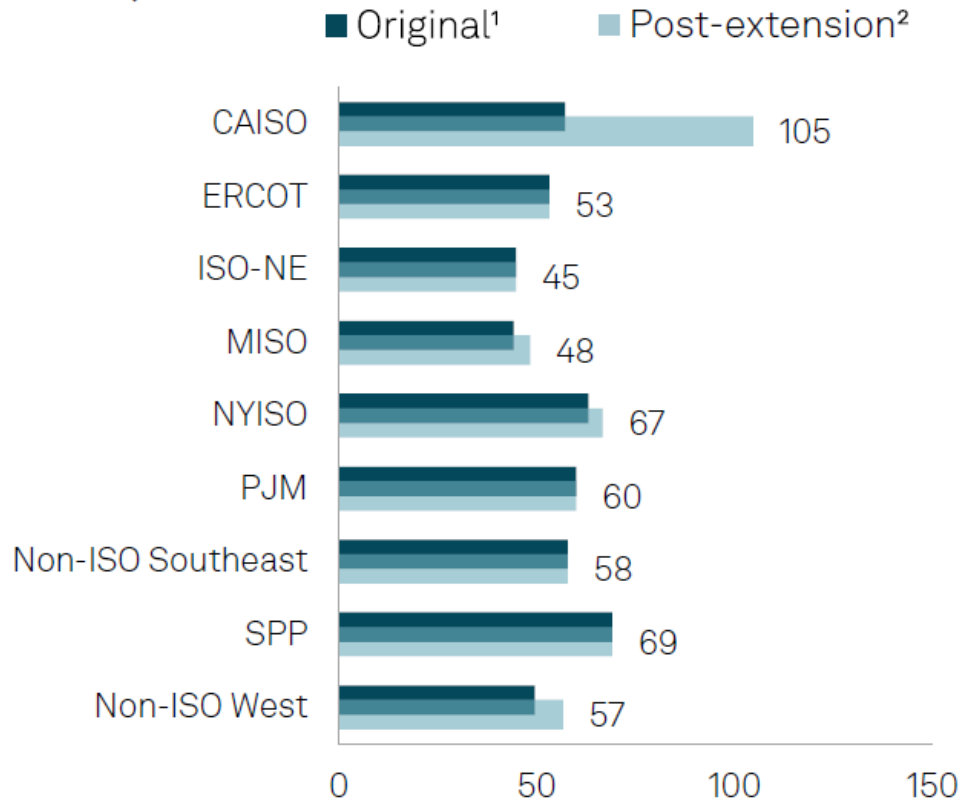
"I'm travelling at the speed of light... I'm a rocket ship on my way to Mars on a collision course."

- Freddie Mercury / Queen (Don't Stop Me Now)

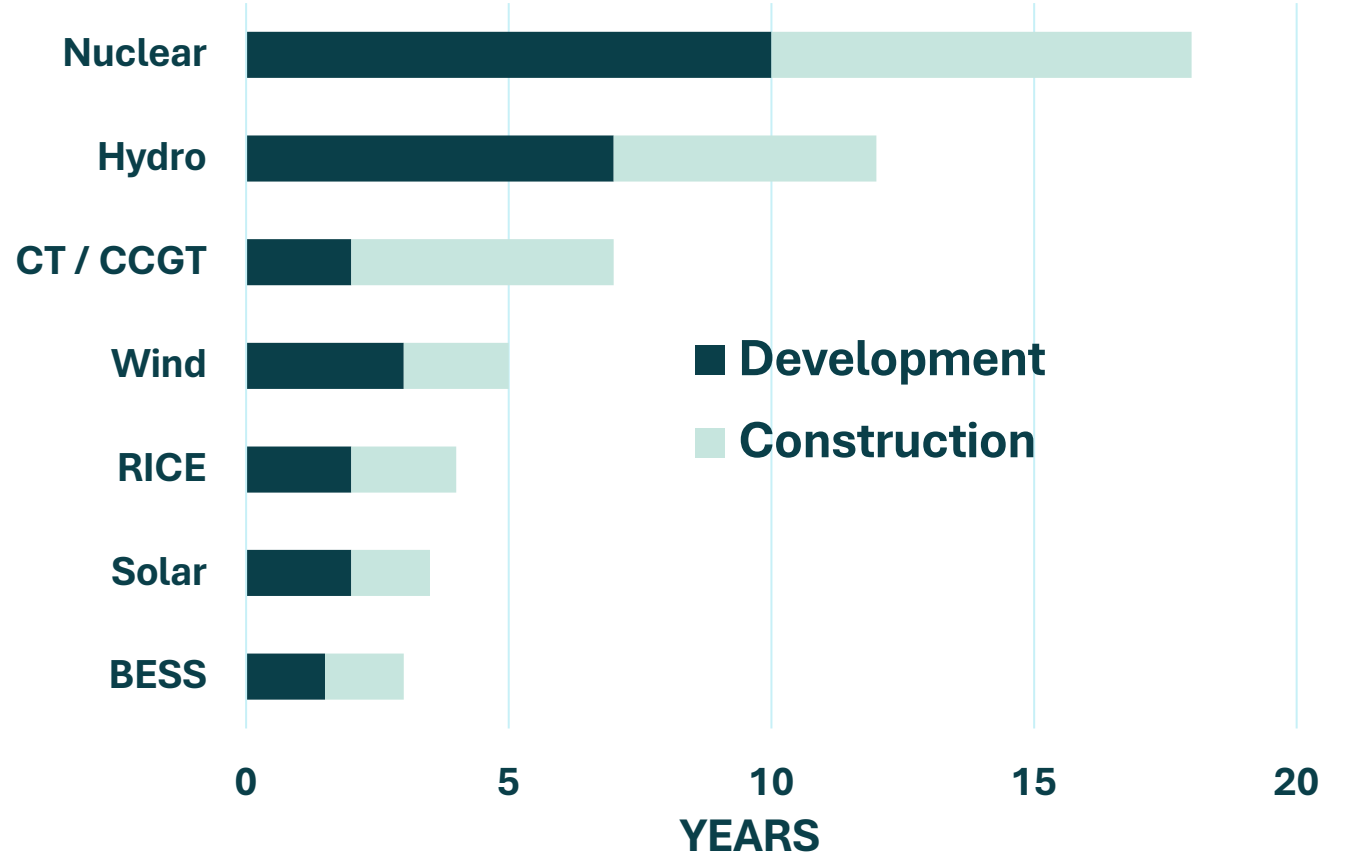
BIG TECH : THE NEED FOR SPEED



Average time from queue date to proposed online date (months)



Traditional Generation Development Timeline



Source: EPRI

As of June 9, 2025.

¹ Average calculations from queue date to initially proposed online date only.

² Average calculations include available revised online dates.

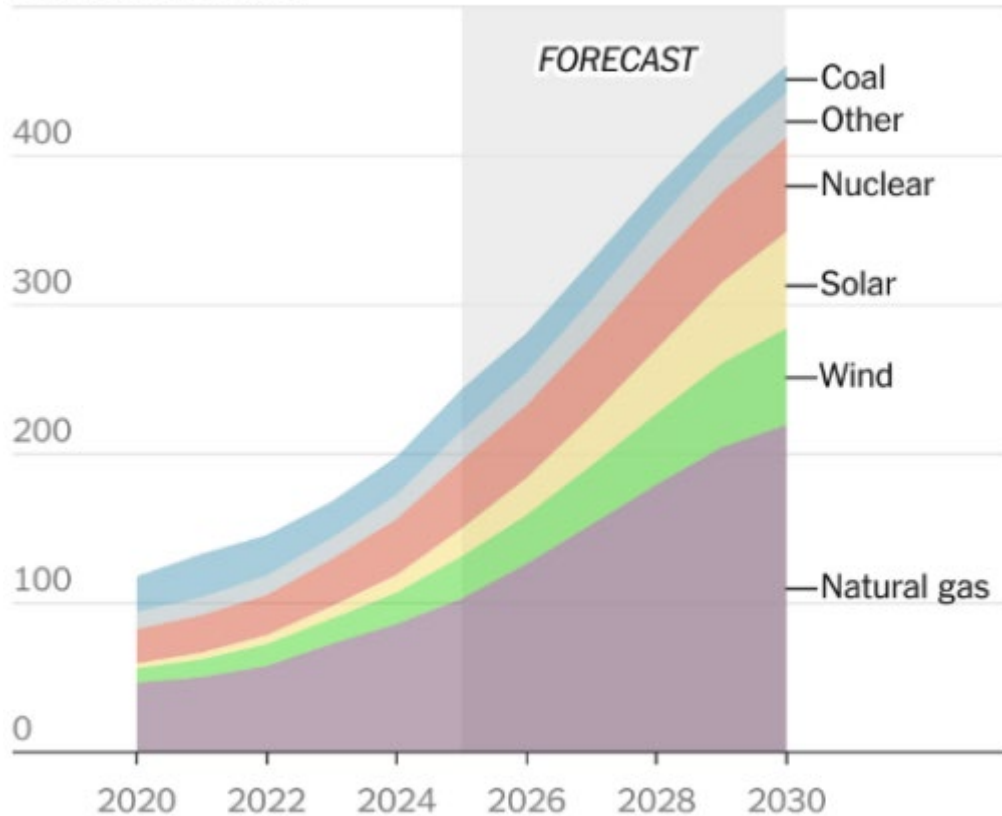
Active queues only.

Sources: S&P Global Commodity Insights; public company reports.

NEW MARKET PLAYERS?

Source of electricity generation for U.S. data centers

500 terawatt hours



Source: International Energy Agency • By The New York Times

Alphabet to Buy Intersect for \$4.75 Billion as AI-Investment Plans Grow

Google-parent says buy Intersect's data-center projects that are in development, plus multiple gigawatts of energy and the Intersect team as part of the deal

By Katherine Hamilton [Follow](#)

Updated Dec. 22, 2025 12:13 pm ET

As Tech Giants Get More Hands-On With Energy, Their Risks Rise

Hyperscalers are getting involved in earlier stages of power development

Why Don't Data Centers Use More Green Energy?

The New York Times

Reliance on fossil fuels is almost unavoidable — at least for now.

Meta Signs Nuclear Power Deal to Fuel Its AI Ambitions

The tech giant will buy power from an Illinois nuclear plant under a deal with Constellation Energy

By Jennifer Hiller [Follow](#)

Updated June 3, 2025 4:48 pm ET

HUNGRY FOR POWER

IOUs Build New Generation

SCC approves Chesterfield gas plant and Dominion rate hike, creates new rate class for data centers

BY: SHANNON HECKT - NOVEMBER 25, 2025 5:26 PM



NATIONAL

Three Mile Island nuclear plant will reopen to power Microsoft data centers

SEPTEMBER 20, 2024 · 1:40 PM ET



Build Micro-Grids

Repower Existing Generation



Meta Unveils Sweeping Nuclear-Power Plan to Fuel Its AI Ambitions

Facebook parent will back nuclear projects with Oklo, Bill Gates-backed TerraPower and Vistra



By Jennifer Hiller [Follow](#)
Updated Jan. 9, 2026 9:59 am ET

Alphabet to Buy Intersect for \$4.75 Billion as AI-Investment Plans Grow

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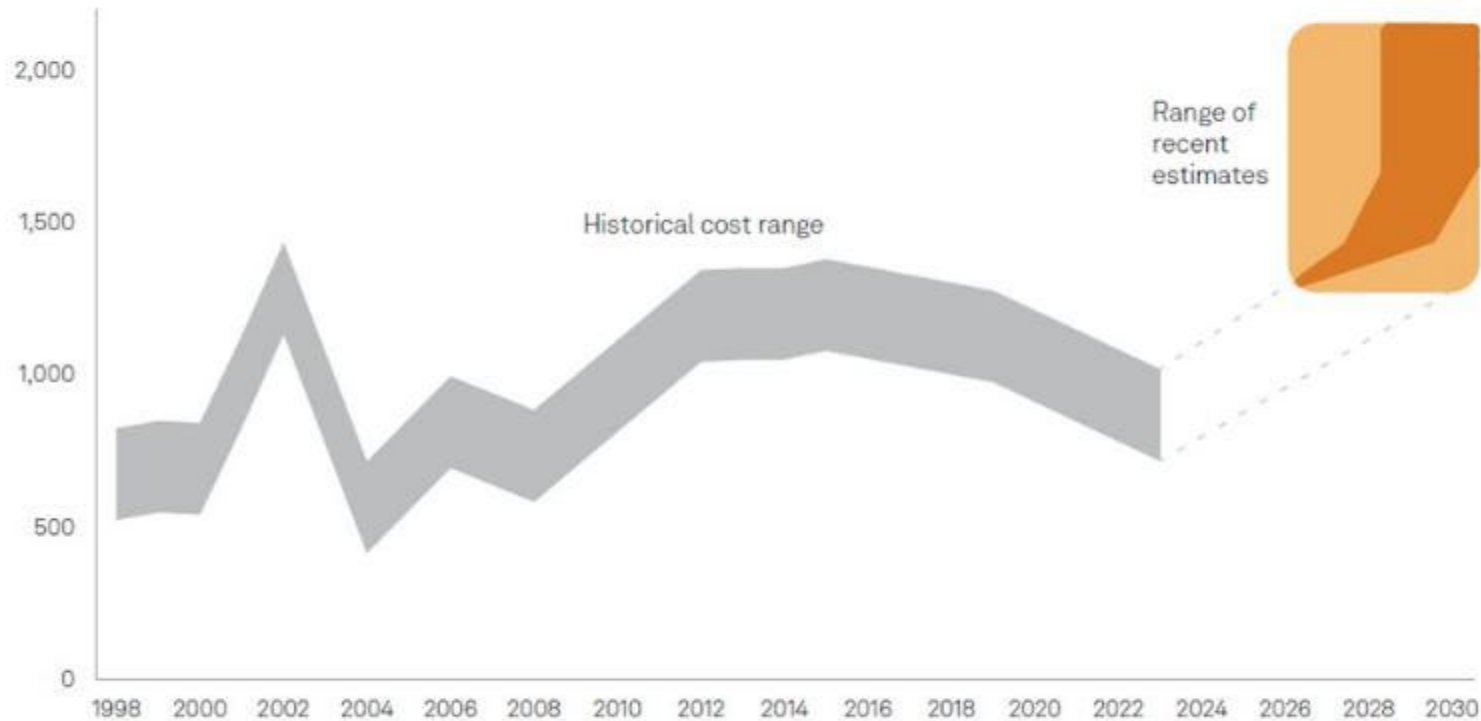
HOW DOES THIS END?

*Those who cannot remember the
past are condemned to repeat it.*

– George Santayana

IS THIS SUSTAINABLE?

US combined-cycle gas turbine cost estimates, 2023 (\$/kW)



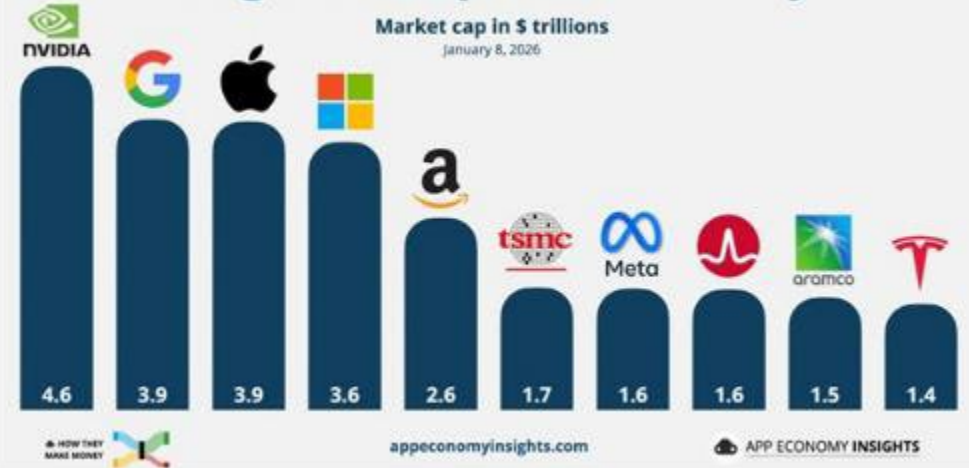
As of May 9, 2025.
Historical benchmarks reflect 2x1 combined cycle configuration; recent estimates are not known but assumed to be mostly 1x1.
Sources: S&P Global Commodity Insights; US Energy Information Administration; Gas Turbine World.
© 2025 S&P Global.

With electricity bills rising, some states consider new data center laws

Leaders in at least a dozen states have targeted data centers with separate, higher electric rates.

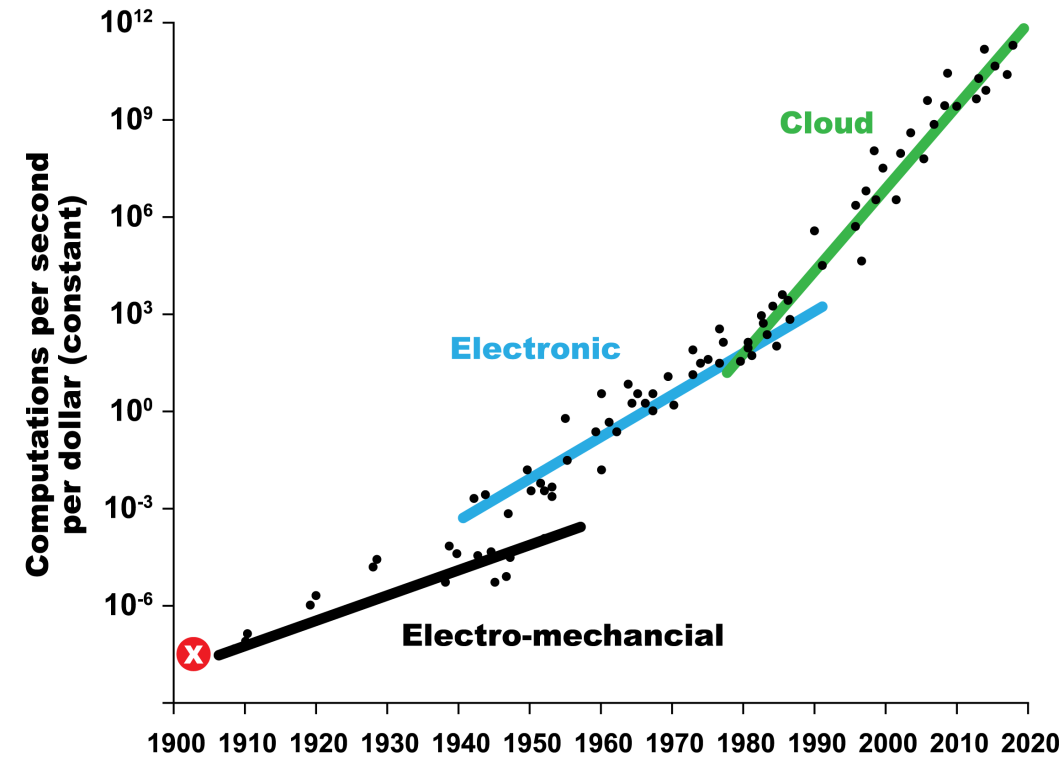
BY: KEVIN HARDY - FEBRUARY 5, 2026 5:00 AM

Largest Companies Globally



INNOVATION OR DISRUPTION?

Moore's Law in Action



Source: Mark Mills, "The Cloud Revolution: How the Convergence of New Technologies Will Unleash the Next Economic Boom and A Roaring 2020s" (Encounter Books, 2021)



The New York Times
Siemens Energy Bets \$1 Billion That A.I. Power Demand Will Last

The German manufacturer announced plans to expand factories in several U.S. states and build a new plant in Mississippi.



MARK MILLS ILLUSTRATION FOR FOREIGN POLICY

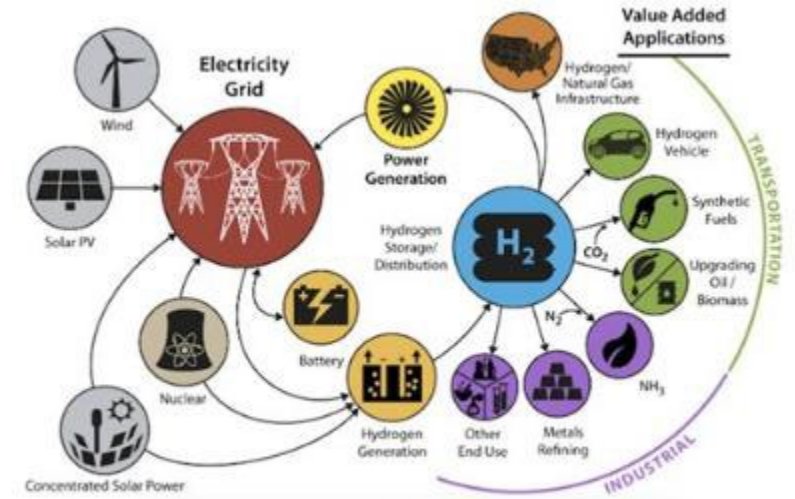


CONTINUOUS INNOVATION & DISRUPTION

Economic forces drive competitive outcomes

Multiple developing technologies : reducing time between concept & operation is key

This innovation will eventually provide a capacity cost equilibrium



QUESTIONS



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