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Battery Energy Storage in the US: The Forward Outlook

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Agenda

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01 The backdrop

02 Where the US market stands today

03 The forward outlook

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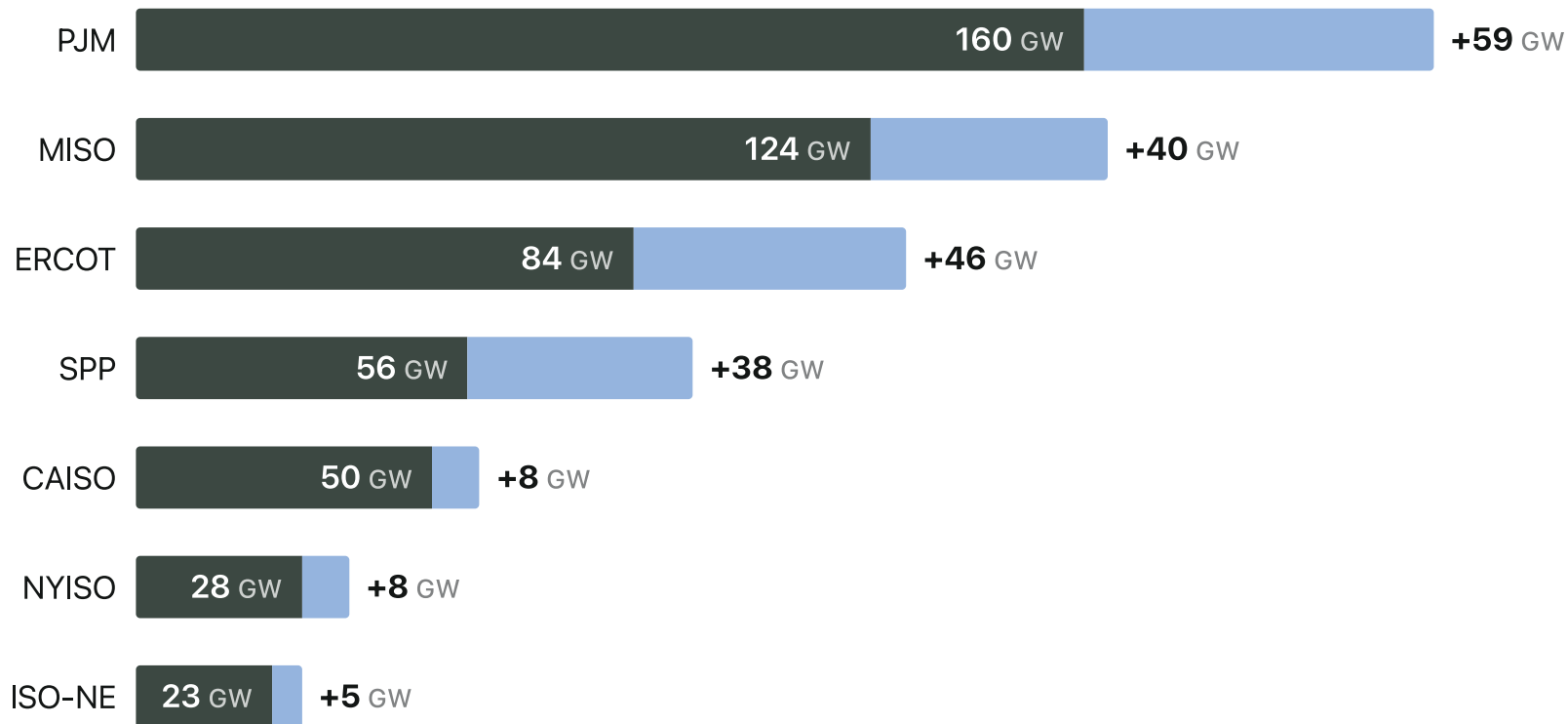
The backdrop

Load growth is coming

Peak demand

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■ Today ■ 2040



Source: Modo Energy World View, Central Scenario; ISO-NE from Modo Energy ISO-NE Market Outlook. Each ISO's system peak; totals are the sum of ISO peaks. CAISO shown at system-peak level (modelled zonally in World View).

But the policy backdrop is noisy

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Renewables under pressure

Trump administration pauses 5 offshore wind projects on the East Coast, citing security concerns

Nation Updated on Dec 22, 2025 2:36 PM EDT — Published on Dec 22, 2025 10:59 AM EDT

PBS News / Associated Press · 22 Dec 2025

REUTERS

Trump executive order seeks end to wind and solar energy subsidies

Reuters · Jul 2025

Demand backlash

Technology

JULY 14, 2026 | Albany, NY

First Statewide Moratorium on New Hyperscale Data Centers Launched by Governor Kathy Hochul

Office of the Governor of New York · 14 Jul 2026

THE TEXAS TRIBUNE

Abbott orders audit of every data center in Texas' power queue before projects can advance

The Texas Tribune · 3 Aug 2026

Cost & trade headwinds

DEEP DIVE

Will tariffs help or hurt the US energy storage industry? It's complicated, experts say

Battery system costs have already soared past 2023 levels, one analyst says, but insiders are cautiously optimistic for a more resilient supply chain in the longer run.

Published May 1, 2025

Utility Dive · 1 May 2025

REPORT

HOW 'FEOC' RULES ARE RESHAPING ENERGY STORAGE TAX CREDIT ELIGIBILITY

March 2026

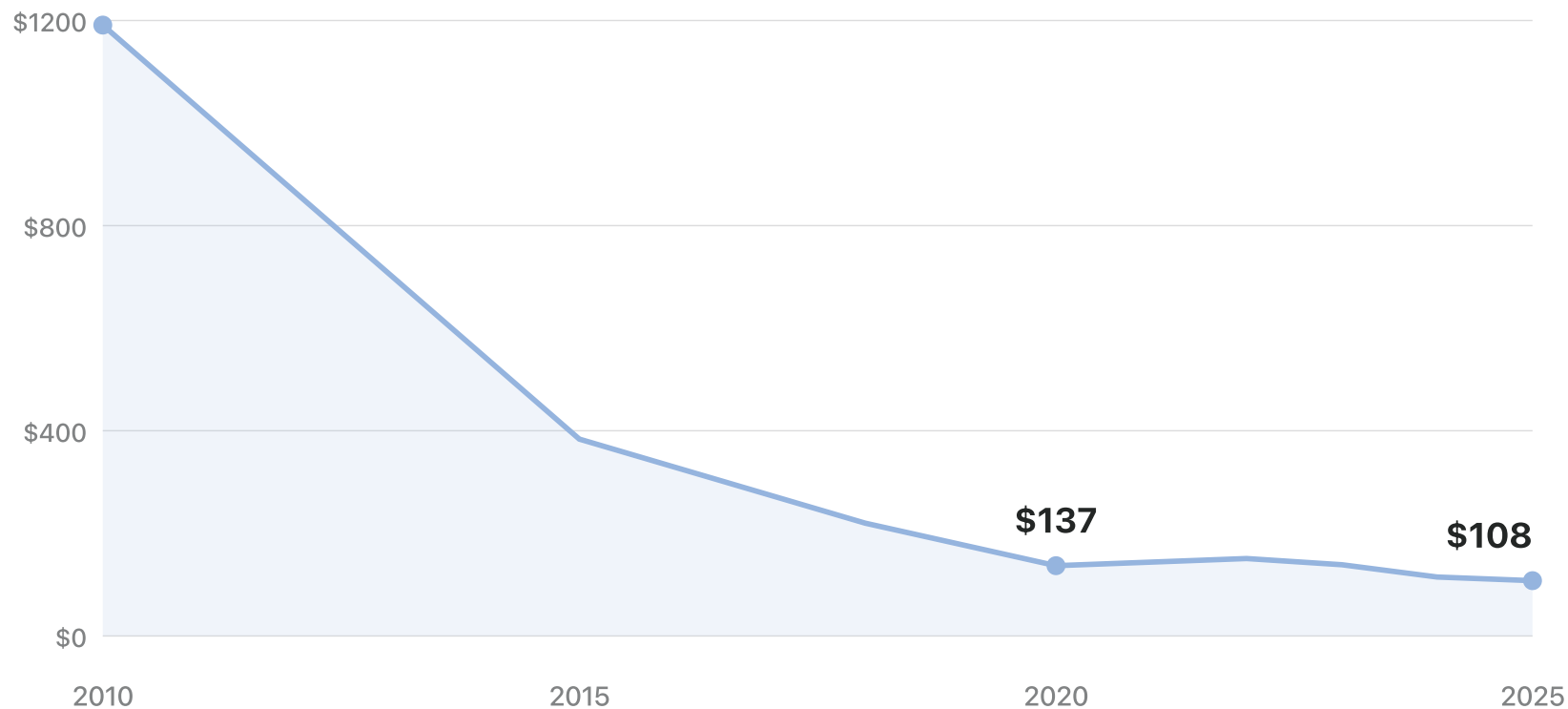
Authors: Casey S. August

Morgan Lewis · Mar 2026

Hardware keeps getting cheaper

Li-ion battery pack price — USD/kWh

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Source: BloombergNEF (Dec 2025).

Capital continues to flow into US BESS

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\$100 billion

of announced investment in US battery storage by 2030

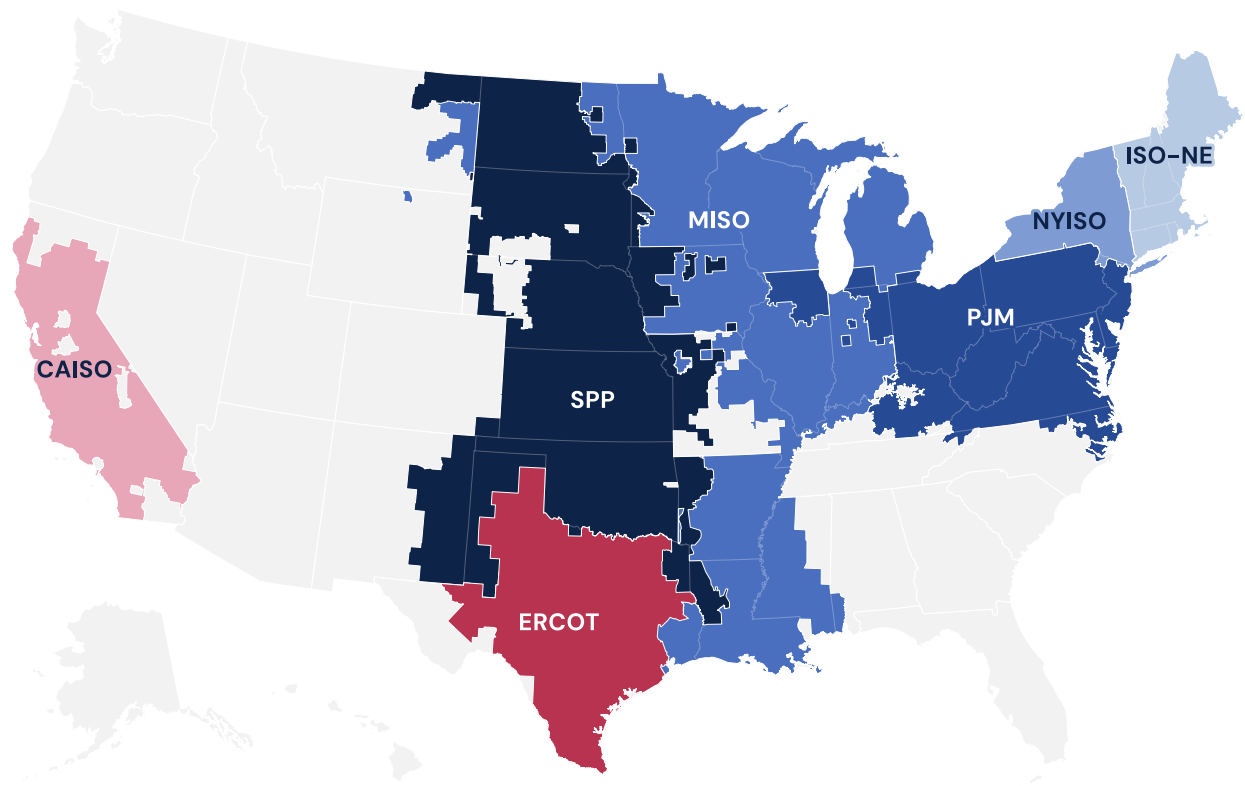
American Clean Power Association

\$17 billion

of publicly disclosed BESS deal value in the first half of 2026

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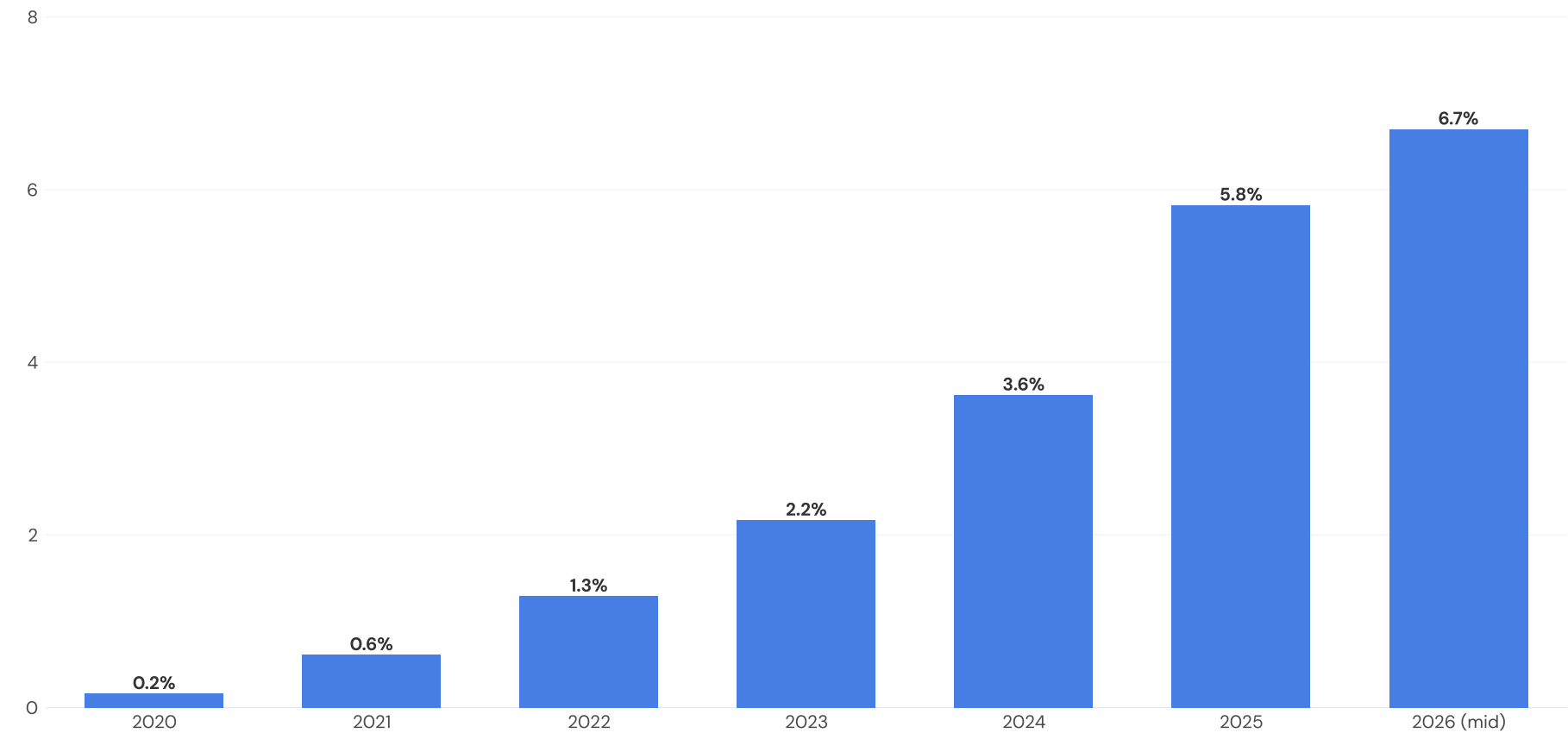
Where the US market stands today



Batteries now cover 7% of peak demand

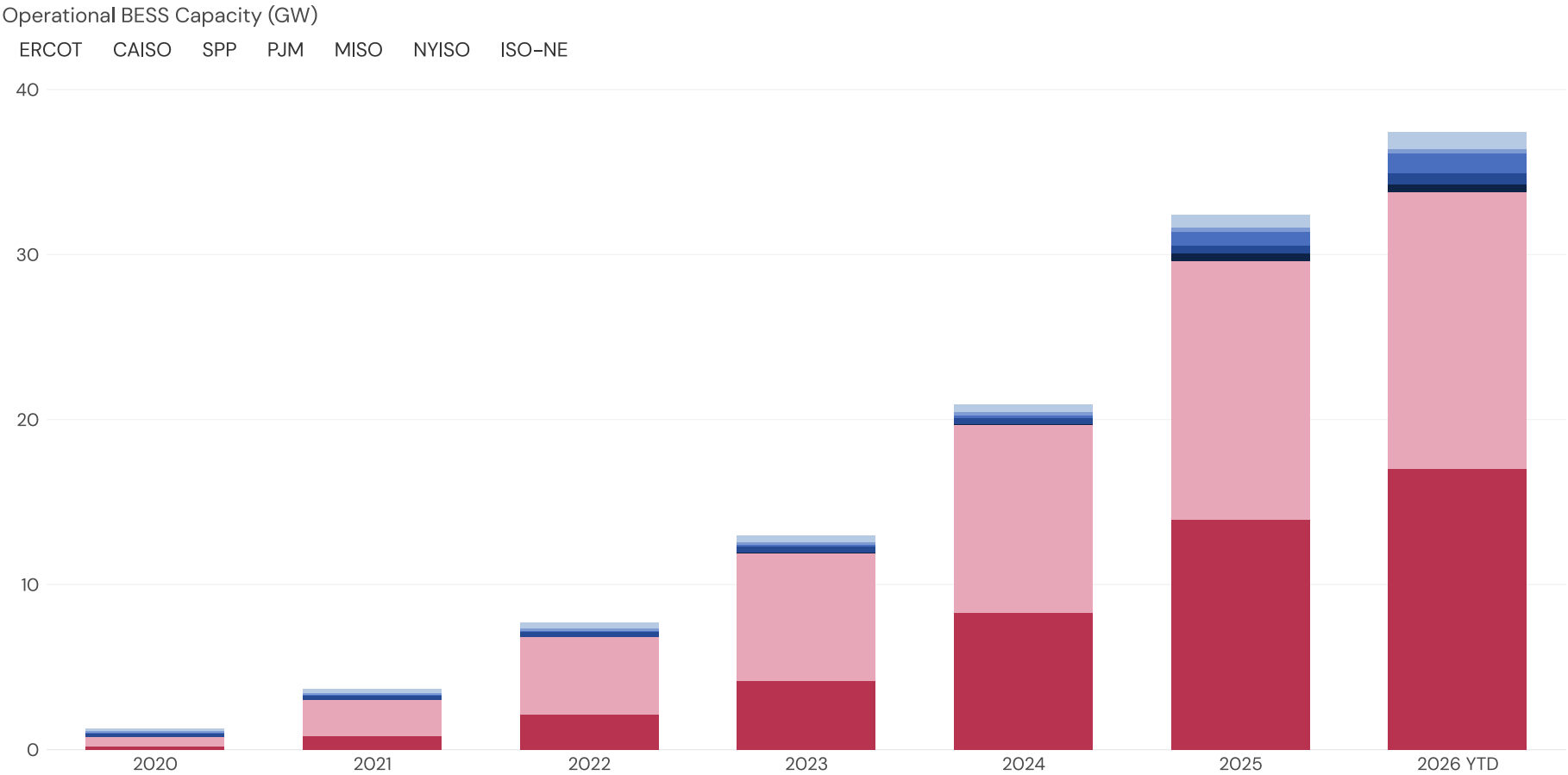
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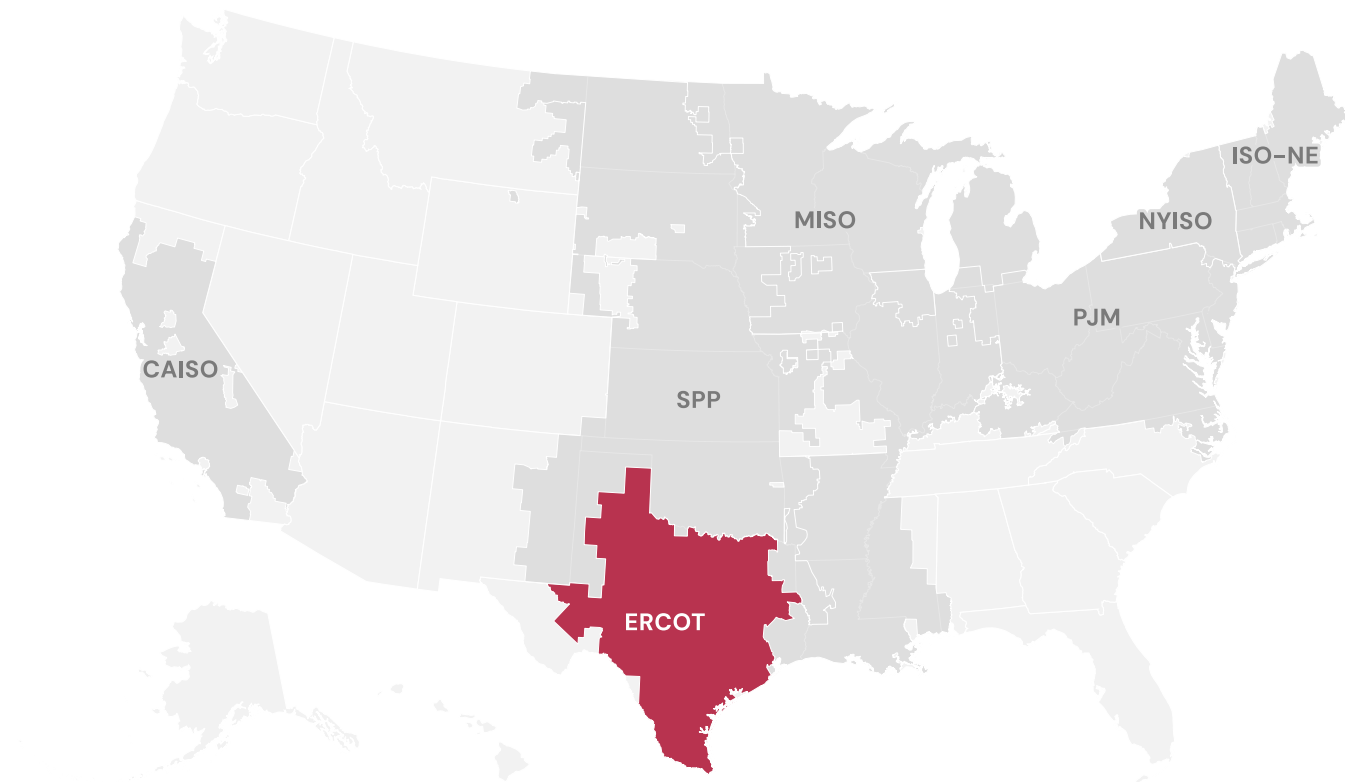
Installed BESS as share of combined ISO peak demand (%)



90% of installed US BESS capacity is in ERCOT and CAISO

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Batteries have transformed ERCOT

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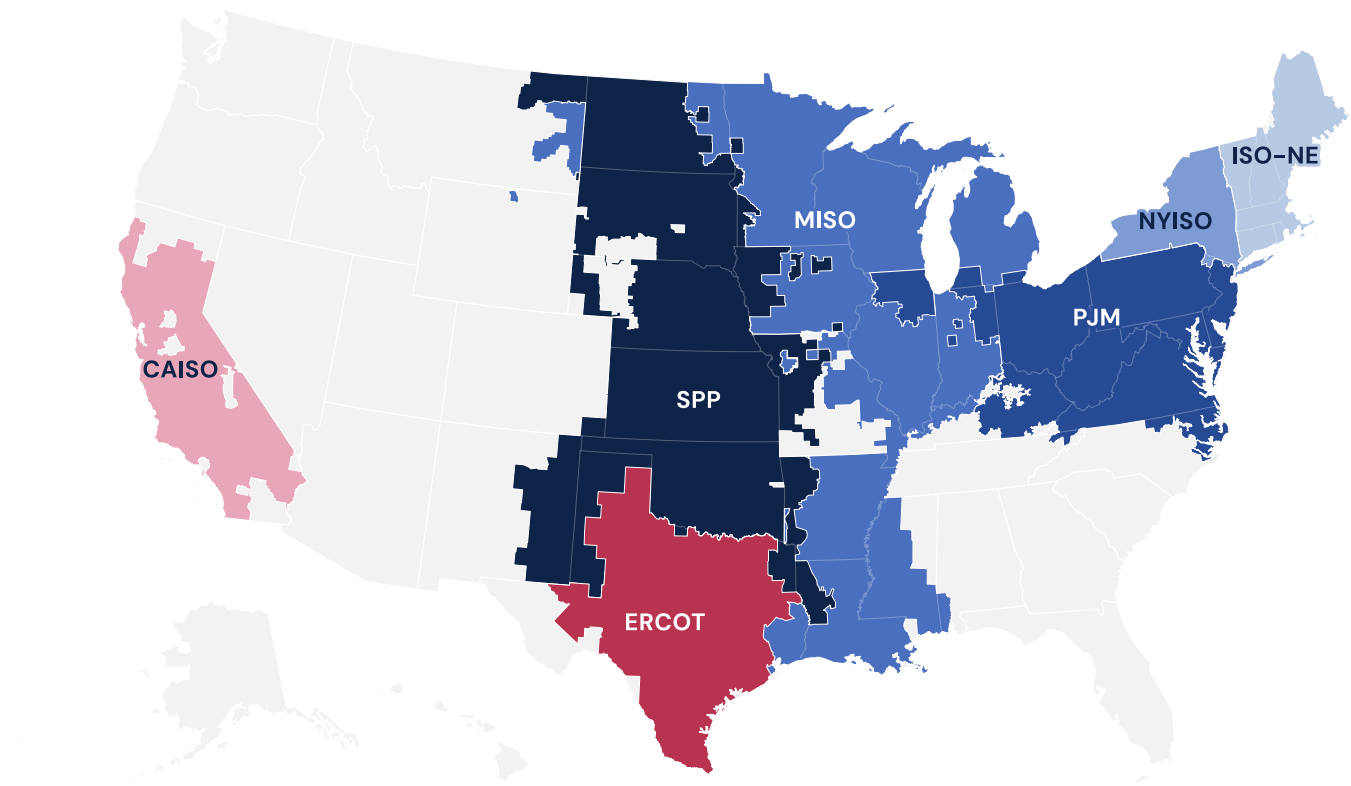
	RECORD-BREAKING DEMAND DAYS	
	Previous	New
	August 20, 2024	July 22, 2026
Peak load	85.6 GW	91.1 GW
Max BESS discharge	3.9 GW	12.0 GW
Peak real-time price observed	<i>\$4,853/MWh</i>	<i>\$345/MWh</i>

In ERCOT, revenues have compressed

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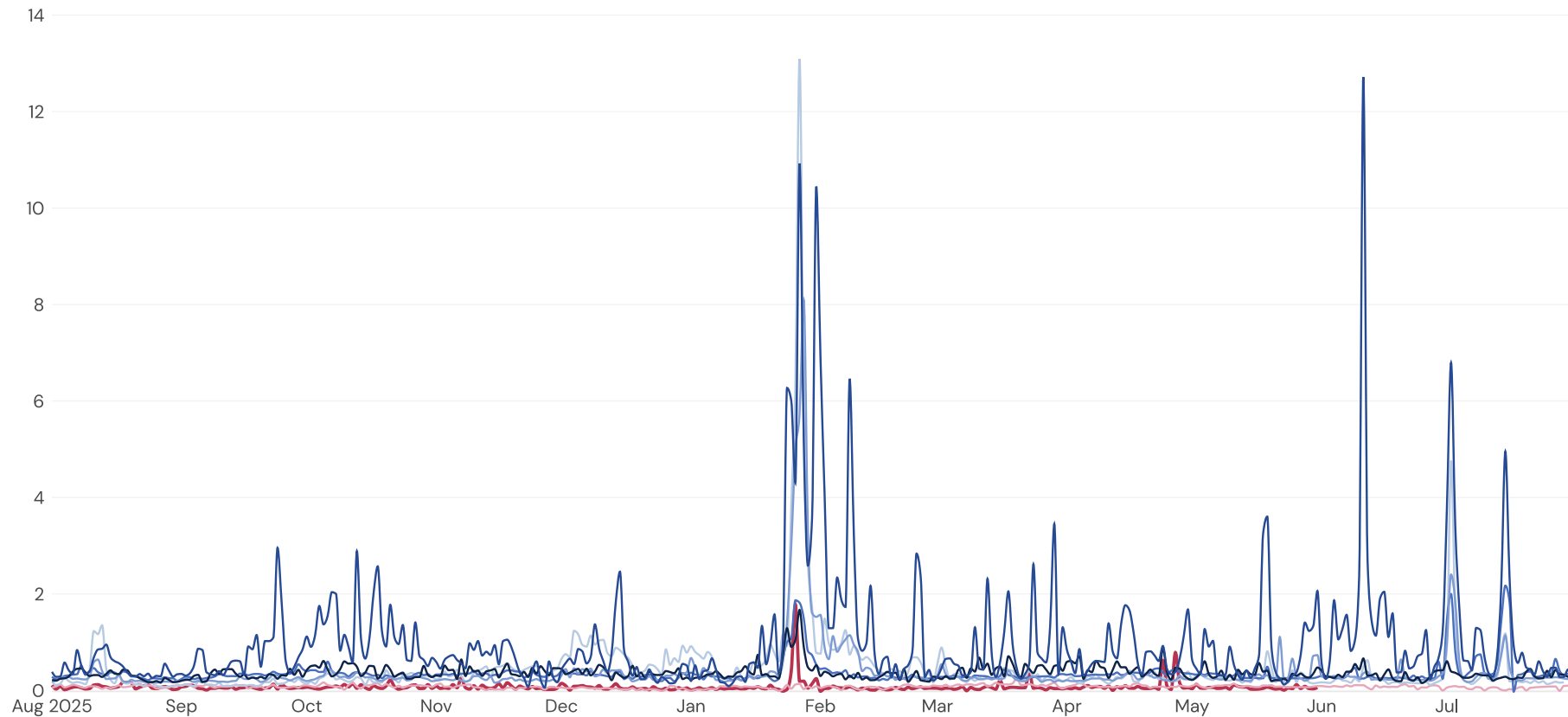
TTM Daily BESS revenue (USD/kW-day), ME BESS Index
ERCOT





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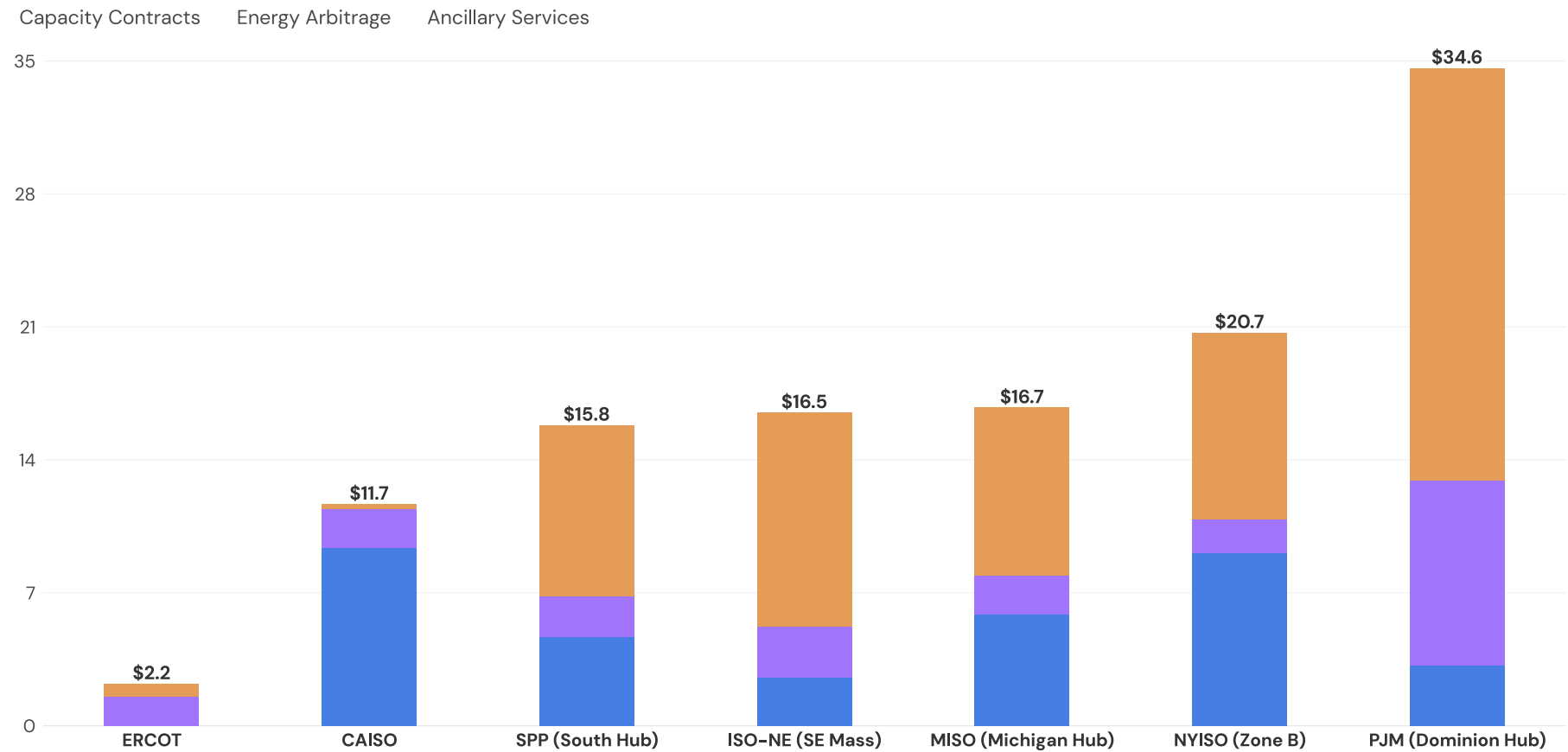
ERCOT CAISO ISO-NE MISO NYISO SPP PJM



But those markets are not yet saturated

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TTM battery revenue by market (USD/kW-month), ME BESS Indices & Benchmarks



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The forward outlook

Made in America?

58% tariff stack on Chinese cells; 55% FEOC sourcing test for the ITC; FCC block on foreign inverters

Credits sunseting

Wind and solar lost their construction-start window on July 4 - storage credits survive, for now

AI backlash

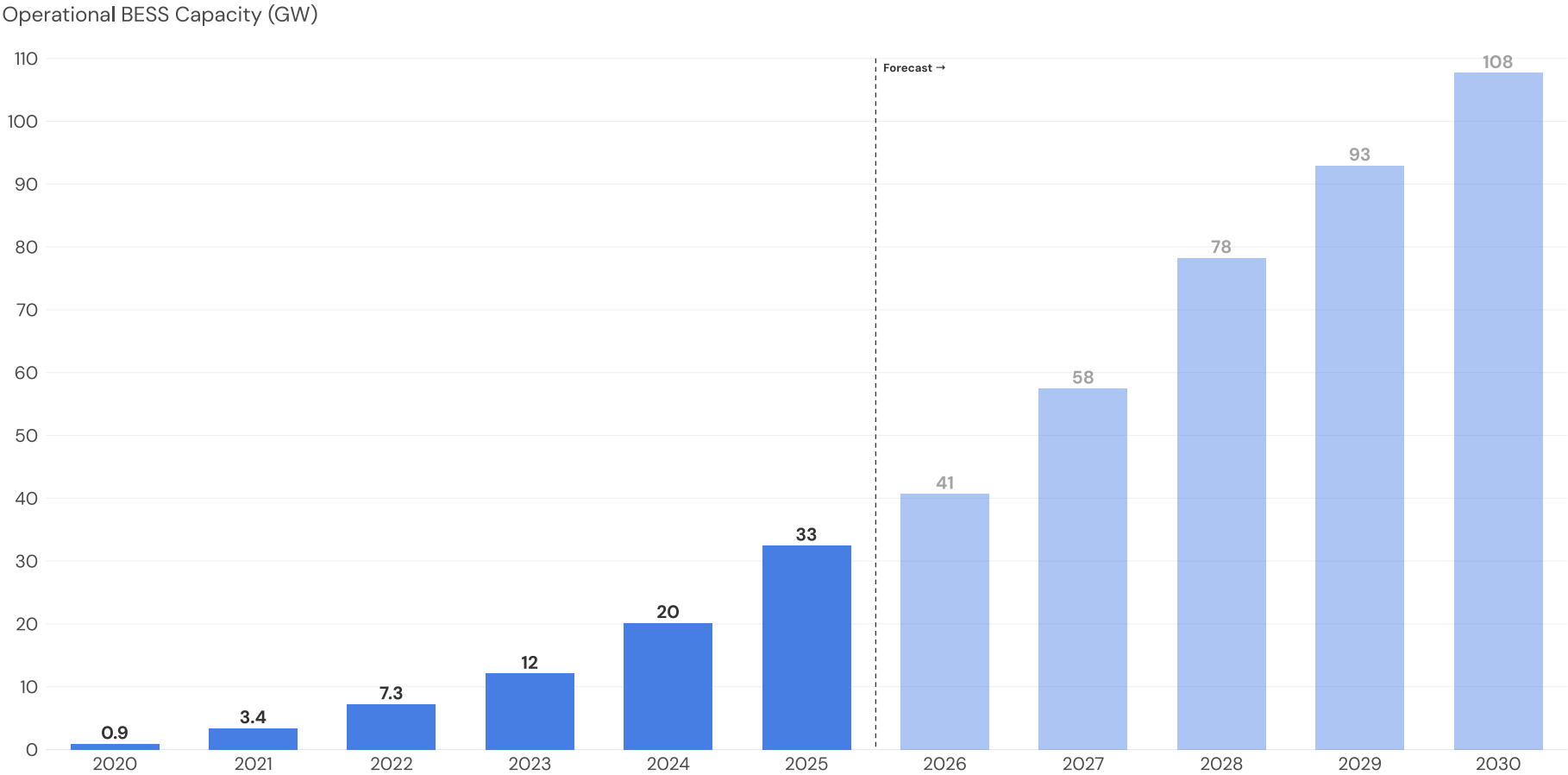
e.g. Abbott ordered audits of a 474 GW queue that is 90% data centers

Local opposition

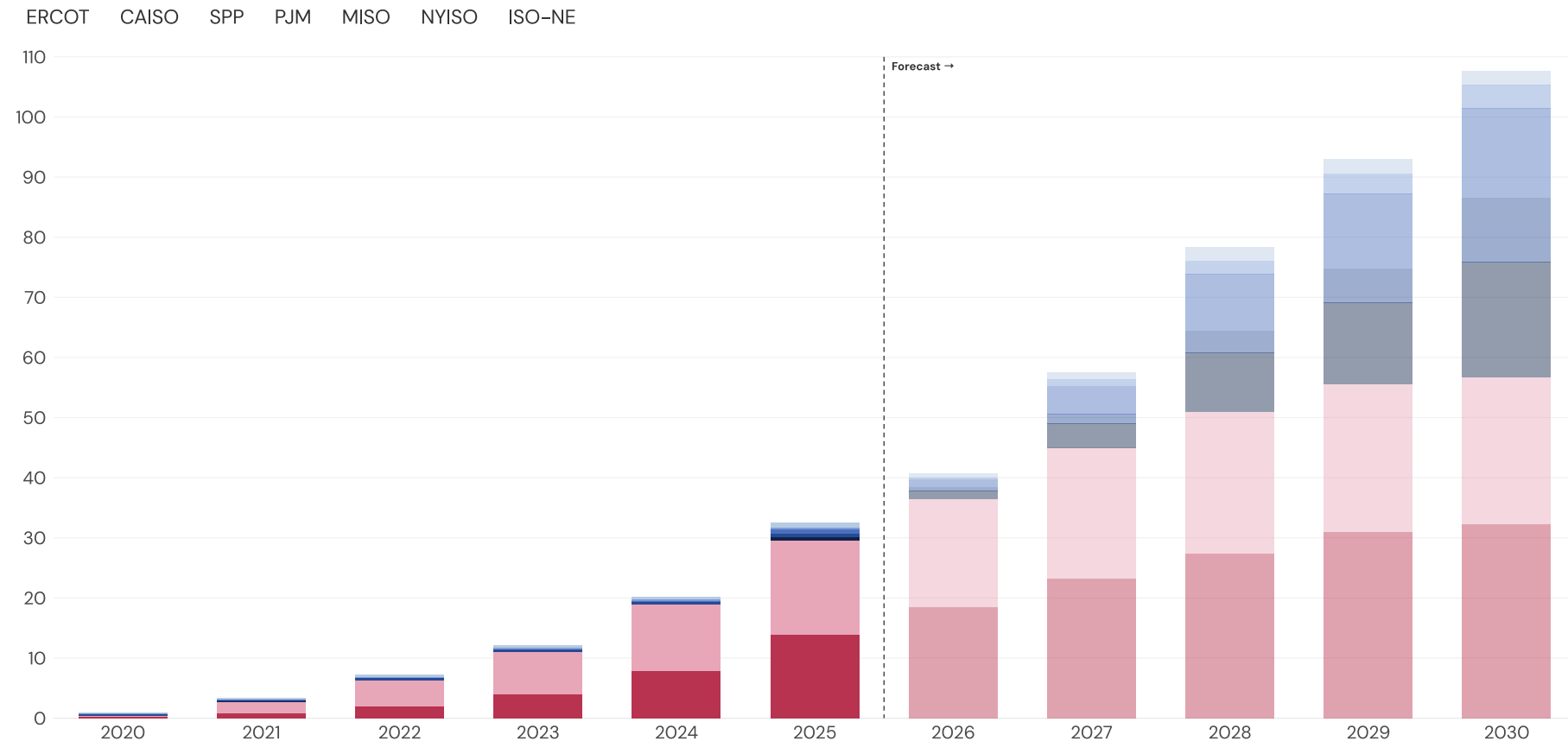
e.g. New York municipalities freezing BESS permits, 1 GW stalled

US battery capacity triples in five years

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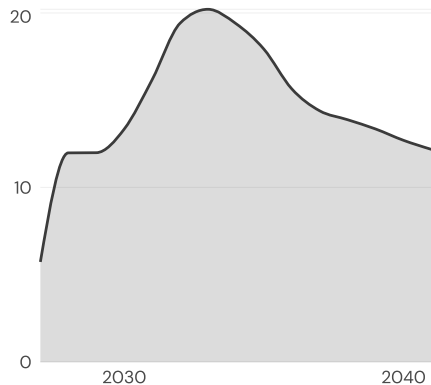
Each market goes through its own cycle(s)

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Forecasted BESS revenue (USD/kW-month, real 2025) – 4h duration

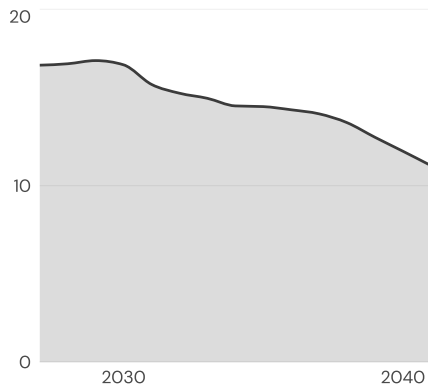
ERCOT

peak \$20 '33



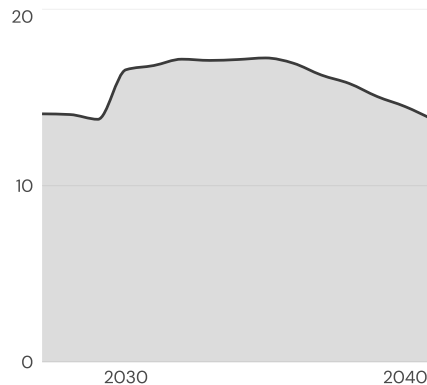
CAISO

peak \$17 '29



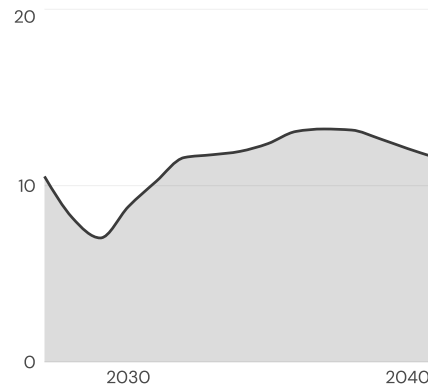
NYISO

peak \$17 '35



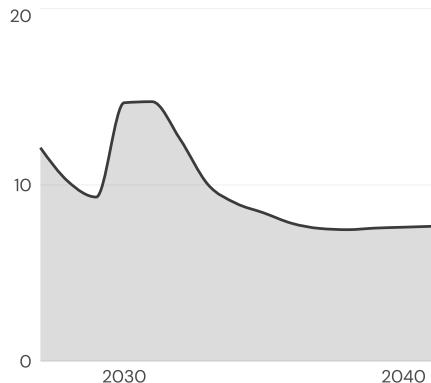
ISO-NE

peak \$13 '37



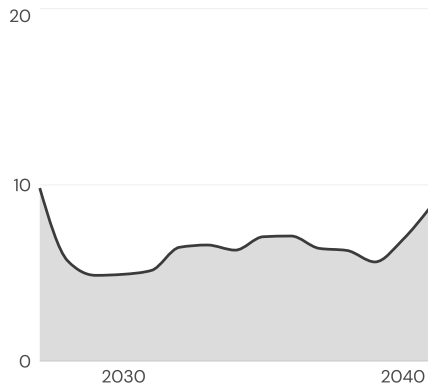
PJM

peak \$15 '31



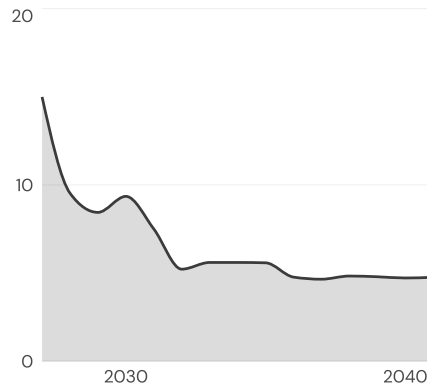
MISO

peak \$10 '27



SPP

peak \$15 '27



On merchant revenue alone, ERCOT stands apart

Forecasted BESS revenue (USD/kW-month, real 2025), 2027–2041 – 4h duration

Energy Arbitrage Ancillary Services

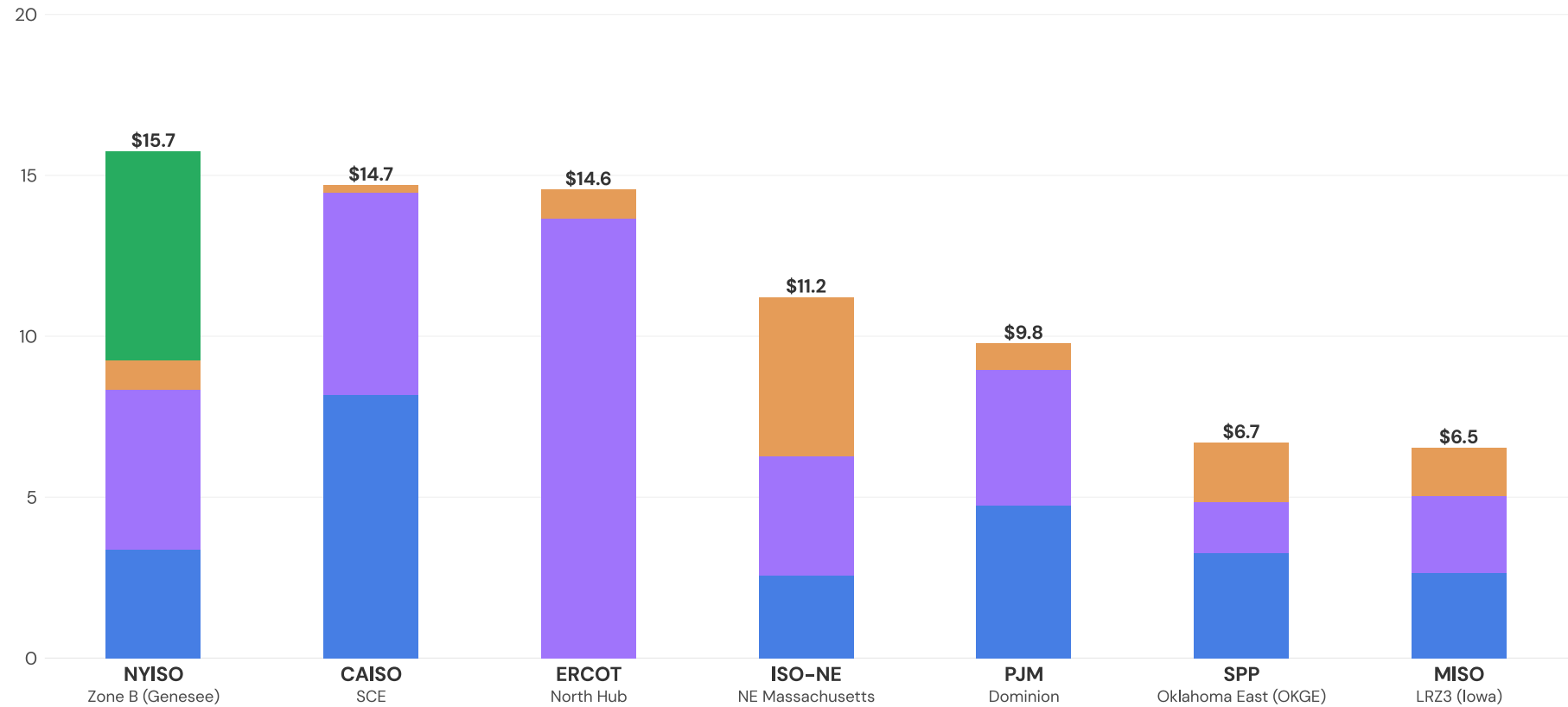


Capacity contracts redraw the revenue map

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Forecasted BESS revenue (USD/kW-month, real 2025), 2027–2041 – 4h duration

Capacity Energy Arbitrage Ancillary Services Other (NYISO ISC)



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The items we're watching

The US battery opportunity map

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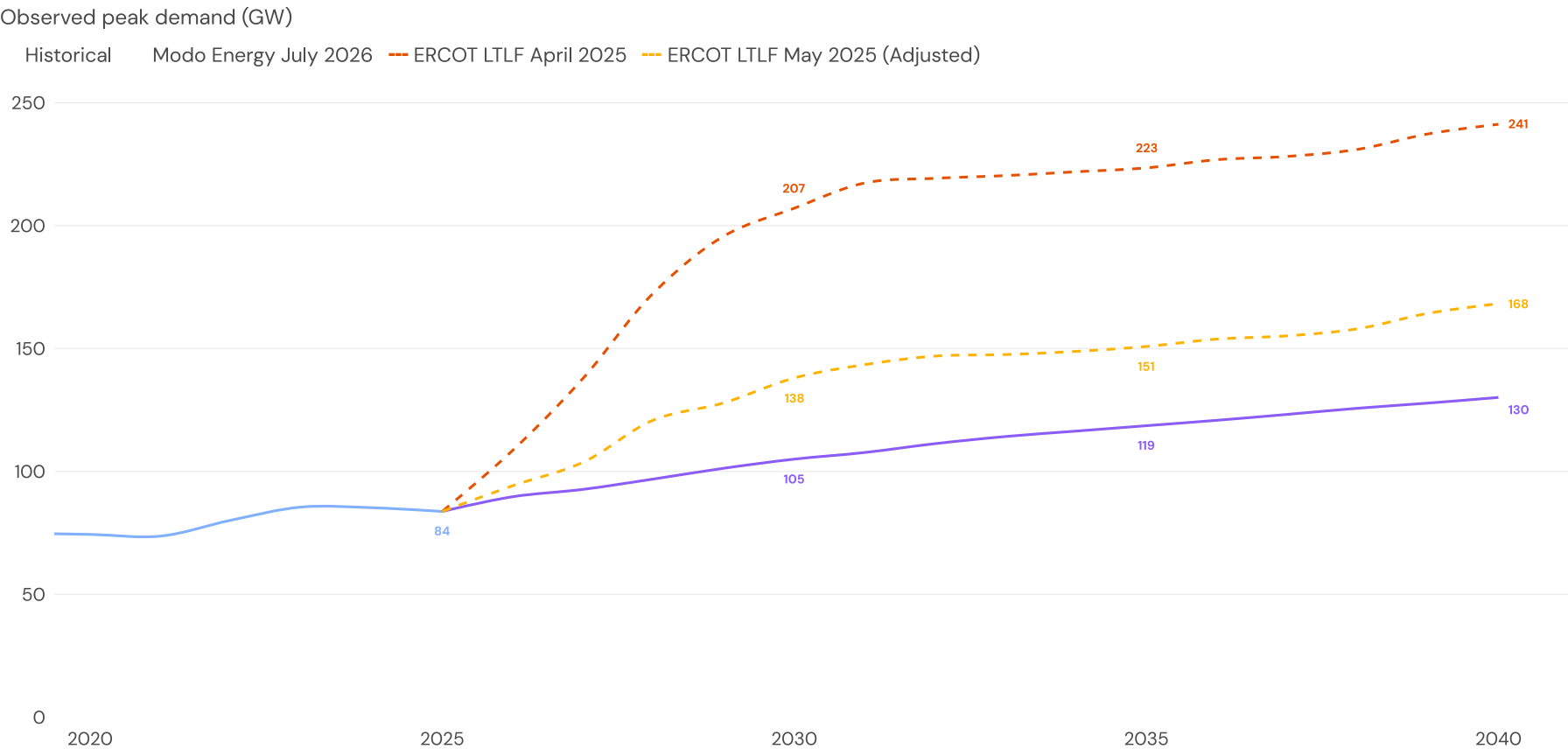
Market	+ Tailwinds	– Headwinds	Forward read
ERCOT	+ Load +25% by 2030 + Potential for huge volatility	– Ancillary saturated (97%→28%) – No capacity market safety net	HIGH Peaking in early 2030s
CAISO	+ RA = stable revenues	– Large fleet = cannibalization – Limited load growth	MED High-value RA maintains potential
PJM	+ Capacity at the cap (\$329/MW-day) + Huge data center queue	– Market design uncertainty – Brutal interconnection	HIGH If BESS can connect
NYISO	+ Index Storage Credit + Locational upside downstate	– Limited procurement – BESS moratoria	MED ISC in NYC
ISO-NE	+ MA Clean Peak ~\$159k/MW-yr	– Value gated to Massachusetts – Hard, slow to build	MED MA only · mid-2030s
MISO	+ Large load growth anticipated	– New gas (ERAS) crowds batteries out – BESS charging limitations	MED Dependent on capacity prices
SPP	+ Big offtake opportunities + Queue reform is working	– High wind not solar – Saturation bites soon	HIGH Early-mover window is now

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Eight charts to key in on

1) ERCOT: peak demand grows 25% by 2030

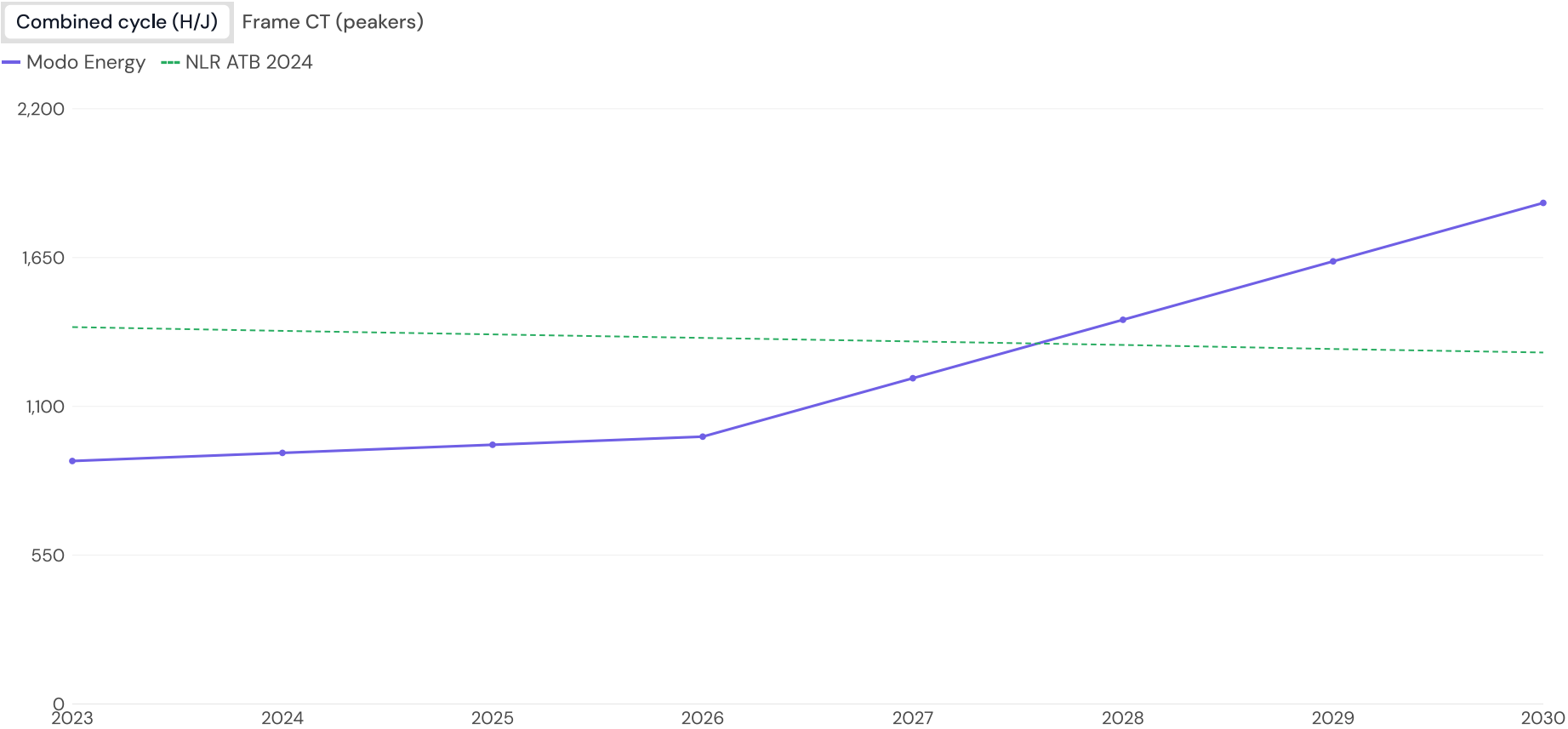
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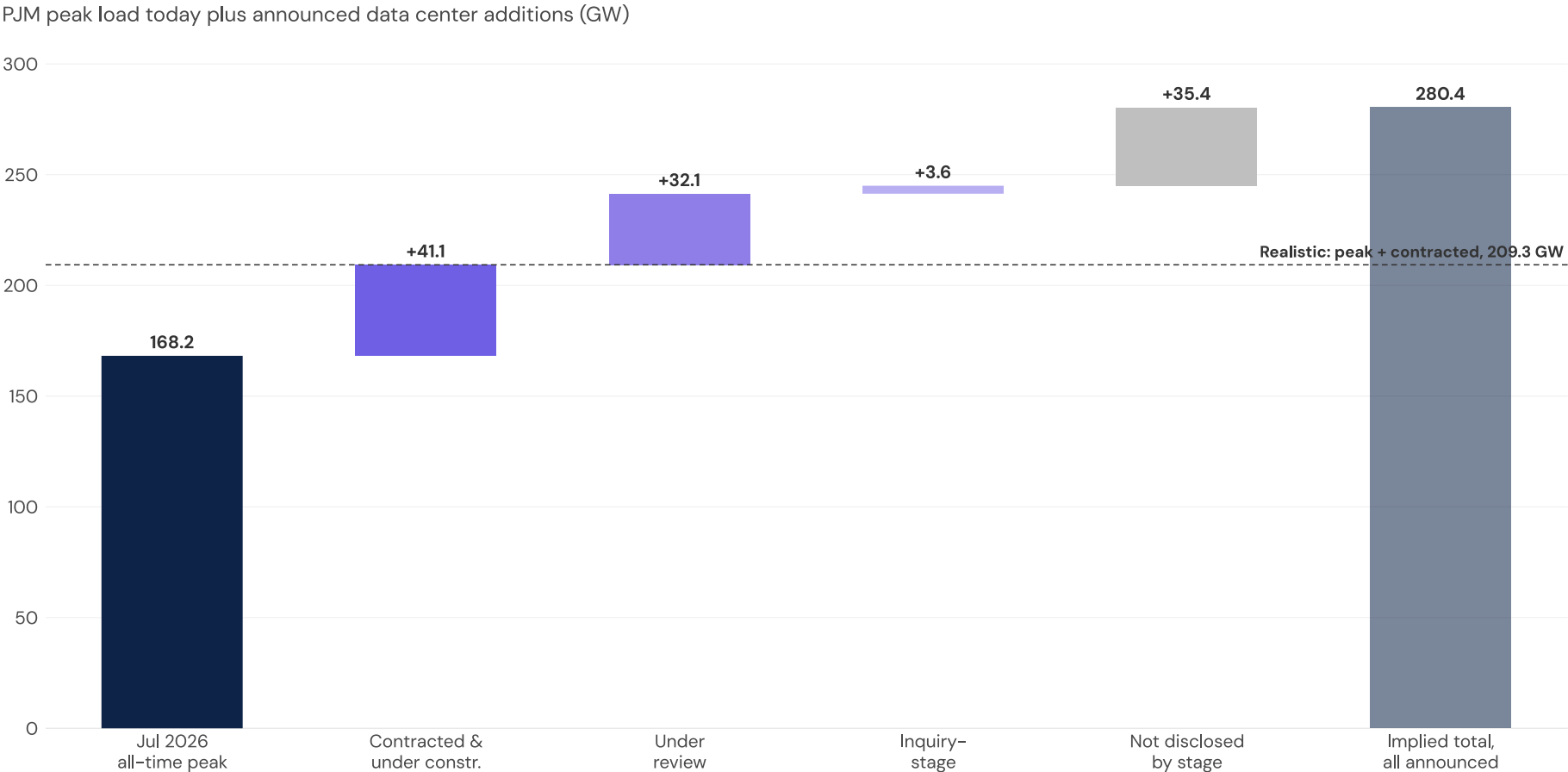
2) ERCOT: rising turbine costs limits gas-fired buildout

Build cost for gas generation, TX (USD/kW, 2025 real)



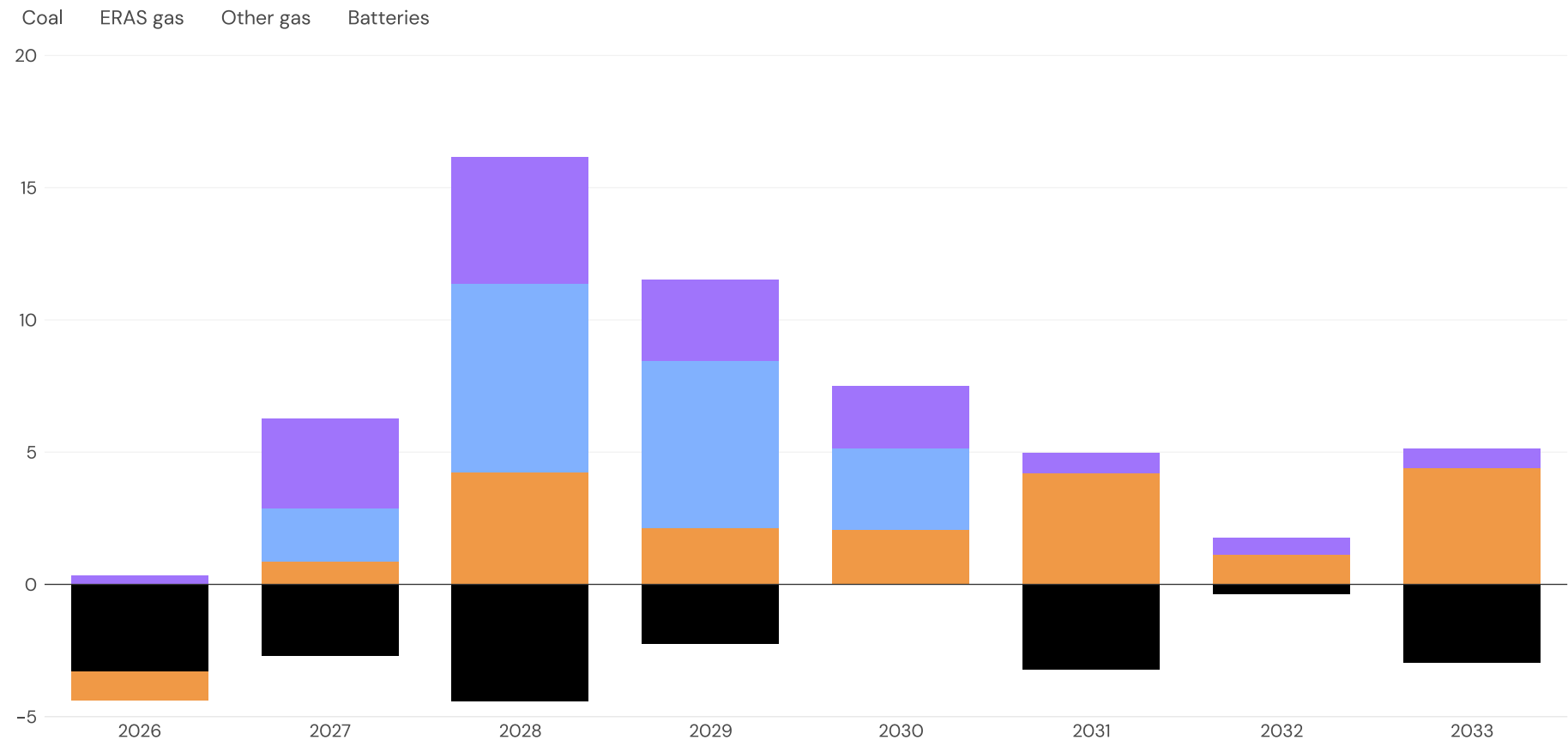
3) PJM: the data center queue dwarfs today's record peak

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4) MISO: fast-tracked gas mutes the volatility upside

MISO capacity additions (+) and retirements (-) by technology (GW), 2026–2033

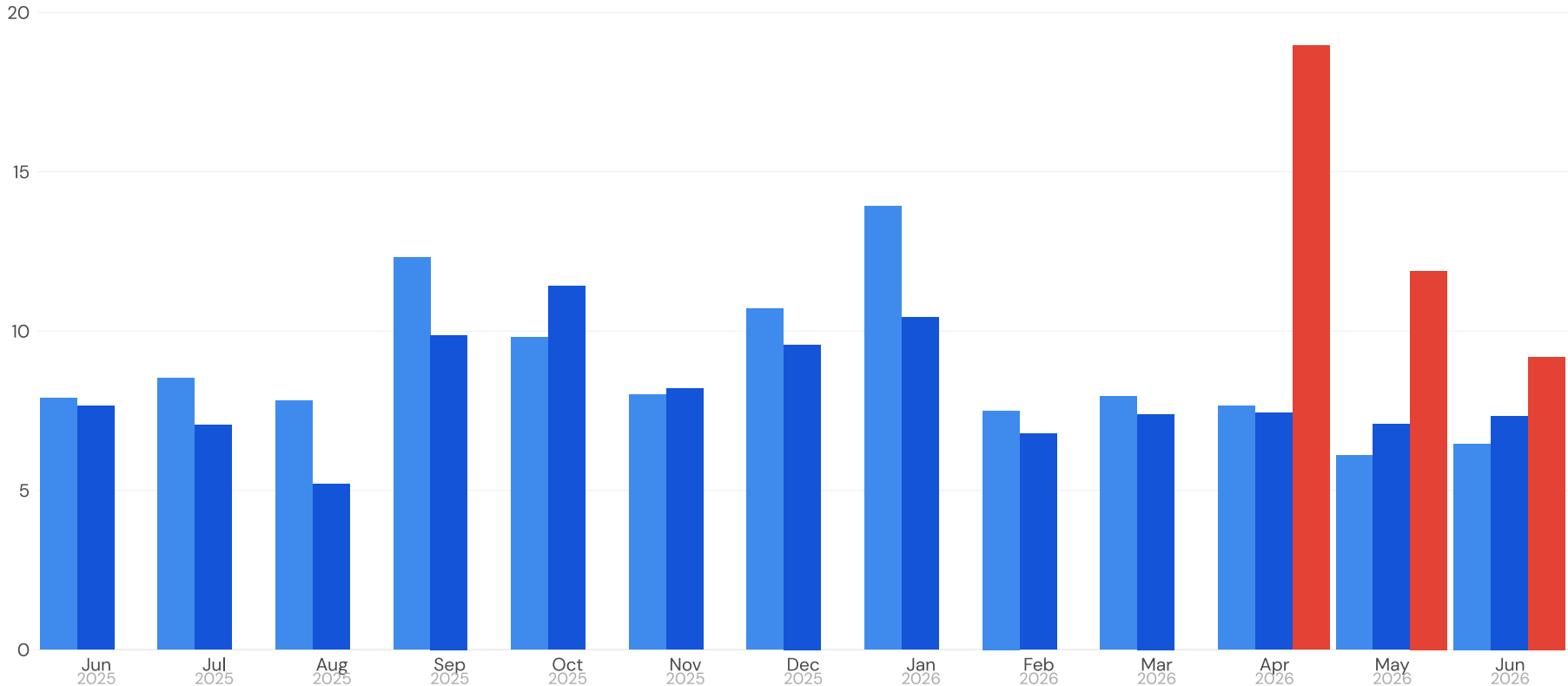


5) SPP: low average spreads hide locational upside

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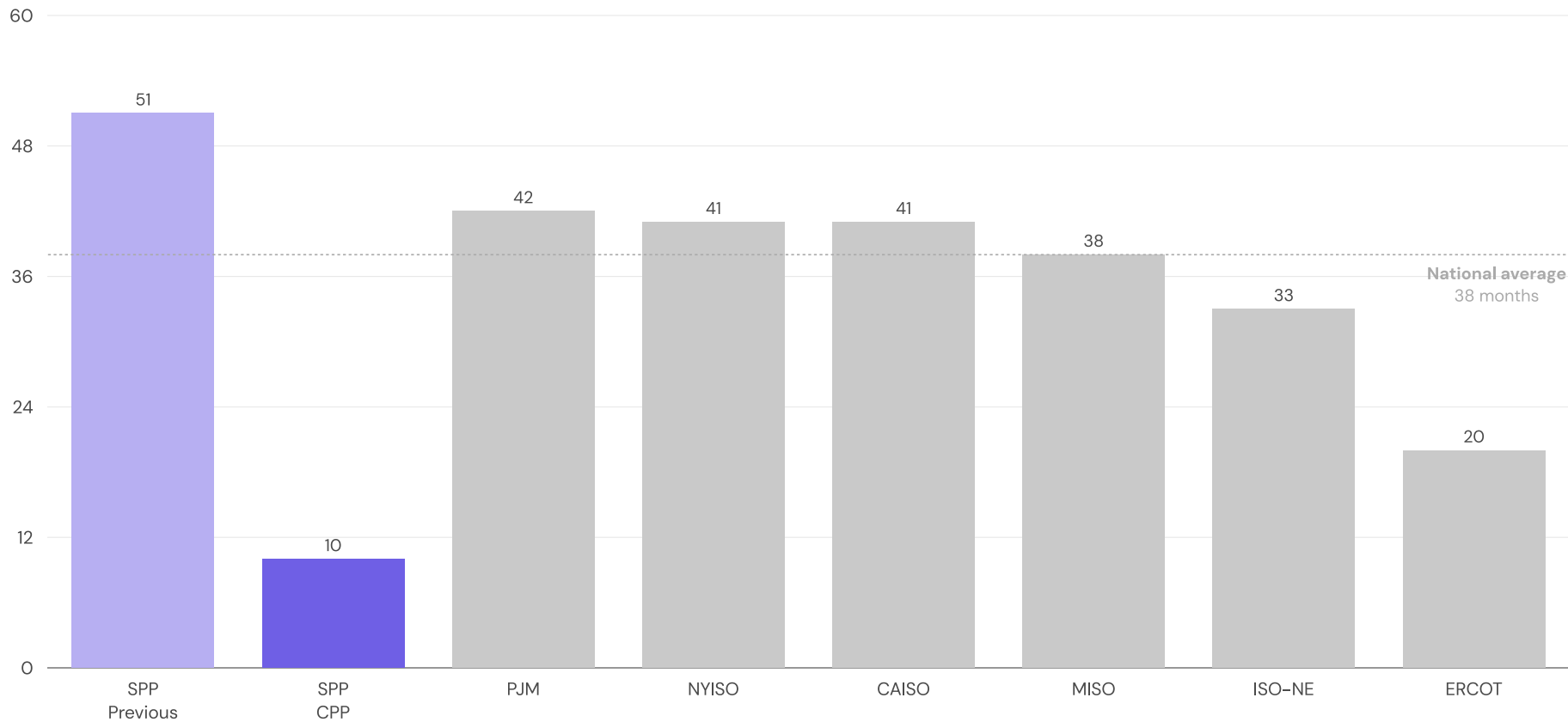
Real-Time Market TB4s (USD/kW-month)

SPP North SPP South SPP West



6) SPP: the new queue process opens the door for development

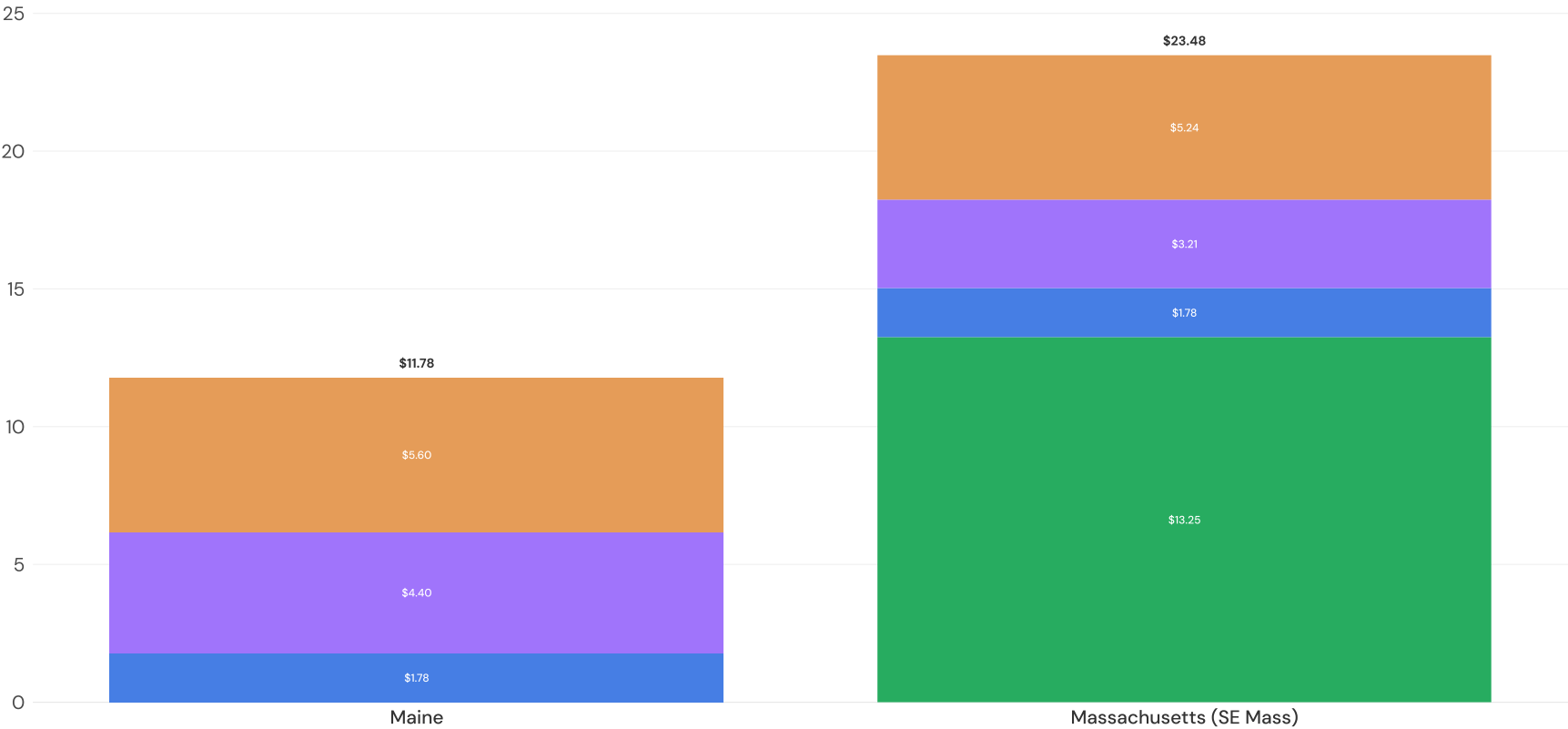
Median duration from interconnection request to interconnection agreement (months)



7) ISO-NE: Clean Peak alone beats Maine's entire revenue stack

BESS revenue by product, 2030 (USD/kW-month)

Clean Peak (CPEC) Capacity Energy Arbitrage Ancillary Services



8) Upside and downside

Indicative BESS revenue range by market (USD/kW-month, real 2025), 2027–2041 average



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