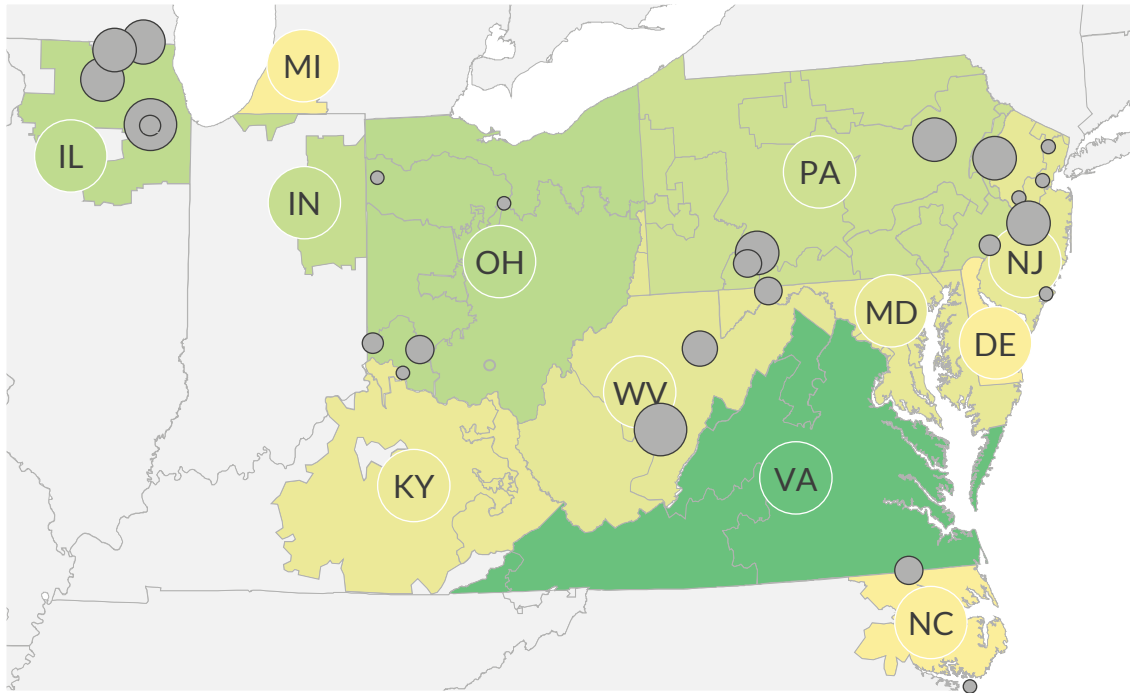


Despite low current BESS capacity, the 80 GW in PJM's interconnection queue – including in new geographies – point to expectations for new business cases

Current capacity totals 400 MW, mostly concentrated in New Jersey, Illinois, and Pennsylvania

Map of operational batteries in PJM by capacity



Current total capacity

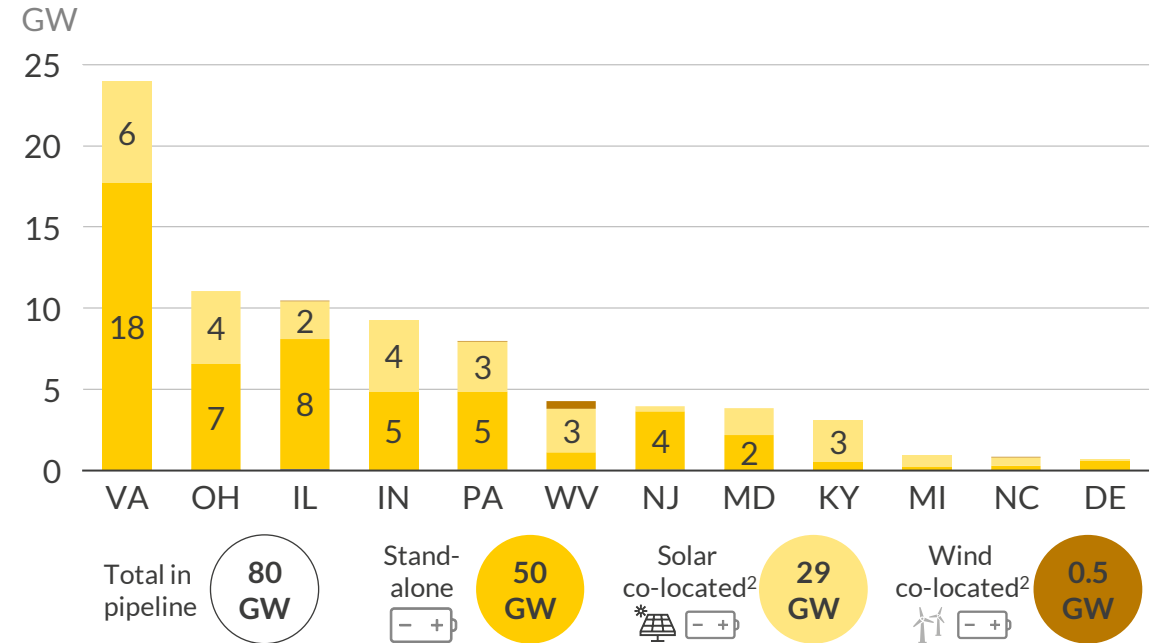
0.4 GW

Legend: battery unit capacity

● 2 MW ● 10 MW ● 18 MW

However, the 80 GW of batteries in PJM's interconnection queue attest to large interest, including in standalone storage, with the largest focus on VA

Battery capacity in PJM's interconnection queue by state¹



Interest in battery investment is supported by:

- Increasing renewable penetration, creating a need for more flexible resources
- State decarbonization targets with explicit carve-outs for battery storage
- Optimism for ≥4-hour batteries to capture value from the capacity market

1) Approximation as of January 2023, based on project MW Capacity in PJM interconnection data. 2) Proportion of individual project applicable to storage vs. solar/wind is estimated.

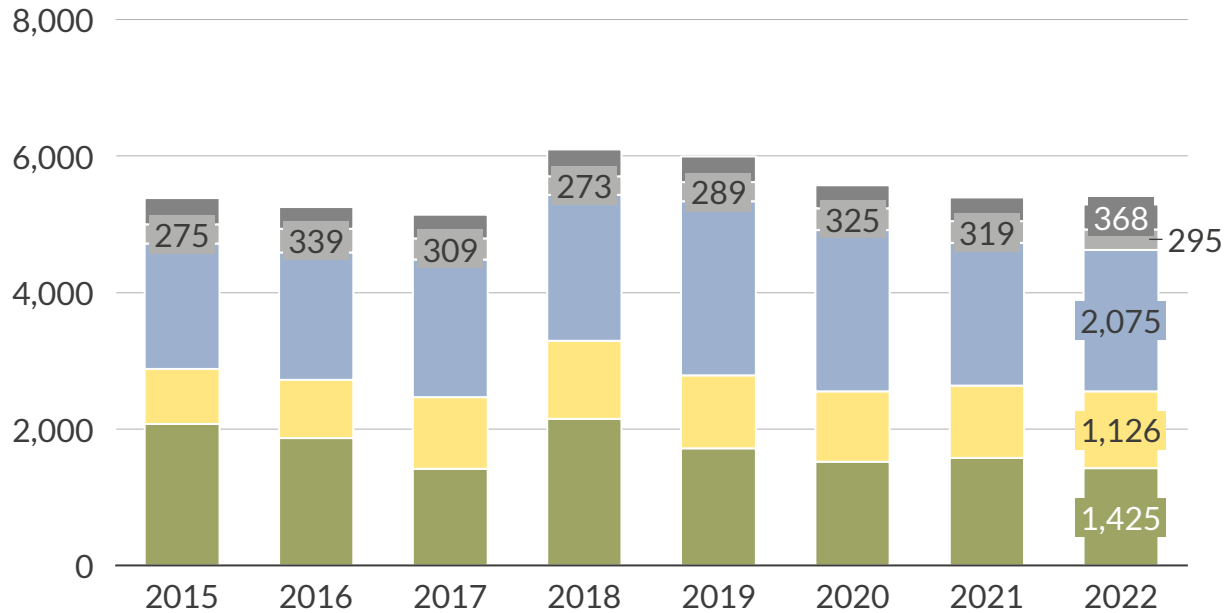
PJM batteries primarily receive revenues in ancillary and wholesale, with expected future revenues from capacity and state incentives

PJM battery potential revenue streams and eligibility for different battery types

		Eligibility for <1-hour duration batteries	Eligibility for ≥4-hour duration batteries	Siting strategy impacts revenues?
Potential additional revenue streams in future	A Ancillary contracts and dispatch <ul style="list-style-type: none"> Contracts awarded in RegD only (includes both RegUp & RegDown) as fast-acting units that can follow signal at ~60Hz Primary revenue stream for existing batteries 	✓	✓	
	B Wholesale energy arbitrage <ul style="list-style-type: none"> When top-bottom price spreads provide sufficient potential revenue, can trade between day-ahead and real time markets 			
	Nodal premium to arbitrage <ul style="list-style-type: none"> Battery trading can benefit from additional revenue through strategic location at nodes experiencing higher volatility or spreads (e.g., near load centers or increasingly, near renewable hotspots) 	✓	✓	✓
	C Capacity payments <ul style="list-style-type: none"> Batteries with a minimum 4-hour duration can act as capacity resources by participating in the RPM, subject to derating for reliability 	✓	✓	✓
	D State Incentives <ul style="list-style-type: none"> Multiple state decarbonization targets contain energy storage provisions: VA Clean Economy Act, New Jersey storage target New Jersey is currently developing a framework for battery financial incentives 	✓	✓	✓

The regulation market is the smallest of PJM's ancillary services but provides the highest prices, due to reserves' many zero-price hours

Average annual total procured ancillary services
Effective MW/h

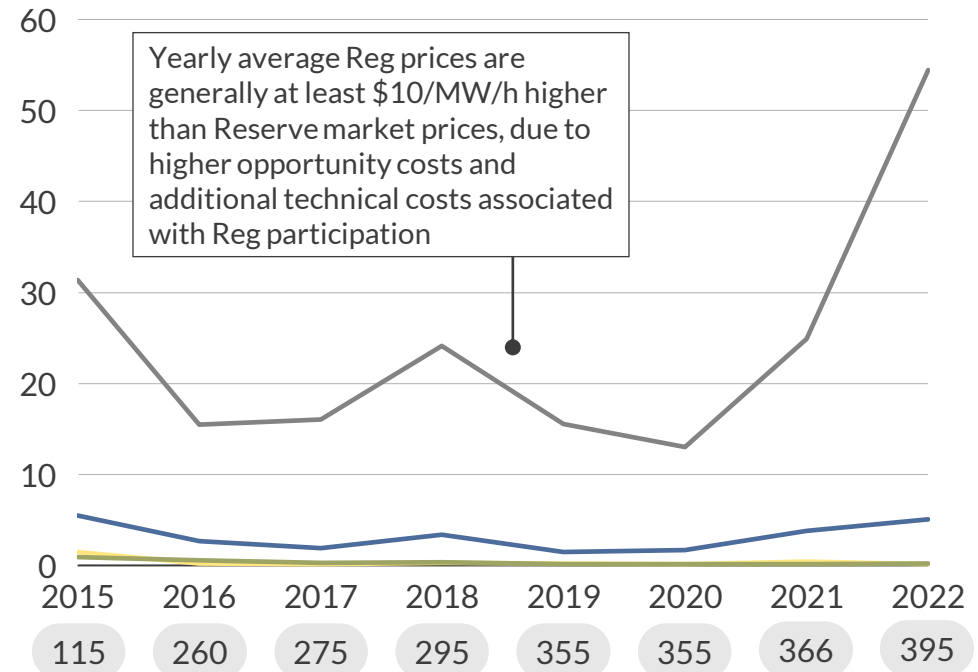


- Regulation market procurement targets toggle between 525 and 800 effective MW (avg 662 MW/year) combined total between **RegA** and **RegD** – targets set by PJM – depending on the time of day¹
- Batteries participate solely in **RegD**, which is designed to make up around 40%¹ of total regulation market procurement (about 210 to 320 effective MW). This ensures ~60% is reserved for other technologies such as CCGT

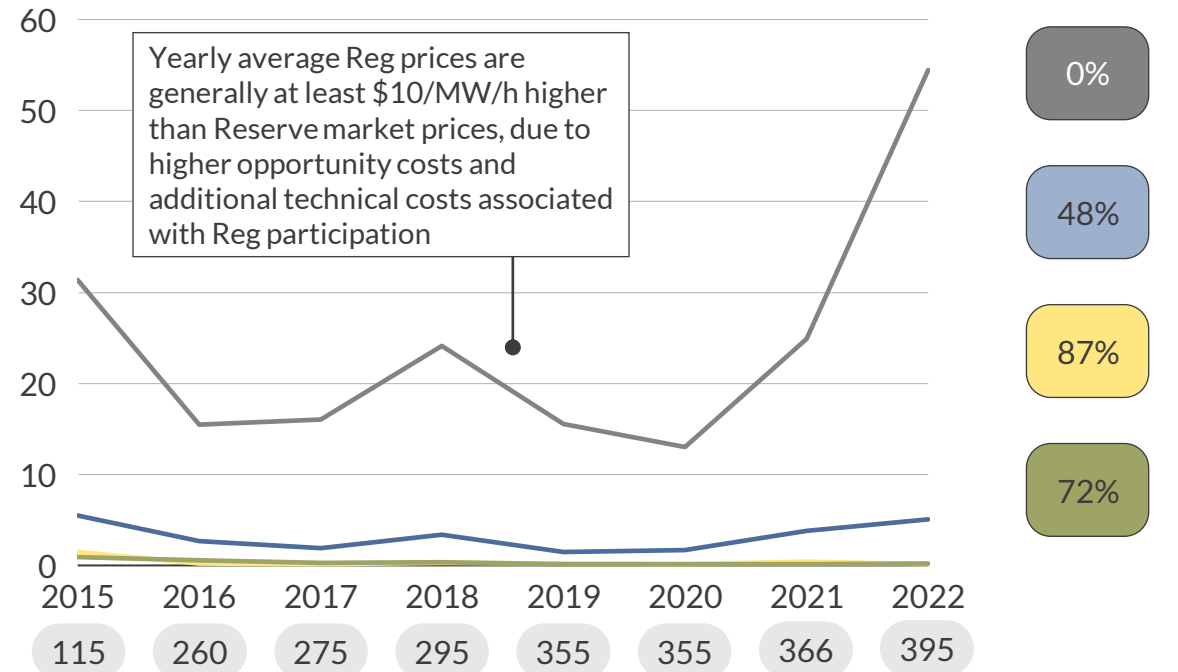
Regulation A Primary Sync Reserve Secondary Reserve (excl. Primary)
Regulation D Primary Non-Sync Reserve

1) The benefits factor is designed to apportion 40% of regulation market procurement to RegD; graph shows effective MW after PJM modelled adjustment.s

Average AS market price
\$/MW/h (real 2021)



Share of zero-price hours
% hours in year (2015-2022 average)
























- Reserve markets clear below \$5/MW/h on average, due to a combination of low bids and a high proportion of zero-price hours, caused by low opportunity costs (due to unused capacity being available for economic reasons)
- Average regulation clearing prices range from \$10 to \$40/MW/h. Thermal opportunity cost to participate in RegA keeps prices above \$0/MW/h

xx Battery installed capacity in PJM (MW)

Aurora is trusted as a bankable lender's advisor across US and European power markets

Aurora's price forecasts have been relied upon by lenders in recently completed transactions:

 \$568MM debt financing of a 300MW Solar + Storage facility in CAISO 	 \$568MM debt financing of a 350MW Storage portfolio in CAISO 	 \$650MM debt financing of a 215MW Solar + Storage facility in CAISO 	 \$130MM debt financing of a 150MW Solar project in ERCOT 
 Market advisor for debt financing of Gresham House's 400+MW battery storage portfolio 	 Debt financing of a 826MW CCGT asset 	 €28MM debt financing First subsidy-free wind financing in Poland 	 £192MM debt financing Saltend CCGT with CHP. LMA for regular forecasts 
 Market advisor for the financing of a portfolio of hydro and PV assets 	 Sell side advisor for the largest operational battery storage portfolio within the frequency containment reserve in Europe (90 MW) 	 Market advisor for first project financing of battery storage in the UK 	 €48MM debt financing 220MW Potegowo onshore wind farm of Israel Infrastructure Fund 