

CASE STUDY

PJM 2025/2026 Capacity Auction

PJM, the ISO/RTO for 13 Mid-Atlantic and Northeastern states and DC, saw a significant price spike in its 2025/2026 capacity auction. Given the substantial load growth in this region, this has prompted questions about the extent that large loads such as data centers have driven this increase.

Why Did It Happen?

Fundamentally, capacity prices are a function of supply and demand, but also several recent changes in the PJM capacity market impacted capacity auction clearing prices:

- + **Power Plant Retirements:** There have been a growing number of power plant retirements, with over 9 GW retiring in PJM from 2023-2025,⁵⁶ and over 15 GW of announced retirements through 2030.⁵⁷ Most of these retirements stem from coal- and gas-fired resources, which have higher capacity accreditation than wind, solar, and battery storage.
- + **Less Reliable Fossil Fuel Resources:** There was a substantial change to the methodology impacting the reliability contribution of fossil fuel resources, thereby lowering the amount of available supply. Following extreme weather events, such as Winter Storm Elliott, during which several gas plants failed to perform, fossil fuel resources were deemed less reliable and assigned lower capacity values for planning purposes.
- + **Change in Reliability Target:** Given past extreme weather events, PJM increased the Installed Reserve Margin (IRM), as well as changed the methodology in which reliability is calculated.
- + **Limitations in New Capacity Additions:** Adding new capacity has also been challenging. Due to lack of sufficient transmission, the cost of interconnection and timeline for interconnection studies have steeply increased, as well as an increase to the cost of new turbines, discouraging developers from building new generation. Historically, it has taken PJM eight years to bring new generation online,⁵⁸ prompting reforms aimed at streamlining the interconnection process. Progress continues to lag as from 2023 to 2025, PJM only added 4.7 GW of gas. While it added many other resources, most of those resources have much lower share of accredited capacity. In terms of nameplate capacity, PJM added 1.2 GW of onshore wind, 10.2 GW of solar, and 320 MW of battery storage capacity.⁵⁹
- + **Increase in Forecast Load:** The forecast load in the 2025/2026 delivery year was 153 GW, which was an increase of 3.2 GW compared to the previous year.⁶⁰ PJM attributes this load growth to data centers, industrial growth, and electrification, with ~93% of the forecast being driven by forecast data center additions,^{61,62,63} as the PJM territory includes several major data center markets, most notably Northern Virginia – the largest in the world.

⁵³ Note that these are prices awarded per effective capacity and after reliability accreditation and are not nameplate capacity.

⁵⁴ Shapiro, J. (2025, January 28). Governor Josh Shapiro reaches agreement with PJM to prevent unnecessary price hikes and save consumers over \$21 billion on utility bills (Press release). Commonwealth of Pennsylvania Governor's Office. <https://www.pa.gov/governor/newsroom/2025-press-releases/gov-shapiro-agreement-pjm-prevent-price-hikes-save-consumers-ove>

⁵⁵ DeCoursey, M., & Saraswat, M. (2026, February 2). Retail rate trends in the US (Report prepared for the Edison Electric Institute). Charles River Associates. <https://media.crai.com/wp-content/uploads/2026/02/02092628/Retail-rate-trends-in-the-US.pdf>

⁵⁶ PJM Interconnection. (n.d.). Generation deactivations. PJM. <https://www.pjm.com/planning/service-requests/gen-deactivations>

⁵⁷ PJM Interconnection. (2023, February 24). Energy transition in PJM: Resource retirements, replacements, and risks (Special report). PJM. <https://www.pjm.com/-/media/DotCom/library/reports-notice/special-reports/2023/energy-transition-in-pjm-resource-retirements-replacements-and-risks.ashx>

⁵⁸ Weeks, A., Toth Kotwis, S., Siegner, K., & Teplin, C. (2025, November 4). PJM's speed to power problem and how to fix it. Rocky Mountain Institute. <https://rmi.org/pjms-speed-to-power-problem-and-how-to-fix-it/>

⁵⁹ Hitachi Energy Velocity Suite

⁶⁰ PJM Interconnection, L.L.C. (2024). 2025/2026 RPM Base Residual Auction planning period parameters. <https://www.pjm.com/-/media/DotCom/markets-ops/rpm/rpm-auction-info/2025-2026/2025-2026-planning-period-parameters-for-base-residual-auction.pdf>

⁶¹ Horger, T., & Keech, A. (2024, August 21). 2025/2026 Base Residual Auction results (Presentation). PJM Markets & Reliability Committee. <https://www.pjm.com/-/media/DotCom/committees-groups/committees/las/2024/20241209/20241209-item-03---2025-preliminary-pjm-load-forecast.pdf>

⁶² Mooney, M. (2024, December 9). 2025 preliminary PJM load forecast (Presentation). PJM Load Analysis Subcommittee. <https://www.pjm.com/-/media/DotCom/committees-groups/subcommittees/las/2024/20241209/20241209-item-03---2025-preliminary-pjm-load-forecast.pdf>

⁶³ Monitoring Analytics, LLC. (2025, June 3). IMM analysis of the 2025/2026 RPM base residual auction: Part G (Revised). https://www.monitoringanalytics.com/reports/reports/2025/IMM_Analysis_of_the_20252026_RPM_Base_Residual_Auction_Part_G_20250603_Revised.pdf