

PJM's Electric Capacity Market: Background and Current Issues

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SUMMARY

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PJM is the country's largest electric grid operator, managing the electricity transmission system for more than 65 million people in all or part of 13 states—Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia—and the District of Columbia. PJM operates several markets that play a large role in setting electricity rates for consumers in the PJM region. One of these markets—PJM's

capacity market—saw its July 2024 auction clear at \$269.92/megawatt-day (MW-day) in most parts of PJM, a nearly 10-fold increase from the previous auction. Capacity auctions affect future electricity rates, so the impacts of the July 2024 auction weren't felt until 2025. Some states are experiencing electricity rate increases of up to 20% from 2024 to 2025, prompting responses from some Members of Congress.

Capacity markets aim to ensure the long-term ability of electricity supply to meet demand (*resource adequacy*) by creating price signals indicating where and how much capacity is needed in future years. Buyers in capacity markets are distribution utilities (e.g., Dominion Energy and Pepco) securing electricity supply for their customers. Sellers in capacity markets are the owners of electricity generators that wish to sell electricity in the delivery year. Capacity clearing prices primarily reflect the expected balance of supply and demand for electricity in the coming years.

Higher PJM capacity prices seen in the July 2024 auction are generally agreed to have been caused by the confluence of three factors, though observers have varying views about the relative importance of each. These three factors are decreasing supply, increasing demand, and capacity market design changes implemented in July 2024. Many of those market design changes were in response to the emergency conditions PJM experienced during Winter Storm Elliott in 2022. Since July 2024, PJM requested—and the Federal Energy Regulatory Commission (FERC) approved—several changes to the capacity market design, aimed in large part at lowering future capacity prices. PJM's next capacity auction is scheduled for July 2025. Lower capacity prices could reduce capacity-related charges paid by consumers but might also discourage investment in new power plants to supply the region.

Congress has conducted some oversight activities related to PJM's capacity markets. For example, PJM officials testified at two separate hearings by the House Energy and Commerce Committee in March 2025 and were asked about the July 2024 auction results. Ranking Member Pallone wrote a letter to PJM's CEO in April 2025 expressing concerns about PJM's capacity market rules. Other Members have written to FERC regarding the July 2024 auction results. Additional options for oversight include questioning FERC commissioners and state legislators and regulators, or additional evaluations by the U.S. Government Accountability Office; the National Academies of Sciences, Engineering, and Medicine; or other expert groups.

Congress could evaluate the outcomes of future PJM capacity auctions. Congress could direct FERC to implement additional changes to PJM's capacity market, if Congress were not satisfied with the future results. Alternatively, if Congress determined that PJM's changes were effective, Congress could direct FERC to require similar changes in other parts of the country (e.g., New England, much of the Midwest) that use capacity markets.

The large capacity price increases in PJM's July 2024 auction, and the ensuing debate around those increases, raise potential considerations for Congress in other areas, such as electricity affordability and electricity supply. These other areas are also being examined as part of broader debates in the 119th Congress around budget priorities and permitting reform. In addition, the Trump Administration is implementing new policies affecting these areas. If Congress chooses to conduct further oversight and other activities related to PJM's capacity market, it may consider how these broader debates might affect the region served by PJM.

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PJM is the country's largest grid operator measured by electricity demand, managing the electricity transmission system for more than 65 million people in all or part of 13 states—Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia—and the District of Columbia (Figure 1). PJM operates several markets that play a large role in setting electricity rates for consumers in the PJM region. One of these markets—PJM's capacity market—saw higher prices in July 2024. As explained in this report, capacity prices affect future electricity prices. As a result, the July 2024 auction is contributing to higher electricity costs in some states beginning in summer 2025.²

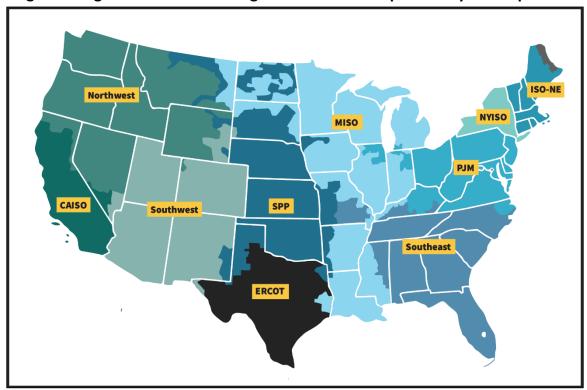


Figure 1. Regional Transmission Organizations and Independent System Operators

Source: Federal Energy Regulatory Commission (FERC), "RTOs and ISOs," https://www.ferc.gov/power-sales-and-markets/rtos-and-isos.

¹ PJM, "Who We Are," https://www.pjm.com/about-pjm/who-we-are. PJM was previously a power pool of utilities in Pennsylvania, New Jersey, and Maryland, and its name derives from the names of those three states. For additional historical information, see Federal Energy Regulatory Commission (FERC), "PJM," https://www.ferc.gov/industries-data/electric/epower-markets/pjm.

² For example, Maryland officials indicated that residential customers would experience average monthly bill increases of \$4-\$18, starting sometime in 2025, associated with the July 2024 capacity auction prices. Maryland Office of People's Counsel, *Bill and Rate Impacts of PJM's 2025/2025 Capacity Market Results & Reliability Must-Run Units in Maryland*, p. 7. In New Jersey, state officials announced that electricity rates for many electricity consumers would increase around 20% beginning in June 2025. According to the officials, "A variety of factors led to this result, including increases in the PJM-determined cost of capacity." New Jersey Board of Public Utilities, "NJBPU Announces Conclusion of New Jersey's Annual Electricity Supply Auction," press release, February 12, 2025, https://www.nj.gov/bpu/newsroom/2024/approved/20250212.html. The Illinois utility ComEd alerted customers to expect a "10-15% increase in their electric bills" starting in July 2025 because of the PJM capacity prices. ComEd, "Why Is Your Electric Bill Going Up?," May 15, 2025, https://poweringlives.comed.com/why-is-your-electric-bill-going-up/.

Notes: FERC does not regulate the electricity industry in Alaska, Hawaii, or U.S. territories. Regional transmission organizations and independent system operators do not operate electricity systems in the Northwest, Southwest, or Southeast.

These rate increases have prompted a response from some Members of Congress and other PJM stakeholders. For example, in opening remarks for a March 25, 2025, hearing on grid reliability, House Energy and Commerce Committee Ranking Member Frank Pallone spoke directly to PJM's capacity market design:

I'm worried that some of the rules of the road that govern Regional Transmission Organizations could start to harm consumers. Last year, partially as a result of poor market design, capacity prices in the PJM region exploded from \$29 to \$270 per megawatt-day. These price increases aren't abstract—they are directly responsible for a roughly \$25 per month increase in New Jersey power bills that my constituents will start feeling in June.³

This report discusses PJM's capacity market, market changes since July 2024, and potential options and considerations for Congress.

What Is a Capacity Market?

Capacity markets are used in some parts of the country to provide *resource adequacy*, a term used by grid planners and policy makers to refer to the long-term ability of electricity supply to meet demand. Capacity markets create price signals to investors to identify where and how much capacity is needed to meet future demand. High capacity prices encourage development of new capacity, and low capacity prices encourage capacity retirement. Stated another way, the price signals from capacity markets influence market entry and exit for power plants.

Not all areas of the country use capacity markets for resource adequacy planning. Another approach is utility integrated resource plans (IRPs). IRP processes are common in states that rely on regulated vertically integrated utilities, as opposed to restructured states. Under an IRP approach, resource adequacy is overseen by utility regulators who estimate future electricity needs and make plans to ensure sufficient power plants are available to meet those needs. Some utilities use a combination of IRPs and capacity markets for resource adequacy, pursuant to state laws and regulations.

When he was in the private sector, now-Deputy Secretary of Energy and former Federal Energy Regulatory Commission (FERC) Chair James Danly summarized resource adequacy procurement methods this way:

Resource adequacy comes down to a matter of either planning for the future properly and having accurate expectations for what the demand is going to be down the road, and administratively determining it and then building it. This usually happens in vertically integrated utilities or states that have vertically integrated utilities through the Integrated Resource Plan, or in the case of the FERC jurisdictional markets, the ISOs [Independent

³ House Energy and Commerce Committee Democrats, "Pallone Blasts Republicans and PJM for Raising Americans' Electricity Bills," press release, March 25, 2025, https://democrats-energycommerce.house.gov/media/press-releases/pallone-blasts-republicans-and-pjm-raising-americans-electricity-bills. See also Letter from Rep. Frank Pallone, Jr., to Manu Asthana, President and CEO, PJM, April 24, 2025, https://pallone.house.gov/sites/evo-subsites/pallone.house.gov/files/evo-media-document/pallone-letter-to-pjm-asthana-april-24-2025.pdf.

⁴ Vertically integrated utilities own power plants and the transmission and distribution systems that deliver electricity to consumers. In restructured states, multiple companies own power plants and compete to generate (and sell) electricity. For background on utility structures, see CRS Report R47521, *Electricity: Overview and Issues for Congress*, by Ashley J. Lawson.

System Operators] and RTOs [Regional Transmission Organizations], by having market rules that properly incentivize the development of needed new generation.⁵

For the regions of the country that have opted to use capacity markets, the design of the markets is subject to FERC approval. FERC is to work to ensure that capacity market rules are likely to result in just and reasonable rates, pursuant to the Federal Power Act. FERC does not play a role in the normal operation of capacity markets, nor does FERC determine prices in the markets. Those operational aspects are left to the market administrators, such as PJM.

Capacity is a distinct electricity market product. It differs, for example, from actual energy generated (electricity) which is procured in day-ahead and real-time markets. PJM, ISO-NE, NYISO, and MISO (**Figure 1**) have capacity markets that are used to ensure resource adequacy, sometimes in combination with more traditional utility resource planning. In these capacity markets, generator owners are paid a specified amount per unit of capacity they agree to be on standby to provide over a specified period of time. Another distinct electricity market product is ancillary services, a group of operational features used to balance the grid in real time and maintain reliability.

One rationale for having multiple electricity markets operating in a given area is that none of them alone provides sufficient revenue to generators to ensure resource adequacy. This is sometimes referred to as the "missing money" problem. In 2007, soon after PJM's capacity market design was finalized, researchers made this observation regarding the need for capacity markets to solve the missing money problem:

Since under deregulation of generation investors have no obligation to meet the regional Resource Adequacy mandate, it is critical for a PRSG [Planning Reserve Sharing Group] to design the appropriate markets that incent the existing generation to stay and the needed new generation to be built. This means that resources must receive adequate revenues. In particular, since the peaking generation needed to meet the adequacy criterion will not receive enough revenue from the energy market to justify investments, other revenue streams are needed to ensure that they cover their fixed costs. The gap between the net revenues and fixed cost of generation is referred to as "Missing Money." ¹⁰

⁵ Written testimony of James Danly to U.S. Congress, House Oversight and Government Reform Committee, Energy Policy, Natural Resources and Regulatory Affairs Subcommittee, *The Power Struggle: Examining the Reliability and Security of America's Electrical Grid*, 118th Cong., 2nd sess., March 12, 2024.

⁶ For background on the Federal Power Act and the role of the Federal Energy Regulatory Commission in the electricity sector, see CRS In Focus IF11411, *The Legal Framework of the Federal Power Act*, by Adam Vann, and CRS Report R48349, *The Federal Energy Regulatory Commission (FERC): Authorities and Membership*, by Paul W. Parfomak.

⁷ For a discussion of markets and resource adequacy planning in different regions, see FERC, *Energy Primer: A Handbook for Energy Market Basics*, December 2023, https://www.ferc.gov/sites/default/files/2024-01/24_Energy-Markets-Primer_0117_DIGITAL_0.pdf (hereinafter FERC, *Energy Primer*).

⁸ For background information on electricity markets generally, see FERC, *Energy Primer*. For additional discussion of ancillary services, see CRS Report R45764, *Maintaining Electric Reliability with Wind and Solar Sources: Background and Issues for Congress*, by Ashley J. Lawson.

⁹ Capacity markets are not necessary to ensure resource adequacy. Utilities can also participate in "energy-only" markets wherein energy market prices are expected to be high enough to encourage sufficient investment in generation capacity. ERCOT, the grid covering most of Texas, is often cited as an example of an energy-only market, although ERCOT does operate a market for ancillary services in addition to its energy markets. For additional discussion of ancillary services, see CRS Report R45764, *Maintaining Electric Reliability with Wind and Solar Sources: Background and Issues for Congress*, by Ashley J. Lawson.

¹⁰ Murty P. Bhavaraju et al., "PJM Reliability Pricing Model—A Summary and Dynamic Analysis," 2007 IEEE Power Engineering Society General Meeting, June 2007.

The sellers in capacity markets are the owners of generators wishing to participate in wholesale electricity markets in the future. 11 Sellers can offer capacity from existing or new generators. Some sellers may have contractual obligations (e.g., power purchase agreements) to sell power to specific utilities or customers. The capacity associated with these contracts can still be offered into the capacity market, even though such sellers have relatively little market risk associated with their future output (i.e., they are less likely to have a missing money problem).

Sellers might also offer capacity from demand-side resources, such as aggregated demand response programs or virtual power plants. Demand-side resources do not necessarily represent electric-generating capacity. Demand response, for example, is a form of electricity conservation, sometimes called a *negawatt* because it represents a negative amount of demand for power. However, demand-side resources can contribute to resource adequacy by helping to balance supply and demand in real time.

The buyers in capacity markets are the utilities (sometimes called *load serving entities*, or LSEs) that wish to sell electricity to customers in the future. Pursuant to state or local regulatory requirements, utilities may have an obligation to buy capacity equal to their expected customer demand plus a reserve margin. The reserve margin is meant to ensure sufficient excess capacity is available to meet demand even if a generator is unexpectedly offline or demand exceeds forecasts.

Capacity market clearing prices are determined by the balance of supply and demand in the market. Sellers offer at different prices; more sellers are willing to commit to maintain their facilities in working condition if they will earn higher revenue from selling capacity. The *clearing price* is the price at which sufficient sellers are available to meet expected demand. All sellers offering at or below the clearing price are paid the clearing price for their capacity. Utilities pay the clearing price for their expected demand and pass these costs on to consumers. Cost pass-through typically has a time delay to account for the forward-looking nature of capacity markets and other regulatory lag that is common in utility ratemaking practices. State utility regulators oversee the details of how capacity costs affect electricity rates.

Features of PJM's Capacity Market

Capacity market designs differ around the country. This section discusses design features in PJM, which are not necessarily found in other regions' capacity markets. The features discussed below were in place for the July 2024 auction. As discussed in the section "Changes to PJM's Capacity Market Since July 2024," some features have since changed on either a temporary or permanent basis.

PJM's capacity market, called the Reliability Pricing Model (RPM), takes place through a series of auctions, called Base Residual Auctions (BRAs). The auctions are nominally scheduled to be held annually to award capacity payments for generators delivering power in the third year following the auction (the *delivery year*, which runs from June 1 to May 31). The three-year

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¹¹ Some nongeneration resources, namely qualifying transmission upgrades and demand response programs, may also participate in PJM's capacity market. For sake of simplicity, this report focuses on generation resources. Details of PJM's capacity market are available in Attachment DD of PJM's Open Access Transmission Tariff available at https://agreements.pjm.com/oatt/5136.

¹² For background information on virtual power plants, see DOE, "Virtual Power Plants Projects," https://www.energy.gov/lpo/virtual-power-plants-projects.

¹³ The uniform payment structure of capacity markets means that lower-cost generators earn greater profits than higher-cost generators. This feature is meant to create an incentive for generators to lower their costs, which can ultimately lead to lower rates for consumers.

advance timing of the BRA is aimed to give developers sufficient time to build new generators before the delivery year if necessary. In the years between the BRA and the delivery year, PJM runs *incremental auctions* for the same delivery year. Incremental auctions are meant, in part, to allow capacity buyers and sellers to adjust to changes in the demand forecast for the delivery year.

PJM is not currently operating under that three-year schedule. In 2023, PJM requested—and FERC approved—extra time between some auctions to allow time to review and implement various auction design changes (a discussion of which is outside the scope of this report). Now that those changes have been implemented, PJM is using a compressed auction schedule to make up delayed auctions. For example, nominally the BRA held in 2025 would be used to secure electricity supply beginning in 2028. However, the actual scheduled BRA in 2025 (currently slated for July 2025) is to be used to secure electricity supply for the 2026/2027 delivery year. PJM intends to use this compressed schedule until all previously delayed auctions can be held, after which the nominal three-year timing between BRA and delivery year can be restored. Additionally, PJM has canceled some incremental auctions as part of the current compressed capacity auction schedule.

The RPM is structured to match expected demand (including a reserve margin) with supply from both existing and new generators. Not every location within PJM experiences the same levels of supply and demand. For example, some PJM subregions experience transmission constraints such that only nearby power plants can provide electricity to sources of demand. To account for these geographic differences, the RPM includes locational pricing. This means that rather than have a single capacity price apply across PJM's full footprint, prices can vary in different subregions. A subregion might be an individual utility's service territory, for example.

In determining the demand at each auction, PJM estimates a reserve margin required to meet reliability goals. PJM includes in the reserve requirement analysis projections of expected electricity demand, existing and planned generators, the risk that generators will be unable to produce electricity when needed, and the ability to import electricity from neighboring regions. The reserve margin analysis aims to have expected outages no more than once per 10 years, in accordance with standard industry practice for reliability planning. Additional details are provided as part of PJM's annual reserve requirement study, available on PJM's website. In January 2024, FERC approved PJM's request to change from basing the reserve margin on the single hour of year with highest demand (which usually occurs in the summer) to demand across all hours of the year. In part, PJM requested this change to align the model for estimating reserve margin with the model used for capacity accreditation (discussed below). The change also reflects increasing demand for electricity in winter in the PJM region.¹⁵

PJM also considers the maximum price that demand is willing to pay for capacity. This price is set by PJM to reflect the typical cost for constructing new generation capacity, effectively assuming that it would be economically irrational for customers to pay more for capacity than the cost to build it. This cost, called the *cost of new entry* (CONE), varies across the region to reflect

¹⁴ PJM, "PJM to Propose Capacity Auction Delay Pending Resource Adequacy Reform," press release, March 27, 2023, https://insidelines.pjm.com/pjm-board-of-managers-delays-capacity-auction-schedule-pending-resource-adequacy-reform/.

¹⁵ For additional background and discussion of PJM's process for estimating demand in the capacity market, see FERC, *Order Accepting Tariff Revisions Subject to Condition*, January 30, 2024, https://elibrary.ferc.gov/eLibrary/filelist? accession_number=20240130-3113&optimized=false.

differences in cost of labor and other factors. CONE serves as a price cap in the market. ¹⁶ By design, the market cannot clear above this price.

In determining the supply at each auction, PJM accounts for the inherent uncertainty around future generator performance. This is necessary to ensure that the capacity market procures sufficient resource adequacy—if planned and unplanned generator downtime were not accounted for, the region would be at risk of not having enough electricity supply during high-demand periods. While most generators typically produce electricity when called upon, sometimes they suffer mechanical failures, fuel shortages, or other limitations on their operations. The process by which PJM (or other grid operators) discount capacity supply based on the probability a generator will be unavailable is called *accreditation*. PJM revised its accreditation methodology in early 2024, in part to account for observed failures at many natural gas-fired power plants during Winter Storm Elliott in December 2022.¹⁷

PJM's current capacity accreditation approach is called a *marginal effective load carrying capability* (marginal ELCC) approach and was used for the first time in the July 2024 auction. The marginal ELCC approach relies on an analysis of the potential for individual generators to produce electricity during peak hours. The analysis is based, in part, on real weather conditions in the region since 1993 and considers weather-related impacts on both electricity supply and demand. The analysis also considers how generators in PJM's system interact with each other, including correlated outages. For example, when natural gas supplies to the region are constrained (as occurred during Winter Storm Elliott), the risk of lack of fuel goes up for all natural gas-fired power plants in the region, not just an individual one. PJM plans to update the analysis and resulting accreditation factors annually to reflect changes in the system mix.

PJM was not the first market to adopt a marginal ELCC approach, and several others are doing so. Adopters of this approach believe it can more accurately account for the potential reliability impacts of fuel limitations for natural gas, wind, solar, and energy storage—all of which are increasing in their share of the electricity supply mix. Most resources in PJM have a lower capacity value under the marginal ELCC accreditation compared to the method used in previous PJM capacity auctions.

Not all generating capacity in the region must be offered into the capacity market. One exempted group includes generators planned for retirement, but whose retirement would cause reliability risks for the grid. The owners of these generators may enter into reliability-must-run (RMR) contracts, under which retirement is delayed for a set period of time in return for out-of-market payments (i.e., they earn revenue above what they could earn in PJM's energy markets). Another exempted group includes many intermittent resources (e.g., wind- and solar-powered generators) and energy storage resources.¹⁸

¹⁶ More precisely, the price cap is set at the net cost of new entry (CONE), determined as the difference between gross CONE and the revenues that new generators are expected to earn in PJM markets.

¹⁷ For discussion of PJM generator performance during Winter Storm Elliott, see PJM, *Winter Storm Elliott: Event Analysis and Recommendation Report*, July 17, 2023, https://www.pjm.com/-/media/DotCom/library/reports-notices/special-reports/2023/20230717-winter-storm-elliott-event-analysis-and-recommendation-report.ashx. For discussion of the broader topic of electricity-natural gas system interdependency, see CRS Report R48127, *Natural Gas Reliability: Issues for Congress*, by Paul W. Parfomak, Ashley J. Lawson, and Michael Ratner.

¹⁸ For context, total PJM installed capacity as of December 31, 2024, from all sources was 198,841.1 megawatts (MW). Installed solar and wind capacity was 12,043.0 MW and 12,200.7 MW, respectively. Combined, this represents 12% of installed PJM capacity. Monitoring Analytics, *State of the Market Report for PJM, Volume 2: Detailed Analysis*, Table 12-1, p. 661, https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2024/2024-som-pjm-vol2.pdf. For purposes of the capacity market supply estimates, wind and solar made up 4.8% of installed capacity as of (continued...)

Clearing prices in PJM's capacity market have varied over time, as shown in **Table 1**, reflecting changing electricity supply and demand balances within the region.

Table 1. PJM Capacity Auction Clearing Prices

Delivery Year	Clearing Price (\$/megawatt-day)
2015/2016	\$136.00
2016/2017	\$59.37
2017/2018	\$120.00
2018/2019	\$164.77
2019/2020	\$100.00
2020/2021	\$76.53
2021/2022	\$140.00
2022/2023	\$50.00
2023/2024	\$34.13
2024/2025	\$28.92
2025/2026	\$269.92

Source: PJM, 2025/2026 Base Residual Auction Report, July 30, 2024, p. 4.

Notes: The delivery year runs from June 1 to May 31. Clearing prices represent PJM-wide prices. Prices in some subregions may have differed from these prices. Prices have not been adjusted to account for inflation.

What Happened in July 2024?

In July 2024, PJM held its capacity auction (the 2025/2026 BRA) to secure supply for June 1, 2025, through May 31, 2026. The auction cleared at \$269.92/megawatt-day (MW-day) in most parts of PJM, a nearly 10-fold increase from the previous auction, which had cleared at \$28.92/MW-day. Some parts of PJM had prices clear even higher, at their price cap: \$466.35/MW-day for part of Maryland and \$444.26/MW-day for parts of Virginia and North Carolina (**Figure 2**).

December 31, 2024. Monitoring Analytics, *State of the Market Report for PJM, Volume 2: Detailed Analysis*, p. 38, https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2024/2024-som-pim-vol2.pdf.

¹⁹ PJM, "PJM Capacity Auction Procures Sufficient Reserves to Meet RTO Reliability Requirement," press release, July 30, 2024, https://www.pjm.com/-/media/DotCom/about-pjm/newsroom/2024-releases/20240730-pjm-capacity-auction-procures-sufficient-resources-to-meet-rto-reliability-requirement.ashx.

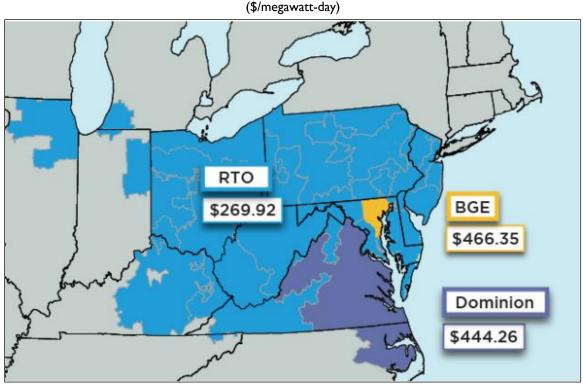


Figure 2. July 2024 PJM Capacity Market Clearing Prices

Source: PJM, "PJM Capacity Auction Procures Sufficient Reserves to Meet RTO Reliability Requirement," press release, July 30, 2024, https://www.pjm.com/-/media/DotCom/about-pjm/newsroom/2024-releases/20240730-pjm-capacity-auction-procures-sufficient-resources-to-meet-rto-reliability-requirement.ashx.

Notes: RTO = regional transmission organization; the RTO represents most of PJM. Separate capacity prices are determined for the service territories of Baltimore Gas and Electric (BGE) and Dominion based on transmission constraints and other local factors. Prices at the July 2024 auction are for capacity delivered from June 1, 2025, through May 31, 2026.

PJM attributed the price increase to three factors: decreased projected supply due to generator retirements; increased projected demand; and market design changes first implemented in July 2024, such as the marginal ELCC accreditation. Most observers agree that these three factors led to the high clearing price, but they have varying views about the relative importance of each.

Monitoring Analytics, which serves as the independent market monitor for PJM, released an initial analysis in September 2024. That analysis found that market design changes played a large role in determining the July 2024 auction outcome. According to Monitoring Analytics,

The BRA prices do not solely reflect supply and demand fundamentals but also reflect, in significant part, PJM decisions about the definition of supply and demand. The auction results were not solely the result of the introduction of the ELCC approach and do in part reflect the tightening of supply and demand conditions in the PJM Capacity Market.²⁰

Monitoring Analytics repeated its criticism of PJM's capacity market design, especially the change in capacity accreditation methodology, in its March 2024 annual *State of the Market* report:

²⁰ Monitoring Analytics, *Analysis of the 2025/2026 RPM Base Residual Auction: Part A*, September 20, 2024, p. 5, https://www.monitoringanalytics.com/reports/Reports/2024/

IMM_Analysis_of_the_20252026_RPM_Base_Residual_Auction_Part_A_20240920.pdf.

PJM's introduction of its significantly modified ELCC method in the 2025/2026 BRA was another radical change to the capacity market design. While it is a good idea to evaluate unit specific performance and a good idea to recognize that risk occurs in the winter as well as the summer and that risks are correlated, ELCC was implemented before it could be fully tested and unintended consequences evaluated. The results of the 2025/2026 BRA illustrate the extreme sensitivity of the market outcomes to a range of assumptions and decisions about market design details that were not adequately tested or reviewed with stakeholders.²¹

In several different reports, Monitoring Analytics recommended that PJM change its capacity market design, specifically by (1) requiring RMR units, intermittent resources, and energy storage to offer their supply into the market; (2) modifying the ELCC calculation; and (3) adjusting the value of CONE.²²

PJM, in contrast, emphasizes the changing supply and demand in the region as the primary cause of the capacity price increase and disputes some of the assumptions used by Monitoring Analytics. According to PJM's analysis, the July 2024 auction would have had a similar supply and demand balance even if PJM had used its previous capacity accreditation methodology. PJM identifies its "risk modeling enhancement" (the way it estimates demand, taking into account demand across all hours of the year) as the main driver:

[E]ssentially all of the impacts on auction clearing outcomes are attributable to the changes in risk modeling and not the accreditation framework. Nearly every resource offered into the 2025/2026 BRA cleared; the same would have been true under an alternative sensitivity where only the accreditation reflected EFORd [the previous accreditation methodology] but the reliability requirement (in units of EFORd-accredited megawatts) reflected the outcomes of the enhanced risk modeling. The risk modeling enhancements resulted in a shift to winter risk and a change in Installed Reserve Margin (IRM) to account for lower resource performance, on average, during newly identified periods of risk. The move to marginal ELCC accreditation from the EFORd approach impacted the relative accreditation of generation resources compared to one another and to the fleet as a whole but did not impact the overall tightness of the markets' supply-demand balance.²³

Other advocacy and think tank groups also analyzed the 2024 capacity market results:

- Natural Resources Defense Council (NRDC) identified market design elements as the largest drivers of the price increase, compared to the previous auction. NRDC recommended accelerated development of new generation and transmission resources, as well as market design changes, such as including RMR generators in the supply estimates.²⁴
- Energy Ventures Analysis (EVA), on behalf of America's Power, stated that "arguably, the most significant impact on the 2025/26 BRA results was PJM's

²¹ Monitoring Analytics, "Section 5 – Capacity Markets," in *2024 State of the Market Report for PJM*, March 13, 2025, p. 279, https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2024/2024-som-pjm-sec5.pdf.

²² See, for example, Monitoring Analytics, *Analysis of the 2025/2026 RPM Base Residual Auction: Part C*, November 6, 2024, https://www.monitoringanalytics.com/reports/reports/2024/ IMM_Analysis_of_the_20252026_RPM_Base_Residual_Auction_Part_C_20241106.pdf.

²³ PJM, *PJM Response to Independent Market Monitor Report on 2025/2026 Base Residual Auction*, October 11, 2024, p. 3, https://www.pjm.com/-/media/DotCom/library/reports-notices/reliability-pricing-model/20241011-response-to-imm-25-26-bra-report.ashx.

²⁴ Claire Lang-Ree and Tom Rutigliano, "PJM's Capacity Auction: The Real Story," *Expert Blog* (NRDC), August 22, 2024, https://www.nrdc.org/bio/claire-lang-ree/pjms-capacity-auction-real-story.

- capacity accreditation for each auction-participating resource."²⁵ EVA also identified higher-demand projects and higher-reserve-margin requirements as contributing factors. PJM increased the reserve margin target after many generators failed during Winter Storm Elliott in December 2022.
- R Street identified rising fuel costs, supply and demand fundamentals, and
 market design changes as the causes of the capacity price increase.²⁶ While the
 group did not offer recommendations for specific changes to PJM's capacity
 market, the analysis called for stakeholders to "trust and enhance the market
 model" and "remain resolute on the market advantage and dismiss rent-seeking
 requests from utilities to re-regulate."

Changes to PJM's Capacity Market Since July 2024

In December 2024, PJM filed multiple requests with FERC to implement changes to future capacity auctions, largely in line with Monitoring Analytics' recommendations. FERC subsequently approved those changes:

- Moving forward, RMR, intermittent, and storage generators will be required to participate in PJM's capacity market.²⁷
- For the next two capacity auctions, PJM will use a lower CONE assumption.
- For the next two capacity auctions, PJM will further lower the price cap in the market to approximately \$325/MW-day and add a price floor of \$175/MW-day.

The price cap and price floor (together sometimes referred to as a *price collar*) arose from a settlement agreement between PJM and Pennsylvania. In December 2024, the governor of Pennsylvania asked FERC to force PJM to change its capacity market rules to lower the price cap, asserting that the existing cap would "leave consumers paying up to \$20.4 billion in added costs over the next two years without receiving commensurate benefits in the form of new or retained generating capacity and increased reliability." The governors of Illinois, New Jersey, Maryland, and Delaware also supported Pennsylvania's complaint. ²⁹

²⁵ Energy Ventures Analysis, *Results and Likely Impacts of PJM's 2025/26 Base Residual Auction*, prepared for America's Power, August 2024, p. 7, https://americaspower.org/wp-content/uploads/2024/08/EVA-Report-on-PJM-2025-26-BRA-Results-Final.pdf.

²⁶ Olivia Manzagol et al., "PJM Capacity Auction Reveals Market Advantages and Room for Improvement," R Street, December 6, 2024, https://www.rstreet.org/commentary/pjm-capacity-auction-reveals-market-advantages-and-room-for-improvement/.

²⁷ PJM has identified two reliability-must-run power plants likely to be affected by the rule change, both in Maryland: Brandon Shores and Wagner. Even so, the Brandon Shores facility might not be allowed to operate after 2025 under terms of a legal settlement. For additional discussion, see FERC, *Order Accepting Tariff Revisions Subject to Condition*, February 14, 2025, paragraph 24, https://elibrary.ferc.gov/eLibrary/filedownload?fileid=99602B45-AF52-CB59-96E6-950606500000.

²⁸ Complaint at 13–14, Pennsylvania v. PJM Interconnection, L.L.C., 191 FERC ¶ 61,066 (2025)(No. EL25-46-000), https://pa.gov/content/dam/copapwp-pagov/en/governor/documents/pjm-lawsuit/gov.% 20shapiro% 20and% 20commonwealth% 20of% 20pa% 20complaint(119760108).pdf. See also Commonwealth of Pennsylvania, "Pennsylvania Governor Josh Shapiro Files Lawsuit Against PJM to Prevent Energy Price Hikes, Fight for Pennsylvania Consumers," December 30, 2024, https://www.pa.gov/governor/newsroom/2024-press-releases/lawsuit-against-pjm-to-prevent-energy-price-hikes.html.

²⁹ Letter to FERC Commissioners from Governors Pritzker (Illinois), Murphy (New Jersey), Moore (Maryland), and Hall-Long (Delaware), January 17, 2025, https://elibrary.ferc.gov/eLibrary/filedownload?fileid=8A44DE67-C539-C8DB-9ED1-948970F00000.

These changes are the latest in many changes to PJM's capacity market design since its inception. Some have questioned whether the current design is the best approach to procuring capacity needed for resource adequacy. For example, FERC commissioner Mark Christie, before being named FERC chair in 2025, made these remarks after voting to approve a change to PJM's capacity market design in January 2024:

Every "fix"—and there have been many since the RPM went into operation about 15 years ago-renders the capacity market construct more incomprehensible (and as I have said many times, it's an administrative construct, not a market). One could even make a credible argument that its sheer complexity renders it unjust and unreasonable. I have described it before as "Rube Goldberg-esque" and as replete with "hopeless complexity." Perhaps PJM should be required to post a warning to every reader who tries to read and comprehend a detailed explanation of how the capacity market construct works (borrowing from Dante): "Abandon all hope, ye who enter here!"30

Not all stakeholders are satisfied with the changes made to date in PJM's capacity market. For example, in April 2025, ratepayer advocates in Illinois, Maryland, and New Jersey asked FERC to direct PJM to rerun the July 2024 auction with the inclusion of generators that will be required to participate in the future. These advocates argued that the results of the July 2024 auction were unjust and unreasonable, because certain generators did not participate, and that electricity customers should be refunded any difference after the auction is rerun.³¹

Options and Considerations for Congress

Congress could choose to monitor results of future PJM capacity auctions as it evaluates affordability and reliability needs in the region. Congress can conduct oversight of PJM's capacity market (and other products) in various ways. Some committees have invited PJM officials to testify on various topics. For example, PJM's president and CEO testified in a March 25, 2025, hearing in the House Energy and Commerce Committee, Energy Subcommittee, "Keeping the Lights On: Examining the State of Regional Grid Reliability."³² Also, PJM's senior vice president for governmental and member services testified in a March 5, 2025, hearing in the same subcommittee called "Scaling for Growth: Meeting the Demand for Reliable, Affordable Electricity."³³ Some committees could also ask FERC commissioners, state utility regulators, power plant owners, consumer advocates, or other stakeholders to testify on various topics, including their views on the functioning of PJM's capacity market.

Members of Congress could choose to express their policy preferences through letters to PJM, FERC, or other stakeholders (e.g., state legislators). For example, Representative Fitzpatrick wrote to then-FERC Chair Phillips in October 2024 to "express my grave concerns regarding a major pending electricity price increase" related to the July 2024 auction.³⁴ Congress might also choose to gather more information about the functioning of PJM's capacity market, or capacity

^{30 &}quot;Commissioner Christie's Concurrence to PJM's Capacity Market Reform Filing, Docket No. ER24-99," January 30, 2024, https://www.ferc.gov/news-events/news/commissioner-christies-concurrence-pims-capacity-market-reformfiling-docket-no.

³¹ For discussion of the complaint, see Ethan Howland, "FERC Should Order PJM to Rerun Last Capacity Auction: Ratepayer Advocates," *Utility Dive*, April 15, 2025. ³² Hearing information is available at https://energycommerce.house.gov/events/energy-subcommittee-keeping-the-

lights-on-examining-the-state-of-regional-grid-reliability. 33 Hearing information is available at https://energycommerce.house.gov/events/energy-subcommittee-scaling-for-

growth-meeting-the-demand-for-reliable-affordable-electricity. ³⁴ Letter from Rep. Fitzpatrick to FERC Chair Willie L. Phillips, October 24, 2024, available in FERC e-Library under

dockets ER24-99-000, EL24-148-000, and ER25-118-000.

markets in general. For example, Congress could request the U.S. Government Accountability Office; the National Academies of Sciences, Engineering, and Medicine; or other expert groups to evaluate PJM's capacity market.

In addition to the relatively narrow topic of PJM's capacity market itself, the July 2024 auction results and resultant congressional interest raise broader policy questions that may be of interest to Congress. These broader topics are discussed in more detail below.

Electricity Affordability

The electricity rate increases caused by PJM's July 2024 capacity auction have raised concerns within the PJM region about electricity affordability.

The Federal Power Act limits the role of the federal government in electricity rate regulation to "the transmission of electric energy in interstate commerce and to the sale of electric energy at wholesale in interstate commerce." Retail rate regulation is left to the states. As a result, the electricity rate increases arising from PJM's capacity market auctions are generally outside of federal jurisdiction. Congress may choose to conduct oversight into the issue, and some Members may seek to persuade state legislatures and utility regulators to take action. Apart from these options, Congress's role in effectuating different electricity rates is relatively limited under current law.

Electricity bills—the total amount consumers pay for electricity—are influenced by rates *and* total consumption. One way to reduce consumption (and, therefore, to reduce consumer cost) is to promote energy efficiency. Some federal programs currently exist to promote energy efficiency, including the Weatherization Assistance Program, the Energy Efficiency and Conservation Block Grant Program, and the Home Efficiency Rebates Program.³⁶ These are primarily administered by the U.S. Department of Energy (DOE).

Several of these energy efficiency programs were authorized and appropriated by the Infrastructure Investment and Jobs Act (IIJA; P.L. 117-58) or P.L. 117-169, commonly known as the Inflation Reduction Act (IRA). Pursuant to Section 7 of executive order (E.O.) 14154, "Unleashing American Energy," DOE is reviewing the extent to which IIJA and IRA programs align with Trump Administration priorities. The status of remaining DOE funds for IIJA and IRA energy efficiency programs are currently unclear. The One Big Beautiful Bill Act (H.R. 1) approved by the House on May 22, 2025, would rescind many of these funds. Additionally, regular appropriations for FY2026 and later fiscal years are expected to determine the level of federal support for many federal energy efficiency programs moving forward.

Apart from funding levels, DOE staffing levels might affect DOE's ability to administer programs. More than 3,000 of DOE's 16,000 staff reportedly plan to leave the department, though not all had left as of May 2025.³⁸ It is unclear how many of these departing staff may have been working in energy efficiency programs.

³⁵ 16 U.S.C. §824(b)(1). For additional background on federal jurisdiction over the electricity sector, see CRS In Focus IF11411, *The Legal Framework of the Federal Power Act*, by Adam Vann.

³⁶ A full list of federal programs for energy efficiency is in CRS Report R40913, *Renewable Energy and Energy Efficiency Incentives: A Summary of Federal Programs*, by Lynn J. Cunningham and Claire M. Jordan. More information about some recently established programs is in CRS In Focus IF12258, *The Inflation Reduction Act: Financial Incentives for Residential Energy Efficiency and Electrification Projects*, by Martin C. Offutt.

³⁷ Executive Order 14154, "Unleashing American Energy," 90 Federal Register 8353-8359, January 29, 2025.

³⁸ Brian Dabbs et al., "5 Takeaways from Chris Wright's Hill Visit," *Energywire*, May 8, 2025, https://www.eenews.net/articles/5-takeaways-from-chris-wrights-hill-visit/.

In the past, Congress has also funded direct bill assistance for low-income consumers, primarily through the Low Income Home Energy Assistance Program (LIHEAP). LIHEAP grantees may also choose to use a portion of their LIHEAP funds for weatherization. The Department of Health and Human Services reportedly laid off all LIHEAP staff in April 2025. Multiple Members of Congress have requested LIHEAP staff be reinstated, but as of this writing, the status of those staff and remaining FY2025 funds for LIHEAP are unclear. LIHEAP is typically funded through regular appropriations, though Congress has occasionally provided supplemental appropriations for LIHEAP as well.

Congress could conduct oversight into the status of funding for energy efficiency and LIHEAP, and the ability of these programs to address consumer impacts in the PJM region and elsewhere. Moving forward, Congress could choose to debate the extent to which the federal government should support energy efficiency or bill assistance for consumers. One view is that current federal programs should continue. Another view might be that consumers should be solely responsible for their energy bills. A third view is that energy efficiency policy is more appropriately set at the state level. Many state utility regulators implement energy efficiency programs funded, in part, through electricity rates. If the federal government decreased its support, states could choose to increase their own policy support for energy efficiency or bill assistance. This could put upward pressure on electricity rates for some customers, while providing financial benefits for others.

Electricity Supply

PJM's July 2024 capacity auction result is viewed by some as an indicator that electricity supply in the region is too low. This fits into a broader concern held by some Members of Congress, administration officials, and other stakeholders that the United States will need more electricity supply in the coming years to meet expected increasing demand from artificial intelligence, manufacturing, and other parts of the economy. In light of these national and PJM-specific concerns, Congress might consider factors that influence electricity supply.

One factor that influences the pace of new power plant construction is market prices, including capacity prices. High capacity prices, in regions that use capacity markets, send a signal to investors that more generators are needed in the region. As a result, generator owners might invest more capital in maintaining existing generators and building new ones. Efforts to modify future PJM capacity market rules to lower prices could counteract this investment signal, potentially slowing the development of new capacity in the region.

Another factor that influences the pace of new power plant construction is permitting processes. Pursuant to the Federal Power Act, most authority for siting and permitting new power plants resides in the states. One key step in power plant development is the Certificate of Public Convenience and Necessity (CPCN), issued by a state agency and giving project developers permission to construct. Each state has its own laws and regulations governing the CPCN issuance.

³⁹ Robert Walton, "Trump Guts LIHEAP, Threatening \$378M in Energy Assistance Already Approved by Congress," *Utility Dive*, April 2, 2025, https://www.utilitydive.com/news/trump-guts-liheap-threatening-378-million-energy-assistance-already-approved/744323.

⁴⁰ See, for example, Letter from Rep. Lawler to Secretary Kennedy, April 14, 2025, https://lawler.house.gov/uploadedfiles/new_york_liheap_letter_.pdf; Letter from Sens. Reed, Collins, Murkowski, King, Smith, Booker, Coons, Durbin, Shaheen, Markey, Merkley, Warner, and Luján to Secretary Kennedy, April 3, 2025, https://www.reed.senate.gov/imo/media/doc/letter_to_hhs_re_liheap_4325.pdf; Letter from 89 House Democrats, led by Rep. Pappas, to Secretary Kennedy, April 4, 2025, https://pappas.house.gov/sites/evo-subsites/pappas.house.gov/files/evo-media-document/04.04.2025-letter-to-sec-kennedy-on-liheap-staff-firings.pdf.

Power plants built on federal lands require approval from a federal agency before they may proceed to construction. In contrast to some regions of the country, PJM states do not have much onshore federal land, so the role of the federal government in promoting more electricity supply in the region may be limited. Offshore wind, however, is an energy source being developed in federally controlled waters off several PJM states. The Trump Administration has taken steps to temporarily cease certain leasing and permitting activities related to offshore wind, raising some doubts about future development of offshore wind in the PJM region and elsewhere. Two offshore wind projects in federal waters are generating electricity.

The timeline for permitting and developing new power plants in the PJM region (whether fueled by offshore wind or other energy sources) may be of interest to Congress as part of broader interest in permitting reform, which Congress has been debating for several years. ⁴⁴ Activity on permitting reform in the 119th Congress has included a February 19, 2025, hearing in the Senate Committee on Environment and Public Works, "Improving the Federal Environmental Review and Permitting Processes," and a February 5, 2025, hearing in the House Energy and Commerce Committee, Energy Subcommittee, "Powering America's Future: Unleashing American Energy." Additionally, the One Big Beautiful Bill Act (H.R. 1) includes some provisions related to federal permits for energy infrastructure.

Notwithstanding the Federal Power Act's jurisdictional framework giving states the primary role in permitting power plant development, some federal agency actions, as discussed below, affect electricity supply in PJM and elsewhere. These actions affect both the pace of development of new supply and the pace of retirement of existing supply. Congress could examine how agency actions in place at the time affected PJM's July 2024 capacity auction, and what changes could be implemented to address PJM's declining electricity supply.

One action is FERC's requirements for reviewing how new generators would affect the grid. This is known as the interconnection study process. This process aims to ensure that new generators will not change the physics of the electricity system in such a way that would create reliability risks. If grid operators identify risks, they inform the new generator's developer of the risk and the costs of system upgrades to reduce the risk. The generator owner can choose to pay for upgrades (and proceed to interconnection and start selling electricity) or can choose to cancel the project.

In recent years, the interconnection study process lengthened in many parts of the country, causing concern by FERC and others that reforms were needed to accelerate new generator development. ⁴⁵ On November 6, 2023, FERC issued new requirements for the interconnection study process in Order No. 2023. Since then, PJM and other grid operators have changed their interconnection study processes in an effort to shorten development timelines for new generators. As of March 2025, PJM, for example, expected to complete its transition process for

⁴¹ For maps of federal lands in different states, see CRS Report R42346, *Federal Land Ownership: Overview and Data*, by Carol Hardy Vincent and Laura A. Hanson.

⁴² For background on U.S. offshore wind development, see CRS Report R46970, *U.S. Offshore Wind Energy Development: Overview and Issues for the 118th Congress*, by Laura B. Comay and Corrie E. Clark.

⁴³ For a discussion of Trump Administration actions related to offshore wind, see CRS Insight IN12509, *Status of U.S. Offshore Wind Leasing and Permitting: President Trump's January 2025 Wind Leasing Memorandum*, by Laura B. Comay.

⁴⁴ See, for example, CRS Report R47627, Electricity Transmission Permitting Reform Proposals, by Ashley J. Lawson.

⁴⁵ Information about lengthening timelines for the interconnection study process is available in Joseph Rand et al., *Queued Up: 2024 Edition*, Lawrence Berkeley National Laboratory, April 2024, https://emp.lbl.gov/sites/default/files/2024-04/Queued%20Up%202024%20Edition_R2.pdf.

implementing the 2023 FERC reforms by late 2026, and it expected to complete interconnection studies within two years following the transition.⁴⁶

Congress could choose to examine the effectiveness of Order No. 2023 at shortening development times for electricity supply while balancing electric reliability requirements. If Congress finds that the order is insufficient for achieving Congress's goals, Congress could direct FERC to make additional changes. For example, the GRID Power Act (H.R. 1047 and S. 465) would direct FERC to reform the interconnection study process to prioritize "new dispatchable power projects."

Relatedly, on February 11, 2025, FERC approved a one-time change to PJM's interconnection process known as the Reliability Resource Initiative (RRI).⁴⁷ The RRI allows "shovel-ready high reliability projects" to accelerate their interconnection study process in order to "address significant near-term resource adequacy concerns in PJM."⁴⁸

Proponents of the RRI believe this approach will address near-term resource adequacy needs in the region by accelerating development of new generation capacity. Opponents often describe this initiative as "queue jumping" and complain that it unfairly treats investors going through the normal interconnection process and that it prioritizes certain kinds of generators over others.⁴⁹

On May 2, 2025, PJM announced it had selected 51 RRI projects. The selected projects represent 7,756 megawatts (MW) of natural gas combined cycle capacity, 2,275 MW of battery capacity, 1,383 MW of nuclear capacity, 365 MW of natural gas combustion turbine capacity, and 14 MW of coal capacity. The selected 90% of the RRI projects to come online by 2030. MISO and SPP (see **Figure 1**) have submitted similar proposals to FERC. On May 16, 2025, FERC rejected MISO's proposal.

Congress could monitor developments with the RRI and similar proposals in other regions, including what energy sources are selected and whether these efforts succeed in identifying projects that can be developed quickly. If Congress finds this to be an effective model for addressing reliability and resource adequacy concerns, Congress could consider legislation to expand use of this model in other regions of the country. If Congress opposes options to prioritize some resources over others, it could alternatively consider legislation to prohibit RRI or similar mechanisms.

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⁴⁶ Written testimony of Manu Asthana, President and CEO of PJM, to House Committee on Energy and Commerce, Subcommittee on Energy, March 25, 2025, p. 7, https://dldth6e84htgma.cloudfront.net/03_25_2025_ENG_Testimony_Asthana_dcac17e12c.pdf.

⁴⁷ FERC, "Order Accepting Tariff Revisions," February 11, 2025, https://elibrary.ferc.gov/eLibrary/filelist? accession_number=20250211-3120&optimized=false (hereinafter FERC, RRI Order).

⁴⁸ PJM, "IPS Special Session – Reliability Resource Initiative," February 2025, https://www.pjm.com/-/media/DotCom/committees-groups/subcommittees/ips/2025/20250211-special/item-02—ips-special-session—reliability-resource-initiative-education.pdf.

⁴⁹ See, for example, discussion of comments in FERC RRI Order and dissenting statement by Commissioner Chang. ⁵⁰ PJM, "PJM Chooses 51 Generation Resource Projects to Address Near-Term Electricity Demand Growth," press release, May 2, 2025, https://insidelines.pjm.com/pjm-chooses-51-generation-resource-projects-to-address-near-term-electricity-demand-growth/.

⁵¹ MISO, Expedited Resource Addition Study (ERAS), https://cdn.misoenergy.org/ ERAS%20Informational%20Guide697922.pdf, and SPP, "SPP Board Approves Expedited Generation Interconnection Process to Help Meet Regional Resource Adequacy," press release, May 8, 2025, https://www.spp.org/news-list/spp-board-approves-expedited-generation-interconnection-process-to-help-meet-regional-resource-adequacy/.

⁵² Robert Walton, "FERC Rejects MISO Plan to Speed Generation Interconnection," *Utility Dive*, May 20, 2025, https://www.utilitydive.com/news/ferc-rejects-miso-plan-to-speed-generation-interconnection/748566/.

Another federal agency action is the U.S. Environmental Protection Agency's (EPA's) environmental requirements for new and existing generators. Some Members of Congress have called on EPA to rescind some environmental regulations in an effort to prevent generator retirement.⁵³ PJM officials and others have pointed to generator retirements prompted by EPA regulations as a cause for the high prices in the July 2024 capacity auction. On March 12, 2025, EPA Administrator Lee Zeldin announced, among other actions, a reconsideration of a number of environmental regulations on electricity generators.⁵⁴

Congress could choose to examine how to prioritize environmental protection and electric reliability. For example, the Reliable Grid Act of 2024 (H.R. 10519), introduced in the 118th Congress, would have prevented EPA from enforcing "a rule or regulation restricting the continuous, previously-permitted operation of any electric generating unit that provides dispatchable capacity" in areas of the country deemed to have elevated reliability risk.

Regions Outside PJM

PJM is not the only region that uses a capacity market to procure resource adequacy. Capacity markets are also used in ISO-NE, NYISO, and MISO (see **Figure 1**).⁵⁵ Some of the supply and demand trends observed in PJM have been observed in these other regions as well. As a result, it is possible that capacity prices in these other markets could potentially increase if the underlying trends continue. Some indications suggest this is already underway. For example, in April 2025, MISO's 2025/2026 capacity auction cleared at \$666.50/MW-day for summer capacity, compared to \$30.00/MW-day in the previous auction. MISO summarized the reason for the price increase: "New capacity additions did not keep pace with decreased accreditation, suspensions/retirements and external resources."

Under the current regulatory framework, grid operators (working in consultation with the states in which they are located) may develop and adopt their own rules for operating capacity markets. FERC does not enforce uniform capacity market requirements in the regions under its jurisdiction. Instead, FERC reviews each capacity market design to determine whether that design is likely to result in just and reasonable rates. ⁵⁷ In theory, many different kinds of capacity market designs could lead to just and reasonable rates, and in practice, FERC has approved various kinds of designs. Capacity market designs may change over time, too, as evidenced by the recent changes to PJM's capacity market design and an initiative in ISO-NE to move from annual capacity obligations to seasonal obligations, among other changes. ⁵⁸

States and other grid operators outside PJM could examine the recent results of PJM's capacity auctions and decide whether changes to their own markets are warranted. If they did identify preferred changes, they could then initiate their own processes for changing their capacity market rules. FERC would need to approve any changes before they could take effect.

⁵³ See, for example, Letter from Rep. Fedorchak to President Donald J. Trump and [North Dakota] Governor [now Secretary of the Interior] Doug Burgum, January 6, 2025, https://fedorchak.house.gov/sites/evo-subsites/fedorchak.house.gov/files/evo-media-document/01.05.24-energy-final-energy-deregulation-letter-tk-2.pdf.

⁵⁴ U.S. Environmental Protection Agency, "EPA Launches Biggest Deregulatory Action in U.S. History," press release, March 12, 2025, https://www.epa.gov/newsreleases/epa-launches-biggest-deregulatory-action-us-history.

⁵⁵ FERC, Energy Primer.

⁵⁶ MISO, *Planning Resource Auction: Results for Planning Year 2025-26*, April 2025, p. 6, https://cdn.misoenergy.org/2025%20PRA%20Results%20Posting%202050428694160.pdf.

⁵⁷ 16 U.S.C. §824d(a).

⁵⁸ For information about ISO-NE's current capacity market reform initiative, see ISO-NE, "Capacity Auction Reforms Key Project," https://www.iso-ne.com/committees/key-projects/capacity-auction-reforms-key-project/.

Alternatively, Congress could examine PJM's capacity market and pass legislation directing FERC to implement any preferred changes to PJM's market or to others. If Congress passed legislation regarding capacity market design, Congress could choose whether to direct FERC to change only PJM's capacity market or to instead implement uniform changes in other capacity markets as well.

Capacity accreditation is a growing topic of interest nationwide as other regions also develop ways to account for generator performance in response to the changing energy mix in the U.S. electricity system. PJM's experience moving to an ELCC approach in its capacity market could raise questions about the strengths and limitations of similar ELCC approaches in other regions. In 2023, some stakeholders asked FERC to examine capacity accreditation nationwide.⁵⁹ At least one Member of Congress also supported this proposal.⁶⁰ Grid operators (including PJM) and others opposed a nationwide approach because of the regional nature of resource adequacy planning. To date, FERC has not held a technical conference on capacity accreditation.

FERC, under its existing authority, is examining resource adequacy and capacity markets in PJM and other regions. FERC is scheduled to hold a two-day technical conference focused on these issues, on June 4-5, 2025, with "three panels specific to PJM." The information from this conference could inform future congressional debate and potential action related to PJM's capacity market or other regions' resource adequacy mechanisms.

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⁵⁹ See, for example, American Clean Power, "ACP Files Petition with FERC Seeking Technical Conference on Capacity Accreditation," press release, August 22, 2023, https://cleanpower.org/news/acp-files-petition-with-ferc-seeking-technical-conference-on-capacity-accreditation/.

⁶⁰ "I strongly encourage FERC to convene the requested technical conference on capacity accreditation in a timely manner. Doing so will provide a venue for broader discussion to update, improve, and standardize capacity accreditation methods to ensure grid reliability." Letter from Sen. Martin Heinrich to FERC, October 19, 2023, https://elibrary.ferc.gov/eLibrary/filedownload?fileid=797E7509-9B9A-CFB6-9E6D-8B4E39E00000.

⁶¹ FERC, "Commissioner-Led Technical Conference Regarding the Challenge of Resource Adequacy in Regional Transmission Organization and Independent System Operator Regions," https://www.ferc.gov/news-events/events/commissioner-led-technical-conference-regarding-challenge-resource-adequacy.

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