UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Sierra Club, et al.,	)	
	)	
Complainants,	)	
	)	
v.	)	**Docket No. EL24-____**
	)	
PJM Interconnection, L.L.C.,	)	
	)	
Respondent.	)	

COMPLAINT OF SIERRA CLUB, NATURAL RESOURCES DEFENSE COUNCIL, PUBLIC CITIZEN, SUSTAINABLE FERC PROJECT AND UNION OF CONCERNED SCIENTISTS

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Pursuant to Sections 206 and 306 of the Federal Power Act ("FPA"),[1] and Rule 206 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission ("FERC" or "Commission"),[2] Sierra Club, Natural Resources Defense Council, Public Citizen, Sustainable FERC Project, and the Union of Concerned Scientists (collectively "Public Interest Organizations" or "PIOs") file this Complaint against PJM Interconnection, LLC ("PJM"). PIOs request that the Commission: (1) establish a refund effective date pursuant to section 206 of the FPA as of the date of this compliant; (2) find that PJM's capacity market rules are unjust and unreasonable because they fail to require a consistent accounting of the resource adequacy contributions of power plants operating under Reliability Must Run ("RMR") arrangements and lead to excessive costs for consumers; and (3) order PJM to reform its capacity market rules to consistently account for RMR units' resource adequacy contributions.

I. INTRODUCTION

This Complaint challenges unjust and unreasonable rules in PJM's capacity market that have already caused $4 billion to $5 billion dollars in excessive costs for consumers in PJM's most recent capacity auction—and that may cause $12 billion to $15 billion more in three upcoming capacity auctions unless the Commission requires reforms. In particular, this Complaint challenges PJM's failure to consistently account in its capacity market for the resource adequacy value of generators operating under Reliability Must Run ("RMR") arrangements. RMR arrangements require consumers to pay power plants that would otherwise retire to stay online in order to maintain reliability. Yet PJM does not accurately account for these RMR units' contributions to resource adequacy during capacity auctions—despite

[1] 16 U.S.C. §§ 824e, 825e.
[2] 18 C.F.R. § 385.206.

consumers paying these power plants to remain in service, despite having explicit authority in numerous RMR arrangements to call these power plants to operate during capacity emergencies, and despite its own stated expectation that these plants will operate when called. Instead, by failing either to require RMR units to bid into the capacity market or to adjust its capacity procurement targets to account for the expected performance of RMR units, PJM forces consumers to pay again to procure the same capacity services that the RMR units already provide. This approach is unjust and unreasonable.

Notably, other regions already have rules—which the Commission has repeatedly approved—that better protect consumers against inflated capacity prices associated with RMR arrangements. Both the New York Independent System Operator ("NYISO") and ISO New England ("ISO-NE") have Commission-approved rules in place that require RMR units to participate in their capacity markets to avoid forcing consumers "to pay twice for the same capacity need"—precisely the outcome that has occurred in PJM.[3] This Complaint asks the Commission to bring PJM's practices into alignment with existing practices in other markets that the Commission has already found are just and reasonable because they protect consumers from unreasonable and excessive costs.

The costs for consumers from PJM's unjust and unreasonable rules are extreme. As detailed below, PJM's most recent capacity auction resulted in record-high prices, and the failure to account for RMR units' resource adequacy contributions caused excessive costs for consumers. As detailed below, Monitoring Analytics, the Independent Market Monitor ("IMM") for PJM, calculates that these excessive costs amount to $4.2 billion.[4] Similarly, an independent

[3] *See ISO-New England, Inc.*, 165 FERC ¶ 61,202 at P 83 (2018).
[4] Monitoring Analytics, Analysis of the 2025/2026 RPM Base Residual Auction Part A, at 2 (Sept. 20, 2024) ("IMM Analysis of 2025/2026 Auction"),

report from Synapse Energy Economics ("Synapse") prepared for the Maryland Office of the People's Counsel finds that these excessive costs amount to $5 billion.[5] As a result, electricity bills for consumers will rise throughout the PJM region—with the most extreme price increases falling on the shoulders of consumers who already bear some of the highest energy burdens in the nation. Under PJM's current rules, consumers in the Baltimore Gas & Electric ("BGE") Locational Delivery Area ("LDA") must pay not only the lion's share of hundreds of millions of dollars annually to keep multiple RMR units operating, but also the highest prices for capacity that are possible in PJM's capacity market. From just the most recent auction, these ratepayers' monthly bills will likely increase by nineteen percent, costing the average household an extra twenty-one dollars per month. This cost increase is especially harmful because the BGE LDA includes disadvantaged communities who already face some of the highest energy burdens in the country, according to the Department of Energy ("DOE").

Unless the Commission acts to protect consumers, energy burdens from PJM's unjust and unreasonable rules will likely continue to skyrocket under PJM's rapid-fire schedule for upcoming capacity auctions. PJM's next Base Residual Auctions ("BRA") will take place in December 2024, June 2025, and December 2025—with a mere six months between each auction. Although PJM maintains that high capacity prices send a signal for investment in new generation, PJM's rapid schedule leaves insufficient time for new generation to come online—especially because PJM's interconnection queue remains badly backlogged and because PJM is resisting accelerating its interconnection process to come up to the pace that the Commission

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https://www.monitoringanalytics.com/reports/Reports/2024/IMM_Analysis_of_the_20252026_RPM_Base_Residual_Auction_Part_A_20240920.pdf. The IMM's analysis document is included as Attachment 1 to this complaint.

[5] Md. Office of People's Counsel, Bill and Rate Impacts of PJM's 2025/2026 Capacity Market Results & Reliability Must-Run Units in Maryland, at 8 (Aug. 2024) ("Synapse Report"), https://opc.maryland.gov/Portals/0/Files/Publications/RMR%20Bill%20and%20Rates%20Impact%20Report_2024-08-14%20Final.pdf?ver=V9hZfyTmjLeNVt2Dg3cTgw%3d%3d. The Synapse Report document is included as Attachment 2 to this complaint.

required in its recent Order No. 2023. The fast pace of PJM's capacity auctions and the slow pace of its interconnection queue mean that new generation is highly unlikely to be able to come online quickly enough to prevent price spikes like the one caused by PJM's most recent auction. In other words, unless the Commission acts, PJM's upcoming auctions are likely to each create another $4.2 billion to $5 billion in excessive costs for consumers.

Failing to account for resource adequacy provided by RMR units produces capacity market price signals that are disconnected from the actual supply and demand balance on the grid. As explained in the attached testimony of economist James F. Wilson,[6] this distorted supply-demand balance is economically inefficient because it signals a degree of scarcity that does not exist. The result is artificially elevated prices that harm the markets by encouraging inefficient decisions by both supply and demand side market participants.

Importantly, the relief requested in this Complaint would not undermine the capacity market's ability to send accurate signals for necessary investment in new capacity resources, or retention of existing resources. PIOs recognize that when the inputs to the capacity market are well-designed, capacity prices can signal the need for new generation to ensure resource adequacy. However, when high capacity prices are inflated by ignoring generation that consumers are already paying to stay online and that an RTO is authorized to call to perform during capacity emergencies, those prices are not reflecting a true resource adequacy need and are excessive and unreasonable. As detailed below, if PJM's capacity market had accounted for the resource adequacy contributions of RMR resources in the most recent capacity auction, as PIOs maintain is necessary, the resulting prices would have been more accurate and substantially lower—but would still have been among the highest capacity prices PJM has seen in a decade. In

[6] *See generally* Affidavit of James F. Wilson, included as Attachment 3 to this complaint ("Wilson Aff.").

short, properly accounting for RMR units will not dull the capacity market's ability to send appropriate signals for new investment, but will instead send more accurate price signals that investors can depend upon.

II. BACKGROUND

A. RMRs require consumers to pay retiring resources to stay online to maintain reliability until transmission solutions are complete.

When a generation owner chooses to deactivate an asset, PJM studies how that deactivation will affect the stability of the transmission system.[7] If PJM concludes that the deactivation will result in violations of reliability criteria established by the North American Electric Reliability Corporation ("NERC"), then PJM works with the affected transmission system owners to plan upgrades that will alleviate the reliability impacts.[8] If these upgrades will not be in place by the retiring resource's planned deactivation date and operational measures are not available to avoid the NERC criteria violations, then PJM will seek to retain the generator under Part V of the Open Access Transmission Tariff, in what is commonly known as an RMR arrangement.[9] PJM's legal framework for these arrangements was approved by the Commission nearly 20 years ago.[10]

A recent analysis presented by PJM planning staff indicates that historically half of all generator deactivations have triggered reliability concerns.[11] Of these, about sixty percent provided sufficient advanced notice for mitigation upgrades (i.e., transmission solutions) to be

[7] PJM Open Access Transmission Tariff ("OATT") at Title V § 113.2, available at https://agreements.pjm.com/oatt/4240 (last visited Sept. 24, 2024).
[8] Perry Ng, Generation Deactivation Education, PJM, at slide 10 (Oct. 12, 2023), https://www.pjm.com/-/media/committees-groups/task-forces/destf/2023/20231012/20231012-item-07---generation-deactivation-education.ashx.
[9] *Id.* at slide 13.
[10] *PJM Interconnection, LLC*, 110 FERC ¶ 61,053 (2005).
[11] Perry Ng, 2023 DESTF Additional Education Historical Statistics related to Deactivation, PJM (Nov. 9, 2023), https://www.pjm.com/-/media/committees-groups/task-forces/destf/2023/20231109/20231109-item-04---historical-stats-deactivation.ashx.

constructed by the deactivation date, while in about a third of cases, interim operational measures were available to avoid an RMR. Five percent of unit deactivations (by number) resulted in an RMR.

These RMR arrangements authorize PJM to dispatch the RMR units under various circumstances as needed to support reliability.[12] Once the transmission solution is complete, the RMR is no longer needed and can be terminated, and the generator may deactivate. For much of the current RPM delivery year, the PJM region has one unit operating under an RMR arrangement—NRG's 410 megawatt ("MW") Indian River 4 coal unit in Delaware. Beginning with the 2025/2026 delivery year, RMR arrangements at the Brandon Shores and HA Wagner plants in Maryland will go into effect.

Unlike many RTO/ISOs, PJM cannot require a retiring resource to enter into an RMR arrangement; instead, in PJM, RMR arrangements are purely voluntary.[13] If a generator chooses to continue operating under an RMR arrangement, it may either opt into a default rate known as the Deactivation Avoidable Cost Credit formula rate provided for in Part V, Sections 114–116 of the PJM Open Access Transmission Tariff ("OATT"), or the generator may instead file with the Commission a unit-specific cost-of-service recovery rate under Section 119 of the PJM OATT.

The costs of RMR arrangements vary widely but can be substantial. In PJM, consumers have paid around $595 million for RMRs in the last twelve years.[14] Recently filed RMRs at

[12] For example, PJM may dispatch these resources for a broad range of reliability, but not economic, purposes, including "Thermal, Reactive, Stability, Capacity Shortages, [and] System Restoration." *See* Vince Stefanowicz, RMR Unit Scheduling in Operations, PJM, at slide 2 (Nov. 9, 2023) ("RMR Unit Scheduling in Operations"), https://www.pjm.com/-/media/committees-groups/task-forces/destf/2023/20231109/20231109-item-08---rmr-unit-scheduling-in-operations.ashx. For additional detail, *see infra* § III(A)(1).

[13] Asya Staevska and Pauline Foley, RTO/ISO Deactivation Processes, PJM, at slide 7 (Jan. 18, 2023), https://www.pjm.com/-/media/committees-groups/task-forces/destf/2024/20240118/20240118-item-04---rto-iso-deactivation-processes.ashx, (noting that PJM's purely voluntary approach contrasts with that of other RTOs).

[14] *See* Monitoring Analytics, RMR History, at slide 4 (Feb. 15, 2024) ("RMR History Slides"), https://www.pjm.com/-/media/committees-groups/task-forces/destf/2024/20240215/20240215-item-03---rmr-

Talen Energy Corporation's Brandon Shores and Wagner fossil units in Maryland seek to recover from consumers as much as $830 million for three-and-a-half years of service, just in fixed costs.[15] These costs may be higher if the transmission owners are unable to complete the solutions by the end of 2028—the current planned in-service date.[16] Notably, consumers in the BGE LDA will bear the vast majority of these RMR costs[17]—the same consumers who will pay record high prices of $466.35/MW-day for capacity during the first year of the Brandon Shores and Wagner RMR based on an apparent shortage of capacity resources in the LDA.[18]

B. PJM allows RMR units to choose whether to participate in the capacity market.

Under PJM's rules, a resource that plans to deactivate may obtain an exception to PJM's requirement that generation resources (other than "intermittent" and energy storage resources) must offer into the Reliability Pricing Model ("RPM"), otherwise known as the capacity

history.ashx (listing "actual" costs identified by the IMM for various RMR arrangements, which total to $595 million).

[15] *See, e.g.*, Brandon Shores LLC, RMR Arrangement – Continuing Operations Rate Schedule, Docket No. ER24-1790 (Apr. 18, 2024), Accession No. 20240418-5176 (seeking fixed costs and project investment for continuing operations that amount to nearly $650 million); H.A. Wagner LLC, RMR Arrangement – Continuing Operations Rate Schedule, Docket No. ER24-1787 (Apr. 18, 2024), Accession No. 20240418-5128 (seeking over $200 million in fixed costs and project investment for continuing operations that amount to over $200 million). This cost estimate reflects the initial filings by Brandon Shores LLC and H.A. Wagner LLC, and may be reduced following litigation. *See also* Protest and Comments of the Maryland Office of People's Counsel and the Southern Maryland Electric Cooperative, at 7 Tbl. 1, Docket Nos. ER24-1787 & ER24-1790 (May 16, 2024), Accession No. 20240516-5193 (listing annual and cumulative costs for the Brandon Shores and Wagner RMRs, including a cumulative $628.6 million for the Brandon Shores RMR and a cumulative $201.7 million for the Wagner RMR, for a cumulative total of $830.4 million).

[16] Synapse Report, *supra* note 5 at 9 (noting that "the projected completion date of December 2028 for these transmission solutions is highly uncertain; there could be delays in the project construction and execution, further imposing RMR costs on electric customers").

[17] OATT at Part V § 120 (cost allocation for RMR follows cost of transmission solution); *see also* Synapse Report, *supra* note 5, at 8–9 (noting that "BGE customers can expect to pay an estimated 74 percent" of the cost of RMR units in that LDA).

[18] PJM, 2025/2026 Base Residual Auction Report (July 30, 2024) ("PJM 2025/2026 Base Residual Auction Report"), https://pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2025-2026/2025-2026-base-residual-auction-report.ashx; *see also* Synapse Report, *supra* note 5 at 6 (noting that the most recent auction had a "total annual cost to electric customers of $14.7 billion, a substantial increase from the $2.2 billion in capacity costs in the 2024/2025 delivery year").

market.[19] If a generator opts to accept an RMR arrangement, it then has a choice whether or not to offer the retained resource into the capacity market.[20]

Because PJM does not publish data regarding which resources have offered into the capacity market, or received capacity obligations, there is no comprehensive, publicly available information about how often RMR resources choose not to offer into the auction. However, PJM has recently observed that "RMR units typically do not participate in capacity auctions,"[21] and as discussed below, it is evident that Talen chose not to offer Brandon Shores and Wagner into the Base Residual Auction during the first year of their anticipated RMR arrangement (2025/2026), which contributed to the historically high prices in that auction.[22] Nevertheless, there are instances in which RMR resources have made commitments to offer into RPM. In 2012, FirstEnergy sought to deactivate seven units it operated in Ohio, Pennsylvania, and Maryland totaling 2,689 MWs.[23] Pursuant to Part V, Section 114, FirstEnergy sought agreement with the PJM IMM on the appropriate levels for each component of the Deactivation Avoidable Cost Rate for each unit. In the resulting agreement, filed with the Commission as part of FirstEnergy's

[19] OATT, Tariff, Attach. DD § 6.6(g) (providing that a resource qualifies for an exception to the capacity market must-offer requirement if it has a "documented plan in place to retire the resource prior to or during the delivery year, and has submitted a notice of Deactivation regardless of whether PJM has asked the unit to continue to operate beyond its requested deactivation date").

[20] *See* David Mroz and Tim Bachus, Treatment of Deactivations in RPM, PJM, at slide 2 (Nov. 9, 2023), https://www.pjm.com/-/media/committees-groups/task-forces/destf/2023/20231109/20231109-item-06---treatment-of-resources-in-rpm.ashx ("Reliability Must Run (RMR) arrangement would stipulate whether unit is subject to must-offer"); Monitoring Analytics, Part V (RMR) CETO Impacts, at slide 2 (Aug. 19, 2024), https://www.pjm.com/-/media/committees-groups/task-forces/destf/2024/20240819/20240819-item-05---rmr-ceto-impacts.ashx (describing RMR capacity market offer options as "[o]ffer[ing] as [a] price taker" or "[d]o not offer").

[21] PJM, PJM Response to the 2023 State of the Market Report, at 4 (Aug. 2024) ("PJM Response to the 2023 State of the Market Report"), https://www.pjm.com/-/media/library/reports-notices/state-of-the-market/20240822-pjm-response-to-the-2023-state-of-the-market-report.ashx.

[22] Synapse Report, *supra* note 5 at 24 (describing the price impact of the RMR units' non-participation in the 2025/2026 capacity auction).

[23] *See, e.g.*, FirstEnergy Serv. Co., Informational Filing regarding Deactivation Avoidable Cost (DAC) Rate under Section 116 of the PJM Interconnection, L.L.C.'s Open Access Transmission Tariff, at Attach. 1 (Deactivation Notice), Docket No. ER12-2710 (Jul. 10, 2012), Accession No. 20120710-5165.

informational filing, FirstEnergy committed to offer the capacity of any unit that did not already have a capacity obligation into the incremental auction "at a price of zero dollars."[24]

PJM has also established rules for RMR resources that do offer into capacity auctions. For instance, such resources must abide by the requirements of capacity resources with respect to offers into the day-ahead and real-time energy markets.[25] Similarly, PJM has noted that when an RMR unit undertakes a capacity commitment, "all obligations of a capacity resource apply."[26]

PJM's rules include an important inconsistency in how they account for RMR units' continued operation. Although PJM does not require RMR units to offer into the capacity auction, it does include these units when modeling the PJM system for purposes of determining the amount of capacity that can be transferred into constrained LDAs under peak load emergency conditions, and how much capacity is available within each LDA. As the IMM has explained, "[t]his approach is internally inconsistent" and could be resolved by either including RMR units as supply or by excluding these resources from the analysis of how much capacity can be imported into an LDA.[27] Relevant here, PJM has explained that it includes the RMR unit in these calculations because the "RMR unit is expected to produce MWs under emergency conditions,"[28] and because "the RMR units [are] expected to be operating and impacting power flows on the system during times of reliability need."[29] PJM has further concluded that

[24] *See, e.g., id.* at Attach. 4 (IMM Agreement dated Apr. 10, 2012) ("To the extent that a Generating Unit does not already have a capacity commitment, FE Genco will offer such Generating Unit's capacity into every Reliability Pricing Model Incremental Auction at a price of zero dollars.").
[25] Keyur Patel, Treatment of Reliability Must Run (RMR) Arrangement Resource in Day-ahead and Real-time Energy Market, PJM (Nov. 9, 2023), https://www.pjm.com/-/media/committees-groups/task-forces/destf/2023/20231109/20231109-item-07---treatment-of-rmr-resources-in-da-and-rt-market.ashx.
[26] *Id.* at slide 2.
[27] IMM Analysis of 2025/2026 Auction, *supra* note 4 at 6.
[28] Patricio Rocha-Garrido and Michael Herman, PJM CETO/CETL & Load Deliverability, at slide 16 (Aug. 19, 2024) ("PJM CETO/CETL & Load Deliverability"), https://www.pjm.com/-/media/committees-groups/task-forces/destf/2024/20240819/20240819-item-04---ceto-cetl-and-load-deliverability-test.ashx.
[29] PJM Response to the 2023 State of the Market Report, *supra* note 21 at 4.

"[e]xcluding these units from the analysis could result in an incomplete and potentially inaccurate assessment of local reliability needs," and lead to "distorted price signals that would incent generation where transmission upgrades could have replaced that need."[30] PJM has not addressed the inconsistency between considering RMR units as available for purposes of modeling capacity import limits because it expects these units to generate energy during capacity emergencies, but failing to account for these units in capacity auctions.

C. Several RTO/ISOs require units operating under RMRs to participate in their capacity markets or similar resource adequacy constructs.

PJM's approach of allowing RMR units to decide whether to participate in its capacity market is an outlier among RTO/ISOs. The Commission has repeatedly approved mechanisms in other RTO/ISOs that ensure that markets account for the fact that RMRs require consumers to pay otherwise retiring units to continue to be available to maintain reliability. The Commission has consistently found that it is critical for markets to avoid "requiring ratepayers to pay twice to satisfy the same capacity need."[31]

1. NYISO

The New York Independent System Operator ("NYISO") requires RMR units to participate in its capacity market as price-takers by submitting bids of $0.00.[32] In 2015, the Commission determined under section 206 of the FPA that NYISO's tariff was unjust and unreasonable because it did not "contain provisions governing the retention of and compensation to generating units needed for reliability," i.e. RMR units.[33] Consequently, NYISO developed

[30] *Id.*
[31] *New York Indep. Sys. Operator, Inc.* ("*NYISO II*"), 161 FERC ¶ 61,189 at P 55 (2017); *see also New York Indep. Sys. Operator, Inc.* ("*NYISO I*"), 155 FERC ¶ 61,076 at PP 82–83 (2016); *ISO New England, Inc.*, 165 FERC ¶ 61,202 at PP 82–83.
[32] *NYISO II*, 161 FERC ¶ 61,189 at PP 55, 62.
[33] *NYISO I*, 155 FERC ¶ 61,076 at PP 1–2.

tariff revisions that included a requirement for "RMR generators to offer all of their unforced capacity (UCAP) into an installed capacity (ICAP) spot market auction," unless an RMR unit had a pre-existing bilateral agreement excusing it from this requirement.[34]

Although NYISO initially proposed exceptions to the requirement for RMR units to be "price-takers,"[35] the Commission "reject[ed] NYISO's proposal to impose a capacity offer price on RMR generators higher than $0.00/kW-month as unjust and unreasonable."[36] The Commission reasoned that if RMR units have bids higher than $0.00 and fail to clear the capacity auction, the result would be that "another generator that otherwise would not have cleared will clear instead," which would mean that "ratepayers will pay twice—once for the cost of the RMR agreement, and again for the generator that otherwise would not have cleared the market."[37] The Commission thus found that "[i]t is more efficient for RMR generators to offer their UCAP at $0.00/kW-month as 'price-takers.'"[38] The Commission also found that this price-taking approach was consistent with its precedent regarding another "form of RMR agreement" in NYISO, and "continue[d] to believe" that any market rule that resulted in a non-zero bid "would allow for inefficient outcomes and is thus unreasonable."[39] The Commission sustained this decision on rehearing.[40]

[34] *Id.* at P 74.
[35] *Id.*
[36] *Id.* at P 82.
[37] *Id.*
[38] *Id.*
[39] *Id.*
[40] *NYISO II*, 161 FERC ¶ 61,189 at PP 54–63. Although NYISO argued that non-zero bids would be appropriate for RMR units needed for resource adequacy as opposed to local transmission security, the Commission found that there was no record basis to "discern under what circumstances NYISO would need an RMR for resource adequacy, and thus, under NYISO's proposal, would need to be subject to an offer floor." *Id.* at P 62.

2. ISO-NE

ISO-NE developed requirements for resources retained for "fuel security" purposes to participate in its Forward Capacity Market ("FCM") as price-takers by submitting bids of $0.00.[41] Under this approach, so-called "fuel security resources" entered into a type of RMR arrangement that is an out-of-market agreement to retain resources that would otherwise retire in order to maintain reliability. As in NYISO, this requirement resulted from a process that the Commission instituted under section 206 of the FPA based on a preliminary finding that ISO New England, Inc.'s ("ISO-NE") tariff may be unjust and unreasonable because it lacked provisions providing for "a short-term, cost-of-service agreement to address demonstrated fuel security concerns."[42] The Commission thus directed ISO-NE to develop generally applicable tariff terms that would, among other reforms, explain "how such resources would be treated in the [capacity market]."[43] In response, ISO-NE proposed tariff revisions that "allow for the retention of a resource for fuel-security reasons" and address how such resources must participate in the capacity market.[44]

ISO-NE proposed that fuel security resources would be required to participate in its capacity market "as price-takers," meaning that these resources would be bid into auctions "at a price of zero to ensure that the resource clears the auction."[45] ISO-NE explained that this price-taker treatment avoids "unreasonably suppressing capacity prices" or "inflated [capacity auction] prices."[46] ISO-NE did not propose alternative approaches such as allowing non-zero bids or allowing fuel security resources to decline participation in the capacity market because those

[41] *ISO New England, Inc.*, 165 FERC ¶ 61,202 at PP 57, 82.
[42] *Id.* at PP 3–4.
[43] *Id.* at P 58.
[44] *Id.* at P 5.
[45] *Id.* at P 57.
[46] *Id.*

"alternatives would result in the [capacity auction] not accounting for a retained resource's contribution to resource adequacy" and thus procuring "excess resources."[47] Similarly, ISO-NE reasoned that "not accounting for the capacity value of a resource retained for fuel security" would cause its capacity auction to "clear at a price that does not reflect the true marginal reliability impact of procured capacity."[48] ISO-NE's price-taker treatment of retained resources aimed to avoid that "costly and inefficient outcome."[49]

Numerous commenters supported ISO-NE's proposal to require retained resources to participate in the capacity market as price-takers, including the New England States Committee on Electricity ("NESCOE"), the American Public Power Association, certain public interest organizations, and Potomac Economics, which is ISO-NE's external market monitor.[50] Potomac Economics explained that "the price-taker proposal will result in efficient capacity prices" and thus was "the most efficient solution."[51]

ISO-NE defended its proposal to treat retained resources as price-takers against a charge that this approach would "suppress capacity prices" by explaining that "once a resource is retained for fuel security, it is appropriate to consider its contributions to resource adequacy when determining capacity awards and prices since the retained resources will continue to contribute to resource adequacy."[52] In contrast, ignoring or discounting retained resources' contributions to resource adequacy would lead to capacity prices "based on an inflated estimate of capacity's incremental contributions to resource adequacy," which "would lead the region to

[47] *Id.* at P 58.
[48] *Id.*
[49] *Id.*
[50] *Id.* at PP 60–63.
[51] *Id.* at P 63.
[52] *Id.* at P 78.

procure more capacity than specified by its demand curves, resulting in an expensive and inefficient outcome for the region."[53]

The Commission accepted ISO-NE's proposal to require fuel security resources to participate in the capacity market as price-takers.[54] The Commission specifically "agree[d] that the year-round resource adequacy contributions of resources retained for fuel security should be counted in the capacity market and therefore f[ound] that such resources should be entered into the [capacity auction] as price-takers to ensure that they clear."[55] The Commission also found that ISO-NE's price-taking approach to fuel security units is consistent with Commission precedent in the *NYISO* decisions discussed above.[56]

In approving ISO-NE's price-taker approach, the Commission emphasized the need to prevent unreasonable price increases for consumers by reiterating the point several times. For example, the Commission reinforced the consistency between ISO-NE and NYISO by noting that "using a non-zero price may result in a reliability must-run resource not clearing the market and allowing a resource to clear that would not have otherwise cleared," which the Commission noted would be "inefficient and unreasonable because it would require ratepayers to pay twice for the same capacity need and would result in over-procuring capacity."[57] Similarly, the Commission rejected the argument that a purported "distinction between resources retained for reliability and resources retained for fuel security" could justify a non-zero price, reiterating that "[i]f resources needed for fuel security are not entered into the [capacity auction] as price-takers, they risk not clearing in the [capacity auction] and their resource adequacy contributions to the

[53] *Id.*.
[54] *Id.* at P 82.
[55] *Id.*
[56] *Id.* at PP 83–84.
[57] *Id.* at P 83 (citing *NYISO I*, 155 FERC ¶ 61,076 at P 82 and *NYISO II*, 161 FERC ¶ 61,189 at P 55).

system would not be counted."[58] The Commission again explained that "such an outcome would result in a higher clearing price and a higher procurement quantity, which would create an inefficient and unreasonable market outcome."[59] The Commission also noted its agreement with Potomac Economics that "as long as resources are retained for fuel security purposes, including such resources in the [capacity auction] as price takers prevents an artificial and inefficient increase in [capacity auction] prices."[60]

Further, the Commission specifically approved ISO-NE's rejection of alternative approaches that would allow non-zero bids under certain circumstances. In doing so, the Commission reiterated that "retaining a resource outside of the [capacity auction] would not account for its contribution to meeting ISO-NE's resource adequacy needs, would result in procuring excess capacity, and would distort the capacity price."[61] The Commission similarly approved ISO-NE's rejection of an alternative of allowing non-zero bids set through the independent market monitor's mitigation, finding that this approach could only account for retained resources' contributions to resource adequacy if "that resource's IMM-mitigated bid clears the [capacity auction.]"[62] The Commission recognized "that it is not possible to avoid an impact on either the pricing in the [capacity auction] or the quantity of resources procured to satisfy resource adequacy when finding that a resource must be retained for fuel security," and emphasized that ISO-NE acted reasonably by "protect[ing] against inefficiently over-procuring capacity resources by reflecting a fuel security resource's contribution to resource adequacy in the [capacity auction]."[63]

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[58] *Id.* at P 85.
[59] *Id.*
[60] *Id.*
[61] *Id.* at P 87.
[62] *Id.*
[63] *Id.*

The Commission also found that "the price taker design accurately reflects a fuel security resource's low going-forward costs."[64] The Commission emphasized prior precedent noting that "in calculating the going forward costs of these reliability resources, it is reasonable to deduct their reliability must run revenues, because the revenues do not overstate the value provided by the resources to customers."[65] Because RMR arrangements "provide the revenue that these resources need to remain available and reduce their going-forward costs to *de minimis* or zero," the Commission found that "it is just and reasonable for ISO-NE to enter fuel security resources as price takers in the [capacity auction.]"[66]

Although ISO-NE only sought temporary authorization to retain resources for fuel security, which has since lapsed, ISO-NE recently confirmed that it continues to view price taker treatment for retained resources as the correct approach. In a stakeholder presentation in September 2024, ISO-NE described potential reforms it may propose for its capacity market, such as development of a seasonal auction.[67] In that presentation, ISO-NE explained that "[r]esources retained for local transmission security are treated as price takers in the capacity market" and that the "ISO finds that this treatment continues to be appropriate and efficient."[68]

3. CAISO

While the California Independent System Operator ("CAISO") does not administer a capacity market like those in NYISO, ISO-NE, or PJM, CAISO does require RMR units to participate in its markets and "align[s] RMR obligations with those of resource adequacy

[64] *Id.* at P 88.
[65] *Id.* (cleaned up).
[66] *Id.*
[67] Chris Geissler, Capacity Auction Reforms: Continued Discussion of Project Scope, ISO-NE (Sept. 10, 2024), https://www.iso-ne.com/static-assets/documents/100015/a03a_mc_2024_09-10_capacity_auction_reforms_iso_presentation.pdf.
[68] *Id.* at slide 20.

resources . . . to help support grid reliability and resilience."[69] CAISO also applies its Resource Adequacy Availability Incentive Mechanism ("RAAIM") to RMR resources,[70] which aims to treat RMR units "just like [resource adequacy] . . . resources."[71] CAISO's RAAIM provides bonus payments for units with availability exceeding a certain threshold and imposes penalties on units with availability below a minimum threshold; the purpose of the RAAIM is to ensure that "resources are available for CAISO to meet [] reliability needs,"[72] which is similar to PJM's Capacity Performance system or ISO-NE's Pay for Performance system.

CAISO explained in its proposal to require RMR units to participate in its markets that this requirement "will help ensure that ratepayers get the full benefit of paying the full cost of service of an RMR resource, while guarding against depressing market prices."[73] CAISO also explained that "less than full participation of RMR resources in the markets could lead to unnecessary over-procurement and deprive ratepayers of receiving the full value of the RMR resources for which they are paying."[74] The Commission agreed, concluding that "the benefits of the must offer obligation discussed above outweigh the potential price impacts."[75]

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[69] *California Independent Sys. Operator Corp.* ("*CAISO*"), 168 FERC ¶ 61,199 at P 72 (2019).
[70] *Id.*
[71] CAISO, Tariff Amendment to Improve the Reliability Must-Run Framework, at 6, Docket No. ER19-1641 (Apr. 23, 2019), Accession No. 20190423-5000.
[72] *See* California Public Utilities Commission, Resource Adequacy Availability Incentive Mechanism, at slides 3–4 (May 15, 2024), https://stakeholdercenter.caiso.com/InitiativeDocuments/CPUC-Resource-Adequacy-Availability-Incentive-Mechanism-May-15-2024.pdf.
[73] *CAISO*, 168 FERC ¶ 61,199 at P 62.
[74] *Id.* at P 68.
[75] *Id.* at P 73. While CAISO's bidding requirement is distinct from NYISO and ISO-NE in that CAISO requires RMR units to bid into its markets at levels that reflect "the resource's full marginal costs," CAISO explained that this approach was necessary because it "cannot predict with certainty the specific hours every day when a resource will be needed." *Id.* at P 62. The Commission agreed, finding that "CAISO must ensure that RMR resources will be available to meet reliability needs whenever they arise through the market optimization." *Id.* at P 72. In other words, CAISO requires marginal cost-based bidding because it relies on clearing in the energy market to determine real-time performance obligations, which is distinct from the capacity markets in other RTO/ISOs, in which an obligation to actually perform is triggered by an RTO/ISO's dispatch instructions during a capacity event.

D. The non-participation of RMR units in PJM's capacity market reduces overall supply and increases prices for consumers.

PJM's approach of allowing RMR units to choose whether to participate in the capacity market effectively reduces the overall supply in capacity auctions—even while consumers are paying RMR units to remain operational and when RMR arrangements enable PJM to call on an RMR unit to perform during a capacity event. As documented in a recent report from Synapse Energy Economics, PJM entered into 17 RMR arrangements since 2005 (not counting the recent RMR arrangements with Brandon Shores and Wagner), and "nearly all, if not *all*, of the past 17 RMRs have not participated in PJM's capacity market."[76] Similarly, "[n]either Brandon Shores nor Wagner participated in the most recent 2025/2026 capacity market auction and are not expected to participate in future auctions."[77] Hence, units' entry into RMR arrangements in PJM has historically reduced the available supply in its capacity auctions and will likely continue to do so moving forward. The fact that RMR arrangements reduce capacity supply in PJM distinguishes PJM from other RTO/ISOs such as NYISO and ISO-NE, where, as discussed above, RMR units are required to bid into the capacity market as price-takers.

Although numerous factors contribute to the clearing price in PJM's capacity auctions, the fact that RMR arrangements effectively reduce supply puts upward pressure on prices. All else being equal, any reduction in supply in the capacity market will increase prices.[78] Indeed, PJM indicated that the reduction in supply associated with retiring resources was a key driver of increased prices in its most recent capacity auction.[79]

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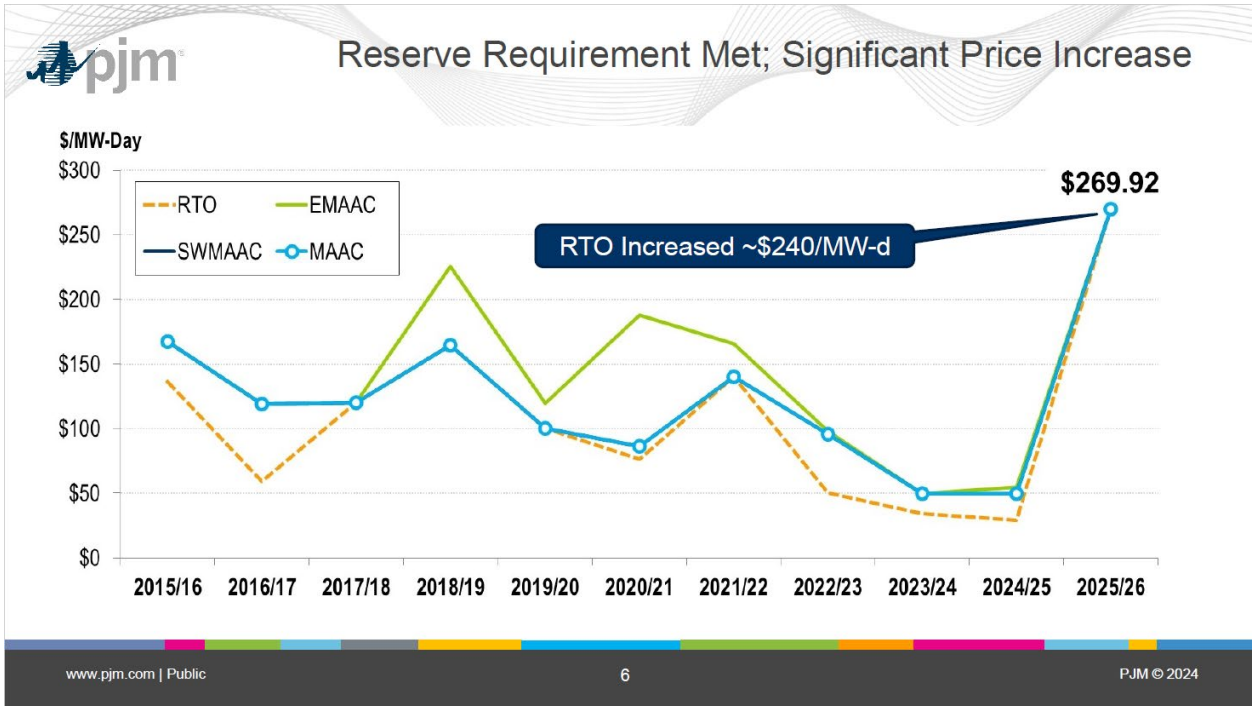
[76] Synapse Report, *supra* note 5 at 15.
[77] *Id.*
[78] *See*, *e.g.*, Synapse Report, *supra* note 5 at 15 ("For an LDA that is already constrained, such as the BGE LDA—and without additional transmission upgrades or new generation to address constraints—if a unit no longer provides supply in the capacity market, clearing prices are pushed upwards.").
[79] PJM, 2025/2026 Base Residual Auction Report, *supra* note 18 at 3 (describing "[s]ignificant decrease in overall supply from retirements (actual retirements plus must offer exceptions for future retirements)" as an important factor driving high prices in the 2025/26 BRA).

E. The non-participation of RMR units in the most recent capacity auction in PJM had a significant effect on prices.

PJM's most recent capacity auction for the 2025/2026 delivery year yielded "a more than 800 percent increase in system-wide prices relative to the prior [auction] for the 2024/2025 delivery year, a price spike unprecedented in PJM."[80] The following chart compares this "significant price increase" to results from PJM's capacity auctions over the prior decade:[81]



Capacity prices in PJM were especially high in constrained LDAs, which are areas with limited capacity and where transmission constraints limit the amount of energy that can be imported during capacity events.[82] In the 2025/2026 auction, both the BGE LDA and the Dominion

[80] Synapse Report, *supra* note 5 at 6.
[81] PJM, 2025/2026 Base Residual Auction Results, at slides 4–5 (Aug. 21, 2024), https://pjm.com/-/media/committees-groups/committees/mrc/2024/20240821/20240821-item-08---2025-2026-base-residual-auction---presentation.ashx.
[82] *See* PJM, Manual 18: PJM Capacity Market, at 24 (June 27, 2024),https://www.pjm.com/~/media/documents/manuals/m18.ashx (noting that "[a]n LDA with Capacity Emergency Transfer Limit (CETL) less than 1.15 times Capacity Emergency Transfer Objective (CETO) will be modeled as a constrained LDA in RPM" and that other factors, such as "other reliability concerns" may lead PJM to model an LDA as constrained).

("DOM") LDA "cleared short of their reliability requirements due to load growth and retirements" and "[p]rices in these LDAs are at the price caps" of $466.35 and $444.26, respectively.[83] For the BGE LDA, "[t]his is a six-fold increase from the 2024/2025 BGE LDA [auction] clearing price of $73/MW-day."[84]

The non-participation of RMR units in PJM's most recent auction contributed significantly to the dramatic increase in capacity prices. As the Synapse Report describes, "[t]he most notable driver behind BGE LDA's record high capacity price is the removal of four generating units from the capacity market, starting in the 2025/2026 delivery year," namely Brandon Shores units 1 and 2, and Wagner units 3 and 4.[85] These units, which are located in the BGE LDA, are subject to RMR arrangements that allow PJM to call on them to perform during a capacity emergency—but which allow the units to choose whether to participate in the capacity market.[86] "Importantly, these RMR units d[id] not participate in the capacity market as supply-side resources, dramatically reducing supply in the already-constrained BGE LDA."[87]

To determine the impact of these RMR units' non-participation in the capacity market, Synapse conducted a "counterfactual analysis of clearing prices in PJM" based on a trio of conservative assumptions about suppliers' bidding behavior. First, Synapse assumed that if these units were to participate in the auction, their bids would be at levels no higher than roughly double the clearing price of prior auctions; because most of these units cleared in prior auctions

[83] Tim Horger & Adam Keech, 2025/2026 Base Residual Auction Results, at slide 4, PJM (Aug. 21, 2024), https://pjm.com/-/media/committees-groups/committees/mrc/2024/20240821/20240821-item-08---2025-2026-base-residual-auction---presentation.ashx.
[84] Synapse Report, *supra* note 5 at 7.
[85] *Id*.
[86] *See infra* § III(B)(1) at Tbl. 1 (citing RMR provisions specifying that PJM may dispatch these units during capacity emergencies).
[87] Synapse Report, *supra* note 5 at 8. Outside the scope of this proceeding, Sierra Club has engaged in related advocacy regarding the RMR units in the BGE LDA, as described in the declaration of Justin Vickers, which is included as Attachment 4 to this complaint.

that had a clearing price of $73/MW-day, Synapse assumed that their bids would have been "at or below $163.46/MW-day."[88] Second, Synapse assumed that these RMR units were likely "marginal resources or were towards the top of the stack of cleared resources," which again is conservative in light of clearing prices from prior auctions.[89] Finally, Synapse assumed that "with the exception of the Dominion LDA . . . other LDAs would not have separated from the RTO and caused other cascading price impacts," which is conservative because other LDAs did not, in fact, separate even in the more constrained situation in which these RMR units did not participate as supply.[90]

Synapse found that the non-participation of RMR units not only raised "the clearing price for the BGE LDA to the capacity price maximum" but "also likely had spillover effects into the RTO as a whole, increasing the RTO-wide clearing price and impacting customers throughout the region."[91] Synapse specifically found that these RMR units reflect a majority of the capacity in the BGE LDA, and without their participation as supply, the result is that the LDA's clearing price is forced to its cap.[92] However, if these RMR units had participated in the capacity auction, the BGE LDA would not have reached its price cap and instead would have cleared at a significantly lower price along with the rest of the RTO.[93]

The price impact that Synapse identified is significant. Synapse found that if these RMR units had participated under its conservative assumptions, the BGE LDA and the entire RTO would have cleared at a price of $163.46/MW-day. Notably, while that clearing price would have been significantly lower than the actual clearing price of $269.92/MW-day, a clearing price of

[88] Synapse Report, *supra* note 5, at 27; *see also id.* at 27, n.58.
[89] *Id.* at 27.
[90] *Id.*
[91] *Id.* at 9.
[92] *Id.* at 24.
[93] *Id.* at 27 ("In this scenario, BGE, SWMAAC, and MAAC LDAs would not have separated from the RTO.").

$163.46/MW-day would still have been among the highest capacity prices in PJM in the last decade.[94] Still, as Synapse reported, "[i]f the RTO cleared at $163.46/MW-day for the 2025/2026 BRA, electric customers across the RTO would save over $5 billion in that delivery year."[95] Hence, the non-participation of these RMR units in the capacity market "had a region-wide impact that will benefit generators (and cost customers) over $5 billion."[96]

The IMM also conducted a sensitivity analysis of the 2025/2026 capacity auction that quantified the price impact of the non-participation of RMR units in the BGE LDA and found that this factor inflated capacity market revenues by $4.2 billion.[97] The IMM's analysis differed from Synapse's in that the IMM assumed that the RMR units would be "included in the supply curve at $0 per MW-day," i.e., as price-takers.[98] The IMM also compared what "RPM revenues would have been had the capacity of the RMR resources been included" and found that their non-participation "resulted in a 41.2 percent increase in RPM revenues."[99] Importantly, the IMM's analysis also demonstrates that RMR units' non-participation in the capacity market has a very large impact on overall capacity market revenues even though the RMR units represent only a small portion of overall supply. Even though the RMR units' inclusion as supply would have been only "an increase of 1,440.6 UCAP MW, or 1.1 percent, compared to the actual results," the IMM's analysis still showed a price impact of $4.2 billion.[100] Additionally, the IMM's analysis corroborates Synapse's finding that even if the RMR units in the BGE LDA had

[94] *See* Wilson Aff., *supra* note 6 at P 32.
[95] Synapse Report, *supra* note 5 at 27.
[96] *Id.* at 27.
[97] IMM Analysis of 2025/2026 Auction, *supra* note 4 at 9 ("If the capacity of the RMR resources in the BGE LDA [had] been included in the supply curve at $0 per MW-day in the 2025/2026 RPM Base Residual Auction and everything else had remained the same, total RPM market revenues for the 2025/2026 RPM Base Residual Auction would have been $10,399,791,048, a decrease of $4,287,256,309, or 29.2 percent, compared to the actual results.").
[98] *Id.*
[99] *Id.*
[100] *Id.* at 13, 6.

participated in the capacity auction, the prices would still have been among the highest in the history of the PJM capacity market; the IMM calculated that total auction revenues would have been over $10 billion.[101]

Synapse also found that the high prices driven by RMR units' non-participation in PJM's capacity market will have significant impacts on retail ratepayers. "Across the PJM footprint, electric utility customers will see rising costs as a result of the increased capacity clearing prices for the 2025/2026 delivery year."[102] In the BGE LDA, increased capacity prices will drive ratepayers' monthly bills up by 14%, meaning that "average residential and commercial customers could see their bills increase by $16 per month and $170 per month, respectively."[103]

These increased capacity prices will fall especially heavily on ratepayers in the BGE LDA, because those same customers will also "bear 74 percent of the[] RMR costs" for the Brandon Shores and Wagner units. "As a result, BGE LDA customers could see their bills increase by 5 percent, resulting in an average residential bill increase of $5 per month," and an increase in commercial customers' bills of "$54 per month."[104] Considering "both the capacity market impact and the RMR service arrangement costs together," bills for BGE LDA ratepayers "are likely to increase by 19 percent—an extra $21 on the average residential customer bill and $224 on the average commercial monthly bill."[105] Similarly, "Maryland customers in APS, DPL-

[101] *Id.* at 9. Analysis from PJM also generally supports the findings from the IMM and the Synapse Report. PJM considered the effect of non-participation by deactivating units and units operating under must-offer exceptions. That category includes "planned retirements," such as units operating under an RMR arrangement, although it also includes retirements that do not require a must-offer exception as well as resources that switched from capacity status to energy-only status—a total of roughly 5,700 MW (ICAP). PJM found that if "all of this would have cleared . . . this would result in a price of around $100/MW-day." Tim Horger & Adam Keech, 2025/2026 Base Residual Auction Results, at slide 32, PJM (Aug. 21, 2024), https://pjm.com/-/media/committees-groups/committees/mrc/2024/20240821/20240821-item-08---2025-2026-base-residual-auction---presentation.ashx.
[102] Synapse Report, *supra* note 5 at 27.
[103] *Id.* at 29.
[104] *Id.*
[105] *Id.*

South, and Pepco zones could see their monthly bills increasing by 24 percent, 2 percent, and 11 percent, respectively," which "translates into a monthly increase of $18, $4, and $14 for the average residential customer" in those zones, respectively.[106]

Critically, the BGE LDA includes numerous disadvantaged communities who already face among the most extreme energy burdens in the nation.[107] These already burdened ratepayers now also bear the heaviest burdens from the skyrocketing prices in PJM's capacity market.

F. RMRs may become more common in PJM given the projected rate of retirements, challenges planning for and building transmission, and the slow pace of PJM's interconnection queue.

Several factors make PJM more likely to enter into an increasing number of RMR contracts in coming years, with potentially significant impacts on capacity prices. First, PJM has stated that "40 [gigawatts ("GW")] of existing generation are at risk of retirement by 2030."[108] PJM projects that 60% of these retiring resources, or 24 GW, will be coal retirements, while 30%, or 12 GW, will be natural gas retirements.[109] The retirement of many generators in a shorter time is more likely to create transmission reliability violations which cause RMR designations.

Second, PJM has expressed concern that the pace of new entry may "be insufficient to keep up with expected retirements and demand growth."[110] Indeed, PJM's interconnection queue remains severely backlogged; at the end of 2023, PJM had more active projects stuck in its queue

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[106] *Id.* at 30.
[107] *See*, *e.g.*, DOE, Climate and Economic Justice Screening Tool: Explore the Map, https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5 (information for census tracts 24510200200, 24510190300, and 24510200400 in Baltimore City, Maryland).
[108] PJM, Energy Transition in PJM: Resource Retirements, Replacements, & Risks, at 2 (Feb. 24, 2023), https://www.pjm.com/-/media/library/reports-notices/special-reports/2023/energy-transition-in-pjm-resource-retirements-replacements-and-risks.ashx.
[109] *Id.* at 3.
[110] *Id.* at 2.

than any other region, and projects languish in PJM's queue longer than in any other region.[111] PJM characterizes the mismatch between the swift expected pace of retirements and the slow slog of new projects through the queue as a "significant reliability concern."[112] However, PJM is also resisting the implementation of the Commission's interconnection reforms in Order No. 2023 by asking the Commission to allow it to retain a study process at least twice as long as the Commission's *pro forma* materials and by requesting waiver of provisions for storage interconnection and Surplus Interconnection Service.[113] The clogged state of PJM's interconnection queue, and the slow pace of its interconnection studies, create a significant risk that new generation may not come online quickly enough to prevent reliability issues associated with the large scale of expected retirements. That mismatch sets the stage for retiring resources to be kept online past their proposed deactivation dates through RMR arrangements.

Third, PJM is slow to develop the type of transmission project that would prevent reliability issues that may trigger the need for an RMR arrangement. While overall transmission costs have grown significantly in the PJM region over the last decade, the dominant form of transmission investment is in local, "supplemental" projects rather than regional projects.[114] Importantly, supplemental projects are ones that "may not be required for . . . system reliability, market efficiency or operational performance,"[115] meaning that supplemental projects are not

[111] *See* Lawrence Berkeley Nat'l Lab'y, Queued Up: 2024 Edition, Characteristics of Power Plants Seeking Transmission Interconnection As of the End of 2023, at slide 9, 35 (April 2024) ("Queued Up 2024"), https://emp.lbl.gov/sites/default/files/2024-04/Queued%20Up%202024%20Edition_1.pdf.
[112] PJM Interconnection, LLC, Order Nos. 2023 and 2023-A Compliance Filing of PJM Interconnection, LLC, at 48, Docket No. ER24-2045 (May 16, 2024), Accession No. 20240516-5155.
[113] *See generally id.*
[114] *See* PJM Interconnection, LLC, Protest of Illinois Citizens Utility Board, Delaware Division of the Public Advocate, Office of the People's Counsel for the District of Columbia, Natural Resources Defense Council, Sustainable FERC Project, and Sierra Club, at 7–12, Docket Nos. EL24-119 and ER24-2338 (July 22, 2024) ("Advocates Protest"), Accession No. 20240722-5135 (discussing the lopsided investment in supplemental projects in the PJM region).
[115] PJM Operating Agreement, Schedule 6 § 1.5.6(n), https://agreements.pjm.com/oa/4771.

well suited to address the reliability issues that may lead to RMR arrangements. Moreover, PJM does not adequately plan transmission upgrades to account for generators that are at risk of retirement due to their age, poor performance, or economic troubles. Instead, PJM defers analysis of the needed transmission upgrades until a unit has actually announced its retirement, which may give PJM as few as 90 days to identify needed transmission upgrades. This lack of proactive transmission planning makes RMR arrangements both more likely to be necessary and more likely to be protracted and costly. The IMM has recommended that PJM should plan more proactively for the transmission needs associated with foreseeable retirements, emphasizing that "[i]t is essential that PJM look forward and attempt to plan for foreseeable unit retirements, whether for economic or regulatory reasons."[116] The IMM further stressed that "improvement is needed in the process for ensuring that planning is looking at the probability of retirements, especially of resources that are critical to locational reliability in order to minimize the duration of any RMR requirement."[117]

These three issues—the anticipated slate of retirements, the slow pace of PJM's interconnection queue, and inadequate transmission planning to address foreseeable retirements—mean that RMRs may become increasingly common in PJM. For example, the Union of Concerned Scientists recently commissioned a power flow analysis of the impacts from retirements of coal and gas generators in Illinois that reinforces this possibility.[118] That power flow modeling found that widespread retirement of coal and gas generators in Illinois would

[116] Monitoring Analytics, Quarterly State of the Market Report for PJM: January through June, at 360 (Aug. 8, 2024) ("Monitoring Analytics, Quarterly State of the Market Report for PJM"), https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2024.shtml ("The planning process should, to the extent possible, evaluate the impact of the loss of units at risk and determine in advance whether transmission upgrades are required.").
[117] *Id.*
[118] *See* James Gignac, *Illinois Has No Time to Waste in Building Its Carbon-Free Electricity Future*, Union of Concerned Scientists (Apr. 3, 2023), https://blog.ucsusa.org/james-gignac/illinois-has-no-time-to-waste-in-building-its-carbon-free-electricity-future/.

create a substantial number of reliability violations in PJM territory.[119] The modeling found that if new clean energy resources are installed quickly enough—which is by no means certain given PJM's clogged interconnection queue—new entry of generation would resolve many, but not all, reliability violations.[120] That modeling illustrates the serious possibility that PJM may seek to keep coal and gas generation online in Illinois through RMR arrangements.

G. Efforts to secure reforms through the stakeholder process.

PIOs have encouraged PJM and its members to proactively resolve the problem discussed in this complaint, the scale and urgency of which became apparent only on July 30, 2024, when PJM published the results for the 2025/2026 Base Residual Auction. On August 30, 2024, a group of six state consumers advocates sent PJM's Board of Managers a letter urging immediate reforms, using PJM's Critical Issue Fast Path process.[121] PIOs filed a supportive letter on September 6, 2024, urging the Board to delay upcoming auctions if necessary and to take immediate action to prevent similar unjust and unreasonable prices in the next several Base Residual Auctions, which will happen in quick succession over the next eighteen months.[122] Because the next Base Residual Auction will occur in mid-December—just three months away—the normal processes for advancing issues through the PJM stakeholder process are too slow to bring about a timely solution. On September 19, 2024, the PJM Board of Managers published a

[119] *Id.*
[120] *Id.*
[121] Md. Office of People's Counsel, Letter to PJM Board of Managers Re: Urgent Reforms to the PJM Capacity Market Regarding Reliability Must Run Units (Aug. 30, 2024), https://www.pjm.com/-/media/about-pjm/who-we-are/public-disclosures/2024/20240903-consumer-advocate-letter-on-capacity-markets.ashx. This letter is included in Attachment 2 to this complaint.
[122] PIOs, Letter to PJM Board of Managers Re: Support for Urgent Reforms Regarding Reliability Must Run Units and the PJM Capacity Market (Sept. 6, 2024), https://www.pjm.com/-/media/about-pjm/who-we-are/public-disclosures/2024/20240906-pios-letter-of-support-to-pjm-bard-on-rmrs-in-rpm.ashx. This letter is included in Attachment 5 to this complaint.

response to the requests by consumer advocates and PIOs, declining to pursue the requested reforms and defending its market rules.[123]

Despite the inadequacy of the regular PJM stakeholder process to address this pressing issue, one of the Complainants—Sierra Club—has proposed a solution in the ongoing Deactivation Enhancements Senior Task Force.[124] PJM has scheduled a vote on this and other solution packages for October 2, 2024. Even if Sierra Club's solution were to move forward, further PJM member consideration and voting would then occur in the Markets and Reliability and Members Committees, adding at least another two months to the timeline.[125] PIOs will update the Commission regarding any relevant developments on Sierra Club's proposal in the Deactivation Enhancement Senior Task Force, but believe that the PJM stakeholder process will be too slow to avoid PJM consumers paying $12 billion to $15 billion in excess costs for capacity in upcoming auctions. Because the PJM Board has stated that it believes the existing rules with respect to RMR participation in the market are appropriate and will not pursue reforms to address the billions of dollars in excessive costs associated with this rule, PIOs have no choice but to initiate this proceeding with the Commission.

[123] PJM Board of Managers, Response Letter to Consumer Advocates and Complainants Re: Urgent Reforms to PJM Capacity Market RMR Units (Sept. 19, 2024) ("PJM Board of Managers Response"), https://www.pjm.com/-/media/about-pjm/who-we-are/public-disclosures/2024/20240919-pjm-board-response-consumer-advocates-letter-re-urgent-reforms-pjm-capacity-market-re-reliability-must-run-units.ashx. This letter is included in Attachment 5 to this complaint.

[124] Casey Roberts, Sierra Club Proposal for Deactivation Enhancement Senior Task Force (Sept. 20, 2024), at https://www.pjm.com/-/media/committees-groups/task-forces/destf/2024/20240920/20240920-item-06---sierra-club-solution-package.ashx.

[125] PJM, Task Forces Work Plan Meeting Schedules (June 14, 2024), https://www.pjm.com/-/media/committees-groups/task-forces/destf/2024/20240614/20240614-item-03---work-plan.ashx.

III. DISCUSSION

A. RMR units' non-participation in the capacity market creates unjust and unreasonable prices by forcing consumers to pay twice for reliability.

The capacity market exists to ensure that the PJM region can meet its resource adequacy needs at a reasonable cost to consumers.[126] Ignoring existing generation that is helping to serve load when conditions are tightest leads to the procurement of unnecessary generation and forces consumers to pay higher, unjustified costs.

1. RMR arrangements retain resources to be available for a broad range of reliability emergencies, including those related to capacity.

As described above, PJM consumers are already paying dearly for the cost of RMR arrangements, and these costs have escalated in recent years. In some cases, PJM consumers are being asked to pay close to the full embedded cost of the generator, rather than simply the generator's more reasonable going-forward costs. While RMR arrangements are triggered in PJM only by transmission stability circumstances, resources retained by PJM under RMR arrangements are available to supply resource adequacy—that is, they are available during most or all times when capacity is tight on the system. For example, a recent PJM presentation to members explained that PJM may dispatch RMR resources for a broad range of reliability, but not economic, purposes, including "Thermal, Reactive, Stability, *Capacity Shortages*, [and] System Restoration."[127]

Although PJM has eschewed a standardized RMR contract, trends are evident from a review of fifteen RMR arrangements filed with FERC for the PJM region, including all those listed in the RMR History table compiled by the Independent Market Monitor as well as the

[126] *ISO New England, Inc. New England Power Pool*, 118 FERC ¶ 61,157 at P 49 (2007) (The Commission's task in regulating capacity markets is to "ensure that there is enough generation to reliably meet load" without "overcharging . . . customers for unnecessary capacity.").
[127] *See* RMR Unit Scheduling in Operations, *supra* note 12 (emphasis added).

more recent Brandon Shores and Wagner arrangements. With a few exceptions from older arrangements, all of these either give PJM the right to dispatch the unit to achieve broadly defined "reliability" purposes, or specifically give PJM the right to dispatch the RMR units in capacity emergencies. Most notably, the RMR arrangements in effect for the delivery year corresponding to the upcoming 2026/2027 Base Residual Auction (Brandon Shores and Wagner) specify that PJM may call these units in the event of capacity emergencies.[128]

Table 1: Provisions for PJM Dispatch in Reliability Must Run Arrangements

Units	**Docket No.**	**Agreement Provisions re PJM Dispatch**
Brandon Shores 1 & 2	ER24-1790	CORS Section 3.3(a), PJM may dispatch for capacity emergencies. *See* Attachment 6-7.
HA Wagner 1 & 2	ER24-1787	CORS Section 3.3(a), PJM may dispatch for capacity emergencies. *See* Attachment 6-21.
Indian River 4	ER22-1539	RMR Section 3.3(a), PJM may dispatch for a capacity emergencies. *See* Attachment 6-32.
Yorktown Units 1 and 2	ER17-750	Section 116 filing letter indicates dispatch in accordance with U.S. EPA Administrative Compliance Order, under which PJM may dispatch for "generation emergencies." *See* Attachment 6-40.
BL England 2 and 3	ER17-1083	Section 3.2 "Dispatch of the Units": "Subject to the Unit operating limitations identified in Section 3.4 below, PJM may dispatch either or both Units." *See* Attachment 6-44.
Eastlake Unit 1-3, Ashtabula, Lakeshore	ER12-2710	Informational Filings, Section IV: Includes agreements to offer "capacity into every Reliability Pricing Model Incremental Auction at a price of zero dollars." *See* Attachment 6-49, 6-53, 6-57, 6-61, 6-65.
Elrama 4 and Niles 1	ER 12-1901	Informational filing, at Section 3.2: "Subject to the Unit operating limitations identified in Section 3.4,

[128] Brandon Shores LLC, RMR Arrangement – Continuing Operations Rate Schedule, Attach. A, at § 3.3(a), Docket No. ER24-1790 (Apr. 18, 2024) ("Brandon Shores CORS"), Accession No. 20240418-5176; H.A. Wagner LLC, RMR Arrangement – Continuing Operations Rate Schedule, Attach. A, at § 3.3(a), Docket No. ER24-1787 (Apr. 18, 2024) ("Wagner CORS"), Accession No. 20240418-5128; NRG Business Marketing LLC, Settlement Agreement and Offer of Settlement, Docket No. ER22-1539 (April 2, 2024) ("NRG Settlement"), Accession No. 20240402-5138. The RMR arrangements for the RMR units in the BGE LDA, as well as relevant excerpts from the RMR arrangements described in Table 1, are included as Attachment 6 to this complaint.

		PJM may dispatch either or both Units." *See* Attachment 6-69.
Eddystone 2, Cromby 2, and Cromby Diesel	ER10-1418	Per terms of settlement approved by FERC, Section 3.2 "Dispatch of the Units": "Subject to the Unit operating limitations identified in the Consent Decree and the PJM Operating Procedures, PJM may dispatch either or both Units in accordance with the PJM Operating Procedures. At no time may PJM dispatch either Unit on the basis of economic considerations." *See* Attachment 6-73. PJM Operating Procedures (Attachment C to Exelon rate filing), Part 2.d states that PJM may dispatch a unit for a reliability purpose to address the reliability impacts identified in the Deactivation Study, or when PJM anticipates operation will alleviate a Transmission Security Emergency, or to support the system during a generation or transmission outage scheduled to facilitate the construction of the transmission system upgrades identified in the deactivation study. *See* Attachment 6-80.
Brunot Island	ER06-993	Informational filing, "Nature of Service" section as follows: Paragraph II.1 during the term of this tariff OPMW shall continue operating the following units. *See* Attachment Paragraph II.3. except when on outage, units will bid into Day Ahead & Real Time energy markets at market caps. Paragraph II.4. Unit will not be delisted as Capacity Resources for PJM. *See* Attachment 6-82.
Hudson 1, Sewaren 1-4	ER05-644	Cost of Service Recovery Rate Tariff, "Nature of Service" section as follows: Paragraph II.1 during the term of this tariff OPMW shall continue operating the following units. Paragraph II.3. except when on outage, units will bid into DA & RT energy markets at market caps. Paragraph II.4. Unit will not be delisted as Capacity Resources for PJM. *See* Attachment 6-86.

Furthermore, PJM anticipates operation of RMR resources as a general matter during stressed grid conditions. PJM has explained that it includes RMR units in its modeling of the system's capability to import capacity into constrained zones because the "RMR unit is expected to produce MWs under emergency conditions,"[129] and because "the RMR units [are] expected to be operating and impacting power flows on the system during times of reliability need.[130] In other words, PJM considers the physical availability of RMR resources during times of reliability need so likely that to exclude them from its modeling would result in "incomplete and potentially inaccurate assessment of local reliability needs."[131] RMR units unquestionably provide resource adequacy value to the system, even though they are not retained for that reason. In approving ISO-NE's proposal for time-limited authority to retain resources for fuel security purposes, the Commission endorsed ISO-NE's view "that the year-round resource adequacy contributions of resources retained for fuel security should be counted in the capacity market and therefore [found] that such resources should be entered into the [capacity auction] as price-takers to ensure that they clear."[132]

As Mr. Wilson concludes in his attached testimony, an RMR unit contributes to resource adequacy, and therefore holding it out of the auction "misrepresents the true state of supply"[133] to the detriment of consumers and the accuracy of capacity market signals.

[129] PJM CETO/CETL & Load Deliverability, *supra* note 28 at slide 16.
[130] PJM Response to the 2023 State of the Market Report, *supra* note 21 at 4.
[131] *Id.*
[132] *ISO New England Inc.*, 165 FERC ¶ 61,202 at P 82.
[133] Wilson Aff., *supra* note 6 at P 25.

2. Despite paying for reliability through the RMR arrangement, consumers must buy replacement capacity through the auction, sometimes at scarcity prices.

Under PJM's current rules, the resource adequacy value of RMR units is not reflected in the capacity market clearing price. PJM's rules permit RMR units not to offer into the capacity market, and in all but a few cases, they have chosen not to. Nor does PJM have any other procedure in place to account for the operation of these RMR resources when determining how much capacity to purchase. As a result, despite paying in some cases hundreds of millions of dollars annually to support the continued operation of RMR units, consumers must nevertheless buy redundant capacity through the auction. To add insult to injury, in some cases consumers may be required to purchase that redundant capacity at elevated prices reflecting an artificial picture of scarcity.

The most recent auction illustrates how dramatic the impacts can be for consumers. In the 2025/2026 auction, the BGE LDA, where Brandon Shores and Wagner are located, "cleared short of [its] reliability requirements due to load growth and retirements" resulting in prices at the administrative price cap of $466.35.[134] For the BGE LDA, "[t]his is a six-fold increase from the 2024/2025 BGE LDA [auction] clearing price of $73/MW-day."[135] BGE customers will have to pay these artificially elevated prices for capacity already being supplied by the Brandon Shores and Wagner plants, which will cost PJM customers approximately $215 million for the same delivery year.[136] These dramatic price increases are especially unjust and unreasonable

[134] PJM, 2025/2026 Base Residual Auction Results, at slides 4–5 (Aug. 21, 2024), https://pjm.com/-/media/committees-groups/committees/mrc/2024/20240821/20240821-item-08---2025-2026-base-residual-auction---presentation.ashx.
[135] Synapse Report, *supra* note 5, at 7.
[136] Protest and Comments of the Maryland Office of People's Counsel and the Southern Maryland Electric Cooperative, Inc., at Tbl. 1, Docket No. ER 24-1787 (May 16, 2024), Accession No. 20240516-5193.

because the BGE LDA includes consumers who bear some of the most extreme energy burdens in the nation.[137]

Such double procurement is unjust and unreasonable because "[h]olding the unit out of RPM also harms consumers by forcing them to 'pay twice' for resource adequacy; first, consumers bear the unit's cost under the RMR contract, and then they also pay through RPM for the capacity procured to meet the part of the Reliability Requirement that the RMR could and should have satisfied."[138] As the Commission has repeatedly concluded, it is not just and reasonable to impose such redundant purchases of capacity on consumers.[139] In approving an RMR framework for NYISO, the Commission rejected any provision allowing RMR units to make capacity bids higher than $0.00, reasoning that if the RMR unit then failed to clear the capacity auction, the result would be that "another generator that otherwise would not have cleared will clear instead," which would mean that "ratepayers will pay twice—once for the cost of the RMR agreement, and again for the generator that otherwise would not have cleared the market."[140] The Commission approved ISO-NE's similar requirement that retained resources offer into the capacity market as price takers on grounds that "using a non-zero price may result in a reliability must-run resource not clearing the market and allowing a resource to clear that would not have otherwise cleared," which the Commission noted would be "inefficient and unreasonable because it would require ratepayers to pay twice for the same capacity need and would result in over-procuring capacity."[141] Now that the same "inefficient and unreasonable"

[137] *Infra* § III(D).
[138] Wilson Aff., *supra* note 6 at P 27.
[139] *NYISO II*, 161 FERC ¶ 61,189 at P 55 (finding that it is critical for markets to avoid "requiring ratepayers to pay twice to satisfy the same capacity need."); *see also NYISO I*, 155 FERC ¶ 61,076 at PP 82–83; *ISO New England Inc.*, 165 FERC ¶ 61,202 at PP 82–83.
[140] *NYISO I*, 155 FERC ¶ 61,076 at P 82.
[141] *ISO New England Inc.*, 165 FERC ¶ 61,202 at P 83 (citing *NYISO I*, 155 FERC ¶ 61,076 at P 82 and *NYISO II*, 161 FERC ¶ 61,189 at P 55).

outcomes that the Commission guarded against when approving RMR rules in NYISO and ISO-NE have in fact played out in PJM—with consumers in the BGE LDA and throughout the RTO unjustly and unreasonably forced to pay twice for the same capacity needs—it is critical for the Commission to require reform to PJM's rules.

The Commission has reached similar conclusions in the analogous context of minimum offer price rules ("MOPR"). In recent years, the MOPR worked to require resources supported by state policies to bid at higher prices in the capacity market.[142] In shifting its approach to MOPR starting in 2021, the Commission acknowledged that these resources would be present on the system regardless of whether they cleared the capacity market due to the effect of state policies.[143] As such, the Commission found, in multiple recent proceedings, that market rules which arbitrarily exclude an existing resource from the capacity market were harmful because "their contribution to resource adequacy could be effectively ignored in the [capacity market] to the extent the current MOPR prevents them from clearing."[144] The Commission concluded that the result would be that "the capacity market would clear surplus resources that are not actually needed to maintain resource adequacy," which is not just and reasonable.[145] RMR resources are likewise present on the system by dint of an external driving force—the RMR agreement that

[142] *See, e.g., ISO-NE*, 179 FERC ¶ 61,139 at P 3 (2022) (describing ISO-NE's MOPR as "requiring new capacity resources to offer their capacity at prices that are at or above a price floor set for each type of resource").
[143] *See, e.g., id.* at P 50 ("[B]ecause state policies typically mandate their development, these state-sponsored resources will likely be developed and available to contribute to ISO-NE's resource adequacy needs.").
[144] *ISO New England, Inc. New England Power Pool Participants Comm.*, 179 FERC ¶ 61,139 at P 50 (2022); *see also New York Indep. Sys. Operator, Inc.*, 179 FERC ¶ 61,102 at P 39 (2022) (finding that NYISO's proposal to no longer apply buyer-side market power mitigation rules to state policy resources "reduces the risk, present under the current BSM Rules, of at least three significant harms: over-procurement of capacity, inflated capacity market prices, and inefficient price signals from the capacity market."). Statement of Chairman Glick and Commissioner Clements Supporting the Focused MOPR, at P 49, Docket No. ER21-2582 (Oct. 19, 2021), Accession No. 20211019-4001 ("Because state-supported resources are available to provide resource adequacy, but those contributions are effectively ignored by PJM when they are pushed out of the market, applying a MOPR to state-supported resources causes an RTO/ISO to procure redundant capacity that is not needed to ensure resource adequacy.").
[145] *ISO New England, Inc. New England Power Pool Participants Comm.*, 179 FERC ¶ 61,139 at P 50.

retains these resources and causes them to operate to support reliability. In both cases, just and reasonable rates require the market to reflect the presence of the resource (RMR or state policy) so that consumers do not buy unnecessary replacement capacity.

In its 2021 filing to implement a narrower Focused MOPR, PJM's Vice President of Market Design, Adam Keech, explained that where a state-supported resource is artificially priced out of the market (in his example, a coal unit), "consumers in the state pay twice, i.e., for both the coal unit and the resource committed through the auction because the coal plant did not clear."[146] Mr. Keech's logic equally applies where a resource is retained for reliability reasons; like the state policy resource that will exist on the system regardless of capacity market clearing, the RMR resource is present and operating at PJM's direction to support reliability. Ignoring it leads unjustly and unreasonably to consumers paying twice for reliability.

Commission precedent is overwhelmingly in favor of requiring RMR units to offer into capacity markets as price takers to prevent consumers from being saddled with unnecessary capacity costs. PJM's rules, which do not require RMR resources to offer into the capacity market or otherwise adjust the amount of capacity procured to reflect the availability of RMR resources to meet resource adequacy needs, are unjust and unreasonable and must be remedied by the Commission.

B. High capacity market prices driven by RMR units' non-participation send inaccurate price signals.

PJM's rules that allow RMR resources not to offer into the capacity market not only require consumers to buy unnecessary capacity, but also produce inaccurate capacity price signals. As James Wilson explains, holding RMR resources out of the capacity auction distorts

[146] PJM Interconnection, LLC, Revisions to Application of Minimum Offer Price Rule, Attach. D: Affidavit of Adam J. Keech on behalf of PJM Interconnection, L.L.C., at P 11, Docket No. ER21-2582 (July 30, 2021) ("Keech Aff."), Accession No. 20210730-5166.

the supply-demand balance and is "economically inefficient because it will lead to price signals that falsely signal a degree of scarcity that does not exist."[147] Further, "[t]he inaccurate price signals harm markets by encouraging inefficient decisions with respect to existing and potential new resources by market participants on the supply side and demand side."[148] Mr. Wilson relays and endorses the logic previously offered by Potomac Economics and the Commission and explains that because an RMR unit's net going forward costs are covered by the RMR contract, that RMR unit's net going forward cost needed from the capacity market is zero.[149] Because the RMR resource should economically offer at zero, the resulting reduction of the capacity price would be correct. Conversely, if an RMR resource is not reflected in the capacity market, even though it will be operating and its going-forward costs are zero, the resulting capacity prices will be higher than is efficient.

In case after case, the Commission has established that when resources providing resource adequacy are ignored or excluded, the resulting capacity prices send exaggerated signals regarding the need for resource retention and new investment. In approving ISO NE's price-taker treatment for RMR resources, the Commission noted its agreement with ISO-NE's external market monitor, Potomac Economics, that "as long as resources are retained for fuel security purposes, including such resources in the [capacity auction] as price takers prevents an artificial and inefficient increase in [capacity auction] prices."[150] In the same order, addressing ISO-NE's rejection of alternative approaches that would allow non-zero bids, the Commission reiterated that "retaining a resource outside of the [capacity auction] would not account for its

[147] Wilson Aff., *supra* note 6 at P 26.
[148] *Id.*; *see also id.*at P 25 ("[H]olding the unit out of RPM misrepresents the true state of supply, because the RMR unit, which is needed and has been retained for other reliability needs, does indeed contribute to resource adequacy. To remove the RMR unit from RPM distorts the supply-demand balance represented there.").
[149] *Id.* at PP 4, 18.
[150] *ISO New England Inc.*, 165 FERC ¶ 61,202 at P 85.

contribution to meeting ISO-NE's resource adequacy needs, would result in procuring excess capacity, and *would distort the capacity price*."[151]

In the parallel context of MOPR, the Commission has emphasized that "[i]f a resource does not clear due to the application of the [current MOPR], it will be replaced by a resource with a higher-priced offer, which will raise the market clearing price insofar as it causes a more expensive resource to clear on the margin than would otherwise occur."[152] Enabling market clearing by state supported resources would, in the Commission's judgment, "reduce[] the risk . . . of at least three significant harms: over-procurement of capacity, inflated capacity market prices, and inefficient price signals from the capacity market."[153] PJM also recognized the potential for excessive capacity prices that results from excluding resources when moving to its Focused MOPR just three years ago. Its Vice President of Market Design, Adam Keech, explained that if resources are prevented from offering into the auction and capacity prices do not reflect out-of-market actions, "then capacity prices will incentivize resources to be built that are not needed to maintain reliability" and that "[i]t is difficult to see how such prices are just and reasonable."[154]

In a recent letter refusing to reform its capacity market rules before the next auction, the PJM Board of Managers espoused the view that reflecting the resource adequacy value of RMR resources in the capacity market could "fail to incent the new build needed in Maryland and in the rest of the regional transmission organization."[155] Other beneficiaries of the status quo will undoubtedly argue that requiring RMRs to participate in the auction will lead to "price

[151] *Id.* at P 87 (emphasis added).
[152] *ISO New England Inc. New England Power Pool Participants Comm.*, 179 FERC ¶ 61,139 at P 50 (citing *New York Indep. Sys. Operator, Inc.*, 179 FERC ¶ 61,102 at P 39).
[153] *New York Indep. Sys. Operator, Inc.*, 179 FERC ¶ 61,102 at P 50.
[154] Keech Aff., *supra* note 146 at P 12.
[155] PJM Board of Managers Response, *supra* note 123 at 3.

suppressi[on]."[156] These arguments are unpersuasive and should not deter the Commission from taking appropriate action, fully consistent with its precedent, to protect consumers from skyrocketing prices in future auctions.

At the outset, it cannot be that the market price must be pumped up by artificial means to an extremely high level, such as the inflation of the BGE LDA's price to $466/MW-day in the most recent auction—the highest possible price—in order to attract investment. In the two months since its historically high auction prices were publicized, PJM has explained many factors driving capacity prices up, including demand growth, PJM's recent capacity accreditation changes reducing supply, an increase in the Installed Reserve Margin requirement, and generator retirements.[157] All of these factors appropriately affect the capacity price and send *accurate* signals to the market about where and how much new entry or resource retention is needed. As Mr. Wilson explains, "while additional resources are needed on the PJM system at this time, RPM is designed to set appropriately high prices when resources are needed, [and] it is not necessary or appropriate to distort the supply-demand balance to send a stronger price signal."[158]

The Synapse analysis concludes the market clearing price would still have been $163.46/MW-day had the RMR units participated; this price is also very high by historical standards and would send a strong investment signal as well. Similarly, the IMM has found that if RMR resources in the BGE LDA had participated as price-takers in the most recent auction, overall revenues still "would have been $10,399,791,048," which is among the highest revenues

[156] *See*, *e.g.*, Letter from Todd Snitchler, Elec. Power Supply Ass'n, to PJM Board of Managers Re: Opposition to Critical Issue Fast Path Request on Reliability Must Run Arrangements in Capacity Markets and Possible Auction Delay, at 3 (Sept. 11, 2024), https://www.pjm.com/-/media/about-pjm/who-we-are/public-disclosures/2024/20240912-epsa-p3-letter-regarding-consumer-advocates-request-for-urgent-reforms-to-the-pjm-capacity-market-regarding-rmr-units.ashx.
[157] *See, e.g.,* PJM 2025/2026 Base Residual Auction Report, *supra* note 18.
[158] Wilson Aff., *supra* note 6 at P 32 (internal citations omitted).

in the history of PJM's capacity market.[159] PJM should not be permitted to further increase its price, over what actual market fundamentals would cause, based on a deliberate distortion of the supply picture. Capacity price signals should be adequate to incent the needed investment, but no higher.[160]

The PJM Board's apparent concern with increasing capacity prices by any means necessary also conflicts with its own approval, less than a year ago, of major new transmission projects that will significantly increase the capability of resources outside the BGE zone to serve load there.[161] A market solution to the reliability issues in BGE would be redundant to PJM's planned transmission solution.[162] An order-of-magnitude price spike sends a price signal for new entry that is simply not needed considering the massive transmission solution that is underway.[163] As the IMM puts it, "[t]here are times when a price signal for the entry of generation is not needed or appropriate, e.g. when PJM has committed to the construction of new transmission that will eliminate the price signal when complete."[164]

[159] IMM Analysis of 2025/2026 Auction, *supra* note 4 at 9.
[160] *See, e.g.*, *ISO New England Inc. and New England Power Pool Participants Comm.*, 147 FERC ¶ 61,173 at P 33 (2014) ("the proposed design [] produce[s] prices that are high enough to meet the reliability standard, but not so high as to add unnecessary costs."); *PJM Interconnection, L.L.C.*, 138 FERC ¶ 61,062 at P 84 (2012) (finding "a reasonable balance between maintaining an incentive for resources to commit to providing capacity while not unduly burdening consumers with higher costs").
[161] *See* PJM, Transmission Expansion Advisory Committee (TEAC) Recommendations to the PJM Board, at 4 (July 2023), https://www.pjm.com/-/media/committees-groups/committees/teac/2023/20230711/20230711-pjm-teac-board-whitepaper-july-2023-public.ashx (authorizing construction of two new 500 kV lines, along with numerous other transmission system upgrades, to be completed by the end of 2028).
[162] *See* PJM Response to the 2023 State of the Market Report, supra note 21 at 4 (defending its decision to include the RMR unit in CETO/CETL modeling, in lieu of the eventual transmission solution, and noting that "[t]his consistency removes the potential for distorted price signals that would incent generation where transmission upgrades could have replaced that need.").
[163] This is not to say that no new entry is needed in the BGE zone, and indeed PJM's interconnection queue is full of projects seeking to sell power there. But new entry (and retention of existing resources) should be based on accurate supply and demand information and projections, not artificially elevated price signals.
[164] IMM Analysis of 2025/2026 Auction, *supra* note 4 at 7.

An inaccurate price signal for new entry is particularly unnecessary and counterproductive because investors know that any price spike associated with RMR units not offering into the market, despite their availability, will be short-lived. Any sophisticated developer would know that these prices do not reflect a fundamental change in supply and demand, because the completion of transmission upgrades will alleviate the transmission constraints that have driven higher prices in the BGE LDA. As Mr. Wilson concludes, "market participants are unlikely to respond to a price signal that 1) they know misrepresents the true near-term and longer-term supply-demand balance, and 2) they also know is likely to be short-lived."[165] He explains that"[i]nvestors base their decisions to invest capital on longer-term price expectations, not short-term prices," and will disregard "[t]he extra price signal that results from excluding an RMR unit from RPM[, which] is known to be a distortion of the actual conditions on the system."[166] Such investors also discount the price signal because they "know that transmission to relieve the constraints that the retirement would cause are under construction."[167] As such, the increased prices will only provide windfall profits to existing generators, rather than facilitating necessary new entry.

An inflated price signal is also unnecessary because long-term prices and market fundamentals have already led to a significant amount of new generation entering PJM's queue. The Synapse report notes that there are already thirteen projects in the PJM queue in the BGE LDA, offering roughly 1,200 MW of capacity, with energy storage reflecting 75% of the

[165] Wilson Aff., *supra* note 6 at P 33.
[166] *Id.*
[167] Wilson Aff., *supra* note 6 at P 33. PJM's chief economist has explained that even existing resources deciding whether or not to exit the market look to longer-term price signals when deciding whether or not to undertake cost capital expenditures that would enable continued operation. *See* PJM Interconnection, L.L.C., Revisions to Application of Minimum Offer Price Rule, Attach. E: Affidavit of Dr. Walter F. Graf on behalf of PJM Interconnection, L.L.C., at P 12, Docket No. ER21-2582 (July 30, 2021) ("Graf. MOPR Aff."), Accession No. 20210730-5166 (noting that such costs would need to be recovered over multiple years).

projects.[168] Especially because transmission upgrades will allow for greater imports into the BGE LDA from the rest of the RTO—where hundreds of gigawatts of new generation are in the queue—it is clear that investors have already responded to long-term prices and market fundamentals by seeking to interconnect significant amounts of new generation.

Rhetoric about suppressing market prices is misplaced. While capacity prices would be lower if RMR resources participate, they would not be "suppressed." To the contrary, a price that fails to reflect the resource adequacy contributions of RMR resources would be one that ignores the true supply and demand balance—and thus would not be an accurate price signal. Lower prices do not necessarily signal a flawed price formation mechanism, but are instead, as the Commission has repeatedly found in similar contexts, the correct price given the reality of the system.[169]

In 2018, ISO-NE defended its proposal to treat retained resources as price-takers against a charge that this approach would "suppress capacity prices" by explaining that "once a resource is retained for fuel security, it is appropriate to consider its contributions to resource adequacy when determining capacity awards and prices since the retained resources will continue to contribute to resource adequacy."[170] The Commission agreed with ISO-NE on this point, noting that while "it is not possible to avoid an impact on either the pricing in the [capacity auction] or the quantity of resources procured to satisfy resource adequacy when finding that a resource must be retained for fuel security," it is reasonable to "protect against inefficiently over-

[168] Synapse Report, *supra* note 5 at 32.
[169] *See ISO New England Inc.*, *ISO-NE*, 165 FERC ¶ 61,202 at P 78; *NYISO I*, 155 FERC ¶ 61,076 at P 82 (rejecting proposals for non-zero bids from RMR units because that approach "would allow for inefficient outcomes and is thus unreasonable"); *ISO New England*, 179 FERC ¶ 61,139 at P 50 ("If a resource does not clear due to the application of the [current MOPR], it will be replaced by a resource with a higher-priced offer, which will raise the market clearing price insofar as it causes a more expensive resource to clear on the margin than would otherwise occur." (citing *NYISO*, 179 FERC ¶ 61,102 at P 39)).
[170] *ISO New England Inc.*, 165 FERC ¶ 61,202 at P 78.

procuring capacity resources by reflecting a fuel security resource's contribution to resource adequacy in the [capacity auction]."[171]

In sum, PJM's current rules permitting RMR units to opt out of the capacity market and then not reducing the amount of capacity purchased to reflect the RMR unit's availability results in unjust and unreasonable prices for capacity. The resulting prices reflect an artificial degree of scarcity because they ignore the physical operation of the RMR units. The harm caused to consumers is urgent and substantial—in the last auction consumers paid approximately $5 billion in excess costs, and similar results are likely in the next few auctions.

C. Allowing RMR units not to participate in the capacity market renders the market vulnerable to manipulation.

Because PJM's capacity market is structurally vulnerable to manipulation through the exercise of market power, PJM relies on certain rules and mitigation measures to prevent non-competitive outcomes. However, as discussed below, the absence of any requirement for RMR units to participate in the capacity market renders the market more vulnerable to manipulation through withholding than similar markets in other RTO/ISOs.

As the IMM has explained, "[s]tructural market power is endemic to the capacity market."[172] The capacity market's vulnerability to market power stems from its design, which is "always tight in the sense that total supply is generally only slightly larger than demand."[173] As a result of the inelasticity of demand for capacity, "any supplier that owns more capacity than the typically small difference between total supply and the defined demand is individually pivotal and therefore has structural market power."[174] Similarly, "[a]ny supplier that, jointly with two

[171] *Id.* at P 87.
[172] Monitoring Analytics, Quarterly State of the Market Report for PJM, *supra* note 116116 at 310.
[173] *Id.* at 317.
[174] *Id.* at 318.

other suppliers, owns more capacity than the difference between supply and demand either in aggregate or for a local market is jointly pivotal and therefore has structural market power."[175] The IMM has consistently reported that both the "aggregate market structure" and the "local market structure" for each LDA are "not competitive," in significant part because "for almost all auctions" in its history, both the RTO-wide capacity market and "all LDAs have failed the [three pivotal supplier] test."[176] As a result of this non-competitive market structure, many sellers have market power, which "is the ability of a market participant to increase the market price above the competitive level or to decrease the market price below the competitive level."[177]

To prevent the exercise of market power from distorting capacity prices, PJM relies on "appropriate market power mitigation rules."[178] For example, PJM relies on offer caps to prevent sellers from engaging in economic withholding by submitting bids above a competitive level.[179] Critically, all capacity resources must offer into the capacity market unless they are eligible for a limited number of exceptions. One "fundamental goal of the must offer requirement" is "to prevent the exercise of market power via withholding of capacity supply."[180] The IMM recently stressed the importance of the must offer requirement (albeit in the context of objecting to must-offer exceptions to other resources than RMR units), explaining that "[t]he capacity market was designed on the basis of a must buy requirement for load and a corresponding must offer requirement for capacity resources" and that "[t]he capacity market can work only if both are enforced."[181]

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[175] *Id.*
[176] *Id.* at 310.
[177] *Id.* at 318.
[178] *Id.*
[179] *See id.* at 336
[180] *Id.* at 311.
[181] *Id.* at 321 (criticizing must offer exceptions for "intermittent and capacity storage resources").

As the IMM also explained, the must offer requirement helps "ensure open access to the transmission system" through the use of Capacity Interconnection Rights ("CIR").[182] "If a resource has CIRs that provide access to the transmission system required for the deliverability of energy, but do[es] not offer, those resources are exercising market power by blocking access to the transmission system that could be used by a resource willing to offer into the capacity market."[183] For that reason, the IMM has recommended that "resources return CIRs to the market on the day of retirement."[184] The IMM also cautioned that "[t]he failure to apply the must offer requirement consistently could also result in very significant changes in supply from auction to auction which would create price volatility and uncertainty in the capacity market and put PJM's reliability margin at risk."[185] The fact that RMR units retain their CIRs without any must-offer obligation runs contrary to this line of reasoning and makes PJM's capacity market vulnerable to the volatility and uncertainty that the IMM identified.

PJM's unusual approach of allowing RMR resources to choose whether to participate in the capacity market also exposes the market to the same type of problems that market power mitigation rules aim to prevent. For example, when RMR units opt not to bid into the capacity market—despite consumers paying these units to be available and despite RMR agreements authorizing PJM to call these units during capacity events—the outcome is a diminution in supply and an increase in overall capacity price similar to the effect of a physical withholding of capacity. As the Court of Appeals for the D.C. Circuit noted, a physical withholding may occur when "a multi-plant generator prematurely withdraws a unit from participation in the Forward

[182] *Id.*
[183] *Id.*; *see also* IMM Analysis of 2025/2026 Auction, *supra* note 4 at 5 ("If a resource has CIRs but fails to use them by not offering in the capacity market, the resource is withholding and is also denying the opportunity to offer to other resources that would use the CIRs.").
[184] Monitoring Analytics, Quarterly State of the Market Report for PJM, *supra* note 116 at 321.
[185] *Id.*

Capacity Auction, thereby dampening supply, driving up prices, and enjoying higher returns from other plants."[186] The Synapse Report provides troubling hints of this type of outcome in PJM's most recent capacity auction: the non-participation of RMR units decreased supply, especially in the constrained BGE LDA; capacity costs increased by roughly $5 billion; and, as the Synapse Report notes, the owners of the RMR units in the BGE LDA likely earned $360 million more than they would have by bidding the RMR units into the auction.[187]

Although the IMM has a process for evaluating whether a generator's deactivation constitutes an exercise of market power, several factors make it difficult to discern whether that process actually prevents distortion of the capacity market from RMR units' decisions not to participate. As the IMM explains, "[w]hen notified of an intended deactivation, the [market monitoring unit] performs a market power study to ensure that the deactivation is economic, not an exercise of market power through withholding, and consistent with competition."[188] However, the IMM's study is not publicly available, making it difficult to know whether its analysis focuses solely on the proposed deactivation or whether that analysis also encompasses RMR units' decisions about whether to bid into the capacity market. Additionally, some RMR arrangements provide the Commission with a summary of the IMM's findings, which indicate that the IMM does not evaluate whether an RMR unit's decision not to participate in the capacity market may qualify as an exercise of market power.[189] The practice of filing a summary of the

[186] *See, e.g.*, *Exelon Corp. v. FERC*, 911 F.3d 1236, 1238 (D.C. Cir. 2018) (noting that a physical withholding occurs when "a multi-plant generator prematurely withdraws a unit from participation in the Forward Capacity Auction, thereby dampening supply, driving up prices, and enjoying higher returns from other plants").
[187] Synapse Report, *supra* note 5 at 24, 27.
[188] Monitoring Analytics, Quarterly State of the Market Report for PJM*, supra* note 116 at 360.
[189] Deactivation Avoidable Cost Rate Informational Filing under Section 116 of the PJM Interconnection, L.L.C. Open Access Transmission Tariff, at Attachment 3, Docket No. ER17-750 (Jan. 5, 2017), Accession No. 20140105-5186 ("The IMM analysis did not consider any market power issues that could arise in connection with any PJM determination that reliable system operations may require this unit to continue operating after the retirement dates specified above.").

IMM's findings with the Commission is not universal, and PIOs are not aware of any summary of the IMM's findings that has been filed in a publicly available manner regarding the RMR units in the BGE LDA that elected not to participate in PJM's 2025/2026 capacity auction.

More broadly, the IMM persuasively reasons that as a general matter, RMR units do possess market power: "Because such units are needed by PJM for reliability reasons, and the provision of the service is voluntary in PJM, owners of units that PJM needs to remain in service after the desired retirement date have significant market power in establishing the terms of this reliability service which have generally been set through settlement."[190] The Synapse Report also provides persuasive evidence of the market power of RMR units. For example, the Synapse Report documents that RMR units in the BGE LDA represent a majority of the capacity in that area,[191] meaning that they have market power as pivotal suppliers. More critically, the Synapse Report also documents the vulnerability of PJM's capacity market by showing how just a few RMR units were able to drive a very large increase in capacity prices.[192]

Notably, other RTO/ISOs' capacity markets are not vulnerable to the exercise of market power through the non-participation of RMR units, because market rules in other RTO/ISOs require RMR units to participate in capacity auctions as price-takers, as described above. The fact that PJM's capacity market is thus unusually vulnerable to the exercise of market power by RMR units reinforces the need for swift action by the Commission.

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[190] Monitoring Analytics, Quarterly State of the Market Report for PJM*, supra* note 116 at 363.

[191] Synapse Report, *supra* note 5 at 24 ("In 2024/2025, Brandon Shores and Wagner represent roughly 75 percent of generation capacity in BGE LDA, and together they were responsible for over 60 percent of all cleared capacity (inclusive of supply-side generators, demand response, and energy efficiency). With Brandon Shores and Wagner removed from the supply stack, the BGE LDA does not have enough capacity to intercept the demand curve to the right of Point A on its VRR curve. There is not enough capacity to exceed Point A's UCAP Level, and as a result, the BGE LDA clearing price is at its maximum, $466.35/MW-day.").

[192] *Id.* at 27 (describing how the 2025/2026 auction would have cleared at a significantly lower price, saving consumers $5 billion, if the RMR units in the BGE LDA had participated); *see also* IMM Analysis of 2025/2026 Auction, *supra* note 4, at 2, 14 (showing that RMR units' non-participation in the most recent auction drove a $4.2 billion increase in overall auction revenues despite those units reflecting 1.1% of supply).

D. Absent immediate action from the Commission, PJM's capacity market will continue to yield unjust and unreasonable outcomes.

PJM plans to conduct three Base Reliability Auctions in the next 15 months, with auctions planned for December 2024, June 2025, and December 2025.[193] Unless the Commission requires PJM to reform its capacity market rules to better incorporate the resource adequacy value of RMR units, the next capacity auctions are very likely to clear at excessive prices, just as the most recent auction did. The stakes for consumers are extremely high; each subsequent auction may cost consumers $4 billion to $5 billion in excess costs.

High capacity market prices are not likely to cause RMR units to bid into the capacity market. As the Synapse Report found, the owners of the RMR units in the BGE LDA likely earned $360 million more by not bidding the RMR units into the capacity market than they would have if the RMR units had bid and cleared.[194] Additionally, RMR units would not likely respond to a high price by offering into the capacity market, because their capacity market earnings would be deducted from their RMR payments.[195]

Similarly, although high capacity prices are intended to serve as a signal for investment in new generation, the rapid pace of the upcoming capacity auctions, combined with the slow pace of PJM's interconnection queue, make it unlikely that new generation will be able to come online quickly enough to change the likely results from upcoming auctions. While a large amount of new generation is currently in PJM's interconnection queue, progress through the queue remains quite slow.[196] For example, while PJM has a "fast lane" interconnection study

[193] *See* PJM, Capacity Market (RPM), https://www.pjm.com/markets-and-operations/rpm (downloadable as an Excel spreadsheet at "Auction Schedule").
[194] Synapse Report, *supra* note 5 at 8, 27.
[195] *See*, *e.g.*, Brandon Shores CORS, *supra* note 128, at Attachment A § 5.5 (noting that the RMR unit "will credit monthly net revenues . . . earned from any sales of . . . capacity").
[196] *See* Queued Up 2024, *supra* note 111 at 9, 12, 35; *see also* PJM Interconnection, LLC, Protest of Public Interest Organizations, at 6–11, Docket No. ER24-2045-000 (June 20, 2024), Accession No. 20240620-5242 (describing PJM's clogged, lengthy interconnection queue).

process that it expects to use along with its first "transition cycle" to clear 56,000 MW (nameplate) of new generation through the queue, PJM projects that "fast lane" process will be complete "by late 2025."[197] Under the current schedule, at least two, and possibly three, more capacity auctions will have happened—with billions of dollars of excess costs for consumers—by that time. Moreover, PJM is quick to cast doubt on whether new projects that clear the queue will get built promptly[198] (while failing to recognize the role its own queue delays play in delaying project construction).[199] As the Synapse Report notes summarizes, "wait times for new entrants to the queue could be longer than 3.5 years" due to "high uncertainty around queue waiting times, the current backlog, and interconnection reforms," which means that "their entry into the market will not help to address the anticipated RMRs and the related capacity market disruptions."[200]

Furthermore, as discussed above, RMR arrangements may become increasingly common in PJM as it anticipates forty GW of retirements by 2030 and the interconnection queue remains slow.[201] If RMRs become more common, their non-participation in the capacity market is likely to cause even more pervasive and extreme increases in capacity market prices.

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[197] PJM, *PJM Reaches Next Interconnection Milestone*, PJM Inside Lines (Aug. 6, 2024), https://insidelines.pjm.com/pjm-reaches-next-milestone/.
[198] *Id.*
[199] *See Improvements to Generator Interconnection Procedures and Agreements*, 184 FERC ¶ 61,054 at P 43 (2023) ("Order No. 2023") (noting that "delayed interconnection study results or unexpected cost increases can disrupt numerous aspects of generating facility development"); *id.* at P 971 ("Interconnection customers face financial harm when study deadlines are not met, ultimately inhibiting their ability to interconnect to the system in a reliable, efficient, transparent, and timely manner"); *see also* Abraham Silverman, et al., *Outlook for Pending Generation in the PJM Interconnection Queue* at 7 (May 2024), https://www.energypolicy.columbia.edu/wp-content/uploads/2024/05/PJM-Interconnection-CGEP_Report_042924-2.pdf (describing the key finding that "PJM's increasingly lengthy interconnection process is exacerbating siting and permitting challenges and leading to knock-on delays in equipment procurement and financing decisions, suggesting the timeline for new generation in this market will likely remain long for the foreseeable future.").
[200] Synapse Report, *supra* note 5 at 33.
[201] *Supra* § II(F).

All of these factors—the rapid pace of PJM's auctions, the slow pace of the interconnection queue preventing new entry before subsequent auctions cause further excessive prices, and the prospect of an increasing number of RMRs further distorting capacity prices—mean that it is urgent for the Commission to act to require reforms.

Equitable factors further reinforce the urgency for action by the Commission. As described above, ratepayers in the BGE LDA currently bear the brunt of paying for both the majority of the cost of RMR units in that LDA—hundreds of millions of dollars annually—while simultaneously paying the highest prices possible in PJM's capacity market. The BGE LDA also includes numerous disadvantaged communities in which consumers bear some of the highest energy burdens in the nation, according to DOE's Climate and Economic Justice Screening Tool. For example, DOE's screening tool identifies several census tracts in the Baltimore area where consumers are ranked above the 90th percentile, and in some instances as high as the 98th or 99th percentile for energy cost, as measured by average annual costs divided by household income, and in some instances as high as the 98th or 99th percentile for low income.[202] The extreme energy burdens faced by consumers in the BGE LDA highlight how PJM's capacity is causing serious equity and energy and environmental justice problems that require immediate resolution by the Commission.

Recent precedent further reinforces that it is urgent for the Commission to act quickly to prevent inequitable impacts from PJM's capacity auctions because the Commission has little to no ability to redress inequities once PJM reaches critical points in its capacity auction process. For example, the Court of Appeals for the Third Circuit recently held that the filed rate doctrine

[202] *See*, *e.g.*, DOE, Climate and Economic Justice Screening Tool: Explore the Map, https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5 (information for census tracts 24510200200, 24510190300, and 24510200400 in Baltimore City, Maryland).

constrained the Commission's authority to redress inequitable outcomes from PJM's capacity market, explaining that "equities play no role in [the] application of the filed rate doctrine . . . no matter how compelling the equities" and regardless of whether that rule may "produce a harsh result."[203] In light of the court's ruling, the Commission was required to approve capacity auction results that were based on an "LDA Reliability Requirement [that] was overstated and inaccurate" for the DPL South LDA and that forced ratepayers who already faced significant energy burdens to "pay over $100 million in excess of what would have been necessary" under accurate rules.[204]

Each of the three then-Commissioners filed concurrences expressing strong disagreement with the Commission's inability to redress inequities and disapproval of the inequitable results. Chairman Phillips stressed that "*equity always matters*," that he "did not join this Commission in order to rubber stamp such patently inequitable outcomes," and that the Commission should "take all necessary steps to ensure that we never find ourselves in this position again."[205] Commissioner Clements noted that the filed rate doctrine has led to "a string of unjust outcomes stemming from the courts' narrow view of that doctrine," and emphasized that if PJM fails "to prevent inequitable outcomes, then it will fall to the Commission to cure this failure pursuant to its authority under section 206 of the Federal Power Act."[206] Commissioner Christie reiterated that the excessive prices at issue in that case "would in no universe . . . be considered just and reasonable," emphasized that the application of the filed rate doctrine did in fact lead to inequitable results, and emphasized that the Commission shares responsibility to protect consumers from "dramatic rate increases" and that in light of the complexities and potential

[203] *PJM Power Providers Grp. v. FERC*, 96 F.4th 390, 400–401 (3d Cir. 2024) (quotation marks omitted).
[204] *PJM Interconnection, LLC*, 187 FERC ¶ 61,065 at PP 5, 25–26 (2024).
[205] *Id.* at PP 3–4 (Chair Philips, concurring).
[206] *Id.* at PP 2, 4 (Clements, Comm'r, concurring).

inequities of PJM's capacity market the Commission must ensure "that it is not consumers who must abandon all hope."[207]

The urgency for the Commission to act to prevent inequitable outcomes is even greater here than it was in the recent litigation regarding inequitable outcomes for ratepayers in the DPL South LDA. In that case, the excessive costs for consumers were roughly $100 million, but in this case the excessive costs are vastly greater—at least $4.2 billion from the most recent auction and likely similar impacts from imminent auctions.

PIOs have filed this Complaint as early as possible in order to provide the Commission with as much opportunity as possible to prevent inequitable outcomes. PIOs also strongly encouraged PJM to delay its upcoming capacity auctions so that it could pursue reforms to better account for the resource adequacy contributions of RMR resources and avoid excessive capacity prices and inequitable outcomes.[208] However, despite having delayed previous auctions based on the possibility that its capacity market rules "may be unjust and unreasonable and require change,"[209] the PJM Board recently refused to do so.

E. A range of just and reasonable approaches are available that would avoid inaccurate price signals and harm to consumers

For all the reasons articulated above, PJM current tariff and practices are unjust and unreasonable in failing to account for RMRs when clearing the capacity auction. It is critical that the Commission require PJM to revise its tariff to consistently account for the resource adequacy contributions of RMR units and thus produce capacity rates that send accurate price signals and

[207] *Id.* at PP 1–3 (Christie, Comm'r, concurring) (quotation marks omitted).
[208] Letter from Sierra Club, Earthjustice, Union of Concerned Scientists, Natural Resources Defense Council, and Public Citizen to PJM Board of Managers, Re: Support for Urgent Reforms Regarding Reliability Must Run Units and the PJM Capacity Market (Sept. 6, 2024), https://www.pjm.com/-/media/about-pjm/who-we-are/public-disclosures/2024/20240906-pios-letter-of-support-to-pjm-bard-on-rmrs-in-rpm.ashx.
[209] *See* PJM Interconnection, LLC, Section 205 Filing to Delay Upcoming RPM Auctions at 4, Docket No. ER23-1609, April 11, 2023, Accession No. 20230411-5057.

avoid imposing billions of dollars in excess costs on consumers. As described below, PIOs believe that PJM may justly and reasonably account for RMR units in its capacity market by either including them as supply or by reducing the amount of capacity procured. PIOs respectfully request that the Commission issue an order requiring PJM to submit tariff revisions providing for RMR resources to be reflected in capacity market clearing. PIOs further request that the Commission delay the upcoming 2026/2027 Base Residual Auction for a limited time as needed for the revised tariff to be approved and implemented, or otherwise have the upcoming BRA run subject to refund.

As described in Mr. Wilson's affidavit, there are two basic approaches that PJM could take to address this issue. First, the Commission could require the RMR units to offer into the capacity market as a price taker, "consistent with economic theory and FERC policy."[210] Essentially, this approach would mirror the market rules that the Commission has already approved in NYISO and ISO-NE. This approach would require PJM to amend its OATT provisions regarding exceptions to the must-offer rule, including OATT Attachment DD, section 6.6(g).

Second, Mr. Wilson offers an alternative "economically efficient approach that would continue to allow RMR units to avoid taking on RPM capacity obligations."[211] Under this approach, "the RMR unit's contribution to resource adequacy could be represented within the resource adequacy analysis that determines the locational Reliability Requirements that will be acquired through RPM."[212] As Mr. Wilson explains:

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[210] Wilson Aff., *supra* note 6 at P 37. Mr. Wilson observes that to the extent the RMR unit owner faces exposure to Capacity Performance penalties (i.e., that the RMR arrangement does not take that risk off the unit owner), it may be appropriate for the owner to offer the RMR unit at a non-zero price reflecting some degree of Capacity Performance Quantifiable Risk. *Id.* at P 38.

[211] *Id.* at P 39.

[212] *Id.*

> The RMR unit would be represented as a resource with capacity injection rights that is called by PJM when needed for reliability at its location (consistent with the RMR arrangement) within the resource adequacy modeling. The unit's performance characteristics, including outage rate, would be modeled. RMR agreements typically allow necessary investments to remain in operation over the required period, so it would be reasonable to assume future performance would be consistent with historical performance.[213]

Mr. Wilson further explains that "[t]his approach can be expected to reduce the Reliability Requirements in the unit's locational delivery area by roughly the resource adequacy value of the RMR unit in that zone, and also in parent zones."[214] He concludes that "[r]educing the Reliability Requirement this way would result in roughly the same clearing prices, in both the local and parent zones, as including the RMR unit as a supply resource in RPM."[215]

PIOs are aware that PJM has expressed concerns that a must-offer requirement for RMR resources would deter some of those resources from accepting an RMR arrangement.[216] While it seems possible that a capacity market obligation would impose no actual incremental costs on an RMR resource, due to the RMR arrangement covering most or all of the going-forward costs of the unit,[217] this may be a reason for the Commission to consider the demand-side adjustment framework described by Mr. Wilson. Regardless of which approach the Commission chooses, it is critical that the result be capacity price signals that reflect the actual balance of supply and demand on the system with the RMR unit in operation. Complainants urge the Commission to

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[213] *Id.* at P 40.
[214] *Id.* at P 41.
[215] *Id.* The IMM has also proposed two alternative solutions to PJM's inconsistent rules, which are generally consistent with Mr. Wilson's affidavit. *See* IMM Analysis of 2025/2026 Auction, *supra* note 4, at 6 ("The MMU recommends that PJM treat the inclusion of RMR resources in the capacity market consistently. . . . It would be internally consistent to leave the RMR units out of the CETO/CETL analysis. It would also be internally consistent to include the RMR units in the supply of capacity and in the CETO/CETL analysis.").
[216] PJM Board of Managers Response, *supra* note 123 at 4.
[217] In his recent analysis, the IMM notes that "[i]ncluding RMR resources in the capacity supply curve does not mean forcing unit owners to offer or to take on PAI risk, for example. It simply means that PJM would recognize the fact that PJM treats RMR resources as a source of reliability." IMM Analysis of 2025/2026 Auction, *supra* note 4 at 6.

issue a Show Cause order with a date certain for PJM to bring forward a solution that would achieve this objective.

To ensure the effectiveness of whatever remedy the Commission favors, PIOs respectfully request that the Commission immediately establish a refund date of the date of this Complaint, as authorized under section 206 of the FPA.[218] The FPA explicitly authorizes the Commission to:

> order refunds of any amounts paid, for the period subsequent to the refund effective date through a date fifteen months after such refund effective date, in excess of those which would have been paid under the just and reasonable rate, charge, classification, rule, regulation, practice, or contract which the Commission orders to be thereafter observed and in force.[219]

PJM's capacity auction is a multi-step process,[220] and PIOs believe it is critical that the Commission act swiftly in this case. The immediate establishment of a refund effective date of the date of this Complaint will put PJM and its members on fair notice that the conduct of upcoming capacity auctions will be subject to the Commission's establishment of a just and reasonable set of rules for accounting for the resource adequacy contributions of RMR resources, and that unjust and unreasonable proceeds from upcoming capacity auctions will be subject to refunds.[221]

IV. RULE 206 REQUIREMENTS

To the extent not already provided above, PIOs provide the following additional information required by Rule 206 of the Commission's Rules of Practice and Procedure.[222]

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[218] 16 U.S.C. § 824e.
[219] *Id.* § 824e(b).
[220] The schedule of pre-auction deadlines for December's 2026–27 auction can be downloaded at https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/rpm-auction-schedule.ashx.
[221] *See PJM Power Providers Grp.*, 96 F.4th at 398 (noting the importance of "fair notice" in determining what is retroactive under the filed rate doctrine); *see also Landgraf v. USI Film Products*, 511 U.S. 244, 270 (noting that "retroactivity is a matter on which judges tend to have 'sound . . . instinct[s]', and familiar considerations of fair notice, reasonable reliance, and settled expectations offer sound guidance." (internal citation omitted)).
[222] 18 C.F.R. § 385.206.

A. **Good Faith Estimate of Financial Impact or Harm (Rules 206(b)(3) and (4)):** As documented above, PJM's unjust and unreasonable rules allowing RMR units to choose whether to participate in the capacity market led to an estimated $4.2 to 5 billion in excess costs in the 2025/2026 capacity auction. Those excessive costs will likely increase monthly utility bills for PIOs' members, including PIOs' members in the BGE LDA who will likely see a 19% increase in monthly bills, or $21/month for the average residential customer. Unless the Commission acts quickly, PIOs expect similarly excessive costs from PJM's upcoming auctions in December 2024 and June 2025, which could again drive up monthly utility bills for PIOs' members.

B. **Practical, operational, or other nonfinancial impacts (Rule 206(b)(5)):** PIOs believe that the impacts from PJM's unjust and unreasonable rules regarding RMR units are primarily financial. Because RMR arrangements generally authorize PJM to call on RMR units to provide an array of reliability-related services, as described above, PJM's failure to account for RMR units in the capacity market creates financial harms for consumers in the form of excessive and unreasonable costs, but does not actually prevent or alter the operation of RMR units as PJM may determine they are needed.

C. **Other Pending Matters (Rule 206(b)(6)):** Aspects of this Complaint are at issue in other matters. Whether specific RMR units in the BGE LDA, namely the Brandon Shores and Wagner units, should offer into the capacity market is at issue in ER24-1787 and ER24-1790. However, resolving those matters would not resolve the core issue in this Complaint of whether PJM's capacity market rules are unjust and unreasonable because they fail to account for the capacity value of RMR units that

consumers pay to keep online, nor would resolution of those matters establish rules applicable to future RMR resources. Additionally, PIOs do not believe that disputes about the Brandon Shores and Wagner RMR arrangements will likely be resolved quickly enough to affect the outcome of the upcoming capacity auctions currently scheduled for December 2024, June 2025, and December 2025.

PIOs are also working in a stakeholder process in PJM to advocate for reforms that would lead the capacity market to more accurately incorporate the capacity value of RMR units that consumers pay to keep online. However, PIOs do not believe that the PJM stakeholder process will be resolved quickly enough to affect the outcome of the upcoming capacity auctions currently scheduled for December 2024, June 2025, and December 2025.

D. Specific Relief or Remedy Request (Rule 206(b)(7)): The Complaint sets forth in detail the specific relief requested.

E. Documents Supporting the Complaint (Rule 206(b)(8)): In addition to materials cited herein, PIOs are attaching to this complaint the following documents:

- Attachment 1: Monitoring Analytics, Analysis of the 2025/2026 RPM Base Residual Auction Part A
- Attachment 2: Maryland Office of People's Counsel, Bill and Rate Impacts of PJM's 2025/2026 Capacity Market Results & Reliability Must-Run Units in Maryland, Prepared by Synapse Energy Economics
- Attachment 3: Affidavit of James F. Wilson
- Attachment 4: Declaration of Justin Vickers
- Attachment 5: Communications with the PJM Board of Managers
- Attachment 6: Excerpts from RMR arrangements

F. Alternative Dispute Resolution (Rule 206(b)(9)): PIOs have not used the Commission's Enforcement Hotline or Dispute Resolution Services and do not believe at this time that alternative dispute resolution would resolve the issues underlying this Complaint. PIOs have no reason to expect that alternative dispute resolution would yield the requested relief.

G. Form of Notice (Rule 206(b)(10)): A form of notice of Complaint suitable for publication in the Federal Register is attached.

H. Fast Track Processing (Rule 206(b)(11)): PIOs do not seek fast track processing.

I. Service (Rule 206(c)): PIOs have served a copy of this Complaint on representatives for the Respondent (including those corporate officials designated by PJM on the FERC website for receipt of complaints) via e-mail, simultaneous with the filing of this Complaint.

V. COMMUNICATIONS

Pursuant to Rule 203(b) of the Commission's Rules of Practice and Procedure,[223] PIOs specify that communications in this matter are to be addressed to the following persons:

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[223] 18 CFR § 385.203(b).

VI. CONCLUSION

For all the reasons explained above, PIOs respectfully request that the Commission establish a refund effective date of the date of this Complaint, find that PJM's failure to consistently account for the resource adequacy contributions of RMR resources is unjust and unreasonable, and protect consumers from having to pay twice for capacity by requiring PJM to amend its capacity market rules.

DATED: September 27, 2024

Respectfully submitted,

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/s/ Tyson Slocum Tyson Slocum Energy Program Director Public Citizen, Inc. 215 Pennsylvania Ave, SE Washington, DC 20003 tslocum@citizen.org	

CERTIFICATE OF SERVICE

I hereby certify that I have on this date caused a copy of the foregoing document to be served upon PJM Interconnection, LLC, at the following addresses obtained from the Commission's list of corporate officials designated to receive services pursuant to 18 C.F.R. § 385.2010(k):

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