UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Sierra Club, et al.,)	
Complainants,)	Docket No. EL24-148-000
v.)	
PJM Interconnection, L.L.C.,)	
Respondent.)	

ANSWER OF PJM INTERCONNECTION, L.L.C.

Pursuant to Rule 213 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission ("Commission"), ¹ and the Commission's October 16, 2024 Notice, ² PJM Interconnection, L.L.C. ("PJM") answers the September 27, 2024 Complaint filed by Sierra Club, Natural Resources Defense Council, Public Citizen, Sustainable FERC Project, and the Union of Concerned Scientists (collectively, "Complainants") in the above captioned proceeding. ³ Complainants ask the Commission to find PJM's capacity market rules unjust and unreasonable because they fail to consider the resource adequacy contributions of those generation resources that have provided notice of deactivation but which PJM has asked to temporarily remain in operation for transmission reliability reasons. For the reasons stated below, the Commission should deny the Complaint.

¹ 18 C.F.R. § 385.213.

² Sierra Club v. PJM Interconnection, L.L.C., Notice of Extension of Time, Docket No. EL24-148-000 (Oct. 16, 2024) ("October 16 Notice").

³ Sierra Club v. PJM Interconnection, L.L.C., Complaint of Sierra Club, Natural Resources Defense Council, Public Citizen, Sustainable FERC Project and Union of Concerned Scientists, Docket No. EL24-148-000 (Sept. 27, 2024) ("Complaint").

This Complaint was filed approximately two months before the Base Residual Auction associated with the 2026/2027 Delivery Year is scheduled to commence. The timing of this Complaint and its request for the establishment of a refund effective date prior to the upcoming auction has unnecessarily injected significant market uncertainty in advance of the upcoming Base Residual Action at the exact time that investor confidence in the capacity market is most needed to maintain resource adequacy throughout the PJM Region. Given this significant injection of market uncertainty, PJM has made the difficult decision to support the Complainants' request to delay the upcoming auction⁴ so that the results of the 2026/2027 Base Residual Auction can ultimately be relied upon by investors without the cloud of a refund effective date that could potentially invalidate the auction results.

To that end, PJM has asked the Commission to grant the Complainant's request⁵ and submitted, in Docket No. ER25-118-000, a request for waiver of the PJM Open Access Transmission Tariff ("Tariff") to delay by six months the upcoming 2026/2027 Base Residual Auction and subsequent RPM Auctions through the 2029/2030 Delivery Year.⁶ PJM requested such delay so that the RPM Auctions going forward will have the benefit of the Commission's consideration of a forthcoming PJM filing, that will be submitted pursuant to section 205 of the Federal Power Act ("FPA"), proposing capacity market rule

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⁴ Complaint at P 53.

⁵ Sierra Club v. PJM Interconnection, L.L.C., Motion of PJM Interconnection, L.L.C. to Delay the Reliability Pricing Model Auctions Beginning with the December, 2024 Base Residual Auction for Delivery Year 2026/2027 Through the 2029/2030 Delivery Year, Request for Expedited Action and Order by November 8, 2024, and Request for Shortened 7-Day Comment Period, Docket No. EL24-148-000 (Oct. 15, 2024).

⁶ *PJM Interconnection, L.L.C.*, Request for Waiver of PJM Interconnection, L.L.C. to Delay the Reliability Pricing Model Auctions Beginning with the December, 2024 Base Residual Auction for Delivery Year 2026/2027 Through the 2029/2030 Delivery Year, Request for Expedited Action and Order by November 8, 2024, and Request for Shortened 7-Day Comment Period, Docket No. ER25-118-000 (Oct. 15, 2024).

revisions that potentially address issues stemming from recent environmental policies and other developments that may affect the choice of the Reference Resource, along with a more targeted approach to the issues surrounding RMR resource participation in future capacity auctions than that proposed by the Complainants. Given the close proximity of the auction and the potential uncertainty of a refund effective date, the proposed targeted delay of the upcoming RPM Auctions strikes the proper the balance. Accordingly, the Commission should expeditiously issue an order granting the request for a six-month delay of the RPM Auction schedule without first issuing a ruling on the merits of this Complaint.

I.

INTRODUCTION AND SUMMARY

The Complaint alleges that the higher than usual capacity auction clearing prices resulting from a tightening of supply and demand impose "excessive costs for consumers," and "challenges PJM's failure to consistently account in its capacity market for the resource adequacy value of generators operating under Reliability Must Run ("RMR") [agreements]." The predicate for the Complaint is the convergence of: (1) the long-term trend of tightening supply and demand balance that PJM has been forecasting for years; and (2) a bilateral agreement between Sierra Club and Talen Energy Corporation ("Talen") for Talen's Brandon Shores coal-fired generating units and Wagner units (recently converted to oil) to cease burning coal by December 31, 2025 ("Sierra Club-Talen 2020 Agreement"), as amended ("Sierra Club-Talen 2023 Amendment"). 9 Together, these two

⁷ Complaint at 1

⁸ Complaint at 1.

⁹ PJM includes in Attachment A to this answer a copy of the Sierra Club-Talen 2020 Agreement, dated November 23, 2020, and the April 6, 2023 amendment to allow Brandon Shores to operate pursuant to an order of the Secretary of the Department of Energy, FPA section 202(c) ("Sierra Club-Talen 2023)

factors, along with several others detailed in PJM's report of the 2025/2026 Base Residual Auction results, ¹⁰ contributed to record capacity auction clearing prices for the 2025/2026 Delivery Year. In the most recent auction, the Baltimore Gas & Electric ("BGE") Locational Delivery Area ("LDA")—where Brandon Shores and Wagner are located—cleared at the price cap because not enough capacity offered into the auction to meet the LDA's reliability requirement. Complainants blame PJM for the record clearing prices, arguing that PJM should have considered as capacity Brandon Shores, Wagner, and any other generator that has submitted its retirement notice and which has accepted PJM's request to stay in operation temporarily to address transmission reliability issues. Complainants contend that the Commission should find PJM's capacity market rules unjust and unreasonable because they do not administratively consider RMR resources as providing capacity in the capacity auctions.

As discussed below, PJM's capacity market rules are just and reasonable, and Complainants' reliance on the outcomes of the 2025/2026 Base Residual Auction do not show otherwise. The exact situation involving the Brandon Shores and Wagner units is much more complicated than detailed in the Complaint, as explained below. Ironically, the circumstances which currently prevent PJM from relying on Brandon Shores during the 2026/2027 Delivery Year are caused by the very agreement that one of the Complainants, the Sierra Club, insisted on as part of its agreement with Talen.

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Amendment"). PJM received written consent from both Talen and Sierra Club to publicly disclose the Sierra Club-Talen Agreement as part of this answer.

¹⁰ Tim Horger & Adam Keech, *2025/2026 Base Residual Auction Results*, PJM Interconnection, L.L.C., 30 (Aug. 21, 2024), https://pjm.com/-/media/committees-groups/committees/mrc/2024/20240821/20240821-item-08---2025-2026-base-residual-auction---presentation.ashx ("2025/2026 Base Residual Auction Results").

Moreover, as discussed below, the terms and conditions in which each resource that has submitted a deactivation notice is retained—through an RMR agreement—to temporarily address transmission reliability issues is inherently fact-specific. Accordingly, the Complaint's sweeping, one-size-fits-all conclusion that the PJM Tariff provisions at issue are on their face unjust and unreasonable is unsupported. Likewise, the Complaint's proposed request that all RMR resources need to be considered in the capacity market no matter their circumstances or operating limits also fails. Accordingly, the Complaint's allegation that the PJM retirement rules as they relate to RMR resources' participation in PJM's capacity market are, across the board, unjust and unreasonable, is not justified on this record, and could lead to a host of unintended consequences when applied broadly. Additionally, the Complaint fails to account for the unique facts and circumstances involving the two resources at the heart of the Complaint—Brandon Shores and Wagner. For these reasons the Complaint should be denied.

A. PJM's Capacity Market Is Designed to Signal the Need for Additional Capacity Through Clearing Prices.

Capacity prices should reflect actual supply and demand fundamentals. As the Commission found in approving PJM's capacity market, the auction clearing price is designed to signal the relative need "to construct facilities necessary for regional reliability by assuring that the market value of resources used to meet the capacity requirements reflect actual deliverability and availability of the capacity resource within the specific region relying on that resource." In other words, the market design has always been that high prices would signal that the market is running short of capacity and new capacity should enter the market, while low prices signal that more expensive generation may be

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 $^{^{11}}$ PJM Interconnection, L.L.C., 117 FERC \P 61,331, at P 68 (2006).

uneconomic going forward and should leave the market. ¹² This particularly embodies the "Purpose" stated in the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region ("RAA") that "it is the intention and objective of the Parties to implement this Agreement in a manner consistent with the development of a robust competitive marketplace." ¹³ In other words, the load serving entities in PJM decided to rely on the market to meet resource adequacy needs. As a result, high prices are a feature designed to incent the development of more capacity. In this instance, there are some early signs of interest in development of new dispatchable resources to complement the intermittent resources which presently dominate the PJM interconnection queue. For example, Calpine Corporation has announced preliminary support for development of new resources in PJM in response to the 2025/2026 auction clearing prices. ¹⁴

For years, PJM has been long on capacity, which has corresponded with relatively low capacity prices. The low clearing prices over the past few Base Residual Auctions, and various out-of-market forces, have compelled numerous resources to retire. However, as a broad region-wide matter, supply and demand have converged in recent years. Thus, higher clearing prices are the natural result of supply and demand fundamentals given resource retirements (without timely replacements) and a large increase in expected load growth, driven in large part by electrification trends and data center development in the

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¹² See Hughes v. Talen Energy Mktg., LLC, 578 U.S. 150, 156 (2016) ("The [PJM] capacity auction serves to identify need for new generation: A high clearing price in the capacity auction encourages new generators to enter the market, increasing supply and thereby lowering the clearing price in same-day auctions three years' hence; a low clearing price discourages new entry and encourages retirement of existing high-cost generators.").

¹³ RAA, Article 2.

¹⁴ Darren Sweeney, *Calpine signals plans to ramp up generation development in PJM*, S&P Global, https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/calpine-signals-plans-to-ramp-up-generation-development-in-pjm-83064266 (last visited Oct. 15, 2024).

PJM Region. In fact, it appears that demand may outstrip supply in the near future. The replacements in the interconnection queue have been slow in coming, with over 34,000 megawatts ("MW") with final agreements in hand but have not come into service.

In the BGE LDA specifically, additional capacity is needed to maintain reliability. Over 40% of energy serving BGE LDA's demand is already imported. ¹⁵ The lack of capacity within the BGE LDA is a major reason why this LDA separated in PJM's capacity market and is considered electrically constrained. That is, transmission import limitations are not the sole driver of congestion and reliability issues in the BGE LDA; it is driven by the combination of the limitations in existing transmission infrastructure together with limited Capacity Resources located within the area. Thus, the high clearing prices accurately signal the need for more projects to be constructed.

B. A Capacity Obligation Entails Performance Obligations But Resources Retained to Address Transmission Reliability Are Not Always Substantially Comparable.

Resource adequacy and reliability are serious considerations. Importantly, not all resources may be relied upon as capacity when procuring sufficient resource adequacy through the capacity market. Specifically, to qualify as supply in PJM's capacity market, PJM must have reasonable confidence that a resource is willing and able to perform during capacity emergencies. Thus, PJM's capacity rules provide strong performance incentives, including strict penalties for underperformance. The Commission has found these performance incentives just and reasonable because they make sure Capacity Market Sellers are responsible for ensuring resource performance, "bear[ing] the burden of

units.ashx.

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¹⁵ See PJM Board Response to Consumer Advocates, PJM Interconnection, L.L.C. (Sept. 19, 2024), 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-

delivering on their capacity obligation." ¹⁶ The Non-Performance Charge "holds capacity resources accountable for delivering on their capacity commitments" and "provide[s] incentive to capacity sellers to invest in and maintain their resources by tying capacity revenues more closely with real-time delivery of energy and reserves during emergency system conditions." This is all necessary because performance to resolve capacity emergencies is paramount and is the reason the resources receive capacity payments daily. As such, resources that are accounted for in the capacity market are required to make their resource available every day during the relevant Delivery Year by submitting offers or selfscheduling such resources in the energy market. 19 By contrast, not all resources retained under an RMR agreement in PJM are willing to provide comparable capacity-like service. As PJM's deactivation rules currently stand, they provide no categorical assurance that RMR resources would perform consistent with an obligation to provide capacity therefore, PJM cannot categorically rely on such resources to meet the region's resource adequacy needs. For example, the RMR agreement for the Eddystone 2, Cromby 2, and Cromby diesel units explicitly limit their operation to support the transmission needs of the system. Specifically, the Operating Procedures for these resources specify that "PJM may dispatch a Unit **only** under the following circumstances:

- (i) PJM may dispatch a Unit for a Reliability Purpose to facilitate the reliable operation of the PJM Transmission System when PJM anticipates that the reliability impacts identified in the Deactivation Study will exist if the Unit or Units are not operated.
- (ii) PJM may dispatch a Unit for a purpose other than a Reliability Purpose to facilitate the reliable operation of the PJM Transmission

¹⁶ PJM, Interconnection, L.L.C. v. PJM Interconnection, L.L.C., 155 FERC ¶ 61,157, at P 110 (2016).

¹⁷ *Id.* at P 18.

¹⁸ *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208, at P 158 (2015).

¹⁹ Tariff, Attachment K-Appendix, section 1.10.1A(d).

System when PJM anticipates such operation will help alleviate a Transmission Security Emergency that does not arise from the reliability impacts identified in the Deactivation Study and when PJM already has dispatched all other units that may help alleviate such Transmission Security Emergency, provided that PJM provides Exelon Generation written explanation of such need not later than five (5) business days after the request.

(iii) PJM may dispatch a Unit when operation of the Unit is needed to help maintain the reliability of the PJM Transmission System during a generation or transmission outage scheduled in connection with the construction of the PJM Transmission System upgrades identified in the Deactivation Study"²⁰

Notably, the term "Reliability Purpose" is defined in the Operating Procedures as "the commitment of a [u]nit or the [u]nits after all resources have already been committed and additional units are required to help alleviate a *Transmission Security Emergency*." Thus, the RMR agreements for the Eddystone and Cromby resources precluded PJM from dispatching those resources for capacity emergencies and were instead limited to operating for transmission needs.

In short, an examination of the facts and circumstances regarding each retained resource would be required on a case-by-case basis to ascertain whether PJM can reasonably rely on such resource to perform comparably to a Capacity Resource. Such individual facts and circumstances would include the resource's legal ability to operate throughout a given Delivery Year, such as the Sierra Club-Talen 2020 Agreement, which, as amended in 2023, only permits Brandon Shores to operate beyond December 31, 2025 if the Secretary of Energy has issued an emergency order under FPA section 202(c).

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²⁰ Exelon Generation Company, LLC, Submittal of RMR Rate Schedule of Exelon Generation Company, LLC, Docket No. ER10-1418-000, Attachment C at OP-3 (June 9, 2010).

²¹ *Id.*, Attachment C at OP-2 (emphasis added).

The operating terms and conditions embodied in an RMR agreement are specific to each retained resource. As such, RMR resources are generally not subject to the same, or even similar, obligations as other Capacity Resources that receive a capacity commitment, such as a daily energy and reserve market must-offer requirement. However, the Complaint essentially argues that PJM should count *all* RMR resources as capacity in the RPM Auctions even though they may not be able to or even be expected to provide resource adequacy value commensurate with their accredited levels as would be expected of a committed Capacity Resource.

The combination of the current process in PJM to arrive at an RMR agreement and the proposed solution by the Complainants can lead to undesirable consequences for resource adequacy. For example, if PJM were required to assume the Eddystone 2, Cromby 2, and Cromby diesel units towards its resource adequacy needs, PJM would be counting on resources to perform during capacity emergencies when the RMR agreements have clearly indicated a limitation to operate such resources only to support transmission needs. Similarly, for the Brandon Shores resource, current agreements require the resource to stop operation on coal at the end of 2025 (due to the Sierra Club-Talen 2020 Agreement). This would result in PJM relying on operation of this resource during the winter portion of the Delivery Year when it would be unable to run on the only fuel it operates on, which clearly increases reliability risk.

From a markets perspective, there are also downsides to this approach. Through an economic lens, reliance on resources that are not comparable to Capacity Resources would effectively substitute a potentially lower quality product (RMR resources) for a superior one (Capacity Resource). Such an outcome would misrepresent the supply of capacity and, all else equal, would result in artificially reduced clearing prices. While low capacity prices

in and of themselves are natural when the system has adequate available resources, in the case where an inferior product is being substituted for a superior one, it results in price suppression and prices signals that do not match the actual supply and demand balance.

Moreover, as detailed below, PJM currently has no authority to require generators to stay online past a 90-days' notice period, no Tariff-based authority to dictate how a retained generator may operate, and no control over how the generator may be compensated. Rather, under the current rules, the generator retains each of these rights—and can elect how to exercise them. Extending the rules and obligations for resources undertaking a capacity commitment to resources *seeking to avoid such obligations and retire* very likely would adversely affect whether the seller chooses to stay in operation or retire. In other words, encumbering resources seeking to retire with additional performance obligations would act as a disincentive for such resources to accept PJM's request and stay online.

Moreover, as noted below, the Complaint ignores the specific circumstances surrounding Brandon Shores such that even if the Complaint were granted, the resource still would not be available to provide capacity (or a substantially comparable service) given the agreement that one of the Complainants (Sierra Club) reached with the resource owner (Talen) without the prior knowledge or approval of PJM.

For all these reasons, and as more fully set forth below, the Complaint should be denied.

BACKGROUND

A. As PJM Has Been Warning for Years, Supply and Demand in PJM Are Tightening.

From the establishment of PJM's current capacity market in 2006 through the Base Residual Auction for the 2024/2025 Delivery Year, the PJM region has been long on capacity, often procuring reserve margins of over 20%.²² But in recent years, PJM has been portending a tightening of the supply and demand balance. In March 2021, PJM informed stakeholders that "[t]he changes occurring in the electric industry and evolving resource mix have the potential to significantly impact the provision of adequate supply and reliability in PJM."²³ In February 2023, PJM warned that "the current pace of new entry would be insufficient to keep up with expected retirements and demand growth by 2030."²⁴ But, since then, load growth has continued to outpace prior expectations as "[a]verage growth estimates for PJM's summer peak, for example, have increased by 375% between the 2022 and 2024 load forecasts – from 0.4% per year to 1.6% per year. This trend adds to the complexity of ensuring reliability through the energy transition."²⁵ Thus, PJM has been taking steps over the past few years to address the "potential for an

²² The Base Residual Auction for the 2024/2025 Delivery Year cleared sufficient unforced capacity to provide a 21.7% reserve margin. 2024/2025 RPM Base Residual Auction Results, PJM Interconnection, L.L.C., 2 (June 18, 2024), https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2024-2025/2024-2025-base-residual-auction-report.ashx.

²³ Reliability in PJM: Today and Tomorrow, PJM Interconnection, L.L.C., 12 (Mar. 11, 2021), https://www.pjm.com/-/media/library/reports-notices/special-reports/2021/20210311-reliability-in-pjm-today-and-tomorrow.ashx.

²⁴ Energy Transition in PJM: Resource Retirements, Replacements & Risks, PJM Interconnection, L.L.C., 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 ("Resource Retirements, Replacements & Risks Report").

²⁵ *Id.* at 12.

asymmetrical pace within the energy transition, where resource retirements and load growth exceed the pace of new entry, underscores the need for better accreditation, qualification and performance requirements for capacity resources," as "[t]he composition and performance characteristics of the resource mix will ultimately determine PJM's ability to maintain the reliability of the bulk electric system."²⁶

Indeed, in response to recent low clearing price signals, increasing environmental compliance costs, and new policies adopted at the federal, state, and local levels,²⁷ a significant portion of PJM's historical, thermal generation fleet has or is in the process of retiring, including Wagner and Brandon Shores, while replacement resources are not arriving timely. These pressures combined to result in a historic transformation in PJM's resource mix as more renewable and energy storage resources come online. In 2008, almost 55% of the energy in PJM was generated by coal-fired resources, with 7.4% from gas-fired resources, and nuclear comprised about 35%. Since then, in 2023, nuclear resources have continued to contribute a steady 33%, while coal and natural gas have flip-flopped, such that coal generates only 14.7% and natural gas fuels 44.1%.²⁸ In fact, between 2012 and 2022, over 47,000 MW of generation retired in PJM, with the vast majority being coal-fired.²⁹ While renewables, storage, and hybrid resources met less than 8% of the PJM Region's demand in 2023, they are the fastest growing resource types,

²⁶ *Id.* at 17.

²⁷ With respect to the Brandon Shores and Wagner resources in the BGE LDA, both resources retired for economic reasons. *Talen Energy Corporation Consolidated Financial Statements For the Year Ended December 31, 2023*, Talen Energy Corporation, 53, 88 (Dec. 31, 2023), https://ir.talenenergy.com/static-files/d65f2be5-0faa-488e-99d6-306150dcc447 ("Talen 2023 Consolidated Financial Statements").

²⁸ State of the Market Report for PJM, Monitoring Analytics, LLC, 198 at Table 3-66 (Mar. 14, 2024), https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2023/2023-som-pjm-sec3.pdf.

²⁹ Resource Retirements, Replacements & Risks Report at 6.

comprising about 94% (~271,000 MW of installed capacity) of PJM's interconnection queue in February 2023.³⁰

In addition to an accelerated pace of resource retirements, the facilities lined up to replace them have been slow in arriving. To significantly improve the timely processing of existing interconnection requests as well as of New Service Requests and more effectively clear the existing interconnection study backlog, PJM proposed and the Commission accepted a comprehensive reform of its interconnection process.³¹ Despite PJM's proactive approach and accelerated processing of interconnection requests, many projects that have completed the queue and have executed interconnection service agreements have not been constructed. As of September 2024, 448 projects, totaling over 34,000 MW (installed capacity) have graduated the queue and have executed final agreements but are not yet in service, and 111 projects are in construction, 199 in engineering/procurement, while 138 projects have elected to suspend.³² Further, many of the resources that retired had a high reliability value per installed megawatt, whereas many of the new generation resources coming online have low reliability contribution due to their inherent operating characteristics. In short, the replacements have been slow in coming and do not provide a one-for-one replacement for the capacity of the retiring resources.

Further to the energy transition affecting the composition of the supply stack, PJM's adoption of the effective load carrying capability ("ELCC") capacity accreditation approach resulted in more accurate reliability accreditation of generation resources

³⁰ Resource Retirements, Replacements & Risks Report at 10.

³¹ See PJM Interconnection, L.L.C., 181 FERC ¶ 61, 162 (2022), order on reh'g, 184 FERC ¶ 61,006 (2023).

³² Jason Shoemaker, *Commercial Deployment of New Generation*, PJM Interconnection, L.L.C., 6-7 (Sept. 25, 2024), https://pjm.com/-/media/committees-groups/committees/mrc/2024/20240925/20240925-item-09---pjm-interconnection-queue----presentation.ashx.

affecting the megawatt quantity of unforced capacity in the supply stack. PJM's ELCC approach analyzes the performance characteristics of each resource and evaluates it over a range of possible scenarios in each hour of the Delivery Year. The natural result of applying the more granular and accurate ELCC method rather than the historical use of the Equivalent Demand Forced Outage Rate is that the reliability values previously ascribed to such generation resources decreased. In other words, even if the installed capacity of the thermal generation resources was unchanged between the 2024/2025 Base Residual Auction and 2025/2026 Base Residual Auction, the amount of unforced capacity available to offer into the auction decreased because the new marginal ELCC calculation better recognizes resources' reliability contribution during times of system stress.

The foregoing changes to the supply stack is only half the equation. After years of low or stagnant growth in demand, loads are now rapidly growing. The increase in demand is likely to continue as electrification trends and construction of new data centers in the PJM Region are projected to increase. Indeed, the 2024 load forecast used in the 2025/2026 Base Residual Auction showed a 2.2% (3,242.7 MW) increase over the 2022 load forecast used in the 2024/2025 Base Residual Auction.³³ Similarly, the 2025 load forecast, while not finalized, is expected to again be significantly higher than the load forecast from 2024.³⁴

As a result, the market's supply and demand are converging to the point where only 514 MW of annual unforced capacity was offered above the PJM Region Reliability

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³³ 2025-2026 RPM Base Residual Auction Planning Parameters, PJM Interconnection, L.L.C., https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2025-2026/2025-2026-planning-period-parameters-for-base-residual-auction.ashx (last visited Oct. 16, 2024).

³⁴ 2024-2025 RPM Base Residual Auction Planning Parameters, PJM Interconnection, L.L.C., https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2024-2025/2024-2025-rpm-bra-planning-parameters.ashx (last visited Oct. 16, 2024).

Requirement in the 2025/2026 Base Residual Auction,³⁵ and in the same auction, the BGE and Dominion Virginia Electric Power LDAs cleared at the price cap due to being short of their respective LDA Reliability Requirements.³⁶

B. PJM's Deactivation Rules Vest Generators with the Rights to Determine Whether, How, and Cost for Remaining in Operation After Submitting a Deactivation Notice.

PJM's retirement rules endow the deactivating generator with the rights to decide: (1) whether the resource elects to remain in operation after the deactivation date to address transmission reliability issues; (2) how the resource may operate during the retained period (in accordance with terms negotiated with PJM); and (3) the means by which the resource may be compensated. Such approach embodies the philosophical approach that the generator is the public utility and the party with FPA section 205 rights over the terms and conditions of its operation and compensation. This is borne out by the Tariff's lack of a *pro forma* RMR agreement, establishing standard operating terms and conditions for RMR resources, and the Tariff's allowance that the retained generator may propose and justify the terms, conditions, and cost of retention before the Commission. ³⁷ As a result, the terms and conditions under which each retained resource agrees to operate are resource-specific, though the operating terms are negotiated with PJM.

Further, PJM's Tariff specifies that a Capacity Market Seller is eligible to seek an exception to the capacity must-offer requirement if the generator submits a notice of deactivation "without regard to whether [PJM] has requested the Capacity Market Seller

³⁵ 2025/2026 Base Residual Auction Results at 30.

³⁶ 2025/2026 Base Residual Auction Report, PJM Interconnection, L.L.C. (July 30, 2024), 2025-2026-base-residual-auction-report.ashx (pjm.com).

³⁷ See PJM Interconnection, L.L.C., 112 FERC ¶ 61,031, at P 19 (2005).

to continue to operate the resource beyond its desired deactivation date."³⁸ Thus, the decision is left to the generator owner to decide whether it wants to submit an offer and take on a capacity commitment, with its associated performance obligations. This general resource deactivation rule fails to provide a general level of confidence that every RMR resource will perform during capacity emergencies consistent with Capacity Resources that have a capacity obligation. That is, to ensure resource adequacy and reliability, PJM must be able to rely on each resource to perform in accordance with its capacity obligation.

1. PJM's Retirement Rules Are Generator-Focused.

PJM proposed its deactivation rules in November 2004,³⁹ and the Commission accepted them in January 2005.⁴⁰ Since then, the following general framework has remained undisturbed: (1) the generator provides 90 days' notice that it will retire;⁴¹ (2) PJM studies the proposed deactivation for any transmission reliability issues that may result, while the Independent Market Monitor for PJM ("Market Monitor") evaluates whether proposed deactivation could result in market power issues;⁴² (3) PJM notifies the generation owner results of its and the Market Monitor's analyses, and to the extent there are transmission reliability issues, PJM asks the generator to remain in service until they

³⁸ Tariff, Attachment DD, section 6.6(g)(A).

³⁹ PJM Interconnection, L.L.C., Compliance Filing, Docket No. EL03-236-003, at 9-21 (Nov. 2, 2004).

⁴⁰ See PJM Interconnection, L.L.C., 110 FERC ¶ 61,053, at PP 123-154 (2005).

⁴¹ Tariff, sections 113.1, 113.3.

⁴² See Tariff section 113.1 (requiring PJM to provide the Market Monitor with a copy of request to deactivate); Operations Planning Division, *PJM Manual 14D: Generator Operational Requirements*, PJM Interconnection, L.L.C., 91 (Dec. 20, 2023), https://www.pjm.com/-/media/documents/manuals/m14d.ashx ("[T]he Independent Market Monitor will analyze the effects of the proposed deactivation with regard to potential market power issues.").

are resolved;⁴³ and (4) the generator either accepts or rejects the request to remain in service to address the transmission issues.⁴⁴

Under these rules, after the generator's 90 days' notice has passed, it is free to retire and cease operations, regardless of the impacts. Indeed, under the Tariff, PJM only has the authority to *ask* a generator to *voluntarily* stay in service on a limited basis to address reliability violations associated with its deactivation, and the generator has no obligation to stay in service. The Tariff is also silent on the manner in which PJM may dispatch a retained generator or require it to operate. Put another way, there is no Tariff requirement authorizing PJM to dictate when the retained generator must operate or provide energy. 46

PJM proposed a tariff rule allowing PJM to require a generator to remain in service while PJM's solutions to the transmission reliability issues are addressed, but the Commission rejected this proposal,⁴⁷ holding that "PJM [can]not require generators to continue operations." The Commission recognized that a generator is free to elect to retire notwithstanding any reliability issues that may cause. As such, it is up to the

⁴³ Tariff, section 113.2.

⁴⁴ Tariff, section 113.2.

⁴⁵ See Tariff, section 113.2 ("Regardless of whether the Deactivation of the generating unit would adversely affect the reliability of the Transmission System, the Generation Owner or its Designated Agent may deactivate its generating unit, subject to the notice requirements in Tariff, Part V, section 113.1.").

⁴⁶ See Tariff, section 113.2.

⁴⁷ See PJM Interconnection, L.L.C., 110 FERC ¶ 61,053, at P 137 ("However, we are rejecting the specific language in Original Sheet No. 224A 4, that provides that PJM can 'require' generators to continue to operate for an indeterminate period, because PJM has not adequately shown that it has the authority to require generators to operate beyond a reasonable notice period.") (footnote omitted).

⁴⁸ *PJM Interconnection, L.L.C.*, 112 FERC ¶ 61,031, at P 36.

⁴⁹ *PJM Interconnection, L.L.C.*, 112 FERC ¶ 61,031, at P 31 ("If PJM notifies the unit that its deactivation would cause reliability concerns, the unit may deactivate 90 days after it gave its notice to PJM." (emphasis added)).

"generator [to] choose[] to remain an active member and connected to the system in order to maintain reliability." ⁵⁰

Generators that elect to stay in-service may choose their cost recovery mechanism from either a Tariff-based default formula or submit their cost of service rate pursuant to FPA section 205.⁵¹ The Commission found that this approach allows "generators within PJM [to] retain their rights to seek a just and reasonable rate by filing a [cost of service] rate case with the Commission."⁵² In sum, PJM has no authority to require generators to stay online past the 90 days' notice period, no Tariff-based authority to dictate how a retained generator may operate, and no control over how the generator may be compensated. Rather, under the current Tariff, the generator retains each of these rights.

As mentioned in the Complaint,⁵³ the Tariff's approach of giving the generator all the authority is in contrast to some other regional transmission operator ("RTO"), which have tariff-based authority to compel generators to remain online and continue operating—and to set the terms and conditions for such operation through a *pro forma* RMR agreement.⁵⁴ PJM recognizes this. About a year ago, PJM and its stakeholders initiated a

⁵⁰ *PJM Interconnection, L.L.C.*, 110 FERC ¶ 61,053, at P 136.

⁵¹ See Tariff, section 113.2 ("Upon receipt of notification from the Transmission Provider that Deactivation of the generating unit would cause reliability concerns, the Generation Owner shall immediately be entitled to file with the Commission a cost of service rate to recover the entire cost of operating the generating unit until such time as the generating unit is deactivated pursuant to this Part V ("Cost of Service Recovery Rate"). In the alternative, the Generation Owner may elect to receive the Deactivation Avoidable Cost Credit provided under this Part V.").

⁵² *PJM Interconnection, L.L.C.*, 112 FERC ¶ 61,031, at P 21.

⁵³ See Complaint at 6 ("Unlike many RTO/ISOs, PJM cannot require a retiring resource to enter into an RMR [agreement]; instead, in PJM, RMR [agreements] are purely voluntary.").

⁵⁴ See, e.g., ISO New England Inc., Transmission, Markets and Services Tariff § III.13.2.5.2.5(a) (requiring that de-list bids for capacity deemed necessary for reliability reasons to be rejected for the sole purpose of addressing a local reliability issue); *Id.* § III, App. I – Form of Cost-Of-Service Agreement.

stakeholder process to update the deactivation rules.⁵⁵ As of the date of this answer, several packages of reforms are up for vote before the Deactivation Enhancements Senior Task Force.⁵⁶

2. PJM's Capacity Market and Deactivations Rules Are Reasonably Distinct.

As discussed, PJM's deactivation rules are silent on whether a retained resource must participate in the capacity market. By contrast, PJM's capacity market explicitly allows resources that have submitted a deactivation request to be excepted from the market's "must-offer" requirement. Specifically, a resource subject to the "must-offer" requirement may obtain an exception if the seller demonstrates that:

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 to [PJM] consistent with Tariff, Part V, section 113.1, without regard to whether [PJM] has requested the Capacity Market Seller to continue to operate the resource beyond its desired deactivation date in accordance with Tariff, Part V, section 113.2 for the purpose of maintaining the reliability of the PJM Transmission System and the Capacity Market Seller has agreed to do so[.]⁵⁷

Therefore, a resource that PJM has asked to stay in service for a given Delivery Year may obtain an exception from its obligation to offer to provide capacity for that Delivery Year. It bears noting that seeking an exception from the "must-offer" requirement is at the

⁵⁵ Early on in the stakeholder process, PJM advocated for reforms that would provide PJM authority to require a generator to remain in operation if directed by PJM. In pursuing these reforms, PJM was concerned that a bilateral agreement between Sierra Club and Talen for Brandon Shores and Wagner coal-fired generating unit to cease burning coal by December 31, 2025, would act as a bar to Talen agreeing to an RMR agreement for Brandon Shores. Once Talen acquiesced to Brandon Shores being retained—pursuant to an RMR agreement it would file with the Commission and with severely limited operating parameters, the acuity of the issue disappeared.

Deactivation Enhancements Senior Task Force, PJM Interconnection, L.L.C., https://www.pjm.com/committees-and-groups/task-forces/destf (last visited Oct. 17, 2024).

⁵⁷ Tariff, Attachment DD, section 6.6(g)(A).

election of the resource seller; there is no obligation to seek such an exception if the resource is being retained to address transmission reliability.

In addition, in the initial order on PJM's RPM proposal, the Commission considered and rejected requiring retiring generators to remain in operation for resource adequacy, finding: "While such an approach might alleviate the situation in the very near term, this stop-gap approach would fail to address the longer-term need to provide sufficient price signals to support development of new resources and the retention of existing resources over the long-term, and the capacity adequacy construct should ensure the presence of financial incentives for resources to voluntarily agree to commit to longer service terms." ⁵⁸

C. The Agreement Between Sierra Club and Talen Regarding Operation of Brandon Shores and Wagner.

The tightening of supply has continued with the announced retirement of Brandon Shores and Wagner in the capacity constrained BGE LDA. The retirement of these resources likely has its genesis in the Sierra Club-Talen 2020 Agreement, a two-party, bilateral agreement between Sierra Club and Talen in which they initially agreed that Brandon Shores and Wagner (since converted to oil) would stop generating energy using coal as a fuel source no later than December 31, 2025, in exchange for Sierra Club not pursuing legal action regarding environmental claims against the resources.⁵⁹ The bilateral agreement allowed Talen to convert the resources to run on oil as a fuel source.⁶⁰ Sierra Club issued a press release touting this agreement and Talen's plans to "mov[e] off coal."⁶¹

⁵⁸ *PJM Interconnection, L.L.C.*, 115 FERC ¶ 61,079, at P 36 (2006).

⁵⁹ See Attachment A (Sierra Club-Talen 2020 Agreement).

⁶⁰ See id.

⁶¹ Sierra Club and Stoney Beach Association statements on Talen Energy's commitment to stop burning coal by the end of 2025, Sierra Club, https://www.sierraclub.org/press-releases/2020/11/sierra-club-and-stoney-

In reaching this bilateral agreement, neither party consulted with PJM as to the ramifications of the potential retirement of these resources—on the transmission system, the capacity market, or the costs required to maintain transmission reliability and resource adequacy.

After the Sierra Club-Talen 2020 Agreement, Talen converted the ~800-megawatt Wagner facility into one that used oil for fuel and in December 2021, Talen applied to convert the ~1,200-megawatt Brandon Shores facility to run on oil. The Maryland Public Service Commission approved the coal-to-oil switching, subject to condition. In May 2021, Talen contacted PJM to discuss the fuel switching at Brandon Shores and Wagner. Over the next fifteen months, through August 2022, Talen continued conversations with PJM staff about the Brandon Shores conversion to oil. Then, as Talen explained in its 2023 Consolidated Financial Statements, Talen opted not to go forward with converting Brandon Shores units to burn oil "due to increased project costs and declining PJM capacity revenues." Thereafter, Talen submitted a deactivation notice for Brandon Shores on April 6, 2023 given its determination that it would be uneconomic to convert Brandon Shores' fuel source and its view that Brandon Shores "is required by contract and permit to cease coal combustion by December 31, 2025."

Also on April 6, 2023, Sierra Club and Talen agreed to amend the Sierra Club-Talen 2020 Agreement to allow Brandon Shores to burn coal after December 31, 2025, but

beach-association-statements-talen-energy-s-commitment (last visited Oct. 15, 2024). Sierra Club noted that, "[i]n addition to moving off coal, Talen publicly committed to develop 1 GW of solar and electricity storage facilities, beginning with a 100MW solar development adjacent to the Montour site in Pennsylvania and storage at Wagner in Maryland." *Id.*

⁶² Talen 2023 Consolidated Financial Statements at 88. PJM was not consulted on the agreement between Talen and Sierra Club and did not become aware that Talen had decided to pivot from its fuel conversion plan until April 6, 2023, when PJM received a deactivation notice for Brandon Shores.

⁶³ Talen 2023 Consolidated Financial Statements at 44.

only to the extent the Secretary of the U.S. Department of Energy "issues an emergency order pursuant to FPA section 202(c), 16 U.S.C. § 824a(c), for Brandon Shores." The amendment continues that "the deadline for Brandon Shores to cease combustion of coal shall be extended until the expiration of such order, provided that Brandon Shores has filed a deactivation notice with PJM prior to the 2025-2026 delivery year PJM capacity auction." Thus, it should not be lost on the Commission that the underlying reason that Talen submitted a deactivation notice prior to the 2025/2026 Delivery Year for Brandon Shores was, at least in part, caused by the efforts of one of the complainants, Sierra Club, to shut down this resource by the end of 2025 and deprive the market of capacity that might otherwise have been provided by this resource.

The timing of the deactivation notice means that Brandon Shores could be excused from the "must-offer" requirement for the 2025/2026 Delivery Year since the resource cannot provide capacity *after* December 31, 2025, by agreeing to cease generating energy on that date. In short, Sierra Club contractually required Brandon Shores to deactivate, and did so in a regulatory context where PJM has no authority to require any retained resource to participate in a capacity auction and no authority to deem a retained resource as capacity or otherwise encumber it with a capacity obligation. In other words, by requiring the submission of the deactivation notice, the April 2023 Amendment licensed Brandon Shores to *not* participate in the 2025/2026 Base Residual Auction.

Upon receiving the Brandon Shores deactivation notice, PJM followed its Tariff, studied the transmission reliability impacts, identified numerous violations resulting from

⁶⁴ Sierra Club-Talen 2023 Amendment, section 3(a).

⁶⁵ Sierra Club-Talen 2023 Amendment, section 3(a).

its retirement, and asked Brandon Shores to remain in service until the necessary transmission enhancements go into service. With regard to the Wagner facility, while Talen successfully converted at least one unit to burn oil, Talen determined to retire the facility "for economic reasons." Accordingly, in October 2023, Talen submitted a deactivation notice for the Wagner facility. PJM similarly followed the Tariff's deactivation study process and asked Talen to keep Wagner in operation for transmission reliability reasons.

As is its right under the Tariff, Talen voluntarily elected to keep these units available, elected to file and justify its own proposed cost of service rate schedule (i.e., RMR agreement), and filed them in Docket Nos. ER24-1787 (Wagner) and ER24-1790 (Brandon Shores). Consistent with its rights under the Tariff, each agreement dictates how the facilities will be operated. Following negotiations between Talen and PJM, both agreements propose that "PJM may schedule and dispatch either or both Units solely to address[:]

- (i) an identified transmission reliability need in support of the requirement to operate such transmission facilities within established thermal, voltage and stability limits under Sections 2 and 3 of PJM Manual 3 and when such transmission reliability needs cannot otherwise be met with available economically dispatched generating resources;
- (ii) a PJM transmission reliability need caused by a system restoration need as described in PJM Manual 36;
- (iii) a capacity emergency (as described in PJM Manual 13) during which PJM determines that the resources scheduled for an operating day are not sufficient to maintain the appropriate reserve levels for PJM[;] and

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⁶⁶ Talen 2023 Consolidated Financial Statements at 53.

(iv) any required testing for either or both Units as set forth in Section 3.3(e).⁶⁷

However, Sierra Club protested these agreements, and told the Commission that it "cannot approve" the proposed RMR for Brandon Shores because the as-filed RMR agreement provides that Brandon Shores "shall not be obligated to cause either Unit to be operated in a manner that will cause Brandon Shores to violate the terms of . . . the [Sierra Club-Talen Agreement]." Thus, Sierra Club stated that its agreement for Brandon Shores would need to be modified to allow Brandon Shores to operate past the end of 2025 and "such resolution must precede approval of the [RMR agreement] as filed." Indeed, Sierra Club has recognized that the Wagner and Brandon Shores' as-filed RMRs lack the necessary performance incentives for Talen "to operate the plants when needed," as the RMRs "do not require Talen to ensure that Brandon Shores and Wagner are available and/or available at the necessary capacity when PJM needs the unit in order to maintain system reliability."

The Commission has since accepted these agreements subject to refund and hearing procedures, 71 meaning that the final terms, conditions, and rates under which Brandon Shores and Wagner may be operated are still unknown.

⁶⁷ HA Wagner LLC, RMR Arrangement – Continuing Operations Rate Schedule Request for Expedited Consideration, Docket No. ER24-1787-000, Attachment A § 3.3(a) (Apr. 18, 2024); Brandon Shores LLC, RMR Arrangement – Continuing Operations Rate Schedule Request for Expedited Consideration, Docket No. ER24-1790-000, Attachment A § 3.3(a) (Apr. 18, 2024).

⁶⁸ HA Wagner LLC, Protest of Sierra Club, Docket Nos. ER24-1790-000, et al., at 3 (May 16, 2024) ("Sierra Club ER24-1790 Protest").

⁶⁹ Sierra Club ER24-1790 Protest at 3.

⁷⁰ *Id.* at 9-10.

⁷¹ See H.A. Wagner LLC, 187 FERC ¶ 61,176 (2024).

To recap, under its current agreement with Sierra Club, Brandon Shores is not allowed to operate after December 31, 2025. The Complaint acknowledges that Brandon Shores cannot operate beyond that date without Sierra Club approval. Indeed, Sierra Club's counsel asserts that "[u]nder the agreement, Sierra Club's remedy against Talen for continuing to burn coal at Brandon Shores beyond 2025 would be to renew its efforts to enforce certain environmental laws at Talen's facilities." While PJM is not—and has never been—a party to any negotiations between Sierra Club and Talen over the operation of Brandon Shores, it appears that "while Sierra Club supports the cessation of coal combustion at the Brandon Shores plants, Sierra Club recognizes that PJM may need to rely on Brandon Shores to maintain reliability and is willing to negotiate necessary modifications to its agreement with Talen to enable PJM to do so."

Central to the Complaint is the claim PJM should have considered Brandon Shores and Wagner as capacity. ⁷⁶ However, as discussed, there are several questions of law and facts about whether PJM can rely on such resource being in operation and if so, the manner in which Talen plans to operate the resources at this time. In fact, it is unclear whether either resource may actually be in operation after December 31, 2025.

Accordingly, even if the Commission were to grant this complaint (which it should not), it would not be reasonable to rely on Brandon Shores or Wagner as capacity toward meeting the applicable reliability requirements in the context of PJM's capacity market absent: (1) modification to the Sierra Club-Talen agreement; and (2) assurances that the

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⁷² Talen 2023 Consolidated Financial Statements at 44.

⁷³ See Complaint, Declaration of Justin Vickers (Att. 4) ¶ 6 ("Vickers Declaration").

⁷⁴ Complaint, Vickers Declaration ¶ 9.

⁷⁵ Complaint, Vickers Declaration ¶ 6.

⁷⁶ See Complaint at 19-24.

resources' operational expectations would be comparable to committed Capacity Resources.

III.

ANSWER TO COMPLAINT

A. Complainants Fail to Meet Their Burden of Proof of Demonstrating that PJM's Approach Is Unjust and Unreasonable.

The Complaint's central claim is that the PJM Tariff's "failure to consistently account in its capacity market for the resource adequacy value of generators operating under [RMR agreements]" is unjust and unreasonable. In support, the Complaint primarily points to the clearing prices from the 2025/2026 Base Residual Auction and the rules of ISO New England Inc. ("ISO-NE"), New York Independent System Operator, Inc. ("NYISO"), and the California Independent System Operator ("CAISO"). But, neither of these factors demonstrate that PJM's rules are unjust and unreasonable. Indeed, the market design approved by the Commission is supposed to yield high clearing prices when supply and demand are tight, and the Commission has on multiple occasions recognized that PJM's capacity market design is markedly different from ISO-NE's and NYISO's. And, CAISO does not even have a market to compare.

Even if the Commission were inclined to consider RMR resources toward meeting a resource adequacy reliability requirement, the Commission should recognize and balance the tradeoff from the short-term gain of such a stop-gap approach against the long-term

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⁷⁷ Complaint at 1.

⁷⁸ In any event, "[i]t is well established that there can be more than one just and reasonable rate." *Midwest Indep. Transmission Sys. Operator, Inc.*, 127 FERC ¶ 61,109, at P 20 (2009); *see also Duke Energy Trading & Mktg., L.L.C. v. FERC*, 315 F.3d 377, 382 (D.C. Cir. 2003) ("[T]here may be a number of different potential rates all of which are just and reasonable."); "*Complex*" *Consol. Edison Co. of N.Y. v. FERC*, 165 F.3d 992, 1004 (D.C. Cir. 1999) (finding that in appropriate circumstances more than one rate may be just and reasonable).

adverse effects of: (1) disincentivizing resources from accepting a request to remain in operation to manage transmission reliability by encumbering them with the significant obligation of providing capacity; and (2) producing a capacity price signal that is not representative of actual capacity supply and demand fundamentals when the RMR resource is not required to operate comparably to a PJM Capacity Resource.

1. Complainants' Reliance on the 2025/2026 Base Residual Auction Results Does Not Support Reforming the Capacity Market Rules

The predicate for the Complaint is the convergence of: (1) electrification coupled with the proliferation of high-demand data centers in the region that will result in material load growth; (2) retirement of thermal generators at a rapid pace due to policy pressures as well as economics; (3) slow new entry of replacement generation resources due to a combination of industry forces, including siting, permitting and supply chain constraints; and (4) the Sierra Club-Talen Agreement for Brandon Shores and Wagner to cease burning coal by December 31, 2025. These factors contributed to record capacity auction clearing prices for the 2025/2026 Delivery Year, with the BGE LDA—where Brandon Shores and Wagner are located—clearing at the price cap because not enough capacity offered into the auction to meet the BGE's Locational Deliverability Area Reliability Requirement.

The results of the Base Residual Auction for the 2025/2026 Delivery Year are evidence of the tightening of supply and demand that PJM has been warning of for several years. PJM has explained that demand is growing, while supply is shrinking, and that new capacity is required to maintain reliability in the PJM Region. ⁸⁰ Basic economic principles

⁷⁹ PJM includes in Attachment A to this answer a copy of the Sierra Club-Talen 2020 Agreement, dated November 23, 2020, and the April 6, 2023 Sierra Club-Talen 2023 Amendment to allow Brandon Shores to operate pursuant to an order of the Secretary of the Department of Energy, pursuant to FPA section 202(c).

⁸⁰ See Resource Retirements, Replacements & Risks Report at 17 ("For the first time in recent history, PJM could face decreasing reserve margins, should these trends – high load growth, increasing rates of generator retirements, and slower entry of new resources – continue. The amount of generation retirements appears to

dictate that prices will rise when supply decreases while demand increases. The Complaint recognizes that this price change is a feature of PJM's capacity market, noting that "RPM is designed to set appropriately high prices when resources are needed." Thus, it should come as no surprise that auction clearing prices in the last Base Residual Auction were very high.

That Wagner and Brandon Shores did not participate in the 2025/2026 auction does not affect the reasonableness of the auction prices. Such non-participation is a natural result of several factors, including the Sierra Club-Talen Agreement precluding Brandon Shores from operating for the last five months of that Delivery Year. Further, Sierra Club required Brandon Shores to submit a deactivation notice prior to the 2025/2026 Delivery Year, 82 which resulted in Talen seeking a "must-offer" exception for Brandon Shores from participating in the 2025/2026 Base Residual Auction. No party objected to Brandon Shores waiver request to obtain such must-offer exception. 83 The after-the-fact protest of the resulting unintended consequences of such actions falls flat.

2. It Would Be Unreasonable to Categorically Rely on Resources Retained in PJM to Address Transmission Reliability Needs to Provide Capacity.

Capacity is a real, jurisdictional product; it comes with actual rights and obligations; it provides a crucial reliability benefit to the PJM Region. One cannot merely "assume" a resource to provide capacity. Requiring PJM to rely on a resource without a Tariff-based

be more certain than the timely arrival of replacement generation resources, given that the quantity of retirements is codified in various policy objectives, while the impacts to the pace of new entry of the Inflation Reduction Act, post-pandemic supply chain issues, and other externalities are still not fully understood.").

⁸¹ Complaint, Affidavit of James F. Wilson (Attachment 3) at ¶ 32.

⁸² See Sierra Club-Talen 2023 Amendment, section 3(a) ("[T]he deadline for Brandon Shores to cease combustion of coal shall be extended until the expiration of such order, provided that Brandon Shores has filed a deactivation notice with PJM prior to the 2025-2026 delivery year PJM capacity auction.").

 $^{^{83}}$ See Talen Energy Mktg., LLC, 183 FERC \P 61,167 (2023).

or contractual commitment to operate during times of system stress would undermine the reliability benefits achieved through prior reforms—and undermine PJM's ability to maintain resource adequacy. Yet, the Complainants appear to ask the Commission to impose a broad ruling that would require all RMR resources, regardless of their respective operating terms and conditions, to be considered as capacity. To the extent that their request is narrower, it still fails to recognize that the terms and conditions under which a retained resource is idiosyncratic, and within the sole authority of the retained resource to file and justify with the Commission, precluding a broad, general rule. PJM has no authority to dictate standardized operating terms. Accordingly, it would be unreasonable for PJM to categorically assume, without a fact-specific examination on a case-by-case basis, that a retained resource could be reasonably relied on to provide a substantially comparable level of performance in the event of a capacity emergency.

Even assuming, arguendo, that the RMR resources may provide energy during a Performance Assessment Interval, it does not merit across-the-board inclusion of RMR resources as capacity in the auction results. Indeed, many energy-only resources and any other Capacity Resource that does not clear an RPM Auction still provide energy to PJM on a daily basis, but are also not counted as cleared supply in the capacity market. At the same time, such resources are also economically incentivized to perform during Performance Assessment Intervals since they would be eligible to receive bonus payments for any energy that is injected into the transmission system during a capacity emergency. There is simply no reason that RMR resources that are not required to operate comparably to a committed Capacity Resource should be treated any differently from all other such resources that are also not accounted as capacity in the RPM Auctions today.

3. It Remains Unknown Whether Brandon Shores Will Be Able to Operate After December 31, 2025, and Therefore, Absent Modification of the Sierra Club-Talen Agreement, It Would Not Be Prudent to Rely on the Resource to Meet Resource Adequacy and Reliability Needs.

When looking at the factors leading to the clearing prices from the 2025/2026 Base Residual Auction, even if PJM had some sort of Tariff authority to compel RMR resources to obtain capacity commitments, it would have been unreasonable, based on present circumstances, to consider Brandon Shores as capacity. Sierra Club and Talen currently have an agreement in place that prohibits Brandon Shores from burning coal—its only fuel source—after December 31, 2025. Sierra Club has stated that its agreement with Talen for Brandon Shores would need to be modified to allow Brandon Shores to operate past the end of 2025 and "such resolution must precede approval of the [RMR agreement] as filed."84 Talen, the other party to the Sierra Club-Talen 2020 Agreement, appears to have concurred, stating in its financial statements that Brandon Shores "is required by contract and permit to cease coal combustion by December 31, 2025,"85 except when allowed by an order of the Secretary of the Department of Energy.86

4. The Complaint's Claims Regarding the State of PJM's Interconnection Queue Are Inaccurate and Fail to Recognize that PJM Has Been Processing Projects at an Enhanced Rate.

The Complainants' claims regarding PJM's interconnection queue also fall well short of supporting their central claim that the PJM Tariff is unjust and unreasonable because it fails to "account for" RMR resources in the capacity market." The Complaint

⁸⁴ Sierra Club ER24-1790 Protest at 3.

⁸⁵ Talen 2023 Consolidated Financial Statements at 44.

⁸⁶ Sierra Club-Talen 2023 Amendment, section 3(a).

⁸⁷ Complaint at 1.

asserts that PJM's interconnection process "remains badly backlogged" and that "PJM is resisting accelerating its interconnection process to come up to the pace that the Commission required in its recent Order No. 2023" are inaccurate and incomplete. 88 PJM has been making steady progress in clearing the backlog in its interconnection process since the Commission approved PJM's interconnection reform proposal in 2022. Indeed, the late 2025 completion date the Complainants point to for PJM's "fast lane" process during PJM's transition from the prior serial interconnection process to the reformed process the Commission approved in 202289 is for the first two of three cycles of the transition, not for the so-called "fast lane" (which is called the Expedited Process cycle) alone. PJM should be done processing projects in the Expedited Process, including entering Generator Interconnection Agreements for those projects by the end of 2024 or, at latest, in the first quarter of 2025. And the Complainants ignore the 130 backlogged projects for which PJM issued final agreements in the first half of 2023 to reach the Transition Date, 90 as well as the 97 projects, 91 representing 8.7 gigawatts, 92 that PJM has processed as of October 14, 2024. The Complainants also fail to reference to the over 34,000 megawatts of projects

⁸⁸ Complaint at 3-4.

⁸⁹ Complaint at 48-49.

⁹⁰ Interconnection Queue Status Update, PJM Interconnection, L.L.C., 4 (June 26, 2023), https://www.pjm.com/-/media/committees-groups/subcommittees/ips/2023/20230626/20230626-item-04---interconnection-projects-ips-queue-update-june-2023.ashx.

⁹¹ Urban Grid Solar Projects LLC v. PJM Interconnection, L.L.C., Answer of PJM Interconnection, L.L.C., Docket No. EL24-18-000, at 6 (Oct. 16, 2024) (describing that, of the 303 Expedited Process projects, 77 have completed the agreement negotiation phase and 20 have final agreements that have been issued for execution by the parties).

⁹² Commercial Deployment of New Generation, Markets and Reliability Committee, 4 (Sept. 25, 2024). https://www.pjm.com/-/media/committees-groups/committees/mrc/2024/20240925/20240925-item-09---pjm-interconnection-queue---presentation.ashx (last visited Oct. 16, 2024) (The Expedited Process represents 26 GW and the 97 projects processed to date are roughly one third of the total number of projects).

that have cleared the PJM interconnection study process, entered into their final agreement, but have not yet reached commercial operation. 93

The Complainants' charge that PJM is resisting "accelerating" its process in accordance with Order No. 2023 ⁹⁴ reflects a misunderstanding of PJM's process and of the independent entity variations PJM seeks in its Order No. 2023. The Order No. 2023 *pro forma* interconnection provisions would create annual interconnection study clusters, to be studied in 150 days. ⁹⁵ PJM sought in its Order No. 2023 compliance filing an independent entity variation to allow PJM to retain its gated interconnection clusters, in which the next cluster cycle does not commence until the prior cluster cycle has reached Phase III. ⁹⁶ This gated approach increases certainty as to cost and enables PJM to focus on studying one cluster before it turns to intake processing for the next cluster. ⁹⁷ As PJM explained in its compliance filing, the *pro forma's* annual clusters with their shorter study period are more likely to produce the illusion of progress, and ultimately result in new backlogs, than they are to increase speed and efficiency of studying interconnection requests. ⁹⁸ In any event, this proceeding is not the venue to adjudicate PJM's Order 2023 compliance filing. Characterizations of that filing, which is pending before the Commission, simply do not

⁹³ See Jason Shoemaker, Commercial Deployment of New Generation, PJM Interconnection, L.L.C., 6-7 (Sept. 25, 2024), https://pjm.com/-/media/committees-groups/committees/mrc/2024/20240925/20240925-item-09---pjm-interconnection-queue---presentation.ashx.

⁹⁴ Complaint at 3-4, 25.

⁹⁵ Improvements to Generator Interconnection Procedures and Agreements, Order No. 2023, 184 FERC ¶ 61,054, at PP 223, 227, 232 limited order on reh'g, 185 FERC ¶ 61,063 (2023), order on reh'g & clarification, Order No. 2023-A, 186 FERC ¶ 61,199 (2024), appeals pending, Petition for Review, Advanced Energy United v. FERC, Nos. 23-1282, et al. (D.C. Cir. Oct. 6, 2023).

⁹⁶ *PJM Interconnection, L.L.C.*, Order Nos. 2023 and 2023-A Compliance Filing of PJM Interconnection, L.L.C., Docket No. ER24-2045-000, at 23 (May 16, 2024).

⁹⁷ *Id*.

⁹⁸ *Id.* at 23-24.

belong in this proceeding as they do little to help the Commission in reaching a decision in this case.

В. The Expected Addition of Transmission Enhancements for Delivery Years Beyond the 2026/2027 Delivery Year Is Not a Categorically Valid Reason to Ignore Present Supply and Demand Fundamentals.

The Complaint alleges that failing to consider resources retained to address transmission reliability "send[s] inaccurate price signals," and such "inaccurate price signal[s]" are unnecessary because "[a]ny 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." The Complaint's argument fails for several reasons.

First, as discussed, without a fact-intensive examination of an RMR resource's operating terms and conditions, PJM cannot reasonably assume that such resource will provide capacity or a comparable substitute. As discussed above, the idiosyncratic nature of the RMR agreements in PJM and the lack of PJM authority to set the operating terms precludes reliance on such resources to perform consistent with a capacity obligation.

Second, while in some cases it may be true that considering the resource adequacy capability of an RMR resource may be a very close surrogate for the impact that planned transmission enhancements will have on the ability of the transmission system to support deliveries of energy to an LDA experiencing a capacity emergency, i.e., the Capacity Emergency Transfer Limit ("CETL"), that is not always the case. Indeed, the transmission enhancements addressing the reliability issues caused by the retirement of Indian River Power LLC's Unit 4, located in the DPL-South LDA did not have an appreciable impact

⁹⁹ Complaint at 36.

¹⁰⁰ Complaint at 41.

on that LDA's CETL values. As a result, modeling the resource adequacy contribution of Indian River Unit 4 would not be supported by this theory. Thus, again, whether the resource adequacy contribution of a retained resource should be considered requires a case-by-case examination of the facts specific to that resource.

Third, there is an intrinsic resource adequacy and reliability benefit to having capacity located within the LDA. While enhancing the transmission system to resolve the reliability violations caused by Brandon Shores' and Wagner's retirements will alleviate some need for transmission in the BGE LDA, those enhancements are not expected to be in service until 2028, after the Delivery Year associated with the 2026/2027 Base Residual Auction. Regardless, a "central element" of PJM's capacity market is locational pricing through which the capacity market "address[es] transmission constraints by creating accurate price signals to incent new generation. It is designed to encourage market signals, not interfere with them." For that reason, it is critical to recognize the actual supply and demand fundamentals in place for a given Delivery Year and not adjust them based on what is expected to happen in the future. "[I]nvestors will not finance generation additions needed in those areas if market revenues are inadequate to recover costs." 102

Fourth, more transmission is not a panacea. Even after the transmission constraints in the BGE area are alleviated by the transmission upgrades, the *PJM Region* will still require additional resources to serve the increasing load. RMR resources are expected to only be retained for a short and defined period of time. Once the RMR agreement expires, the RMR resource will deactivate and no longer be available in the localized zone, as well

¹⁰¹ *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331, at P 69.

¹⁰² *PJM Interconnection L.L.C.*, 115 FERC ¶ 61,079, at P 35.

as the PJM Region. Thus, a savvy developer will reasonably expect that the supply and demand fundamentals for the PJM Region in the intervening Delivery Years should result in clearing prices that does not account for RMR resources.

C. Inclusion of RMR Resources in the Planning Models Are Appropriately Distinct from Accounting for All RMR Resources in the Capacity Market.

The Complainants argue that PJM should account for RMR resources in the capacity market models for the same reasons that PJM accounts for RMR resources in the modeling of the system's capability to import capacity into constrained zones. ¹⁰³ However, the reasons for including RMR resources in the planning models are separate and distinct from considering RMR resources for resource adequacy purposes. More particularly, PJM's planning studies include RMR resources in the CETL and Capacity Emergency Transfer Objective ("CETO") analyses to reflect the best approximation of the expected system PJM will have in the future under different system conditions. That is, PJM's reliability analysis must assess the total quantity of system-accredited capacity necessary to meet the LDA's reliability needs. Such analysis is based on local risks, and therefore must include *all* physical resources expected to operate in the LDA. Thus, these studies focus on transmission limitations in a particular area and do not consider whether or not resources in an area are Capacity Resources. ¹⁰⁴ In other words, resources that are included

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¹⁰³ See Complaint at 53-54.

¹⁰⁴ See PJM Manual 14B: PJM Region Transmission Planning Process, Attachment C.2 § 2.1.4 (rev. 56, June 27, 2024), https://www.pjm.com/-/media/documents/manuals/m14b.ashx ("After an LDA is defined, two generation patterns must be established. The first represents the Capacity Resource deficiency within the LDA. Based on the calculated CETO for the LDA, sufficient resources must be removed from service to create a need to import energy into the LDA. As the magnitude of the deficiency is adjusted, single contingency analysis is used to establish the CETL value. The second generation pattern required represents the dispatch of the remainder of PJM and surrounding non-PJM areas, and is comprised of a much larger number of generators that are not experiencing any emergency conditions. The larger area in PJM is modeled as experiencing only normal levels of unit outages simulated through existing RTEP base case procedures (see also "Deliverability of Generation")).

in the CETO and CETL calculations include energy-only resources and all Generation Capacity Resources (regardless of whether they clear the capacity auction). Thus, PJM's planning studies includes all physical resources located within an LDA, including RMR resources, and are not limited to only Capacity Resources.

As a result, comparing the inclusion of RMR resources in PJM's planning models with the treatment of RMR resources in the capacity market is akin to comparing apples and oranges. That is, the planning models are designed to study expected system conditions with a focus on transmission limitations, while the capacity market is designed to procure resource adequacy that impose specific obligations on resources that receive capacity obligations.

D. Encumbering a Deactivating Unit with a Capacity Obligation Will Act as a Disincentive for Resources Voluntarily Agreeing to Remain in Operation to Address Transmission Reliability Needs.

Requiring RMR resources to offer into a capacity auction as "price takers," as suggested by the Complaint, ¹⁰⁵ is also problematic. As discussed, a capacity obligation carries with it significant performance obligations. Adding such a requirement to RMR resources would affect a seller's calculus in determining whether to voluntarily keep its deactivating resource in operation to address transmission reliability. A deactivating resource may or may not be a reliably performing resource. Recall that such resources are seeking to leave the market. It is reasonable to assume that some resources seeking to retire are doing so because the capacity payments do not cover their risk of underperformance, and they are not making enough money in the energy market to remain economic.

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¹⁰⁵ See Complaint at 53.

Moreover, requiring RMR resources to offer as capacity would require pricing certain costs associated with being capacity and ensuring the RMR agreements net out capacity payments from their cost of service rate. Any RMR agreements currently in effect (e.g., the five-year RMR agreement for Indian River Power LLC's Unit 4) would need to be revised to accommodate such change in circumstances from those present with the agreement, and such considerations likely would need to be embodied in future RMR agreements, including the Brandon Shores and Wagner agreements set to be effective June 1, 2025.

Thus, a requirement to offer, clear the capacity market, and assume a capacity commitment may be a bridge too far for owners of such resources. This could result in resource owners declining PJM's request to remain online to address transmission reliability needs in the future. RMR agreements are a last resort and play a vital role in maintaining transmission reliability. The Commission should be wary of taking actions that would undermine incentives for resources to enter into such agreements.

The Market Monitor seems to understand that RMR resources should not be required to participate in the capacity market because such would impose "significant and unnecessary risks" on those resources. ¹⁰⁶ In addition, the must-offer requirements in the energy and ancillary services markets would result in "inefficient and unnecessary impacts on prices in those markets," ¹⁰⁷ including "inefficiently reduc[ing] prices for competitive generation in those markets." ¹⁰⁸ In other words, the Market Monitor believes that RMR

¹⁰⁶ Sierra Club v. PJM Interconnection, L.L.C., Comments of the Independent Market Monitor for PJM, Docket No. EL24-148-000, at 2 (Oct. 10, 2024).

¹⁰⁷ Id.

¹⁰⁸ *Id.* at 6.

resources should not be required to be committed as Capacity Resources because they do not provide the same capacity services. However, the Market Monitor's alternative proposal of including the unforced capacity of RMR resources in the supply curve at $\$0^{109}$ where they would displace actual Capacity Resources directly contradicts its position that such RMR resources are not capacity.

Moreover, both the Market Monitor's proposal to include RMR resources as a price takers and the Complainants' alternative proposal to reduce the relevant reliability requirement on the demand side neglect to consider important cost-allocation principles that can produce undesirable outcomes. Specifically, under both proposals, the subset of load that pays for the RMR agreement would not receive a benefit commensurate with counting the resource as capacity even though the RMR resource would be included to meet the PJM Region Reliability Requirement where the capacity costs are allocated more broadly, generally on a load ratio share basis. 110 Additionally, these suggested alternatives fail to address, or even consider, various other issues with considering RMR resources as capacity. For instance, none of the suggested alternatives contains any detail addressing the circumstance where an RMR resource may be terminated early because necessary transmission upgrades are completed ahead of schedule and whether PJM would be required to acquire additional capacity to replace the RMR resource in such scenarios. Likewise, the suggestions are silent on how to treat any excess or deficient megawatts that may result if an RMR resource's ELCC accreditation value changes between the Base Residual Auction and the subsequent Incremental Auctions. Any market solution seeking

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¹⁰⁹ Id. at 5.

¹¹⁰ See RAA, Schedule 8.

to change how RMR resources may be accounted in the capacity market needs to consider a spectrum of outcomes and scenarios that can occur. However, neither the Market Monitor nor the Complainants' suggestions appear to contemplate such considerations.

E. Complainants' Claim that PJM's Capacity Market "Is an Outlier Among RTO/ISOs" for Not Requiring RMR Resources to Provide Capacity Is Disingenuous.

Complainants' claim that "PJM's approach of allowing RMR units to decide whether to participate in its capacity market is an outlier among RTO/[Independent System Operators ("ISOs")]" is disingenuous at best. In fact, the Complaint cherry-picked three RTOs/ISOs—NYISO, ISO-NE, and CAISO—against which it has compared PJM.

The claim is easily unraveled. First, as even Complainants must admit, ¹¹² one of the chosen RTOs/ISOs (CAISO) does not even feature a capacity market, much less one that would feature mandatory participation. Second, the four RTOs/ISOs *with* capacity markets are, in fact: PJM, NYISO, ISO-NE, and Midcontinent Independent System Operator, Inc. ("MISO"). ¹¹³ Of the four RTOs/ISOs with capacity markets, two—NYISO and ISO-NE—require RMR resources to participate in their capacity markets. Two—PJM and MISO—*do not*.

MISO, like PJM, takes a voluntary approach to RMR participation in its capacity market. In fact, MISO's RMR agreements (called SSR Agreements) typically include the *explicit* statement that the SSR resource "*may* also offer, from the SSR Unit(s)" into MISO's capacity market. ¹¹⁴ In other words, PJM is not an outlier. There is no consensus

¹¹² Complaint at 16-17.

¹¹¹ Complaint at 10.

¹¹³ Likewise, Southwest Power Pool, Inc. does not operate a capacity market.

¹¹⁴ See, e.g., Supplemental Filing of Midcontinent Independent System Operator, Inc., Docket No. ER22-2691-000, Exhibit D § 8(C)(4) (Aug. 30, 2024) (emphasis added); Second System Support Resources Agreement with Cleco Power LLC Regarding Teche Power Station Unit 3 of Midcontinent Independent

among the six FERC-jurisdictional RTOs/ISOs as to whether capacity markets are necessary, much less consensus on whether RMR resources in the various RTOs/ISOs should be required to participate in their respective capacity markets.

1. The Complaint's Characterization of Commission Precedent Is Inaccurate.

Notwithstanding the Complaint's inaccurate comparison of PJM's practices to its preferred set of RTOs/ISOs, its reliance on Commission precedent addressing NYISO's, ISO-NE's, and CAISO's treatment of RMR resources suffers from fundamental flaws. First, the Complaint expounds extensively on Commission precedent for the proposition that assigning a non-zero price to RMR units in ISO-NE and NYISO's capacity markets would be "inefficient and unreasonable." But, of course, just because the Commission has found it appropriate for RMR resources participating in NYISO's and ISO-NE's capacity markets to offer as price-takers, it does not follow that PJM's "approach of allowing RMR units to choose whether to participate in the capacity market" is unjust and unreasonable. In fact, the line of cases that the Complaint relies on *never requires* NYISO's or ISO-NE's RMR resources to participate in their capacity markets. Rather, the cases stand for the proposition that, to the extent that RMR resources do participate in

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System Operator, Inc., Docket No. ER19-1219-000, Exhibit C \S 8(C)(4) (Mar. 8, 2019) (same); see also MISO Open Access Transmission, Energy and Operating Reserve Markets Tariff, Attachment Y-1, Standard Form SSR Agreement \S 8(C)(4) (emphasis added).

¹¹⁵ Complaint at 11 & n.38 ("[i]t is more efficient for RMR generators to offer their UCAP at \$0.00/kW-month as 'price-takers.'" (quoting *N.Y. Indep. Sys. Operator, Inc.*, 161 FERC ¶ 61,189, at P 82 (2017) ("NYISO II")); Complaint at 14 & n.57 (quoting ISO New England Inc., 165 FERC ¶ 61,202, at P 83 (2018) (citing N.Y. Indep. Sys. Operator, Inc., 155 FERC ¶ 61,076, at P 82 (2016) and NYISO II, 161 FERC ¶ 61,189, at P 55)).

¹¹⁶ Complaint at 18; see id. at 2.

NYISO and ISO-NE's capacity markets, it is "more efficient" for RMR generators to offer as "price-takers." ¹¹⁷

2. The Complaint's Arguments Overlook Significant and Relevant Regional Differences in the Capacity Markets and RMR Procedures of PJM and Other RTOs.

The Complaint's reliance on the practices of other RTOs/ISOs is misplaced. The Complaint asserts that because NYISO and ISO-NE have rules in place requiring their RMR resources to participate in their respective capacity markets, PJM must too. Even more of a stretch is the Complaint's assertion that because CAISO requires RMR resources to participate in CAISO's bilateral resource adequacy market, PJM's RMR resources must participate in PJM's capacity market.

These claims are wholly unsupportable. The Commission has expressly held that "it is not necessary that all RTOs use the same procedures [for dealing with deactivation] as long as the generators retain options for filing rates with the Commission." Furthermore, the Commission has "consistently allowed for regional differences in the RTO context and has never mandated a one-size-fits-all approach for dealing with resource adequacy." The Commission has also repeatedly acknowledged that flexibility is needed

¹¹⁷ See supra note 119.

¹¹⁸ *PJM Interconnection, LLC*, 112 FERC ¶ 61,031, at P 32.

¹¹⁹ Midwest Indep. Transmission Sys. Operator, Inc., 116 FERC ¶ 61,292, at PP 52-53 & n.50 (2006) (rejecting calls for MISO to file a capacity market proposal) (citing generally Long-Term Firm Transmission Rights in Organized Electricity Markets, 71 Fed. Reg. 43,564 (2006), FERC Stats. & Regs. ¶ 31,226, at P 100 (2006) (noting the appropriateness of recognizing regional differences in market design)); Sw. Power Pool, Inc., 110 FERC ¶ 61,031, at PP 22-23 (2005) (finding that differences between RTO regions may be warranted given the different circumstances of the markets); Midwest Indep. Transmission Sys. Operator, Inc., 102 FERC ¶ 61,196, at P 43 (2003) (same)); see also Regional Transmission Organizations, Notice of Proposed Rulemaking, 64 Fed. Reg. 31,443 (June 10, 1999) (Indeed, in proposing amendments to facilitate the formation of RTOs, the Commission noted that "[a] pervasive theme was the need for the Commission to avoid taking a one-size-fits-all approach to RTOs."); CXA La Paloma, LLC v. Cal. Indep. Sys. Operator Corp., 165 FERC ¶ 61,148, at P 76 (2018).

where regional differences drive different approaches to market design. ¹²⁰ With respect to capacity markets generally, while "the Commission has opined on the benefits of specific features of . . . centralized capacity markets within the context of those specific regions and market designs," the Commission recognizes that it has never "imposed a centralized capacity market in an RTO/ISO or found that it is the only just and reasonable resource adequacy construct to attract and retain sufficient capacity." ¹²¹

The Complaint's gloss of NYISO's and ISO-NE's treatment of RMR resources in their respective capacity markets, and of CAISO's treatment of RMR resources in its bilateral construct, fails to recognize significant and fundamental differences between PJM and these three RTOs/ISOs. The Complaint discusses Commission precedent on NYISO's, ISO-NE's, and CAISO's treatment of RMR units in a complete vacuum, failing to recognize the significant regional differences that have driven the resource adequacy design choices in each RTO/ISO.

In fact, as a Commission Staff Report issued on Centralized Capacity Market Design Elements of the "Eastern RTOs," i.e., PJM, NYISO, and ISO-NE, explicitly states:

The particular [capacity] market design choices of each region have been different, with each market arriving at its specific approach through stakeholder processes and settlement agreements, evolving over time to address emerging issues. In recent years, refinements have been pursued or discussed to address the impact that broader industry changes have had on the markets, including an evolution in the mix of available resources driven by low natural gas prices, state and federal policies encouraging the entry of renewable resources and other technologies, state policies supporting the development of

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¹²⁰ See, e.g., Building for the Future Through Regional Transmission Planning and Cost Allocation, Order No. 1920, 187 FERC ¶ 61,068, at P 237 (2024) (recognizing the "need for sufficient flexibility to implement Long-Term Regional Transmission Planning . . . to reflect regional differences, such as different market structures" (citing Order No. 1000, 136 FERC ¶ 61,051, at P 61 (2011) (noting the need for sufficient flexibility in regional transmission planning to reflect regional differences))), appeals pending, Petition for Review, Appalachian Voices v. FERC, Nos. 24-1650, et al. (4th Cir. July 16, 2024).

¹²¹ CXA La Paloma, 165 FERC ¶ 61,148, at P 76.

resources in particular areas or with particular characteristics, the retirement of aging generation resources, and the need to retain certain resources. 122

The Staff Report then notes that "the Commission has considered these variables on a caseby-case basis." ¹²³

Accordingly, contrary to the Complaint's assertions, the Commission must likewise consider PJM's proposal concerning the treatment of RMR resources in its capacity market on a case-by-case basis, in the specific context of PJM's capacity market design.

3. As the Commission Has Held, "PJM's and NYISO's Capacity Markets Are Fundamentally Different."

Further, the Complaint's contentions are contrary to the Commission's response to previous claims that NYISO's capacity market rules are unjust and unreasonable because they differ from PJM's. The Commission put it plainly: "PJM's and NYISO's capacity markets are fundamentally different." Based on these significant distinctions, the Commission has previously held, "[w]hether the Commission has found certain exemptions . . . in PJM or any other region to be just and reasonable *is not dispositive of* whether the Commission should find NYISO's . . . rules to be unjust and unreasonable." The Commission, in *New York Public Service Commission v. New York Independent System Operator, Inc.*, further elaborated, in relevant part:

• "NYISO's capacity market is short-term in nature—with auctions for spot, monthly, and three month (strip) capacity—whereas PJM's

¹²⁴ N.Y. Pub. Serv. Comm'n v. N.Y. Indep. Sys. Operator, Inc., 153 FERC ¶ 61,022, at P 38 (2015); see also id. at P 102 ("PJM's capacity market is different from the NYISO capacity market in a number of respects," thus meriting different application of buyer-side market power mitigation rules to nuclear resources).

¹²² Centralized Capacity Markets in Regional Transmission Organizations and Independent System Operators, Supplemental Notice of Technical Conference, Docket No. AD13-7-000, Commission Staff Report at 2 (Aug. 23, 2013).

¹²³ *Id*.

¹²⁵ *Id.* at P 38 (emphasis added).

auction occurs three years in advance awarding a year-long capacity obligation." ¹²⁶

- "NYISO is a single-state ISO while PJM is a multi-state (and the District of Columbia) regional transmission organization (RTO)."¹²⁷
- "PJM's peak demand is therefore much higher than NYISO's peak demand." ¹²⁸

The Commission, in distinguishing NYISO's capacity market from PJM's, has found it particularly important that "NYISO's ICAP markets—in comparison to PJM's and ISO-NE's—offer a capacity product that is shorter in duration." Thus, the Commission recognized that applying NYISO's buyer-side market power mitigation resources to certain self-supply resources would be unjust, unreasonable, or unduly discriminatory or preferential, because, in NYISO, there is little to no incentive for self-supply load serving entities that own or contract for large amounts of capacity needed to meet its load to finance uneconomic strategy, as doing so would not be profitable. In light of NYISO's comparatively shorter capacity product, the Commission reasoned, there is a need for certain load serving entities to self-supply by procuring a portfolio that allows it to manage long-term risk and eliminate the risk of requiring such load serving entities to pay twice for capacity should a self-supply resource not clear the capacity market.

In addition, NYISO also relies heavily on bilateral contracting to meet its capacity obligation needs. In fact, NYISO's Market Monitor, Dr. David B. Patton, has opined that

¹²⁶ 153 FERC ¶ 61,022, at P 38.

¹²⁷ Id.

¹²⁸ *Id*

¹²⁹ 153 FERC ¶ 61,022, at P 61.

¹³⁰ Id.

¹³¹ *Id*.

it is not necessary for NYISO's capacity market to provide for three-year or longer capacity obligations, because "NYISO's spot capacity market facilitates bilateral contracting that can provide revenue certainty." In other words, a primary purpose of NYISO's capacity market is to supplement bilateral contracting activity. New York state agencies and regulated utilities supervise new builds through state-supervised bilateral procurements to ensure sufficient supply. PJM, on the other hand, relies primarily on the three-year forward-looking design, which is intended to be a period long enough to allow for and incentivize the addition of new resources. 133

4. The Commission has "Acknowledged the Difference Between the Capacity Market Designs in ISO-NE and PJM."

The Complaint's assertion that PJM's voluntary treatment of RMR resources in its capacity market must be revised to conform with ISO-NE's market rules is directly contradicted by the Commission's finding that that significant differences between ISO-NE and PJM's capacity markets justify different treatment of their respective retirement resources in their respective capacity markets. ¹³⁴

First, in *ISO New England Inc.*, 125 FERC ¶ 61,102, at PP 95-97 (2008), the Commission rejected the contention that ISO-NE's proposal regarding the treatment of retiring resources in its capacity market should be rejected because it differed from PJM's, as well as other RTOs' rules. In doing so, the Commission noted, that "regional differences may be recognized in [the Commission's] analysis of the just and reasonableness of

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¹³² Dr. David B. Patton, NYISO Capacity Markets: Function, Performance, and Future (Docket No. AD14-18-000), Potomac Economics, 11 (Nov. 15, 2014), https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B76A56577-FBC2-4345-9D93-228A5C89EB49%7D.

¹³³ See, e.g., PJM Interconnection, L.L.C., 149 FERC ¶ 61,183, at P 44 (2014), aff'd, PJM Power Providers Grp. v. FERC, 880 F.3d 559 (D.C. Cir. 2018).

¹³⁴ ISO New England Inc., 130 FERC ¶ 61,089, at PP 32-33 (2010).

transmission organization proposals, and the fact that other RTOs have enacted (or failed to enact) a particular market rule is not disposition of the justness and reasonableness of ISO-NE's market rule." On rehearing, the Commission upheld this finding. Thus, the Commission was not, in assessing ISO-NE's proposal, bound by its findings as to PJM's treatment of retiring resources in PJM's capacity market. In fact, to hold otherwise would, according to the Commission "fail[] to acknowledge the difference between the capacity market designs in ISO-NE and PJM." 137

Under ISO-NE's Forward Capacity Market ("FCM"), the Commission reasoned, a retiring resource "may make a decision about whether and how to participate in the capacity market, and choose the appropriate level of risk for itself through its choice of de-list bid in the auction. PJM's capacity market, by contrast, does not permit capacity resources to choose the level of risk appropriate to it in this manner." The Commission thus held, "the instant proposal is distinguishable from the retirement provisions in PJM."

Likewise, the Complaint has similarly failed to recognize the distinction between ISO-NE and PJM's respective retirement provisions in the context of its RMR units. While ISO-NE's rules require RMR units to participate in its capacity market, as the Commission has previously made clear, in ISO-NE's capacity market "a resource that does not wish to take the risk of assuming a three-year forward capacity obligation at a price it considers

 135 ISO New England Inc., 125 FERC \P 61,102, at P 97.

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¹³⁶ ISO New England Inc., 130 FERC ¶ 61,089 at PP 32-33.

 $^{^{137}}$ ISO New England Inc., 130 FERC \P 61,089, at PP 32-33 (upholding ISO New England Inc., 125 FERC \P 61,102).

¹³⁸ ISO New England Inc., 130 FERC ¶ 61,089, at P 33.

¹³⁹ *Id.* at P 34.

undesirable may submit either a permanent de-list bid or a non-price retirement request. Such resources that seek to leave the FCM and are found needed for reliability may still leave the FCM." In PJM, this is not the case. ¹⁴⁰ Thus, while PJM's capacity market allows for voluntary RMR participation, it lacks ISO-NE's flexibility, which allows resources to elect to choose a de-list bid or a non-price retirement request.

Moreover, until December 2020, ISO-NE's capacity market featured an administrative price-lock mechanism, the New Entrant Rules, which permitted new entrants to ISO-NE's capacity market to lock in a capacity market price for five years. ¹⁴¹ Subsequently, the Commission found that the price lock that the Commission had previously found necessary was "no longer required to attract new entry. Consequently, the benefits provided by the price certainty afforded by the New Entrant Rules for new capacity resources no longer outweigh their price suppressive effects." ¹⁴² PJM continues to feature New Entry Price Adjustment provisions, but the Commission has found significant differences between these mechanisms. Unlike ISO-NE's price-lock mechanism, as ISO-NE noted, PJM's "is limited to certain constrained zones and has a maximum price-lock duration that is a considerably shorter time period." ¹⁴³ In addition, the Commission did not require ISO-NE to adopt an offer floor, similar to the floor in PJM's New Entry Price Adjustment provisions, despite having rejected PJM's prior request to remove the offer floor. ¹⁴⁴

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¹⁴⁰ 130 FERC ¶ 61,089, at P 33.

 $^{^{141}}$ ISO New England Inc., 173 FERC ¶ 61,198 (2020) (finding ISO-NE price-lock provisions to no longer be just and reasonable due to changed circumstances).

¹⁴² 173 FERC ¶ 61,198, at P 68 (footnote omitted).

¹⁴³ *Id.* at P 21 n.34.

¹⁴⁴ *Id.* at P 5 (noting D.C. Circuit remand requiring Commission to explain why PJM and ISO-NE had been treated differently).

5. The Commission Has Previously Rejected Arguments that Its Orders on PJM's Capacity Market Dictate the Same Result Under CAISO's Bilateral Capacity Framework.

The Complaint relies on entirely inapposite Commission precedent on CAISO's treatment of RMR resources in CAISO's bilateral resource adequacy market. The Commission, for example, has rejected arguments that Commission precedent regarding the treatment of state-subsidized resources in PJM's capacity markets is applicable to CAISO, reasoning that CAISO, unlike PJM, "does not have a centralized capacity market with a market clearing price. The fact that the Commission found, based on the circumstances of that proceeding, that PJM's tariff was unjust and unreasonable does not require the same result in the instant proceeding [concerning CAISO]." Similarly, CAISO's treatment of RMR resources in its bilateral market is wholly irrelevant here.

6. The Commission Expressly Held that PJM's RMR Procedures Need Not Be the Same as Those in Other RTOs.

Just as the Complaint's contention that PJM's capacity market must conform to NYISO's, ISO-NE's, or CAISO's is incorrect, so too is the implication that PJM's RMR procedures must also conform with those of other RTOs/ISOs. From the very start, in considering PJM's proposed provisions for generator deactivations, the Commission held that PJM's RMR procedures need not be identical to those of other RTOs in order to be reasonable. In response to the assertion that "PJM should treat units that wish to deactivate in exactly the same manner as [MISO SSR units]," the Commission held that it "will not require PJM to use the precise SSR procedures of [MISO] for units that delay

¹⁴⁵ CXA La Paloma, LLC v. Cal. Indep. Sys. Operator Corp., 169 FERC¶ 61,045, at P 43 (2019) (footnote omitted).

¹⁴⁶ See PJM Interconnection, LLC, 112 FERC ¶ 61,031, at PP 21, 32.

deactivation."¹⁴⁷ Similarly, the Commission held that "[w]hile PJM's provisions for dealing with deactivation may be different from those of ISO-NE, it is not necessary that all RTOs use the same procedures" so long as generators within PJM retain filing rights with the Commission and are thus afforded a sufficient vehicle for exercising statutory rights to seek just compensation. ¹⁴⁸ The Commission noted, "[e]ach [RTO/ISO] is developing different systems for handling deactivation, and the Commission is not insisting that exactly the same system be applied in each RTO."¹⁴⁹ Similarly, here, PJM's treatment of RMR units in its capacity market need not be identical to NYISO's, ISO-NE's, CAISO's, or any other RTO's/ISO's practices, so long as generators retain sufficient filing rights in order to seek a just and reasonable rate.

F. PJM Supports the Complainants' Request to Delay the 2026/2027 Base Residual Auction and Has Submitted Its Own Request for a Six-Month RPM Auction Delay to Provide PJM Time to Alleviate Significant Uncertainty Created by the Complaint.

While PJM maintains that its existing rules regarding the participation of RMR resources in the capacity market are just and reasonable, the issues raised in the Complaint are significant enough to cast a cloud of uncertainty on the upcoming Base Residual Auction for the 2026/2027 Delivery Year, particularly given that the Complainants' request the results of the 2026/2027 auction be subject to refund. The prospect of the Commission potentially invaliding the auction results could undermine investor confidence and ultimately nullify the objective that the capacity market price signal is designed to achieve. Thus, given the complex issues raised in the Complaint, it is prudent to delay the

¹⁴⁷ 112 FERC ¶ 61,031, at PP 20-21.

¹⁴⁸ *Id.* at P 32.

¹⁴⁹ *Id.* at P 21.

¹⁵⁰ See Complaint at 1, 53; see generally October 16 Notice.

upcoming Base Residual Auction by approximately six months to provide time for thoughtful consideration of the various issues that are not addressed by the underlying complaint. Accordingly, to provide the Commission with a wide avenue to expeditiously issue an order delaying the upcoming 2026/2027 Base Residual Auction and propose a compressed schedule to accommodate the cascading effects of such a delay to the RPM Auctions associated through the 2029/2030 Delivery Year, PJM submitted a motion in this proceeding and has separately requested, in Docket No. ER25-118-000, that the Commission waive the Tariff provisions prescribing the current auction schedule dates.

Such auction delay will allow time to consider the issues raised in this Complaint and how they may also affect other aspects of the capacity market design, as reflected in recent letters filed to the PJM Board of Managers by the Organization of PJM States, Inc. ("OPSI") and the PJM Power Providers' Group ("P3"). The complex issues raised in this Complaint may require other capacity market and resource deactivation rules to be redesigned that the narrow scope of the Complaint, which focuses solely on RMR agreements, would not address.

Accordingly, PJM intends to submit market rule revisions, pursuant to FPA section 205, that potentially will address issues stemming from recent environmental policies and other developments that may affect the choice of the Reference Resource, along with a

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¹⁵¹ Emile Thompson, OPSI September 27, 2024 Letter to PJM Board of Managers, Organization of PJM States, Inc., 3-4 (Sept. 27, 2024), https://www.pjm.com/-/media/about-pjm/who-we-are/public-disclosures/2024/20240927-opsi-letter-re-results-of-the-2025-2026-bra.ashx (requesting that PJM address market rules related to RMR agreements, Must-Offer requirements, maximum capacity prices, and ELCC accreditation prior to the next auction); Glen Thomas, P3Response to September 27, 2024, OPSI Letter, PJM Power Providers Group, 2-4 (Oct. 2, 2024), https://www.pjm.com/-/media/about-pjm/who-we-are/public-disclosures/2024/20241002-p3-letter-re-opsi-letter-addressing-results-of-25-26-bra.ashx (requesting PJM prioritize not delaying the auction but otherwise agreeing with OPSI that many issues could serve as a basis for reforms in relatively short order, including ELCC, Reference Resource, the steep slope of the Variable Resource Requirement Curve, RMR agreements, and Must Offer requirements).

more targeted approach to the issues surrounding RMR resource participation in future capacity auctions than those proposed by the Complainants. These revisions will be tailored to more broadly consider other aspects of the RPM market design while also addressing concerns raised in this Complaint. To that end, PJM requests that the Commission expeditiously issue an order granting the auction delay without ruling on the Complaint's merits. The requested six months delay of the auction would also allow PJM and Market Participants to conduct relevant pre-auction activities following any market rule change that may be accepted by the Commission.

PJM does not request auction delay lightly, as the schedule for these auctions have already been compressed several times due to various reform efforts. However, PJM believes this delay is necessary given the significant market uncertainty that now clouds the 2026/2027 Base Residual Auction as a result of this Complaint. Any potential detriment caused by further delay would be far outweighed by the potential harm of conducting that auction under the cloud of uncertainty raised by the Complaint. In the meantime, PJM will continue to prepare for the 2026/2027 Base Residual Auction and proceed with the December auction as currently scheduled in the event the Commission does not grant a delay.

IV.

ADMISSIONS AND DENIALS

In accordance with Rule 213(c)(2) of the Commission's Rules of Practice and Procedure, 152 except as stated in this Answer, PJM does not admit any facts in the form

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¹⁵² 18 C.F.R. § 385.213(c)(2).

and manner stated in the Complaint. To the extent that any fact or allegation in the Complaint is not specifically admitted in this answer, it is denied.

V.

NOTICES AND COMMUNICATIONS

All correspondence and other communications regarding this proceeding should

be directed to:

Craig Glazer
Vice President–Federal Government Policy
PJM Interconnection, L.L.C.
1200 G Street, N.W., Suite 600
Washington, D.C. 20005
(202) 423-4743 (phone)
Craig, Glazer@pjm.com

Ryan J. Collins Vivian W. Chum Wright & Talisman, P.C. 1200 G Street, N.W., Suite 600 Washington, D.C. 20005 (202) 393-1200 (phone) collins@wrightlaw.com chum@wrightlaw.com

Chenchao Lu Associate General Counsel PJM Interconnection, L.L.C. 2750 Monroe Blvd. Audubon, PA 19403 (610) 666-2255 chenchao.lu@pjm.com

^{*} Designated for inclusion on the Commission's official service list for this docket.

VI.

CONCLUSION

For the foregoing reasons, the Commission should deny the Complaint.

Respectfully submitted,

Craig Glazer
Vice President–Federal Government Policy
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1200 G Street, N.W., Suite 600
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/s/Ryan J. Collins
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Counsel for PJM Interconnection, L.L.C.

October 18, 2024

Attachment A

Sierra Club-Talen 2020 Agreement

and

Sierra Club-Talen 2023 Amendment

SETTLEMENT AGREEMENT

- THIS SETTLEMENT AGREEMENT (this "Agreement") is made as of this <u>23rd</u> day of November, 2020 (the "Effective Date"), by and among the Sierra Club ("Sierra Club") on the one hand and Talen Energy Corporation, Montour, LLC, Brandon Shores LLC and H.A. Wagner LLC on the other (collectively "Talen" and collectively with Sierra Club, the "Parties").
- **WHEREAS,** Montour, LLC ("Montour") owns and operates the Montour Steam Electric Facility, located in Derry Township, Montour County, Pennsylvania; and
- **WHEREAS**, Brandon Shores LLC ("Brandon Shores") owns and operates the Brandon Shores Power Plant, located in Pasadena, Maryland; and
- **WHEREAS**, H.A. Wagner LLC ("Wagner") owns and operates the H.A. Wagner Generating Station, located in Pasadena, Maryland; and
- WHEREAS, Montour, Brandon Shores and Wagner own Facilities, as that term is defined below, that combust coal to generate electricity; and
- WHEREAS, Sierra Club believes that it has claims against Talen under various Environmental Laws, as that term is defined below, in connection with the coal related operations at the Facilities; and
- WHEREAS, Talen denies it has violated any Environmental Laws and further denies that Sierra Club has valid claims related to operations at the Facilities; and
- WHEREAS, the Parties desire to settle all matters related to operation of the Facilities by agreeing to phase out the combustion of coal and thereby avoid the costs, delay, and uncertainty of litigation.
- **NOW, THEREFORE,** in consideration of the mutual promises contained in this Agreement, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound, the Parties hereby agree as follows:

A. **DEFINITIONS**

- 1. "Brandon Shores Facility" means all real and personal property owned or operated by Brandon Shores, together with all on-site and off-site locations to which hazardous substances, pollutants or other contaminants generated, released or disposed by Brandon Shores are located or come to be located.
- 2. "Environmental Laws" shall mean any existing federal environmental statute or regulation, including without limitation, the Clean Water Act, 33 U.S.C. §§ 1251 et seq., and its implementing regulations, the Safe Drinking Water Act, 42 U.S.C. §§ 300f et seq., and its implementing regulations, the Clean Air Act, 42 U.S.C. §§ 7401 et seq., and its implementing regulations, the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 et seq., and its implementing regulations, including without limitation, the Coal Combustion Residuals or CCR regulations, the Comprehensive Environmental Response Compensation and Liability Act, 42

- U.S.C. §§ 9601 *et seq.* and its implementing regulations, and/or any existing Pennsylvania, Maryland or local environmental law, implementing regulations or common law cause of action, including without limitation, the Pennsylvania Constitution, the Pennsylvania Clean Streams Law, the Pennsylvania Air Pollution Control Act, the Pennsylvania Solid Waste Management Act, including without limitation, the Residual Waste Regulations, the Pennsylvania Hazardous Sites Cleanup Act, the Pennsylvania Land Recycling and Environmental Remediation Standards Act, the Maryland Constitution, the Maryland Environment Article, and the Maryland Natural Resources Article.
- 3. "CCR Rule" means the Coal Combustion Residuals Rule, 40 C.F.R. § 257.50 et seq.
- 4. "ELG Rule" means the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, 40 C.F.R. part 423.
- 5. "Facilities" means collectively the Brandon Shores Facility, the H.A. Wagner Facility and the Montour Facility.
- 6. "Wagner Facility" means all real and personal property owned or operated by Wagner, together with all on-site and off-site locations to which hazardous substances, pollutants or other contaminants generated, released or disposed by Wagner are located or come to be located.
- 7. "Montour Facility" means all real and personal property owned or operated by Montour, together with all on-site and off-site locations to which hazardous substances, pollutants or other contaminants generated, released or disposed by Montour are located or come to be located.

B. ACTIONS OF THE PARTIES

- 1. In order to phase out the combustion of coal and subject to the Sierra Club's undertakings in 2 below, Talen agrees as follows:
- a. Talen and Montour agree to cease the combustion of coal at the Montour Facility by December 31, 2025.
- b. Talen and Wagner agree to cease the combustion of coal at the Wagner Facility by December 31, 2025, conditioned upon approval of all permits required to burn oil at Wagner Unit 3. Talen and Wagner will make good faith efforts to secure such permits.
- c. Talen and Brandon Shores agree to cease the combustion of coal at the Brandon Shores Facility by December 31, 2025, conditioned upon approval of all permits required to burn oil, to enable the Brandon Shores Facility to operate as a capacity resource. Talen and Brandon Shores will make good faith efforts to secure such permits.
- d. Talen, Brandon Shores, and Wagner agree that the affected units will emit nominally the same or lower quantities of NOx, SO2 and CO2 on an annual average basis while burning oil than when the affected units burned coal and that they will not request to relax the

numerical limit or averaging time for any of the emission limitations presently applicable to the affected units for those pollutants.

- e. For as long as the Brandon Shores and Wagner Facilities continue to generate coal combustion byproducts, Talen, Brandon Shores, and Wagner agree to maintain current disposal and reuse practices and agree that any coal combustion byproducts generated by the Brandon Shores and Wagner Facilities will either be beneficially reused or disposed of in a synthetically lined landfill.
- 2. Sierra Club agrees not to initiate or participate in any judicial or administrative proceeding, or submit written comments to a government agency, challenging any State or Federal permits or permit modifications or changes necessary for Talen to effectuate the commitments in Paragraph B.1 above, as well as any permitting to allow the use of oil at the Brandon Shores and Wagner Facilities. In addition, Sierra Club agrees not to initiate or participate in any judicial or administrative proceeding challenging: (i) the method or timing of closure of any ash basins or ash deposits at the Montour Facility, including without limitation, any permits needed for the off-site disposition of any ash; (ii) coal-related groundwater and surface water conditions at any of the Facilities; or (iii) Talen's timing or methods of compliance with the CCR Rule or the ELG Rule at any of the Facilities, including the National Pollutant Discharge Elimination System ("NPDES") permit issued for the Brandon Shores and Wagner Facilities (Permit No. MD0001503) on July 21, 2020. Sierra Club recognizes and acknowledges that the commitment to cease burning coal at the Brandon Shores and Wagner Facilities is contingent on each Facility obtaining the required permits for the conversion to oil.
- 3. Should either the Brandon Shores or Wagner Facilities not cease to burn coal by December 31, 2025, or should Talen, Brandon Shores or Wagner cease its diligent good faith efforts to obtain the permits necessary to effectuate the commitments in Paragraph 1 for either of the Facilities, the provisions of Paragraph 2 concerning that Facility shall not apply.
- 4. Both Talen and Sierra Club agree to issue one or more public statements supporting providing Pennsylvania and Maryland RGGI revenues, or other public sources of revenue, to employees and communities affected by the transition away from coal.

C. RELEASE

In consideration of the undertakings contained herein, Sierra Club releases and covenants not to pursue any enforcement action in court or any other litigation for any Claims arising under any Environmental Laws, in any way related to coal combustion operations (including without limitation, the operation and closure of CCR units) at any of the Facilities, that Sierra Club has or may have as of the effective date of this Agreement. "Claims" is used in this Agreement in its broadest sense, including without limitation any and all claims, causes of action, demands, actions and/or rights of action for damages, penalties, attorneys' fees, declaratory and injunctive relief, or other rights of action. Sierra Club does not waive the right to enforce any violation of Talen's environmental permits arising after the effective date of this Agreement or to comment on or challenge future Federal or State permits for the Facilities, subject to the limitations of Paragraph B2.

D. ENTIRE AGREEMENT

This Agreement contains the entire, final, complete and exclusive agreement among the Parties with respect to the settlement and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. The terms of the Agreement may not be modified, altered, or changed except upon the express written consent of the Parties. Sierra Club and Talen acknowledge and agree that this Agreement has been negotiated by and among Parties of equal bargaining power and each has had the opportunity to contribute to its drafting. It is not to be construed in favor of or against any Party hereto.

E. NO ADMISSION; LEGAL FEES AND REMEDIES

Nothing contained in this Agreement is or shall be construed as an admission by Talen of any liability, breach of duty, unlawful conduct, or violation of any local, state, or federal law, permit, regulation, or ordinance, all such liability being expressly denied. This Agreement shall not be admitted into evidence in any proceeding except a proceeding to enforce the terms of the Agreement. Each Party will bear its own legal fees and costs related to this Agreement. The Parties agree that breach of this Agreement will cause irreparable harm for which there will be no adequate remedy at law and that injunctive relief is the appropriate and only remedy for any breach. No Party shall be subject to any claim for damages as a result of an alleged breach of this Agreement. Any Party alleging that another Party is in breach of this Agreement must provide written notice to that Party and provide 30 days for that Party to cure the alleged breach before seeking a remedy consistent with this paragraph.

F. GOVERNING LAW

This Agreement is made and shall be governed by and construed under the laws of the State of Maryland without regard to any choice of law or conflict of law principles.

G. COUNTERPARTS AND AUTHORIZATION

This Agreement may be signed in two or more counterparts, which together shall constitute a single, integrated agreement binding upon all the Parties and their successors and assigns. Signatures may be delivered by facsimile or electronically, and such signature shall be treated as the original thereof. Each undersigned representative of a Party certifies that he or she is fully authorized to enter into and legally bind such Party to this Agreement.

IN WITNESS WHEREOF, the Parties intending to be legally bound by the terms and conditions of this Agreement have executed this Agreement or caused this Agreement to be executed on their behalf by their duly authorized representative.

FOR SIERRA CLUB:



Name: Zachary M. Fabish

Title: Senior Attorney

Date: November 23, 2020

FOR TALEN ENERGY CORPORATION:

Name: Debra Raggio

Title: SVP - Regulatory and External Affairs Counsel

Date: November 23, 2020

FOR BRANDON SHORES LLC

Name: Debra Raggio

Title: SVP - Regulatory and External Affairs Counsel

Date: November 23, 2020

FOR H.A. WAGNER LLC

Name: Debra Raggio

 $Title: \ \, \text{SVP-Regulatory and External Affairs Counsel}$

Date: November 23, 2020

FOR MONTOUR, LLC

Name: Debra Raggio

 $Title: \ \ \, \text{SVP - Regulatory and External Affairs Counsel}$

Date November 23, 2020

AMENDMENT TO SETTLEMENT AGREEMENT

THIS AMENDMENT TO SETTLEMENT AGREEMENT (this "Amendment") is made as of this 6Th day of APRIL , 2023 (the "Effective Date"), by and among the Sierra Club ("Sierra Club") on the one hand and Talen Energy Corporation, Montour, LLC, Brandon Shores LLC and H.A. Wagner LLC on the other (collectively "Talen" and collectively with Sierra Club, the "Parties").

WHEREAS, the Parties entered into a Settlement Agreement dated November 23, 2020 (the "Agreement") related to, among other things, the cessation of coal combustion at the Montour Facility, the Wagner Facility and the Brandon Shores Facility, assuming certain conditions are met, by December 31, 2025; and

WHEREAS, the Parties have agreed to amend the Agreement as set forth below.

- **NOW, THEREFORE,** in consideration of the mutual promises contained in this Agreement, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound, the Parties hereby agree as follows:
- 1. The "WHEREAS" clauses set forth above are hereby reiterated and incorporated into this Agreement.
- 2. All capitalized terms used in this Amendment without definition shall have the same meanings given to such terms in the Agreement.
- 3. Section B. of the Agreement Actions of the Parties is amended by adding Paragraph B.3.a, which reads as follows:
- (a). Notwithstanding the provisions of Paragraphs B.1.c and B.3, in the event that the Secretary of the U.S. Department of Energy issues an emergency order pursuant to section 202(c) of the Federal Power Act, 16 U.S.C. § 824a(c), for Brandon Shores, the deadline for Brandon Shores to cease combustion of coal shall be extended until the expiration of such order, provided that Brandon Shores has filed a deactivation notice with PJM prior to the 2025-2026 delivery year PJM capacity auction.
- 4. Except as expressly amended hereby, the Agreement remains unmodified and in full force and effect and the Parties hereby confirm the terms and conditions thereof as amended in the Amendment. In the event of a conflict between the terms of this Amendment and the terms of the Agreement, the terms of this Amendment shall control.

IN WITNESS WHEREOF, and intending to be legally bound by the terms and conditions of this Amendment, the Parties have caused this Amendment to be signed as of the day and year first written above by their duly authorized representative.

FOR SIERRA CLUB:

Name: Zachary M. Fabish Title: Senior Attorney

Date: 6 April 2023

FOR TALEN ENERGY CORPORATION:

Name: Debra L. Raggio

Title: Senior Vice President-Regulatory and External Affairs Counsel

Date: April 6, 2023

FOR BRANDON SHORES LLC

Name: Debra L. Raggio

Title: Senior Vice President-Regulatory and External Affairs Counsel

Date: April 6, 2023

FOR H.A. WAGNER LLC

Name: Debra L. Raggio

Title: Senior Vice President-Regulatory and External Affairs Counsel

Date: April 6, 2023

FOR MONTOUR, LLC

Name: Debra L. Raggio

Title:Senior Vice President-Regulatory and External Affairs Counsel

Date April 6, 2023

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C., this 18th day of October 2024.

/s/ Ryan J. Collins
Ryan J. Collins

Attorney for PJM Interconnection, L.L.C.