UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

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SunEnergy1, LLC Complainant,	
v.	
PJM Interconnection, L.L.C., Respondent.	

Docket No. EL23-58-000

ANSWER OF PJM INTERCONNECTION, L.L.C.

PJM Interconnection, L.L.C. ("PJM"), pursuant to Rule 213 of the Federal Energy Regulatory Commission's ("Commission") Rules of Practice and Procedure,¹ submits this Answer to the Complaint filed by SunEnergy1, LLC ("SunEnergy1" or "Complainant") on April 5, 2023.² Notably, SunEnergy1 does not argue that PJM failed to comply with its Open Access Transmission Tariff ("Tariff") when it assessed Non-Performance Charges³ on SunEnergy1. Rather, it argues that PJM's Tariff, as applied to SunEnergy1's solar resources, is unjust and unreasonable. As a result, SunEnergy1 argues that PJM should refund the Non-Performance Charges, change the performance expectations for solar resources, and otherwise "explore" alternatives to the present Tariff.⁴ Although PJM does

¹ 18 C.F.R. § 385.213.

² SunEnergy1, LLC v. PJM Interconnection, L.L.C., Complaint of SunEnergy1, LLC, Docket No. EL23-58-000 (Apr. 5, 2023) ("Complaint").

³ Capitalized terms used, but not otherwise defined, in this pleading have the meaning provided in, as applicable, the Tariff, the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. ("Operating Agreement"), or the Reliability Assurance Agreement Among Load-Serving Entities in the PJM Region.

⁴ See Complaint at 7, 28.

intend, through its accelerated Critical Issue Fast Path ("CIFP") process,⁵ to undertake a holistic review of its existing capacity rules (including issues like those raised by SunEnergy1) the Complaint amounts to a collateral attack on the Commission's orders accepting the Capacity Performance construct. That SunEnergy1 does not like the Tariff provisions as they apply to solar resources does not justify waiving the Non-Performance Charge provisions that (a) were approved by the Commission and (b) SunEnergy1 voluntarily accepted by offering its solar resources as Capacity Resources.⁶ Accordingly, SunEnergy1 has failed to meet its burden under Federal Power Act, section 206(a),⁷ to demonstrate that any provision of PJM's Tariff is unjust, unreasonable, or unduly discriminatory in the treatment of solar resources as Capacity Resources. Therefore, the Commission should deny the Complaint.

I. INTRODUCTION

As a federal court of appeals recognized in 2017, "PJM's experience with winter weather events in 2014 . . . confirmed the virtue of capacity that is available to perform at any time, year round."⁸ Accordingly, in approving PJM's Capacity Performance reforms, the Commission, as it more recently affirmed, "accepted PJM's revisions to create a single capacity product to provide greater assurance of delivery of energy and reserves during

⁵ See Issue Charge: Critical Issue Fast Path – Resource Adequacy, PJM Interconnection, L.L.C. (Mar. 24, 2023), <u>https://www.pjm.com/-/media/committees-groups/cifp-ra/postings/cifp-ra-issue-charge.ashx</u>.

⁶ As explained below, solar resources do not have a must-offer requirement in the capacity market. Rather, SunEnergy1 voluntarily chose to offer its resources in the Capacity market and enjoy the revenues they received by virtue of clearing in that market.

⁷ 16 U.S.C. § 824e(a).

⁸ Advanced Energy Mgmt. All. v. FERC, 860 F.3d 656, 669 (D.C. Cir. 2017) ("Advanced Energy Mgmt. All.").

emergency conditions."⁹ The Commission in 2020 endorsed its 2015 holding that "applying PJM's annual capacity product to all resources . . . was appropriate because it creates the same expectations for all Capacity Performance Resources without regard to technology type."¹⁰ Moreover, "[c]apacity market design does not become unjust and unreasonable, or unduly discriminatory, simply because it does not accommodate the business model for certain resources."¹¹ As *Advanced Energy Mgmt. All* held, "[t]he law provides no basis to claim the Commission cannot approve uniform performance requirements simply because those requirements will be easier to satisfy for some generators than for others."¹²

The Earth's daily rotation was known when the Commission approved the Capacity Performance rules. In designing the Capacity Performance construct, PJM recognized that "certain resources, including Intermittent Resources . . . may not be capable of sustained, predictable operation."¹³ To mitigate against this risk and to encourage participation, PJM included in the Capacity Performance construct an exemption from the must-offer requirement for Intermittent Resources¹⁴ and permitted such resources to combine with other resources to offer as an aggregated resource capable of achieving 24-hour

⁹ Old Dominion Elec. Coop. v. PJM Interconnection, L.L.C., 171 FERC ¶ 61,149, at P 76 (2020) ("ODEC").

¹⁰ Id.

¹¹ *Id.* at P 82.

¹² Advanced Energy Mgmt. All., 860 F.3d at 670.

¹³ *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208, at P 53 (2015) ("CP Order"), order on reh'g & compliance, 155 FERC ¶ 61,157 (2016) ("CP Rehearing Order"), aff'd sub nom. Advanced Energy Mgmt. All. v. FERC, 860 F.3d 656 (D.C. Cir. 2017).

¹⁴ See Tariff, Attachment DD, section 6.6A(c).

performance.¹⁵ The Commission recognized that these tools provide Intermittent Resources with the opportunity to participate in Capacity Performance that otherwise would not be available "because no reasonable amount of investment in the resource can mitigate non-performance risk to an acceptable level within the Capacity Performance market design."¹⁶

SunEnergy1 chose to offer and commit four of its solar generation projects in North Carolina and Virginia as Capacity Resources (and chose not to pair its resources with storage or other resources that could perform at night) for the current Delivery Year under the Capacity Performance rules knowing that: i) it was under no obligation to do so, since it had no must-offer requirement; ii) it would be subject to Non-Performance Charges if its resources did not perform during Performance Assessment Intervals; and iii) its resources were incapable of performing when it is dark. SunEnergy1 made that choice, and took on that risk. As a result, Load-Serving Entities in the PJM Region have been funding the Tariff-prescribed compensation to SunEnergy1 for commitment of its four Capacity Resources throughout the entire current Delivery Year—based on the Capacity Resource clearing price paid to all Capacity Resources, regardless of technology type, that cleared in the "Rest of RTO" Locational Deliverability Area ("LDA").

But SunEnergy1's voluntary commitment of its Capacity Resources, and receipt of those capacity revenues, came with the obvious risk of Non-Performance Charges if there were any Performance Assessment Intervals during this Delivery Year at times when its resources were incapable of performing. That risk was realized when PJM declared

¹⁵ See Tariff, Attachment DD, section 5.6.1(h).

¹⁶ CP Order at P 102.

Emergency Actions on December 23 and December 24, 2022, triggering 277 Performance Assessment Intervals—most of them for periods when SunEnergy1's Capacity Resources could not perform because it was too dark.

SunEnergy1 now wants the Commission to declare the rules it voluntarily accepted when it offered and committed its Capacity Resources to be unjust, unreasonable, and unduly discriminatory.¹⁷ It asks the Commission to modify the Tariff to excuse solar Capacity Resources from any performance responsibility when it is too dark to generate,¹⁸ yet make no change to the Tariff rules that pay all Capacity Resources clearing in the same LDA the same price, regardless of technology type. SunEnergy1 even asks the Commission to direct PJM to refund to SunEnergy1 the Non-Performance Charges for the current Delivery Year¹⁹ while, again, leaving with SunEnergy1 all the revenue that loads paid SunEnergy1 for its Capacity Resources this Delivery Year.

SunEnergy1's demand to be treated the same as a 24-hour, year-round Capacity Resource in all respects *except* performance is itself discriminatory in the extreme. SunEnergy1's entire argument is based on solar resources' technical incapability to perform,²⁰ but that argument presumes that solar resources are *entitled* to Capacity Resource status regardless of that technical incapability. SunEnergy1 argues that PJM knows²¹ solar resources cannot perform when it is dark—as if that is a new revelation—

¹⁷ Complaint at 16-20.

¹⁸ Complaint at 14-15.

¹⁹ Complaint at 31.

²⁰ Complaint at 14-22.

²¹ Complaint at 7, 20-21.

but the more salient fact is that *SunEnergy1* knew its resources cannot perform in the dark, but still voluntarily offered them as Capacity Resources without making any effort, such as adding storage or aggregating with other Intermittent Resources, to mitigate that obvious non-performance risk. SunEnergy1's only other argument—that excusing Capacity Resource performance for planned and maintenance outages requires excusing resources²² that cannot perform for more than half the hours in a year—has already been rejected by the Commission.²³

Accordingly, because SunEnergy1 fails to meet its burden under FPA section 206 to show that the current Tariff is unjust, unreasonable, or unduly discriminatory, the Commission should deny the Complaint. As a result, there is simply no basis for the Commission to excuse SunEnergy1 from the obligations it voluntarily took on and the penalties that resulted from its resources not meeting those obligations. Notwithstanding, the issues raised in the Complaint are part of the holistic review of the existing Capacity Performance penalty structure that PJM is actively undertaking through its accelerated CIFP process, with a filing expected by the fall of this year.

II. BACKGROUND

A. The Capacity Performance Construct Shifted Performance Risk to Generators from Load by Requiring Generators to Perform when Needed, with Very Limited Excuses, or Pay Stringent Non-Performance Charges

PJM's capacity market is designed to ensure reliability at just and reasonable rates. Following severe weather events in January 2014 during which generating resources in the PJM Region performed very poorly, PJM proposed, and the Commission accepted,

²² Complaint at 22-23.

²³ *ODEC* at P 82.

capacity market reforms to incent committed Capacity Resources to deliver the promised energy and reserves when PJM calls upon them in emergencies.²⁴ Central to these reforms was a new capacity product, the Capacity Performance Resource, which must be "capable of sustained, predictable operation such that the resource will be reliably available to provide energy and reserves in an emergency condition."²⁵

To incent committed Capacity Resources to deliver the capacity and reliability they are paid to provide, the Tariff provides that, in emergency conditions, underperforming Capacity Resources face stringent²⁶ Non-Performance Charges and over-performing resources earn bonus payments.²⁷ Specifically, for the period (known as Performance Assessment Intervals) when certain PJM-declared Emergency Actions are in effect, the Tariff requires PJM to compare a Capacity Resource's Actual Performance against its Expected Performance, and assess Non-Performance Charges when the resource falls short.²⁸ The Commission found that Non-Performance Charges will "act as a strong incentive for performance,"²⁹ explaining that "if and to the extent [a Capacity Resource]

²⁴ See CP Order at P 8.

²⁵ CP Order at P 28.

²⁶ The Non-Performance Charge is based on the Net Cost of New Entry (*see* Tariff, Attachment DD, section 10A(e)) even if the Capacity Resource Clearing Price for the relevant Delivery Year is set at a level well below the Net Cost of New Entry.

²⁷ The details for applying and determining Non-Performance Charges and bonus payments are set forth in Tariff, Attachment DD, section 10A. A resource does not need to be a Capacity Resource to receive bonus payments.

²⁸ See Tariff, Attachment DD, section 10A(c) (prescribing comparison of Actual Performance against Expected Performance); Tariff, Definitions – E-F (defining Emergency Action), *id.*, Definitions – O-P-Q (defining Performance Assessment Interval).

²⁹ CP Rehearing Order at P 72.

fails to perform during an emergency, when it is most needed, it is appropriate that the compensation for that resource be reduced and possibly entirely forfeited."³⁰

There are only two narrow excuses from Non-Performance Charges,³¹ and neither is relevant here.

As a result of the very limited excuses from Non-Performance Charges, Capacity Market Sellers are responsible for ensuring resource performance, and thus "bear the burden of delivering on their capacity obligation."³² In this way, the Non-Performance Charge "holds capacity resources accountable for delivering on their capacity commitments"³³ 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."³⁴

Capacity Performance also offers a carrot to perform, in addition to the Non-Performance Charge stick. Resources that over-perform receive "bonus" payments,³⁵

³⁰ CP Rehearing Order at P 29.

³¹ Specifically, a resource's performance shortfall may be excused only if the resource "was unavailable during such Performance Assessment Interval solely because the resource on which such Capacity Resource . . . is based was on a Generator Planned Outage or Generator Maintenance Outage approved by [PJM];" or if the resource "was not scheduled to operate by [PJM], or was online but was scheduled down, by [PJM], based on a determination by [PJM] that such scheduling action was appropriate to the security-constrained economic dispatch of the PJM Region." *See* Tariff, Attachment DD, section 10A(d).

³² CP Rehearing Order at P 110.

³³ CP Rehearing Order at P 18.

³⁴ CP Order at P 158; *see also* CP Rehearing Order at P 88 ("Capacity sellers need to make the investment and maintenance decisions ahead of time to reduce the probability that they will consistently, and for prolonged periods, be unable to deliver energy during Performance Assessment Hours.").

³⁵ See Tariff, Attachment DD, section 10A(g) ("Revenues collected from assessment of Non-Performance Charges for a Performance Assessment Interval shall be distributed to each Market Participant, whether or not such Market Participant committed a Capacity Resource or Locational UCAP for a Performance Assessment Interval, that provided energy or load reductions above the levels expected for such resource during such interval.").

"provid[ing] the appropriate incentives for all resources to perform when they are most needed."³⁶ Bonus payments are derived from the collected Non-Performance Charges.³⁷ The Commission found this "redistribution of capacity revenues from under-performing resources to over-performing resources provides the appropriate incentives for all resources to perform when they are most needed."³⁸

The Non-Performance Charges and bonus payments are "a tariff-defined mechanism that establishes a transparent, operative framework to provide an incentive for resource reliability."³⁹ They both advance the overarching goal of Capacity Performance: ensuring all Capacity Resources are available to provide energy or reserves when needed, while reallocating non-performance risk from consumers to capacity suppliers.⁴⁰ Stated another way, PJM's Tariff rules penalizing under-performance and rewarding over-performance are designed so that customers get the reliability for which they are paying and generators' capacity revenues are tied "more closely with real-time delivery of energy and reserves during emergency system conditions."⁴¹

³⁸ CP Order at P 182.

³⁹ CP Order at P 15.

⁴¹ CP Order at P 158.

³⁶ CP Order at P 182.

³⁷ See Tariff, Attachment DD, section 10A(g); see also CP Order at P 182 ("Regarding PJM's proposal to allocate Non-Performance Charge revenues to over-performing resources, we find PJM's proposal to distribute these penalties to generators to be just and reasonable.").

⁴⁰ See, e.g., CP Order at P 5, 24 ("a resource adequacy construct that fails to provide adequate incentives for resource performance can threaten the reliable operation of PJM's system and force consumers to pay for capacity without receiving commensurate reliability benefits"); CP Rehearing Order at P 27 ("PJM's proposed revisions to the capacity market penalty structure reallocate a significant portion of this performance risk to capacity resource owners and operators."); CP Rehearing Order at P 109 (recognizing that each non-performance excuse "represent[s] a reallocation of nonperformance risk from capacity suppliers to consumers" (citing *ISO New England Inc.*, 147 FERC ¶ 61,172, at P 71 (2014).).

B. The Capacity Performance Rules Recognize, and Include Measures for Sellers to Manage, the Non-Performance Risks of Intermittent Resources

In designing the Capacity Performance construct, PJM specifically contemplated the performance risks and challenges faced by Intermittent Resources. That is, certain resources, including Intermittent Resources, "may not be capable of sustained, predictable operation and may not be able to provide energy during both summer and winter emergency conditions."⁴² Based on that understanding, PJM included within the Capacity Performance exemptions and risk mitigation tools designed to encourage Intermittent Resources to participate despite the potential for performance challenges.

First, Intermittent Resources, along with other operationally-limited resource categories, are not required to offer as Capacity Resources.⁴³ The exception from the "must-offer requirement" stems from the understanding that a must-offer requirement would be difficult to enforce against these types of resources. As PJM explained in its Capacity Performance proposal, it is not clear how PJM could demand that an Intermittent Resource assume its resource will operate when solar or wind conditions do not allow operation.⁴⁴ Importantly, while not *required* to offer as Capacity Performance Resources, these types of resources can choose to offer as Capacity Performance Resources if the Capacity Market Seller wishes to do so.⁴⁵ The exception therefore allows Intermittent

⁴² CP Order at P 53.

⁴³ Tariff, Attachment DD, section 6.6A(c).

⁴⁴ *PJM Interconnection, L.L.C.*, Reforms to the Reliability Pricing Market and Related Rules in the PJM Open Access Transmission Tariff and Reliability Assurance Agreement Among Load Serving Entities of PJM Interconnection, L.L.C., Docket No. ER15-623-000, at 61 (Dec. 12, 2014).

⁴⁵ Id.

Resources to assess their individual risk of non-performance in determining whether to offer as a Capacity Resource.

In addition to the exception from the must-offer requirement, Intermittent Resources can mitigate against the risk of non-performance by combining with other operationally-limited resources, including Capacity Storage Resources, Demand Resources, or Energy Efficiency Resources, to submit a Sell Offer as an aggregated resource.⁴⁶ Individual resources that are part of an aggregated resource are expected to respond to a Performance Assessment Interval in the area where they are physically located, and the aggregated resource's Non-Performance Charge Rate will be based on the location of the physical resources underlying the aggregate.⁴⁷ If one or more individual resources that are part of an aggregated resource are in the same area where there is a Performance Assessment Interval, the under-/over-performance of the aggregated resource will be based on the total commitment and performance of all of the individual resources included in the Performance Assessment Interval.⁴⁸ The Non-Performance Charge Rate applicable to an under-performing aggregate resource is based on the rate associated with the LDA in which the under-performing underlying resources are located, weighted by the under-performance megawatt ("MW") quantity of such resources.⁴⁹ The annual nonperformance charge limit of an aggregated resource is based on the limit applicable to the

⁴⁶ See Tariff, Attachment DD, section 5.6.1(h).

⁴⁷ See Capacity Market & Demand Response Operations, *PJM Manual 18: PJM Capacity Market*, PJM Interconnection, L.L.C., section 4.9 (Feb. 9, 2023), <u>https://pjm.com/-/media/documents/manuals/m18.ashx</u> ("Manual 18").

⁴⁸ Manual 18, section 4.9.

LDA in which the aggregated resource was modeled in the Reliability Pricing Model ("RPM") Auction.⁵⁰

In approving PJM's proposal to allow Intermittent Resources to submit aggregated offers as Capacity Performance Resources, the Commission found that such aggregations would enhance resources' ability to provide reliability benefits to the PJM Region and increase competition in the Capacity market.⁵¹ The Commission also found that PJM's aggregated offers proposal was "designed to provide an avenue to Capacity Performance participation by resources that otherwise may be unable or unwilling to participate on a stand-alone basis *because no reasonable amount of investment in the resource can mitigate non-performance risk to an acceptable level* within the Capacity Performance market design."⁵²

C. SunEnergy1 Voluntarily Chose to Offer and Commit Four Solar Projects as Capacity Resources Notwithstanding the Obvious Non-Performance Risks, and They Indeed Did Not Perform During Most of the Performance Assessment Hours Resulting from Winter Storm Elliott

As summarized in the Complaint, SunEnergy1 owns four solar facilities in the PJM Region that SunEnergy1 chose to commit as Capacity Resources for the current Delivery Year. Those resources cleared in the "Rest of RTO" LDA, and accordingly have been compensated—ultimately by PJM Region loads—for the last twelve months based on the same Capacity Resource clearing price paid to all Capacity Resources, regardless of technology type, that cleared in that LDA.

⁵⁰ Id.

⁵¹ CP Order at P 101.

⁵² *Id.* at P 102 (emphasis added).

During that Delivery Year, Winter Storm Elliott prompted PJM to declare certain Emergency Actions that triggered Performance Assessment Intervals. Most of those Performance Assessment Intervals occurred during hours when SunEnergy1's resources could not generate. Accordingly, each of these facilities was assessed Non-Performance Charges in connection with its performance during the Performance Assessment Intervals occurring over December 23 and 24, 2022.⁵³

III. ANSWER

A. Capacity Performance Resources Assume the Risk Associated with Any Non-Performance

The Complaint contends that the requirements of Tariff, Attachment DD, section 10A permitting penalties to be charged to solar resources during evening hours are unjust, unreasonable, and unduly discriminatory because "they serve no purpose in deterring against undesirable conduct."⁵⁴ Complainant argues that the purpose of Non-Performance Changes is to "modify behavior," and because solar resources cannot make investments to improve their performance, application of Non-Performance Charges to those resources during evening hours is unjust and unreasonable.⁵⁵ Not only does this argument completely ignore the aspects of the Capacity Performance construct designed to account for and mitigate against risks of nonperformance for Intermittent Resources, it also mischaracterizes the purpose of Non-Performance Charges and their role in ensuring procurement of reliable available capacity.

⁵³ Complaint at 13. SunEnergy1 also earned bonus payments, which it notes were earned "outside of the Evening Hours."

⁵⁴ *Id.* at 15.

⁵⁵ *Id.* at 14-16.

First, SunEnergy1's assertion that solar resources cannot be incented to modify their behavior to avoid Non-Performance Charges assumes that solar resource are somehow uniquely at risk for non-performance in a way other Intermittent Resources are not. As discussed in Section II.B, *supra*, PJM built into Capacity Performance mitigations *specifically designed* to reduce the risks of non-performance for Intermittent Resources.⁵⁶ Glaringly, the Complaint makes no mention of the exception for Intermittent Resources from the must-offer requirement, nor does it explain why Complainant chose to forego the option of partnering its solar resources with other resources to offer as an Aggregated Resource, thereby mitigating against the risk of non-performance during evening hours.

Second, rather than deter resources that cannot provide capacity from offering, Non-Performance Charges are intended to *incent* resources to provide the capacity for which load is paying and thus ensure reliability, regardless of the resource type. Under PJM's prior capacity construct, "much of the risk, and cost, of under-performance was placed on load, while the [Capacity Performance] penalty structure reallocates a significant portion of this performance risk to capacity resource owners and operators."⁵⁷ In doing so, Capacity Performance Resources are incented to account for the risk of non-performance when submitting offers:⁵⁸

In calculating [its] offer price, we expect the resource owner to consider the likelihood of Performance Assessment Hours in the Locational Deliverability Area in which the resource is located, as well as the Non-Performance Charge rate that would apply to the resource based on its

⁵⁶ See section II.B, supra.

⁵⁷ CP Rehearing Order at P 27.

⁵⁸ As noted in the Complaint, Complainant's solar resources were assessed Non-Performance Charges and also received bonus payments for over performance during Winter Storm Elliott. *See* Complaint at 13. Although the Commission recently removed the ability to price this opportunity into sell offers, SunEnergy1 shows that the possibility of receiving bonus payments is viable.

physical location. If, based on that offer price, that resource clears a capacity auction and obtains a capacity commitment, the resource is guaranteed to receive capacity auction-based compensation (i.e., capacity market compensation independent of Non-Performance Charges and Performance Bonus Payments) equal to or greater than its offer price.⁵⁹

The fact that solar resources cannot perform at night is a risk that the owner/operator of each such resource takes in making a capacity commitment. Solar facilities assume the same risk that all Capacity Performance Resources assume when participating in RPM. In approving the Capacity Performance proposal, the Commission assumed resources would price this risk into their offers.⁶⁰ Indeed, the Capacity Performance Quantifiable Risk component (which assesses quantifiable and reasonably-supported costs of mitigating the risks of non-performance) was added to the Avoidable Cost Rate determination for this very purpose.⁶¹

Complainant's assertion that no additional investments would allow solar to perform when there is no solar radiance requires the Commission to look at solar resources in a vacuum. This view ignores the reality that solar resources have the option to invest in or combine with other resources to create an aggregated resource for purposes of offering as a Capacity Resource, thereby significantly reducing the risk of non-performance. For example, if SunEnergy1 had invested in battery storage resources (i.e., Capacity Storage Resources) and combined those resources with its solar facilities, SunEnergy1's

⁵⁹ *PJM Interconnection, L.L.C.*, 162 FERC ¶ 61,159, at P 43 (2018).

⁶⁰ See CP Order at P 159; CP Rehearing Order at P 109 ("[C]apacity resource owners are in the best position to assess and price the nonperformance risk of their resources into their capacity offers.").

⁶¹ See CP Rehearing Order at P 197 (explaining addition of Capacity Performance Quantifiable Risk to Avoidable Cost Rate "will properly allow capacity resources to reflect their estimates of physical and capital costs needed to remain in service or improve peak-hour availability or operating flexibility to ensure performance during emergency operations.").

aggregated Capacity Performance Resource may have been capable of 24-hour performance, including when the sun is down.

SunEnergy1 has failed to demonstrate that solar resources are uniquely incapable of accounting for the risk of non-performance in offering as Capacity Performance Resources. The Complaint should therefore be denied.

B. Exempting Solar Resources from Non-Performance Changes Would Unduly Discriminate Against All Other Capacity Performance Resources

The Complaint argues that since PJM "knows" that solar resources cannot operate during evening hours, PJM plans its system accordingly, and therefore assessing Non-Performance Charges during evening hours is unnecessary to incentivize performance.⁶²

There is no dispute that solar resources are incapable of performing when it is too dark; there is similarly no dispute that PJM is aware of the performance capabilities of solar resources operating as Capacity Performance Resources. However, neither of these facts lead to the conclusion that Tariff, Attachment DD, section 10A is unjust or unreasonable as applied to Complainant's solar resources. To the contrary, treating solar resources as functionally equivalent to resources that are excused from Non-Performance Charges based on resource-specific and tightly limited circumstances is unjust and unreasonable and would unduly discriminate against other Intermittent Resources that are held to the same performance standard. Rather than addressing resource-specific issues through oneoff complaints such as this one, PJM believes a comprehensive review of the Capacity Performance penalty structure is the best way to further consider these issues. PJM has

⁶² Complaint at 21-22.

embarked on that exact process through its accelerated CIFP process, with a filing planned for this fall.

All Capacity Performance Resources provide the same capacity product and are treated similarly under Tariff, Attachment DD, section 10A.⁶³ PJM designed the Capacity Performance construct with the understanding that Intermittent Resources (including solar) "may not be capable of sustained, predictable operation and may not be able to provide energy during both summer and winter emergency conditions."⁶⁴ For this very reason, PJM designed the options for Intermittent Resources to mitigate the risk of non-performance discussed above. Any resource that opts to provide the annual capacity product should be held to the same performance standards as all other annual resources. Load pays the same \$/MWh rate for capacity regardless of product type. Indeed, PJM specifically designed Capacity Performance to be resource neutral—by not adopting any resource specific criteria and making the only criteria that the resource provide capacity when called upon during emergencies.⁶⁵

SunEnergy1 makes much of the fact that PJM "knows" that solar resources cannot operate at night, arguing that PJM accounts for such resources' unavailability when determining their Effective Load Carrying Capability for each Delivery Year.⁶⁶ Capacity

⁶³ See Tariff, Attachment DD, section 10A (applying Non-Performance Charges to "each Capacity Market Seller that commits a Capacity Resource for a Delivery Year").

⁶⁴ CP Order at P 53.

⁶⁵ See CP Rehearing Order at PP 59, 281.

⁶⁶ Complaint at 21 (citing Resource Adequacy Planning, *Manual 20: Resource Adequacy Analysis*, PJM Interconnection, L.L.C., section 5.3 (Aug. 25, 2021), https://pjm.com/-/media/documents/manuals/m20.ashx.).

Performance Resources receive capacity payments based on 24-hour availability.⁶⁷ If *any* resource cannot be available for a 24-hour period, it must account for the risk of non-performance when offering as a Capacity Performance Resource. Moreover, SunEnergy1's invocation of the Effective Load Carrying Capability rules is irrelevant since those rules do not become effective until the 2023/2024 Delivery Year, well after the Winter Storm Elliott events that prompted the Complaint. The Complaint essentially asks PJM to pay solar resources for 24-hours, but only charge them for non-performance on less than half of those hours. Such treatment is, on its face, unduly discriminatory to all other Capacity Performance Resources participating in RPM.

C. Solar Resources' Inability to Generate at Night Is Not Analogous to a Generator Planned Outage

The Complaint argues that during evening hours, solar resources are "functionally equivalent to being on a Generator Planned Outage or Generator Maintenance Outage because such resources are not expected to perform during specified periods, including during [Performance Assessment Intervals]."⁶⁸ Contrary to the Complaint's contention, solar resources do not go on a "Generator Planned Outage" every time the sun goes down. As explained in the Operating Agreement, Generator Planned Outages are limited to outages for "inspection, maintenance or repair" and require prior approval, which can be revoked if PJM determines that the Generator Planned Outage "would significantly affect

⁶⁷ See Manual 18, section 1.5 ("For a Capacity Resource to qualify as a Capacity Performance Resource product type, the resource must be capable of sustained, predictable operation that allows the resource to be available throughout the entire Delivery Year to provide energy and reserves whenever PJM determines an emergency condition exists.").

⁶⁸ Complaint at 23.

the reliable operation of the PJM Region."⁶⁹ Similarly, Generation Maintenance Outages are limited to outages to "perform repairs on specific components of the facility," require prior approval, and can be revoked.⁷⁰ Intermittent Resources are, by their nature, incapable of sustained performance. As such, Intermittent Resources are not "similarly situated" to resources on a Generator Planned Outage or Generator Maintenance Outage.

The Commission has already rejected the argument that certain Capacity Performance Resources should be treated as if they are on a planned or maintenance outage during intervals where they are incapable of performing. In *ODEC*, the Commission denied complaints arguing that seasonal capacity resources, which are unavailable during certain points of the year, should be held to a lesser standard of performance than "sustained, predictable operation" throughout the Delivery Year. The Commission found that permitting seasonal resources to take "outages" when unavailable is not analogous to a Generator Planned Outage or Generator Maintenance Outage, which are fully within PJM's control:

Capacity market design does not become unjust and unreasonable, or unduly discriminatory, simply because it does not accommodate the business model for certain resources. ODEC argues in its Complaint that other resources have regularly scheduled outages, and that seasonal resources should also be able to participate without having full availability. However, scheduled outages do not present the same issues for PJM's reliability as seasonal availability. *PJM does not schedule generation outages; rather, PJM only accepts or rejects a request for an outage and PJM can reject any request when the outage affects system reliability. However, PJM would not be capable of rejecting seasonally available resources, which are not available for months at a time,* and Complainants' proposed remedy has the potential to disrupt system reliability.⁷¹

⁶⁹ Operating Agreement, Schedule 1, section 1.9.2(b).

⁷⁰ Operating Agreement, Schedule 1, section 1.9.3(b).

⁷¹ ODEC at P 82 (emphasis added).

Here, as in *ODEC*, Complainant argues that its solar resources should be excused from the standard of performance for all Capacity Performance Resources by taking outages at its discretion when it cannot perform at night. Complainant's attempt to link solar resources' unavailability during evening hours to generators qualifying for the limited exceptions from Non-Performance Charges is a false equivalency. The Complaint should therefore be rejected.

D. Other "Design Characteristics" Referenced Are Beyond the Scope of the 206 Complaint and Should Be Disregarded

In addition to the arguments outlined above, SunEnergy1 makes a number of contentions regarding the "design characteristics" of PJM's capacity market that it asserts will make assessing Non-Performance Charges to solar resource even more unjust, unreasonable, and unduly discriminatory in the future.⁷² By its own express admission, SunEnergy1 *is not* challenging the justness or reasonableness of the "design characteristics" themselves, or asking the Commission to make any rulings regarding these design characteristics in this proceeding.⁷³ In an FPA section 206 proceeding initiated by a complainant, the Commission reviews and acts on the claims raised in the complaint that a public utility's acts, practices, or Tariff terms are unjust, unreasonable or unduly discriminatory.⁷⁴ The Commission thus can and should disregard the Complaint's objections to these design characteristics.

⁷² Complaint at 24-28.

⁷³ *Id.* at 27.

⁷⁴ See N. Ind. Pub. Serv. Co. v. Midcontinent Indep. Sys. Operator, Inc., 155 FERC ¶ 61,058, at P 94 (2016); order on reh'g, 172 FERC ¶ 61,101 (2020), aff'd sub nom. Entergy Ark., LLC v. FERC, 40 F.4th 689 (D.C. Cir. 2022); Cal. Pub. Utils. Comm'n v. Pac. Gas & Elec. Co., 164 FERC ¶ 61,161, at P 73 (2018).

IV. ADMISSIONS AND DENIALS PURSUANT TO 18 C.F.R. § 385.213(c)(2)(i)

Pursuant to Rule 213(c)(2)(i) of the Commission's rules of Practice and Procedure,⁷⁵ PJM affirms that any allegation in the Complaint is not specifically and expressly admitted above is denied.

V. AFFIRMATIVE DEFENSES PURSUANT TO 18 C.F.R. § 385.213(c)(2)(ii)

PJM's affirmative defenses are set forth above in this answer, and include the

following, subject to amendment and supplementation.

1. The Complainant has failed to satisfy its burden of proof under FPA section 206 (16 U.S.C. § 824e), and have not demonstrated that PJM violated any Commission order, the Tariff, the Operating Agreement, Reliability Assurance Agreement, the Consolidated Transmission Owners Agreement, or any other Commission-jurisdictional governing document.

VI. COMMUNICATIONS AND SERVICE

PJM requests that the Commission place the following individuals on the official

service list for this proceeding:⁷⁶

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) (202) 393-7741 (fax) craig.glazer@pim.com

Chenchao Lu Associate General Counsel PJM Interconnection, L.L.C. 2750 Monroe Blvd. Audubon, PA 19403 (610) 666-2255 (phone) Chenchao.Lu@pjm.com Paul M. Flynn Ryan J. Collins Elizabeth P Trinkle Wright & Talisman, P.C. 1200 G Street, N.W., Suite 600 Washington, D.C. 20005 (202) 393-1200 (phone) (202) 393-1240 (fax) flynn@wrightlaw.com collins@wrightlaw.com trinkle@wrightlaw.com

⁷⁵ 18 C.F.R. § 385.213(c)(2)(i).

 $^{^{76}}$ To the extent necessary, PJM requests a waiver of Commission Rule 203(b)(3), 18 C.F.R. § 385.203(b)(3), to permit more than two persons to be listed on the official service list for this proceeding.

VII. CONCLUSION

For the reasons set forth in this answer, the Commission should dismiss the

Complaint.

Respectfully submitted

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) (202) 393-7741 (fax) craig.glazer@pjm.com

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May 26, 2023

<u>/s/ Elizabeth P. Trinkle</u> Paul M. Flynn Ryan J. Collins Elizabeth P. Trinkle Wright & Talisman, P.C. 1200 G Street, N.W., Suite 600 Washington, D.C. 20005 (202) 393-1200 (phone) (202) 393-1240 (fax) flynn@wrightlaw.com collins@wrightlaw.com trinkle@wrightlaw.com

Attorneys for PJM Interconnection, L.L.C.

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 26th day of May 2022.

> /s/ Elizabeth P. Trinkle Elizabeth P. Trinkle Wright & Talisman, P.C. 1200 G Street, N.W., Suite 600 Washington, D.C. 20005 (202) 393-1200 (phone) (202) 393-1240 (fax) trinkle@wrightlaw.com

Attorney for PJM Interconnection, L.L.C.

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