187 FERC ¶ 61,209 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Willie L. Phillips, Chairman;

Allison Clements and Mark C. Christie.

Roy J. Shanker v. PJM Interconnection, L.L.C.

Docket No. EL23-13-000

ORDER DENYING COMPLAINT

(Issued June 27, 2024)

1. On November 30, 2022, Dr. Roy J. Shanker filed a complaint (Complaint) under section 206 of the Federal Power Act (FPA), alleging that PJM Interconnection, L.L.C.'s (PJM) application of its Effective Load Carrying Capability (ELCC) process violates PJM's governing documents. Dr. Shanker requests that the Commission direct PJM to comply with its governing documents and make adjustments to all future Base Residual Auction (BRA) settlements and all prior BRA settlements "that are not time barred." As discussed below, we deny the Complaint.

I. Background

A. Procedural History

2. On October 30, 2020, PJM submitted its initial ELCC proposal in Docket No. ER21-278-000, which the Commission rejected on April 30, 2021 (*ELCC I* Order), finding that the proposed transition mechanism was unjust and unreasonable.² On June 1, 2021, in Docket No. ER21-2043-000, PJM submitted a revised ELCC proposal that omitted the transition mechanism. The Commission accepted PJM's revised proposal on July 30, 2021 (*ELCC II* Order).³ In that proceeding, several commenters raised concerns that PJM's ELCC methodology may not adequately consider

¹ 16 U.S.C. § 824e.

 $^{^2}$ PJM Interconnection, L.L.C., 175 FERC \P 61,084, at PP 1, 104 (2021) (ELCC I Order).

³ *PJM Interconnection, L.L.C.,* 176 FERC ¶ 61.056 (2021) (*ELCC II* Order).

transmission constraints and resources' Capacity Interconnection Rights (CIR)⁴ but noted PJM's commitment to conduct an ELCC methodology review in the future to consider these issues more closely.⁵ Given commenters' concerns, the Commission strongly encouraged PJM and stakeholders to continue refining the ELCC methodology as PJM gained experience with its new approach.⁶ No participant sought rehearing of this determination.

3. On January 25, 2023, PJM Members approved a set of reforms to the ELCC construct to improve the accuracy of accounting for CIRs and deliverability. On February 8, 2023, PJM filed an FPA section 205 proposal with those reforms in Docket No. ER23-1067-000. Dr. Shanker did not protest PJM's filing. On April 7, 2023, the Commission accepted PJM's reforms subject to condition (2023 ELCC Order).⁷

B. <u>Capacity Interconnection Rights and PJM's ELCC Procedures</u>

4. PJM requires that generation Capacity Resources⁸ be deliverable to PJM load. One way PJM ensures that Capacity Resources are deliverable to load is through its

⁴ CIRs are "the rights to input generation as a [capacity] resource in the Transmission System at the Point of Interconnection." PJM, Intra-PJM Tariffs, OATT, \S 1 (Definitions – C – D) (32.2.0).

⁵ *ELCC II* Order, 176 FERC ¶ 61,056 at P 45.

⁶ *Id.* P 55.

 $^{^7}$ *PJM Interconnection, L.L.C.*, 183 FERC ¶ 61,009 (2023) (2023 ELCC Order). On January 30, 2024, the Commission accepted revised PJM Tariff and Reliability Assurance Agreement provisions that, among other things, proposed to determine resource-specific ELCC ratings for all resources. *PJM Interconnection, L.L.C.*, 186 FERC ¶ 61,080 (2024) (January 2024 Order). The references in this order apply to the ELCC construct as it existed prior to the January 2024 Order.

⁸ The RAA defines Capacity Resources as "megawatts of (i) net capacity from Existing Generation Capacity Resources or Planned Generation Capacity Resources meeting the requirements of the Reliability Assurance Agreement, Schedules 9 and Reliability Assurance Agreement, Schedule 10 that are or will be owned by or contracted to a Party and that are or will be committed to satisfy that Party's obligations under the Reliability Assurance Agreement, or to satisfy the reliability requirements of the PJM Region, for a Delivery Year; (ii) net capacity from Existing Generation Capacity Resources or Planned Generation Capacity Resources not owned or contracted for by a Party which are accredited to the PJM Region pursuant to the procedures set forth in such Schedules 9 and 10; or (iii) load reduction capability provided by Demand Resources or Energy Efficiency Resources that are accredited to the PJM region pursuant to the

interconnection process, through which PJM determines what transmission upgrades are necessary for a Capacity Resource to interconnect with the transmission system and be deliverable to load. PJM's Tariff differentiates Capacity Resources from Energy Resources; PJM's Reliability Assurance Agreement incorporates by reference the definition of Energy Resource in PJM's Open Access Transmission Tariff (OATT), which defines an Energy Resource as "a Generating Facility that is not a Capacity Resource."

- 5. A resource seeking to participate as a Capacity Resource in PJM's capacity market must proceed through the interconnection process and obtain CIRs. As part of that process, a resource first submits an interconnection request to PJM specifying the quantity of CIRs, in MW, that it would like to request. PJM historically limited the amount of CIRs that a resource may request to the resource's net capability at the time of the expected summer peak or, for wind and solar resources, the average expected summer peak hour capacity factor of the wind or solar resource over the last three summers. Second, PJM applies power flow analyses collectively called deliverability tests to determine what network upgrades, if any, are required for the resources' requested CIRs to be deliverable to PJM load. Finally, the resource owner executes an interconnection service agreement (ISA) with PJM agreeing to fund the required network upgrades in exchange for an award of CIRs.
- 6. PJM's capacity market transacts in units of Unforced Capacity (UCAP), where UCAP reflects the amount of capacity that a resource provides after accounting for its

procedures set forth in the Reliability Assurance Agreement, Schedule 6." PJM, Intra-PJM Tariffs, RAA, art. 1 – Definitions (38.0.0).

⁹ See generally PJM, Intra-PJM Tariffs, OATT, § IV (4.0.0) (providing an overview of the procedures for requesting interconnection and seeking necessary upgrades).

¹⁰ PJM, Intra-PJM Tariffs, RAA, RAA art.1 – (Definitions) (38.0.0) ("[u]nless the context otherwise specifies or requires, capitalized terms used herein shall have the respective meanings assigned herein or in the Schedules hereto, or in the PJM Tariff or PJM Operating Agreement if not otherwise defined in this Agreement").

¹¹ PJM, Intra-PJM Tariffs, OATT, § 1, (Definitions E – F) (32.2.0).

¹² See PJM Manual 21, app. B. For wind and solar resources, the capacity factor is a percentage reflecting the proportion of the installed capacity they generate, on average, during summer peak hours. *Id.* at 11-12.

¹³ See PJM Manual 14B, attach. C, PJM Deliverability Testing Methods.

forced outage rate, intermittency, and/or limited output duration capability.¹⁴ PJM uses an ELCC analysis to calculate the Accredited UCAP value for Variable Resources (e.g., wind and solar), Limited-Duration Resources (e.g., storage), and Combination Resources (e.g., solar/storage hybrids) (collectively, ELCC Resources).¹⁵

- Under the Tariff provisions adopted in the 2023 ELCC Order, PJM calculates the 7. Accredited UCAP of ELCC Resources using a four-step process. 6 First, PJM uses an ELCC analysis to calculate the ELCC Portfolio UCAP, which reflects the installed capacity of a group of Unlimited Resources¹⁷ with no outages that yield the same annual loss of load expectation as the group of ELCC Resources that are expected to offer into a given capacity auction. Second, PJM allocates the ELCC Portfolio UCAP among individual ELCC Resource Classes (e.g., 4-hour storage, 10-hour storage, wind, tracking solar, etc.) by conducting additional ELCC analyses that consider the reliability value of ELCC Classes in the presence and absence of other ELCC Classes. The result of this allocation process is an ELCC Class UCAP for each ELCC Resource Class. Third, PJM converts the ELCC Class UCAP for each class to an ELCC Class Rating, using procedures described in its RAA. Finally, PJM calculates an Accredited UCAP value for each individual ELCC Resource based on the resource's ELCC Class Rating, its nameplate capacity, and a resource-specific ELCC Resource Performance Adjustment factor.
- 8. At the time that Dr. Shanker filed this Complaint, PJM accounted for the deliverability of ELCC Resources in two ways. First, PJM's ELCC analysis implicitly accounted for historical transmission limitations by considering the actual operating transmission constraints that affected historical performance for ELCC Resources. ¹⁸

¹⁴ PJM defines "Unforced Capacity" as "installed capacity rated at summer conditions that is not on average experiencing a forced outage or forced derating[.]" PJM, Intra-PJM Tariffs, RAA, art. 1 – Definitions (36.0.0).

¹⁵ See PJM, Intra-PJM Tariffs, RAA, Schedule 9.1 (2.0.0). We refer to ELCC Resources for purposes of this order but note that the January 2024 Order adopted PJM's proposal to apply the ELCC construct to all resources. January 2024 Order at PP 75-79.

¹⁶ *Id.* §§ C-F (2.0.0).

¹⁷ PJM's RAA defines an Unlimited Resource as a generating unit with "the ability to maintain output at a stated capability continuously on a daily basis without interruption." PJM, Intra-PJM Tariffs, art. 1 (Definitions) (36.0.0).

¹⁸ PJM, Intra-PJM Tariffs, RAA, Schedule 9.1, § H (2.0.0) ("These expected quantities are based on . . . actual and putative values for Variable Resource output[.]"). *See also* PJM Answer, Docket No. ER21-2043-000, at 10 (filed July 9, 2021) ("While the ELCC analysis does not explicitly model transmission limitations, it does implicitly

Second, PJM limited the amount of capacity an ELCC Resource could offer in the capacity market to the lesser of its Accredited UCAP or its CIRs, where CIRs reflect the MW that have been demonstrated as deliverable through PJM's interconnection process. In approving this approach, the Commission rejected protests arguing that hourly output must be limited to CIRs in the ELCC calculation, including one by LSP Development, relying on an affidavit from Dr. Shanker. The Commission concluded that: "[g]iven the fact that a Variable Resource may deliver more than its CIR quantity to the PJM system during hours when the transmission system is not constrained, we find PJM's approach reasonable in contrast to artificially limiting a Variable Resource's output to its CIRs within the ELCC model." The Commission found this approach would not unreasonably ignore transmission limits as "PJM will limit an ELCC Resource's capacity market offer to be no greater than its CIRs, ensuring that the capacity market clearing process will not give an ELCC resource a capacity supply obligation that exceeds the capacity the resource can physically deliver."

9. PJM subsequently reconsidered this approach and proposed changes to the ELCC calculation in Docket No. ER23-1067-000, which the Commission accepted. Under PJM's rules adopted in the 2023 ELCC Order, PJM specifically accounts for resources' CIRs in modeling the expected hourly output of ELCC Resources.²³ Specifically, PJM caps the output of Variable and Combination Resources in any hour at: (1) the resource's CIRs for hours in the months of June through October and the following May of the Delivery Year, and (2) the resource's "winter deliverability MW" for hours in the months of November through April of the Delivery Year (collectively, Deliverable MW). PJM also adjusts the hourly output of Variable and Combination Resources to reflect historical curtailments by adding back MW that were historically curtailed without exceeding the level of Deliverable MW.²⁴ The Commission found these modifications to be just and reasonable because they guarantee that the modeled output of an ELCC Resource will not

account for historic transmission limitations for ELCC resources by considering actual operating transmission constraints that impacted historical performance.").

¹⁹ *ELCC II* Order, 176 FERC ¶ 61,056 at P 43.

 $^{^{\}rm 20}$ LSP Development, Comments, Docket No. ER21-2043-000 (filed Jun 22, 2021).

²¹ *ELCC II* Order, 176 FERC \P 61,056 at P 53.

²² *Id*.

²³ 2023 ELCC Order, 183 FERC ¶ 61,009 at P 12.

²⁴ *Id.* P 13.

exceed that resource's studied deliverability and will align with the requirement that a Capacity Resource's capacity market offer cannot be greater than its CIR MW value.²⁵

II. Complaint

10. Dr. Shanker alleges that PJM violated its governing documents by including output from Energy Resources in its ELCC process for determining Variable Resources' Accredited UCAP, in violation of the PJM RAA and all applicable ISAs.²⁶ Furthermore, Dr. Shanker argues that PJM's practice is unjust and unreasonable, causing harm to virtually all market participants.²⁷ Although Dr. Shanker acknowledges that PJM's 205 filing addresses his concerns prospectively, Dr. Shanker argues that PJM has violated its governing documents and that past violations must be rectified.²⁸

III. Notice of Filing and Responsive Pleadings

- 11. Notice of Dr. Shanker's filing was published in the *Federal Register*, 87 Fed. Reg. 75,623 (Nov. 30, 2022), with interventions and protests due on or before December 20, 2022. On December 7, 2022, PJM filed a motion for an extension of time to file answers and comments, and, on December 13, 2022, the Commission granted that request by extending the comment and answer period to January 10, 2023. On December 30, 2022, Dr. Shanker filed a Supplement to the Complaint, and the Commission responded by further extending the comment and answer period until January 15, 2023. Appendix A identifies entities that submitted notices of intervention and timely motions to intervene, as well as abbreviations for those entities. On January 25, 2023, Delaware Municipal Electric Corporation, Inc. (DMEC) filed an out-of-time motion to intervene.
- 12. On January 13, 2023, the IMM filed comments. On January 17, 2023, Sierra Club, NRDC, ACP, and SEIA (Sierra Club, et al.) filed a joint protest, AMP filed a separate protest, and Constellation and MPC filed comments. PJM also filed its answer to the Complaint. On January 27, 2023, Dr. Shanker filed an answer in response to Sierra Club, et al.'s protest. On February 1, 2023, LSP Development filed a motion for leave to answer and answer in response to PJM's answer, AMP and Sierra Club, et al.'s protest, and MPC's comments. On February 17, 2023, PJM filed a motion for leave to answer and

²⁵ *Id.* P 29.

²⁶ Complaint at 1.

²⁷ *Id.* at 7.

²⁸ Shanker Second Answer at 3-4. Note that the Commission accepted the changes that PJM proposed in this filing. 2023 ELCC Order, 183 FERC ¶ 61,009 at P1.

answer in response to Dr. Shanker's answer. On February 21, 2023, Dr. Shanker filed a motion for leave to answer and answer in response to PJM's motion.

IV. <u>Discussion</u>

A. Procedural Matters

- 13. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2022), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. DMEC filed a late motion to intervene. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d), we grant DMEC's late-filed motion to intervene given their interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.
- 14. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2022), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We accept the answers filed by PJM, Dr. Shanker, and LSP Development because they have provided information that assisted us in our decision-making process.

B. Substantive Matters

1. PJM's Recent Filing in Docket No. ER23-1067-000 Resolves the Issues in the Complaint

a. Pleadings

15. On February 8, 2023, PJM filed revisions to its Tariff and RAA under FPA section 205 to revise the modeling of the interaction between CIRs and PJM's ELCC methodology. The Commission accepted those revisions for filing, effective April 10, 2023. PJM asserts, and Constellation largely agrees, that the reforms resolve the Complaint's underlying concerns regarding both ELCC accreditation and the interaction between the ELCC methodology and CIRs and thereby effectively moot the Complaint as to the prospective relief it seeks.

²⁹ PJM Second Answer at 4-5 (citing PJM, Filing, Docket No. ER23-1067-000 (filed Feb. 8, 2023)).

³⁰ 2023 ELCC Order, 183 FERC ¶ 61,009 at P 1.

- 16. In response, Dr. Shanker argues that his Complaint is not moot.³¹ Although Dr. Shanker acknowledges that PJM's 205 filing addresses his concerns prospectively, Dr. Shanker argues that PJM has violated its governing documents and that past violations must be rectified.³²
- 17. PJM argues that Dr. Shanker's request that the Commission direct adjustments to prior BRA settlements and associated payment in "eligible previous auctions" amounts to a request for retroactive refunds and surcharges, neither of which is permissible under FPA section 206.³³ Therefore, PJM argues that Dr. Shanker's request for adjustments to prior capacity auctions is moot because the Commission cannot require adjustments to any auction prior to November 30, 2022, the date on which Dr. Shanker filed the Complaint. Moreover, PJM contends that Dr. Shanker has failed to demonstrate that PJM's then-current accreditation practices are inconsistent with its tariff, unjust, unreasonable, or unduly discriminatory.³⁴ Accordingly, PJM argues that the Complaint does not satisfy the initial predicate of FPA section 206 and, therefore, the Commission does not have the authority to direct Dr. Shanker's proposed remedy even prospectively.
- 18. Similarly, Constellation and the IMM state that the Commission should not grant retroactive relief. Constellation states that rerunning past auctions would be disruptive to market participants and should be avoided.³⁵ Likewise, the IMM states that it does not support modifying the results of prior auctions.³⁶
- 19. Dr. Shanker disputes the allegation that his request amounts to retroactive adjustment of capacity accreditations.³⁷ Dr. Shanker argues that the Commission's grant of his request would not retroactively adjust rates but, rather, replace unlawful rates established under a violation of the Tariff.
- 20. In his Supplement and Second Answer, Dr. Shanker argues that, should the Commission reach the conclusion that PJM may rerun the December 2022 BRA, then the

³¹ Shanker Second Answer at 3-6.

³² *Id.* at 3-4.

³³ PJM Answer at 12-13 (citing Complaint at 18).

³⁴ *Id.* at 13-14.

³⁵ Constellation Comments at 9-10.

³⁶ IMM Comments at 2.

³⁷ Shanker Answer at 10-12.

Commission logically must also find that the relief sought in the Complaint must be reflected in the rerun of the auction.³⁸ LSP Development requests that the Commission direct a remedy on a going-forward basis but agrees with Dr. Shanker that the Commission should ensure that PJM corrects ELCC Resource accreditation for the 2024/2025 BRA to the extent it grants PJM's request to modify the rules applicable to that BRA.³⁹

b. Determination

- 21. We deny the complaint. First, as Dr. Shanker acknowledges, the Commission's acceptance of PJM's filing in the 2023 ELCC Order resolves Dr. Shanker's concerns from April 10, 2023, forward, by incorporating a just and reasonable approach that prospectively reflects CIRs in the hourly energy output considered in the ELCC calculation.⁴⁰
- 22. As discussed below, we find that PJM did not violate its tariff even prior to the effective date of the FPA section 205 revisions the Commission approved in the 2023 ELCC Order.

2. Alleged Violation of PJM's Governing Documents

a. <u>Pleadings</u>

23. Dr. Shanker argues that PJM's ELCC accreditation process for Variable Resources directly contradicts the ISAs of all impacted facilities because those ISAs categorize all energy production above a resource's CIRs as an Energy Resource and by definition "not capacity." In support, Dr. Shanker states that RAA, Schedule 9.1, section H of the PJM RAA provides that "Energy Resources are not included in the effective load carrying capability analysis." Dr. Shanker then argues that section 2.1a of each ISA explains that the PJM capacity accreditation process will only recognize energy production up to the CIR level, stating that "[t]o the extent that any portion of the

³⁸ Supplement at 5; Shanker Second Answer 5-6.

³⁹ LSP Development Answer at 11.

⁴⁰ Shanker Answer at 4 stating, "Dr. Shanker acknowledges that PJM has addressed his concerns prospectively AFTER approval by FERC, after implementation by PJM, and after an inappropriate and indefinite proposed transition."

⁴¹ Complaint at 7.

⁴² Id. at 22 (citing PJM, Intra-PJM Tariffs, RAA, Schedule 9.1, § H (2.0.0)).

Customer Facility described in section 1.0 is not a Capacity Resource with Capacity Interconnection Rights, such portion of the Customer Facility shall be an Energy Resource."⁴³ Dr. Shanker reasons that including any outputs greater than a resource's CIRs in the ELCC calculation therefore violates RAA, Schedule 9.1, which prohibits the inclusion of Energy Resources in the ELCC calculation.

- 24. Dr. Shanker asserts that, despite these provisions, PJM has been regularly allowing existing Variable Resources to collect capacity payments based on accreditations that include ineligible output from the Energy Resource portion of a facility.⁴⁴ Dr. Shanker argues that the provisions of the ISAs and RAA make clear that PJM's use of hourly energy in excess of the CIR level in any accreditation of a Capacity Resource is a violation of PJM's governing documents. Furthermore, Dr. Shanker cites RAA, Schedule 10, which states that "Generation Capacity Resources must be deliverable" and the definitions of Energy Resource and Capacity Resource in the PJM Tariff and RAA.⁴⁵
- 25. The IMM agrees with Dr. Shanker that PJM has violated its tariff.⁴⁶ The IMM first argues that the difference between an Energy Resource and a Capacity Resource is that a Capacity Resource must demonstrate deliverability and obtain a corresponding level of CIRs, but an Energy Resource does not.⁴⁷ In support, the IMM cites OATT § 36.1.1 and Attachment DD, which require that the output of a Capacity Resource be deliverable.⁴⁸ Second, the IMM argues that, when a resource has obtained CIRs equal to a MW level less than the resource's full capability, the CIRs define the portion of the resource that is a Capacity Resource. In support, the IMM echoes Dr. Shanker's citation

to section 2.1a of PJM's *pro forma* ISA.⁴⁹ Additionally, like Dr. Shanker, the IMM cites RAA Schedule 9.1, Section H for the proposition that "Energy Resources are not

⁴³ *Id.* at 22 (citing PJM, Intra-PJM Tariffs, OATT, attach. O, (Form of Interconnection Service Agreement) (9.0.0), § 2.1a).

⁴⁴ *Id.* at 21-22.

⁴⁵ *Id.* at 26-27.

⁴⁶ IMM Comments at 2.

⁴⁷ *Id.* 2-4.

⁴⁸ *Id.* at 3 (citing PJM, Intra-PJM Tariffs, OATT, § 36.1 (9.0.0), § 36.1.1; *id.* attach. DD, § 5.5 (4.0.0)).

⁴⁹ *Id.* (citing PJM, Intra-PJM Tariffs, OATT, Attach. O(Form of Interconnection Service Agreement) (9.0.0), § 2.1a ("To the extent that any portion of the Customer Facility described in section 1.0 is not a Capacity Resource with Capacity

included in the [ELCC] analysis," meaning that PJM will only include output equal to and not exceeding a resource's CIR MW in the ELCC analysis.⁵⁰ Constellation and P3 make similar arguments.⁵¹

- 26. Sierra Club, et al. state that CIRs reflect the right to participate in the capacity market as determined by RAA Schedule 9 and 10, and the eligible capacity value of a resource is determined based on RAA Schedule 9, which includes PJM's ELCC rules.⁵² Therefore, according to Sierra Club et al., when a resource obtains CIRs, it obtains the right to input generation consistent with its capacity value. Sierra Club, et al. state that the OATT section describing the receipt of CIRs states that CIRs are "commensurate with the size in megawatts of the accredited generation," not equal in size.⁵³ Sierra Club, et al. allege that the Complaint's reading of PJM's ISA is novel and contradicts PJM's longstanding practice that an intermittent resource owner wishing to designate its entire facility as a Capacity Resource must request CIRs equal to a fraction of its maximum output, contradicting Dr. Shanker's claim that energy in excess of a facility's CIRs is by definition not capacity. Sierra Club, et al. note that nothing in PJM's governing documents or manuals mandates the correspondence between 1 MW of capacity value, 1 MW of energy injections, and 1 MW of CIRs.⁵⁴
- 27. Sierra Club, et al. further note that PJM's current intermittent resource capacity accreditation procedures date to around 2008, when PJM calculated the accredited capacity of these resources based on their average output on summer weekdays between 2 pm and 6 pm, inclusive of energy injections above or below the accredited capacity value.⁵⁵ Sierra Club et al. assert that, for this entire period, PJM has been clear and consistent that intermittent resources may only request CIRs up to this capacity value and that this level of CIRs allows the entire resource to participate as a Capacity Resource. Finally, Sierra Club, et al. state that PJM's rules prevent intermittent resources from

Interconnection Rights, such portion of the Customer Facility shall be an Energy Resource.").

⁵⁰ *Id.* at 5 (citing PJM, Intra-PJM Tariffs, RAA, Schedule 9.1, § (2.0.0)).

⁵¹ Constellation Comments at 5-6; P3 Comments at 2.

⁵² Sierra Club, et al. Protest at 5-8.

⁵³ *Id.* at 6 (citing OATT, § 230.2).

⁵⁴ *Id.* at 6-7.

⁵⁵ *Id.* at 5-8.

obtaining the CIRs the Complaint asserts they need because PJM offered no opportunity for intermittent resources to request CIRs above their capacity accreditation.

- 28. In its first answer, PJM states that its practice of accounting for the historical hourly output of Variable Resources in capacity accreditation has been in place for decades and directly complies with RAA, Schedule 9, which mandates that PJM develop "rules and procedures . . . to determine and demonstrate the capability of Generation Capacity Resources," and requires that these rules "recognize the difference in the relative ability of units to maintain output at a stated capability over a specified periods of time." PJM argues that the Complaint fails to offer any evidence, either through textual cross-reference or administrative history, to support its claim that a single sentence from the *pro forma* ISA is designed to preempt or negate PJM's framework for capacity accreditation established under RAA Schedule 9 and its manuals. PJM contends that market rules of general applicability would be ill-suited for a form of service agreement under an umbrella tariff. Further, PJM explains that the text of the *pro forma* ISA itself affirms that capacity qualification requirements arise under the RAA, and not the ISA.
- 29. PJM contends that there is no nexus between Dr. Shanker's interpretation of the *pro forma* ISA and the text as written because the *pro forma* ISA contains no reference of any kind to PJM's Accredited UCAP process.⁵⁹ PJM states that the Commission has explained that "tariff provisions should be in clear and explicit language that leaves no doubt whatsoever as to their meaning and applicability."⁶⁰ PJM argues that no plain reading of the provision on which Dr. Shanker relies could reasonably apprise customers of the meaning he seeks to ascribe to it.
- 30. Furthermore, PJM contends that the administrative history does not support the Complaint's attempt to link PJM's Accredited UCAP process to the *pro forma* ISA.⁶¹ With respect to the *pro forma* ISA, PJM states that there is nothing in the 2005 filing,⁶²

 $^{^{56}}$ PJM Answer at 20 (citing PJM, Intra-PJM Tariffs, RAA, Schedule 9 (3.0.0), \S A).

⁵⁷ *Id.* at 21.

⁵⁸ *Id.* at 21-22 (citing PJM, Intra-PJM Tariffs, OATT, attach. O, § 6.3 (9.0.0)).

⁵⁹ *Id.* at 23.

⁶⁰ *Id.* at 24 (citing *Algonquin Gas Transmission Co.*, 54 FPC ¶ 675, 692 (1974)).

⁶¹ *Id.* at 24-25.

⁶² PJM Interconnection, L.L.C., Filing, Docket No. ER06-28-000 (filed Oct. 11,

which added the *pro forma* ISA sentence to which Shanker refers, that would provide notice to market participants, PJM, the Commission, or reviewing courts that this single sentence in the ISA is designed to limit the RAA's rules for determining Accredited UCAP or PJM's Accredited UCAP process more broadly. With respect to the Accredited UCAP process as defined in the RAA, PJM reiterates that the Commission explicitly rejected Dr. Shanker's preferred interpretation in the ELCC II Order, which approved the applicable language in RAA, Schedule 9.1, section H.⁶³ Specifically, PJM contends that Dr. Shanker's claim that the sentence "Energy Resources are not included in the Effective Load Carrying Capability Analysis," in RAA, Schedule 9.1, section H functions to limit the output considered in the Accredited UCAP process ignores the associated record in ELCC II that directly explains the meaning of the term "Energy Resources" as defined by the filing public utility. 64 Specifically, PJM explains that its transmittal letter in ELCC II states that "PJM will omit energy-only resources from the ELCC analysis, as such resources have no obligation to provide capacity and therefore cannot be relied on to meet reliability needs" and then immediately references RAA, Schedule 9.1, section H.⁶⁵ Therefore, PJM argues that "Energy Resources" as used in RAA, Schedule 9.1, section H refers to units that are exclusively Energy Resources, i.e., units with no CIRs whatsoever.

31. In his answer to PJM, Dr. Shanker argues that the fact that PJM's practice of accounting for the historical hourly output of Variable Resources in capacity accreditation has been in place for decades does not diminish the existence of the violation. Additionally, Dr. Shanker disagrees with PJM's contention that there is no connection between PJM's *pro forma* ISA section 2.1a and Accredited UCAP. Dr. Shanker argues that PJM itself directly links the Capacity and Energy Resource status of a given facility to its ISA. In support of his contention that the ISA is an integral part of the capacity paradigm, Dr. Shanker highlights the following OATT provision:

2005).

⁶³ PJM Answer at 27 (citing *ELCC II* Order, 176 FERC ¶ 61,056 at P 53 n.131).

⁶⁴ *Id.* at 28.

⁶⁵ *Id.* at 28-29 (citing PJM, Filing, Docket No. ER21-2043-000, at 25 n.52 (filed June 1, 2021)).

⁶⁶ Shanker Answer at 17.

⁶⁷ *Id.* at 19-22.

⁶⁸ *Id.* at 20.

A Generation Capacity Resource that is removed from Capacity Resource status shall no longer qualify as an Existing Generation Capacity Resources, and the Capacity Interconnection Rights associated with such facility shall be subject to termination in accordance with the rules described in Tariff, Part VI, section 230.3.3. The Office of the Interconnection shall amend the applicable Interconnection Service Agreement or wholesale market participation agreement to reflect any such removal of the Capacity Interconnection Rights, and shall report the amended agreement to the Commission in the same manner as the original.⁶⁹

- 32. LSP Development echoes Dr. Shanker and comments supporting the Complaint. In support of the argument that a resource may partially be a Capacity Resource and partially an Energy Resource, LSP Development highlights the fact that a Capacity Resource is defined in terms of megawatts. Additionally, LSP Development refutes PJM's argument that there is no link between the *pro forma* ISA and the Accredited UCAP process in two ways. First, LSP Development notes that federal court precedent favors consistent usage of a term across sections of an act or code but that, here, PJM is urging the Commission to adopt one definition of an "Energy Resource" under its *pro forma* ISA and another in the context of PJM's determination of Accredited UCAP. Second, LSP Development argues that PJM does not point to any language in Schedule 9.1 that supports its assertion that "units that are *exclusively* Energy Resources" are excluded from the ELCC analysis. In support, LSP Development notes that Schedule 9.1 does not contain the word "exclusively."
- 33. In response, PJM provides additional evidence of the administrative record underlying section 2.1a of the *pro forma* ISA, including excerpts from the stakeholder process, PJM's filing proposing the revisions, and the Commission's delegated letter order accepting the revisions.⁷³ PJM contends that none of these materials demonstrate

⁶⁹ PJM, Intra-PJM Tariffs, OATT, attach. DD, § 6.6 (0.0.0) § 6.6(g).

⁷⁰ LSP Development Answer at 5 (citing PJM, Intra-PJM Tariffs, RAA, art. 1, Definitions (38.0.0) (defining Capacity Resources as "megawatts of (i) net capacity from Existing Generation Capacity Resources or Planned Generation Capacity Resources meeting requirements of the [RAA], Schedules 9 and [RAA]], Schedule 10[.]")).

⁷¹ *Id.* at 6 (citing *U.S. v. Bittner*, 19 F.4th 734, 741 (5th Cir. 2021 (internal citation omitted); *see also Brown v. Gardner*, 513 U.S. 115, 118 (1994); *Atl. Cleaners & Dyers v. U.S.*, 286 U.S. 427, 433 (1932) (parenthetical omitted)).

⁷² *Id.* at 6 (citing PJM Answer at 28).

⁷³ PJM Second Answer at 5-6.

that a single sentence added to the *pro forma* ISA in 2005 was designed to act as a restriction on a future upstream accreditation process under the Reliability Pricing Model construct that did not yet exist. Furthermore, PJM reiterates that the administrative history of RAA, Schedule 9.1, section H makes clear that the intent of the language is to exclude resources with no ability to offer capacity from the ELCC analysis, and PJM contends that the section's use of the term "Energy Resource" accomplishes this task because it is defined as "a Generating Facility that is not a Capacity Resource." PJM argues that Dr. Shanker's invitation for the Commission to make findings of noncompliance based on his interpretation of two sentences while completely dismissing the Commission's own evaluation of the administrative record is "enormously problematic."

34. In response, Dr. Shanker argues that the fact that section 2.1a of PJM's *pro forma* ISA existed before PJM's Reliability Pricing Model does not allow PJM to ignore that language.⁷⁶ Dr. Shanker notes that, despite the fact that PJM reviews and updates its tariffs routinely, PJM did not change section 2.1a of its *pro forma* ISA, so this section should not be ignored.⁷⁷

b. <u>Determination</u>

35. We find that PJM did not violate the terms of its tariff. Dr. Shanker contends that the sentence in RAA, Schedule 9.1, section H ("Energy Resources are not included in the Effective Load Carrying Capability Analysis") should be interpreted as referring to the portion of a resource's capacity above its CIR level. Dr. Shanker contends that the *pro forma* ISA's language provides that output above a resource's CIR level shall be deemed an Energy Resource. PJM counters by arguing that this sentence "makes clear that units that are exclusively Energy Resources—i.e., units with no CIRs—are excluded from the ELCC analysis" and cites to the administrative record that approved PJM's ELCC construct in the first instance. Although Dr. Shanker points to a potential different usage of the term Energy Resource, we find the interpretation of the term "Energy Resource" in the RAA provisions should be based on the provisions in the RAA itself, rather than analogies to provisions in other agreements, such as the *pro forma* ISA.

⁷⁴ *Id.* at 6-9.

⁷⁵ *Id.* at 9.

⁷⁶ Shanker Second Answer at 7-10.

⁷⁷ *Id.* at 9.

⁷⁸ PJM Answer at 28.

- Commission precedent dictates that, "[w]hen confronted with a question of tariff 36. interpretation, we look first to the text of the tariff."⁷⁹ As such, we find PJM's interpretation more consistent with the express requirements of the RAA, as well as the administrative record underlying the relevant language. PJM's OATT defines "Energy Resource" as "a Generating Facility that is not a Capacity Resource," and PJM's RAA explicitly incorporates this definition by reference.⁸¹ In other words, the definition of Energy Resource as used in the RAA is a facility and not a portion of a facility.⁸² PJM's transmittal letter proposing its ELCC methodology made clear that it interpreted this provision to refer only to a resource that has no capacity obligation at all: "PJM will omit energy-only resources from the ELCC analysis, as such resources have no obligation to provide capacity and therefore cannot be relied on to meet reliability needs."83 Because the RAA explicitly defines Energy Resource, the RAA's definition, and not inferences from a section of PJM's pro forma ISA, governs the meaning of Energy Resource for the purpose of interpreting provisions within the four corners of the RAA. Contrary to Dr. Shanker's claims, the alleged inconsistency between the pro forma ISA and the RAA is no reason to substitute inferences from language in the pro forma ISA for the definition contained in the OATT and RAA, or to apply a different definition to RAA, Schedule 9.1. Accordingly, we find that RAA, Schedule 9.1, section H's statement that "Energy Resources are not included in the effective load carrying capability analysis" signifies that *energy-only* resources, i.e., Generating Facilities that are not Capacity Resources, are not included in the ELCC analysis.
- 37. This interpretation is consistent with PJM's longstanding course of conduct in applying its tariff. As PJM explains, PJM has long accredited Variable Resources based on their historic energy output, even when it exceeds CIR levels, and the Commission has consistently found this practice just and reasonable. For example, when the Commission accepted PJM's Capacity Performance construct, it explicitly accepted PJM's proposal to accredit Variable Resources based on "their average expected output during peak-hour

 $^{^{79}}$ See N.Y. Indep. Sys. Operator, Inc. v. Astoria Energy LLC, 118 FERC \P 61,216, at P 34 (2007).

⁸⁰ PJM, Intra-PJM Tariffs, OATT, § 1 (Definitions E – F) (32.2.0).

⁸¹ PJM, Intra-PJM Tariffs, RAA, art. 1 (Definitions) (38.0.0) ("capitalized terms used herein shall have the respective meanings assigned herein or in the Schedules hereto, or in the PJM Tariff or PJM Operating Agreement if not otherwise defined in this Agreement, for all purposes of this Agreement").

⁸² PJM, Intra-PJM Tariffs, OATT, § 1 (Definitions E – F) (32.2.0).

⁸³ PJM, *ELCC II* Filing, Docket No. ER21-2043-000, at 25-26 n.52 (filed June 1, 2021) (citing to Proposed RAA, Schedule 9.1, section H.).

periods" and required PJM to submit tariff revisions specifying this practice.⁸⁴ In 2021, PJM replaced this practice with its ELCC process. In that proceeding, the Commission accepted PJM's proposal to accredit Variable Resources based on their actual hourly historic output (regardless of their CIR),⁸⁵ including RAA language effectuating such treatment.⁸⁶

38. In addition, although PJM referenced its interpretation of RAA, Schedule 9.1 in its transmittal letter, and the Commission pointedly accepted PJM's implementation of the ELCC based on that interpretation,⁸⁷ no party to that proceeding, including the IMM and LSP Development – or its expert Dr. Shanker, who filed an affidavit on behalf of LSP Development in the proceeding, challenged this interpretive issue on rehearing. Challenging this interpretation by filing a new complaint presenting no new evidence, therefore, is an impermissible collateral attack on the Commission's July 30, 2021 order.⁸⁸

⁸⁴ *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208, at P 100 (2015); *see also* PJM, Intra-PJM Tariffs, OATT, attach. DD, § 5.6(h) (14.0.0), § 5.6(h) ("A Capacity Market Seller that owns or controls one or more . . . Intermittent Resources . . . may submit a Sell Offer as a Capacity Performance Resource in a MW quantity consistent with their average expected output during peak-hour periods[.]").

⁸⁵ ELCC II Order, 176 FERC ¶ 61,056 at P 53 ("PJM states it will implicitly account for historically binding transmission constraints by considering each Variable Resource's historic performance, including instances of curtailment due to transmission constraints. Given the fact that a Variable Resource may deliver more than its CIR quantity to the PJM system during hours when the transmission system is not constrained, we find PJM's approach reasonable in contrast to artificially limiting a Variable Resource's output to its CIRs within the ELCC model.").

⁸⁶ PJM, Intra-PJM Tariffs, RAA, Schedule 9.1 (2.0.0), § H ("The effective load carrying capability analysis shall compare hourly values for . . . expected Variable Resource output These expected quantities are based on . . . actual and putative values for Variable Resource output (standalone or as a component of Combination Resources) after June 1, 2012 (inclusive) through the most recent Delivery Year for which complete data exist.")

 $^{^{87}}$ ELCC II Order, 176 FERC \P 61,056 at P 53.

⁸⁸ See Sacramento Mun. Util. Dist. v. FERC, 428 F.3d 294, 299 (D.C. Cir. 2005) ("Because the time for seeking judicial review has long passed, Sacramento's argument amounts to an impermissible collateral attack on the previously approved California ISO tariff."); Cf. Black Oak Energy, LLC v. PJM Interconnection, L.L.C., 122 FERC ¶ 61,208, at P 27 (2008) (permitting complaint where the complainant raised changed circumstances

39. We note that, even if we had found that PJM violated its tariff, we would not grant retroactive relief because we agree with PJM and the IMM that re-running past auctions to correct such a violation is not warranted under these circumstances. The Commission generally is wary of re-running auctions because market participants participate in the market with the expectation that the rules in place and the market outcomes will not change after the results are set and resources make investment decisions based on the outcome of those auctions.⁸⁹ These concerns would be especially applicable here as well, where remedying the alleged violation of PJM's governing documents might require rerunning every capacity auction PJM has conducted over the past 19 years.⁹⁰

3. Treatment of CIRs in the ELCC Process

a. **Pleadings**

40. Dr. Shanker argues that PJM's improper accreditation of Variable Resources causes unjust and unreasonable harm to market participants in a number of ways. First, Dr. Shanker contends that PJM's practice causes load to overpay for "phantom capacity" that does not qualify to support the reliability of PJM. Moreover, Dr. Shanker contends that this phantom capacity increases overall capacity supply and, in turn, artificially reduces overall capacity clearing prices to the detriment of other resources. Dr. Shanker alleges that, as a result of this improper accreditation, the price of capacity is not reflective of market conditions, causing buyers and sellers to make inefficient decisions based on imperfect information. Dr. Shanker states that the IMM has estimated that

from the prior order).

(explaining the basis for the Commission's general policy) (citing See Md. Pub. Serv. Comm'n v. PJM Interconnection, L.L.C., 123 FERC ¶ 61,169, at ¶ 49 (2008), order on reh'g, 125 FERC ¶ 61,340 (2008) ("In a case involving changes in market design, we generally exercise our discretion over remedies and do not order refunds that require rerunning a market."); Bangor Hydro-Elec. Co. v. ISO New England Inc., 97 FERC ¶ 61,339 (2001) (finding that rerunning markets, even when a software error results in clearing prices that are inconsistent with the market rules, would do more harm to electric markets than is justifiable), reh'g denied, 98 FERC ¶ 61,298 (2002); Cal. Indep. Sys. Operator, 120 FERC ¶ 61,271, at P 25 (2007) (identifying market reruns as the exception, not the rule)).

⁹⁰ PJM Answer at 4-5 (explaining that PJM has accredited the capacity value of Variable Resources based on their historic output, including output that may be higher than their CIRs, since 2004).

⁹¹ Complaint at 7.

Variable Resources' Accredited UCAP was overstated by approximately 1,133 MW in the 2022/2023 BRA and that market revenues to capacity suppliers would have been approximately \$200 million higher for the 2022/2023 BRA and approximately \$59 million higher for the 2023/2024 BRA. Further, Dr. Shanker asserts that PJM itself has estimated an over accreditation of 1,300 MW and price suppression of approximately \$230 million for the 2022/2023 BRA. Constellation and the IMM make similar arguments. Page 194

- 41. Second, Dr. Shanker contends that PJM's accreditation of Variable Resources based on energy output above their CIRs is unduly discriminatory because PJM does not augment the accreditation of other resources who produce energy in excess of their CIRs. Psecifically, Dr. Shanker explains that the CIR level for conventional thermal units is based on their production during stress periods of high demand and temperature. Because thermal resources' maximum production capability decreases with increasing temperature, Dr. Shanker asserts that their maximum potential output is almost always greater than the awarded CIR levels.
- 42. Third, Dr. Shanker argues that PJM's accreditation of Variable Resources that existed prior to April 10, 2023, results in perverse incentives whereby the Accredited UCAP of the ELCC Portfolio, the specific ELCC Class, and a specific Variable Resource can all be increased by adding incremental undeliverable capacity at any facility that has even a single MW of CIRs. As an example, Dr. Shanker describes a hypothetical example of two adjacent 100 MW wind resources, where one facility holds 13 MW of CIRs and the other facility has no CIRs (i.e., it is an energy-only resource). Dr. Shanker opines that, under that accreditation method for Variable Resources, combining the two resources behind a single meter would add all of the output of the energy-only wind resource to the hour-by-hour output of the first wind resource that holds CIRs, increasing the total amount of accredited capacity. Dr. Shanker argues that the "magic of

⁹² *Id.* at 13 n.14.

⁹³ *Id.* at 27-28.

⁹⁴ Constellation at 5; IMM at 6-7.

⁹⁵ Complaint at 8 n.13.

⁹⁶ *Id.* at 8.

⁹⁷ *Id.* at 34.

PJM's incorrect approach" causes a "totally illogical" outcome whereby change of ownership creates new capacity. 98

- 43. PJM maintains that its rules require that all sell offers submitted into capacity auctions be backed by CIRs and states that it has never permitted Variable Resources to submit offers in excess of their assigned CIRs. PJM contends that these rules ensure that all capacity offers submitted into the capacity auctions is fully deliverable. Further, PJM states that the Commission found this fact particularly compelling in *ELCC I*, where it found that PJM's rules "ensure that reliability is not at risk by appropriately limiting the total capacity in a resource's capacity market offer to be no greater than its CIR, which reflects the resource's deliverable capacity to the PJM market during peak conditions." 100
- 44. In response to PJM, Dr. Shanker argues that the cap on the total Accredited UCAP offered into the auction does nothing to prevent additional supply, supported only by Energy Resource production above the CIR level, from improperly raising the total MWs of Sell Offers in the BRA under the ELCC paradigm. ¹⁰¹ Similarly, LSP Development states that the amount of Accredited UCAP that can be offered into an RPM auction is directly determined by PJM's "upstream" ELCC analysis. ¹⁰²
- 45. In reply, PJM argues that Dr. Shanker fails to recognize that the hourly output of one Variable Resource modeled in the upstream ELCC analysis could serve to increase *or decrease* the Accredited UCAP of another Variable Resource. Furthermore, PJM reiterates that the Accredited UCAP of each of the other Variable Resources is also capped at each resource's respective CIRs. Therefore, PJM states that the Capacity Resource portion of an ELCC resource can never be accredited to a level higher than its CIR entitlement.
- 46. Furthermore, PJM argues that Dr. Shanker's Complaint constitutes a collateral attack on the Commission's recent ELCC orders. Specifically, PJM cites the Commission's finding in the *ELCC I* Order that PJM's accreditation approach would ensure that reliability is not at risk by limiting a resource's capacity market offer to be no

⁹⁸ *Id.* at 34-35.

⁹⁹ PJM Answer at 18-19.

¹⁰⁰ Id. at 19 (citing ELCC I Order, 175 FERC ¶ 61,084 at P 78).

¹⁰¹ Shanker Answer at 15-16.

¹⁰² LSP Development Answer at 3-5.

¹⁰³ PJM Second Answer at 12.

greater than its CIRs.¹⁰⁴ Moreover, PJM cites the Commission's explicit finding in the *ELCC II* Order that PJM's approach of considering historically binding transmission constraints is just and reasonable as compared to limiting artificially a resource's output to its CIRs within the ELCC model. PJM contends that the positions Dr. Shanker advances here are identical to the positions his client LSP Development previously advanced in *ELCC I, ELCC II.*¹⁰⁵ PJM states that the Commission specifically rejected Dr. Shanker's and his clients' contentions, and, therefore, the Complaint is a "textbook example" of a collateral attack or out-of-time request for rehearing of the ELCC orders. PJM explains that the Commission has found that "[a] collateral attack is an 'attack on a judgement in a proceeding other than a direct appeal' and is generally prohibited." Accordingly, PJM argues that the Commission should reject the Complaint's attempt to revive argument that the Commission rejected in prior proceedings by repackaging materials from those proceedings. Sierra Club, et al. agree with PJM that the Commission considered and rejected the same arguments Dr. Shanker is raising here. To the commission considered and rejected the same arguments Dr. Shanker is raising here.

- 47. The IMM argues that the Commission has not decided the issues that Dr. Shanker raises in the Complaint. The IMM asserts that, while paragraph 53 of the *ELCC II* Order questions limiting the energy output to the CIRs within the ELCC model, it makes clear that the objective of PJM's approach is for ELCC Resources not to have a capacity value that exceeds the capacity they can physically deliver, i.e., no greater than their CIR value. The IMM argues that the Complaint and the relief it seeks is consistent with those principles. The IMM argues that the Complaint and the relief it seeks is consistent with those principles.
- 48. Dr. Shanker and LSP Development contend that the Complaint is not a collateral attack.¹¹¹ Dr. Shanker argues that, rather than an attempt to undermine the Commission's orders, his Complaint highlights that PJM is violating the Tariff modifications that the

¹⁰⁴ *Id.* at 11.

¹⁰⁵ *Id.* at 12.

¹⁰⁶ PJM Answer at 17 (citing *Louisville Gas & Elec. Co.*, 144 FERC ¶ 61,054, at P 12 (2013) (citing *Wall v. Kholi*, 131 S.Ct. 1278, 1284 (2011))).

¹⁰⁷ *Id.* at 17-18.

¹⁰⁸ Sierra Club, et al. Protest at 4.

¹⁰⁹ IMM Comments at 11.

¹¹⁰ *Id.* at 13.

¹¹¹ Shanker Answer at 12: LSP Development Answer at 8-9.

Commission accepted. Similarly, LSP Development states that the Commission was mistaken in believing that PJM's accreditation process would ensure that the capacity market clearing process would not give ELCC resources a capacity supply obligation that exceeds the capacity they can physically deliver.

b. <u>Determination</u>

49. We deny Dr. Shanker's arguments that PJM's prior treatment of CIRs in the ELCC accreditation process is unjust, unreasonable, and unduly discriminatory or preferential. The Commission found that the Tariff prior to the Commission's 2023 ELCC Order was just and reasonable because, among other reasons, it ensured that no resource would receive a capacity commitment in excess of its CIRs. Contrary to Dr. Shanker's claims, considering hourly output above a resource's CIRs in the upstream ELCC modeling process is not unjust and unreasonable, for the reasons the Commission explained in its order. Because Dr. Shanker and LSP Development raised substantially similar arguments in that same proceeding, Dr. Shanker's attempt to relitigate the justness and reasonableness of the prior Tariff constitutes a collateral attack on the Commission's order, as noted above. Although the 2023 ELCC Order adopts a different approach to the treatment of CIRs in the upstream ELCC modeling process, it does not make the prior approach unjust and unreasonable as two different accreditation constructs may both be just and reasonable.

¹¹² *ELCC II* Order, 176 FERC ¶ 61,056 at P 53.

¹¹³ Louisville Gas & Elec. Co., 144 FERC ¶ 61,054, at PP 12, (2013) (citing Wall v. Kholi, 131 S.Ct. 1278, 1284 (2011)); see also See, e.g., NSTAR Elec. Co. v. ISO New England, Inc., 120 FERC ¶ 61,261, at P 33 (2007) ("[c]ollateral attacks on final orders and relitigation of applicable precedent, especially by parties that were active in the earlier case, thwart the finality and repose that are essential to administrative efficiency, and are strongly discouraged.").

¹¹⁴ The Commission has recognized that there can be "more than one just and reasonable rate." *PJM Interconnection, L.L.C.*, 180 FERC ¶ 61,051, at PP 23, 68 (2022); *Sw. Power Pool, Inc.*, 158 FERC ¶ 61,063, at P 13 (2017); *Int'l Transmission Co.*, 123 FERC ¶ 61,065, at P 20 (2008); *Louisville Gas & Elec. Co.*, 114 FERC ¶ 61,282, at P 29 (2006). *See Oxy USA, Inc. v. FERC*, 64 F.3d 679, 692 (D.C. Cir. 1995) ("the Commission may approve [a revised rate schedule] ... if it is 'just and reasonable'; it need not be the only reasonable methodology, or even the most accurate"); *Cities of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984) ("[The Commission] has interpreted its authority to review rates under [FPA section 205] as limited to an inquiry into whether the rates proposed by a utility are reasonable — and not to extend to determining whether a proposed rate schedule is more or less reasonable than alternative rate designs.")).

4. Standing

50. Although PJM and Dr. Shanker dispute whether Dr. Shanker has standing to file the subject complaint, we need not address those arguments because, regardless, we deny the complaint on the merits.

The Commission orders:

Dr. Shanker's Complaint is hereby denied, as discussed in the body of this order.

By the Commission. Commissioner Christie is concurring in part and dissenting in part with a separate statement attached.

Commissioner Rosner is not participating.

(SEAL)

Debbie-Anne A. Reese, Acting Secretary.

Appendix A

Docket No. EL23-13-000 List of Intervenors

American Clean Power Association (ACP)

American Electric Power Service Corporation

American Municipal Power, Inc.

Boston Energy Trading and Marketing LLC

Buckeye Power, Inc.

Calpine Corporation

Constellation Energy Generation, LLC (Constellation)

The Dayton Power and Light Company, doing business as AES Ohio

Dominion Energy Services, Inc.

Electric Power Supply Association

Exelon Corporation

FirstEnergy Utility Companies¹¹⁵

J-POWER USA Development Co., Ltd.

LS Power Development, LLC (LSP Development)

Maryland Office of People's Counsel (MPC)

Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor for PJM (IMM)

Natural Resources Defense Council and the Sustainable FERC Project (NRDC)

New Jersey Division of Rate Counsel

NRG Power Marketing, LLC

Ohio Federal Energy Advocate

Old Dominion Electric Cooperative

The Pennsylvania Public Utility Commission

PJM Industrial Customer Coalition

PJM Power Providers Group (P3)

Sierra Club

Solar Energy Industries Association (SEIA)

Southern Maryland Electric Cooperative, Inc.

Vistra Energy Corp. and Dynegy Marketing and Trade, LLC

¹¹⁵ In this case, FirstEnergy Service Company serves as an agent for its regulated affiliates: Ohio Edison Company, The Cleveland Electric Illuminating Company, The Toledo Edison Company, Pennsylvania Power Company, Pennsylvania Electric Company, Metropolitan Edison Company, West Penn Power Company, Jersey Central Power & Light Company, Monongahela Power Company, and The Potomac Edison Company.

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Roy J. Shanker v. PJM Interconnection, L.L.C.

Docket No. EL23-13-000

(Issued June 27, 2024)

CHRISTIE, Commissioner, concurring in part and dissenting in part:

- 1. I concur with the finding in today's order that the Commission's acceptance in the 2023 ELCC Order of PJM's filing resolved the core of Dr. Shanker's complaint.¹
- 2. I dissent from today's finding that in the period prior to the effective date of PJM's tariff revisions approved by the Commission's 2023 ELCC Order, PJM did not violate its tariff. I am not convinced there was no violation in the prior period and I would have sought additional evidence on certain issues before making a finding here.
- 3. Nonetheless, I also concur in this order's statement that even if a tariff violation had been found, there should have been no re-runs ordered to adjust prior auction settlements and payments.²

For these reasons, I respectfully concur in part and dissent in part.

Mark C. Christie	
Commissioner	

¹ Order at P 21 ("[A]s Dr. Shanker acknowledges, the Commission's acceptance of PJM's filing in the 2023 ELCC Order resolves Dr. Shanker's concerns from April 10, 2023, forward, by incorporating a just and reasonable approach that prospectively reflects CIRs in the hourly energy output considered in the ELCC calculation.").

² *Id.* P 39. I note that while PJM's Independent Market Monitor (IMM) agrees that PJM violated its tariff (*see*, *e.g.*, *id.* P 25), the IMM does not support granting retroactive relief (*see*, *e.g.*, *id.* PP 18, 39). *See*, *e.g.*, IMM January 13, 2023 Comments at 2 ("The [IMM] does not support modifying the results of prior auctions. The [IMM] recommends that the offered MW from intermittent resources and storage resources be correctly defined for the 2025/2026 Delivery Year and subsequent delivery years. The [IMM] believes that PJM agrees with the proposed approach going forward. The [IMM's] position is that it is critical to resolve the issue on a going forward basis and that assigning intention or fault to prior actions is not relevant in this matter.").