UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection LLC, Revisions to Application of Minimum Offer Price Rule	))))	**Docket No. ER21-2582-000**

MOTION FOR LEAVE TO ANSWER AND ANSWER OF NATURAL RESOURCES DEFENSE COUNCIL, SUSTAINABLE FERC PROJECT, SIERRA CLUB, AND UNION OF CONCERNED SCIENTISTS

Dated: September 7, 2021.

MOTION FOR LEAVE TO RESPOND OF PUBLIC INTEREST ORGANIZATIONS

Pursuant to Rules 212 and 213 of the Federal Energy Regulatory Commission's ("FERC" or "Commission") Rules of Practice and Procedure,[1] Sierra Club, Sustainable FERC Project, Natural Resources Defense Council, and Union for Concerned Scientists ("Public Interest Organizations" or "PIOs"), move for leave to answer and answer to protests and comments submitted in response to the July 30, 2021 filing submitted by PJM Interconnection, L.L.C. ("PJM") under Section 205 of the Federal Power Act ("FPA") in the above-captioned docket.[2] Although the Commission's procedural rules generally do not allow for answers,[3] the Commission has accepted answers that facilitate the decisional process or aid in the explication of issues, and has explained that it will accept answers that "assist[] in our decision-making process."[4] PIOs requests that the Commission accept this answer to clarify the record and address issues raised by other protests and comments.

RESPONSE OF PUBLIC INTEREST ORGANIZATIONS

I. Introduction

PJM's Section 205 filing finds broad support among the parties to this proceeding, which include state public utility commissions, consumer advocates, developers and owners of clean energy resources, developers and owners of gas-fired resources, and clean energy buyers.[5] Even

[1] 18 C.F.R. §§ 385.212 & 385.213 (2017).
[2] PJM Tariff Filing: Revisions to Application of Minimum Offer Price Rule (MOPR) to be effective 9/28/2021, Docket No. ER21-2582 (July 30, 2021) ("PJM Transmittal Letter"), Accession No. 20210730-5166.
[3] 18 C.F.R. §§ 385.213(a)(2), 385.713(d)(1).
[4] *Columbia Gas Transmission, LLC*, 146 FERC ¶ 61,116, at P 1, n.3 (2014), *pet. for review denied*, *Gunpowder Riverkeeper v. FERC*, 807 F.3d 267 (D.C. Cir. 2015); *see also Algonquin Gas Transmission Co.,* 83 FERC ¶ 61,200, at 61,893, n.2 (1998) (accepting an answer in order to ensure "a complete and accurate record"), *order amending certificate*, 94 FERC ¶ 61,183 (2001); *Transwestern Pipeline Co.*, 50 FERC ¶ 61,211, 61,672, n.5 (1990) (citing *Buckeye Pipe Line Co.*, 45 FERC ¶ 61,046 (1988)) (accepting answer "where consideration of matters sought [will be] addressed in the answer will facilitate the decisional process or aid in the explication of issues.").
[5] *See, e.g.,* Comments of the District of Columbia Public Service Commission, Docket No. ER21-2582 (Aug. 20, 2021), Accession No. 20210820-5071; Comments of Pine Gate Renewables, Docket No. ER21-2582 (Aug. 20, 2021), Accession No. 20210820-5101; Comments of the Solar Energy Industries Association and the American

some parties that protest PJM's filing support its foundational elements such as eliminating the application of Minimum Offer Price Rule ("MOPR") based on a resource's revenues received as a result of state policies and otherwise limiting mitigation to circumstances where an incentive and ability to reduce capacity prices exist.[6] PJM's filing is broadly supported, and just and reasonable, because it will avoid over-mitigating capacity supply offers based on vague and ill-defined notions of buyer-side market power that serve only to stifle competition. PJM's filing is not about accommodating state policies "above all else";[7] it is about ensuring that the capacity market sends the right price signals for when investment is needed. This includes PJM's decision to fundamentally revise the "legacy MOPR" which applied broadly to new gas resources even absent any evidence that their offers reflected buyer-side market power. Thus, PJM's filing is internally consistent in its move toward a more tailored and realistic conception of the circumstances in which buyer-side market power may adversely affect rates for capacity. Consumers will benefit, as will suppliers who can be better assured that market prices reflect

Clean Power Association, Docket No. 21-2582 (Aug. 20, 2021), Accession No. 20210820-5105; Joint Consumer Advocates Comments in Support of PJM's MOPR Filing and Request for Clarification, Docket No. ER21-2582 (Aug. 20, 2021), Accession No. 20210820-5239; Comments of Exelon Corporation and the PSEG Companies, Docket No. ER21-2582 (Aug. 20, 2021) ("Exelon/PSEG Comments"), Accession No. 20210820-5176; Comments of the New Jersey Board of Public Utilities, Docket No. ER21-2582 (Aug. 20, 2021), Accession No. 20210820-5199; Comments of J-Power USA Development Company, Limited (Aug. 20, 2021), Accession No. 20210820-5175; Comments of Advanced Energy Buyers Group, Accession No. 20210820-5063; Comments of Advanced Energy Economy, Accession No. 20210820-5093; Comments of the Institute for Policy Integrity, Accession No. 20210820-5178.

[6] *See, e.g.*, Protest and Motion to Intervene of Vistra, at 3, Docket No. 21-2582 (Aug. 20, 2021) ("Vistra appreciates the efforts that PJM has made to work with stakeholders to refocus the MOPR so that it mitigates exercises of buyer-side market power and avoids frustrating state policies supporting the development of renewable and low-carbon resources. Vistra supports the objective of reforming the MOPR to focus on the exercise of buyer-side market power and believes that PJM's proposal to evaluate the ability and incentive to exercise buyer-side market power represents a sound conceptual framework for achieving this objective.") ("Vistra Protest"), Accession No. 20210820-5201; Joint Protest of the Pennsylvania PUC and PUC of Ohio to PJM's Filing Concerning Application of the Minimum Offer Price Rule, at 7–8, Docket No. ER21-2582 (Aug. 20, 2021) ("PAPUC/OPUC Protest"), Accession No. 20210820-5164.

[7] *See* Protest of the NRG Companies, at 17, Docket No. ER21-2582 (Aug. 20, 2021) ("NRG Protest"), Accession No. 20210820-5168.

underlying supply and demand fundamentals rather than a bubble inflated by an ideological approach to market "integrity."[8]

Under Section 205, the Commission review of PJM's filing is to ascertain whether it will result in rates that are just and reasonable, and not unduly discriminatory; the Commission need not determine that it is the *most* just and reasonable rate.[9] PJM and intervenors have provided ample justification for the Commission to approve this filing, and specifically to reach determinations that differ from those the Commission articulated in recent orders relating to PJM's MOPR. Although changed circumstances are not required in order for the Commission to reach different determinations, PJM has described several important changes, including state and utility responses to the Expanded MOPR, refinements to PJM's capacity valuation methodology, and progress in better compensating for the flexibility services offered by many resources. We urge the Commission to issue a robust and comprehensive order approving PJM's filing.

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[8] *See* Errata to Comments of the Natural Resources Defense Council, Sustainable FERC Project, Sierra Club, and Union of Concerned Scientists, Exhibit A, Written Testimony of Dr. Kathleen Spees and Dr. Samuel A. Newell, at 22 Docket No. ER21-2582 (Aug. 27, 2021) ("[E]levated prices should not be conflated with less-risky prices. We do not believe the MOPR-Ex reduces regulatory risk or provides an efficient basis for attracting new investment. On the contrary, a market whose price is artificially inflated by a rule as controversial and economically inefficient as MOPR-Ex is unsustainable. Investors will not count on the price premiums produced by such a rule to persist over the long term.") ("Brattle Aff."), Accession No. 20210827-5205.

[9] *See, e.g.*, *PJM*, 176 FERC ¶ 61,056, at P 31 (2021).

II. Argument

A. FERC should mitigate only actual exercises of buyer-side market power to ensure just and reasonable rates

1. Application of minimum offer price rules to conduct that is not buyer-side market power is anti-competitive and leads to excessive rates.

As explained in PIOs' initial comments, PJM's focused MOPR avoids over-mitigation that would unnecessarily increase costs for consumers.[10] Specifically, by limiting application of the MOPR to actual exercises of buyer-side market power, rather than to almost anything that causes low offers, the Commission will correct only for market power, not competition.

Several protestors refer to the Commission's "inescapable duty and obligation under the FPA to ensure that mitigation protections are in place to effectively address buyer-side market power"[11] While the case law in support of such an obligation is far from robust, even assuming there were such an obligation,[12] it does not follow that the Commission must mitigate offers based on any particular protestor's specific understanding of buyer-side market power. And because state policies are not exercises of buyer-side market power[13]—which the Commission acknowledged in the 2019 PJM MOPR order[14] these precedents certainly do not require

[10] *See* Comments of Nat. Res. Defense Council, Sustainable FERC Project, Sierra Club, and Union of Concerned Scientists, at 23–29, Docket No. ER21-2582 (Aug. 20, 2021) ("Comments of PIOs"), Accession No. 20210820-5241.

[11] Mot. to Intervene and Protest of the Natural Gas Supply Association, at 7, Docket No. ER21-2582 (Aug. 20. 2021) ("NGSA Protest"), Accession No. 20210820-5188; *see also* Protest of Cogentrix Energy Power Management, LLC, at 4, Docket No. ER21-2582 (Aug. 20, 2021) ("Cogentrix Protest"), Accession No. 20210820-5240; Protest of the PJM Power Providers Group, at 18, Docket No. ER21-2582 (Aug. 20, 2021) ("P3 Protest"), Accession No. 20210820-5242. P3 contends that "sellers should not be compelled to provide service at unreasonably low rates," P3 Protest at 18. But this notion is from an inapplicable regulatory paradigm—none of P3's units are compelled to continue supplying power or capacity at the rates approved by FERC if they are unacceptable to P3. *See ISO New England, Inc. & New England Power Pool Participants Comm. New England Power Generators Ass'n*, 138 FERC ¶ 61,027, at PP 139–40 (2012).

[12] *See* Mot. for Leave to File Answer and Answer of the Harvard Electricity Law Initiative, at 2–3, Docket No. ER21-2582 (Sept. 3, 2021) ("Harvard Answer"), Accession No. 20210903-5146.

[13] *See infra* at Sec. II.D.2.a.).

[14] December 2019 Order at P 17 ("This order addresses the growing impact of State-Subsidized Resources because those subsidies reject the premise of the capacity market and circumvent competitive outcomes."). The December 2019 Order was one of a related series of orders from the Commission that resulted in the current expanded MOPR

mitigation of state public policies.[15] As discussed throughout PJM's transmittal letter and accompanying affidavits, and in dozens of supporting comments, there are ample reasons that the Commission should not mitigate state public policies.[16]

The Commission must reject the notion that the MOPR is a tool to guard against all "price suppression,"[17] where there are no indicia of the actual exercise of buyer-side market power.[18] Many protestors in this proceeding would apparently prefer that all low offers be deemed guilty.[19] But applying the MOPR based on "price suppression" (whatever the cause) is profoundly anti-competitive and anti-consumer. As one author has explained, "exercises of monopsony power are very difficult to differentiate from competition" and in the anti-trust context, courts have recognized that "[t]he same actions that may be taken in a predatory bidding scheme may also represent 'the very essence of competition.'"[20] Experts from The Brattle Group noted over a decade ago in a report for PJM:

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tariff in PJM. *See* Calpine Corp. v. PJM, 163 FERC ¶ 61,236 (2018) ("June 2018 Order"), on reh'g, 171 FERC ¶ 61,034 (2018) ("June 2018 Order"); Calpine Corp., 169 FERC ¶ 61,239 (2019) ("2019 MOPR Order" or "December 2019 Order"); *Calpine Corp. v. PJM*, 171 FERC ¶ 61,034 (2020) (Order Denying Rehearing); Calpine Corp. v. PJM, 171 FERC ¶ 61,035 (2020) ("April 2020"). To date there are at least 28 petitions seeking review of the Commission's orders in the Seventh Circuit Court of Appeals, and currently in abeyance until September 21, 2021. *See Ill. Commerce Comm. et al. v. FERC*, Case Nos. 20-1645, 20-1759, 20-1760, 20-1761, 20-1762, 20-1819, 20-1849, 20-2010, 20-2016, 20-3027, 20-3028, 20-3029, 20-3030, 20-3031, 20-3032, 20-3033, 20-3034, 20-3035, 20-3036, 20-3037, 20-3038, 20-3039, 20-3040, 20-3041, 20-3042, 20-3043, 20-3044, 20-3045 and 20-3046; Order, Case No. 20-1645 (7th Cir. Jun. 9, 2021), ECF No. 136.

[15] In *NJBPU v. FERC*, the 3rd Circuit held that the Commission had jurisdiction to require that the MOPR apply to resources benefiting from certain types of state contracts. 744 F.3d 74 (3d Cir. 2014). The court was not presented with the question of whether that decision resulted in just and reasonable rates, or whether FERC had any obligation to apply MOPR in that manner.

[16] PJM's filing does contemplate future Section 205 filings to apply MOPR to resources benefitting from "conditioned state support," which PIOs expressed concern about in our initial comments.

[17] *See, e.g.*, P3 Protest at 8 ("the Commission cannot simply turn a blind eye to artificial price suppression caused by uneconomic entry").

[18] As explained in our initial comments and infra at Sec. II.D., PJM's definitions of buyer-side market power and the exercise thereof, are appropriate.

[19] *See, e.g.*, Joint Protest of Calpine Corporation and LS Power Development, LLC, at 16, Docket No. ER21-2582 (Aug. 20, 2021), Accession No. 20210820-5216 ("Calpine/LS Power Protest").

[20] Jay Morrison, *Capacity Markets: A Path Back to Resource Adequacy*, 37 Energy L.J. 1, 32 (2016) (quoting *Weyerhaeuser v. Ross-Simmons Hardwood Lumber Co.*, 549 U.S. 312, 323 (2007)), https://www.eba-net.org/assets/1/6/18-1-60-Morrison_FINAL.pdf.

> There will be many legitimate reasons why an RPM bid could be below the Net CONE benchmark and should not be mitigated. In fact, the wide range of offer prices for new generation observed in RPM auctions over the last few years suggests the existence of a large range of cost structures, market outlooks, and bidding strategies.[21]

The crux of the problem is how to differentiate a legitimate low offer from an uncompetitive low offer, if not through indicia of buyer-side market power such as an incentive and ability to suppress price. The focused MOPR offers a just and reasonable standard for making such a distinction without, as did the Expanded MOPR, artificially boosting capacity prices through an overly broad mitigation approach that failed to distinguish market power from competitive advantage.

The expanded MOPR did not make such a distinction and instead imposed artificially high floor prices for an arbitrarily defined subset of resources that earned revenues in markets outside of FERC's jurisdiction. The Pennsylvania and Ohio PUCs, despite opposing PJM's filing, recognize that default offer floor prices greatly exceed the actual competitive entry level for new combined cycle gas plants, as demonstrated by Base Residual Auction ("BRA") clearing prices presumably established by a marginal combined cycle facility in the last five auctions.[22] Similar discrepancies undoubtedly exist across resource types. Yet, the unit-specific review process that is supposed to ameliorate the overbroad MOPR has often failed to acknowledge the "legitimate reasons why an RPM bid could be below the Net CONE benchmark," and instead has imposed a rigid view of what critical inputs such as a resource's cost of capital or financial asset life "should"

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[21] Johannes Pfeifenberger et al., *Second Performance Assessment of PJM's Reliability Pricing Model*, at 149, Brattle Group (Aug. 26, 2011), https://www.pjm.com/~/media/committees-groups/committees/mrc/20110818/20110826-brattle-report-second-performance-assessment-of-pjm-reliability-pricing-model.ashx; *see also id.* at 151 ("[t]he objective should be to protect the wholesale capacity market from intentional manipulation, not from inadvertent effects that normal contracting and investment decisions can have on RPM prices, even if those investments and contracts turn out to be poor decisions.").

[22] *See* PAPUC/OPUC Protest at 6.

be.[23] The extended MOPR has also treated as invalid revenues earned through the sale of renewable energy credits or other environmental attributes, if the sale was made to a party purchasing for state or local regulatory compliance purposes, while permitting accounting for revenues from sales of fossil combustion byproducts or those earned as a result of federal policies.[24] This discrepancy is illogical and illustrates the arbitrariness of deeming certain offers competitive, and others somehow tainted.

The Commission has been abundantly clear that "*low prices, in and of themselves, do not demonstrate that a market is not just and reasonable.* For instance, such prices are justified in instances where a region contains substantial excess capacity unrelated to intentional uneconomic entry."[25] Low prices do not equal price suppression and should not be viewed as a problem *unless* they result from an exercise of market power. The Commission's responsibility to mitigate buyer-side market power is not a license to define anything that lowers prices as buyer-side market power, simply because it could benefit buyers.

If the Commission does not comprehensively reject the notion that state policies result in price suppression that must be mitigated, it can be assured that parties whose market share is threatened by state policies will not be satisfied with barriers to capacity market competition, but will also

[23] *See Jackson Generation, LLC v. PJM*, 175 FERC ¶ 61,116 (2021) (granting complaint in part based on refusal by PJM to consider evidence as a longer financial asset life when determining a unit-specific offer floor). Commenters in the AD21-10 proceeding described numerous problems with the unit-specific review process as implemented by PJM and the Independent Market Monitor in the months leading up to the 2022/23 Base Residual Auction. *See, e.g.*, Post-Technical Conference Comments of the American Clean Power Ass'n, at 6–9, Docket No. AD21-10 (Apr. 26, 2021), Accession No. 20210427-5028; Comments of Advanced Energy Buyers Group, at 3–7, Docket No. AD21-10 (Apr. 26, 2021), Accession No. 20210426-5272.

[24] As described in the Comments of the Institute for Policy Integrity at the NYU School of Law, at 27–33, Docket No. EL16-49 (Oct. 2, 2018), a capacity resource's profitability can also be shaped by the sale of "products and services that are valued outside of the FERC-jurisdictional markets," including sales of coal ash, steam heat, and emission allowances. The marketability of all these products are also shaped by state law.

[25] *Midwest Indep. Transmission Sys. Operator, Inc.*, 153 FERC ¶ 61,229 (2015) (emphasis added).

seek to apply the same flawed rationale to the energy markets.[26] Such an application would deprive consumers of the price-stabilizing benefits zero-marginal cost resources, and open up an even more challenging area of conflict with states, local governments, clean energy buyers, and utilities working to achieve private decarbonization targets.

2. Buyer and seller market power are distinct problems justifying distinct mitigation protocols, and there is no factual dispute on this point.

PJM witness Dr. Walter Graf capably explained in his affidavit why mitigation for buyer-side market power does not need to be commensurate with mitigation for seller market power.[27] This makes sense, as buyer and seller side market power are distinct problems, which PJM's market is more or less vulnerable to depending on market structure and design.[28] Protestor P3 takes issue with Dr. Graf's conclusion, even while admitting that "[s]upplier-side and buyer-side mitigation measures have always been structured differently because they are directed against different abuses."[29] P3 asserts that because this is an obvious and long-standing principle, it does not justify PJM's new, more focused approach to mitigation buyer market power.[30] But the thrust of Dr. Graf's affidavit is not that buyer and seller market power are different in a generic sense, but specifically that it is difficult to successfully exercise buyer market power, and therefore the risk of over-mitigation was substantial without a narrowly focused MOPR.[31]

[26] *See, e.g.*, Protest of Electric Power Supply Association ("EPSA Protest"), Affidavit of Collin Cain, M.Sc., ¶¶ 2, 14, Docket No. ER21-2582 (Aug. 20, 2021) (asserting that state clean energy policies also cause price suppression in the energy markets) ("Cain Aff."), Accession No. 20210820-5200.
[27] Transmittal Letter, Attach. E, Aff. of Dr. Walter F. Graf on Behalf of PJM ("Graf Aff.").
[28] *Midwest Indep. Transmission Sys. Operator, Inc.*, 153 FERC ¶ 61,229 ("there need not be symmetry between mitigation for buyers and sellers because of differences in how they could exercise market power.").
[29] P3 Protest at 89; *see also id.* at 86–89 (disputing Dr. Walter Graf's explanation of why buyer-side market power is challenging to exercise and requesting a factual hearing).
[30] *Id.*
[31] Graf Aff., ¶ 15 ("Given the lower risk of buyer-side market power relative to supplier-side, it is reasonable to design a buyer-side market power mitigation mechanism that is more focused.").

Despite P3's admission that "symmetry" is not the issue, P3 witness and Vistra Corporation employee Dr. J. Arnold Quinn aims to establish that PJM failed to show asymmetry between buyer-side and seller-side market power.[32] Dr. Quinn fails to provide any convincing argument that symmetry is required or desirable, or that Dr. Graf erred in his more specific reasoning that buyer-side market power is challenging to exercise.

Dr. Quinn first disputes Dr. Graf's explanation of the difficulties associated with successfully exercising buyer-side market power, asserting that Dr. Graf's explanation assumes sellers would be exercising market power in order to respond to lower prices in the way Dr. Graf indicates is predictable.[33] This critique fails to acknowledge that Dr. Graf's explanation is based in the long-run elasticity of supply, in other words, that the supply curve is shaped largely by entry and exit decisions, not solely by existing or new generators adjusting their offers.[34] Dr. Graf's observation that supply in PJM is responsive to high and low prices, consistently returning the clearing price to a rough equilibrium, is consistent with what other experts have observed.[35] It is also consistent with what Dr. Quinn states just a few sentences later, that "market dynamics will at most return to where they were at the time of the uneconomic entry

[32] The protest filed by Vistra Corporation does not refer to the testimony of its Vice President for FERC-Jurisdictional Markets and advocates a more moderate position regarding mitigation of resources supported by state policy than does Dr. Quinn.
[33] P3 Protest, Attach. A, Affidavit of J. Arnold Quinn, Ph.D. on Behalf of the PJM Power Providers Group, ¶ 42 ("Quinn Aff.").
[34] Graf Aff., ¶ 11.
[35] *See* Affidavit of James F. Wilson, ¶¶ 21–22, Docket No. ER18-1314 ("Market participants generally will select the timing of retirements and new capacity additions in anticipation of the RPM supply-/demand balance and price level; if RPM prices are expected to rise, some retirements may be delayed or relatively more new entry may be offered, and if prices are expected to be soft there might be more retirements or some new entry may be delayed. Such adjustments have kept RPM prices within a limited range over the past several years despite the retirements and new entry. In addition, various short lead time resources that can efficiently take on RPM obligations, or not, on a year-by-year basis depending upon need and prices (such as some imports, some demand response, and resources that are economic on an energy-only basis) also tend to buffer the RPM price changes from year to year."); Affidavit of James F. Wilson in Support of the Reply Brief of the Joint Consumer Advocates, ¶¶ 21–33, Docket No. EL19-47 (June 9, 2021) (presenting analysis showing consistent trend in RPM auction results, that auctions with higher prices follow those with lower prices, and vice versa).

with no change to the competitive pressure sellers experience."[36] Dr. Quinn then attempts to rebut Dr. Graf's assertion that existing units are also an improbable vehicle for the exercise of market power, given that such units often face significant capital upgrade costs that could not be recovered in a single or handful of years.[37] Dr. Quinn argues (without supporting citations) that the need for major capital expenditures has not been cited as the basis for state policies supporting retention of those units,[38] but this misses Dr. Graf's point entirely. Dr. Quinn does not dispute that existing units often need existing capital upgrades, or that such costs would be challenging to recover in a few years; the public basis cited for state policies pertaining to these resources is irrelevant to the core of Dr. Graf's argument.

Dr. Quinn never explains his premise that exercises of seller and buyer market power *are* symmetrical (which P3 itself disclaims); thus his insistence that PJM is obligated to disprove this thesis falls flat. The remedies that a finding of "symmetry" would suggest border on the absurd; Dr. Quinn's notion of "symmetrical" mitigation would appear to be subjecting essentially every offer to buyer-side market power mitigation, since that is how seller-side market power mitigation works in PJM.[39] Having every offer subject to both an offer cap and floor sure is an odd approach to a competitive market. Dr. Quinn acknowledges that seller market power mitigation in PJM is extremely broad because of the structure of the market (i.e., concentration of ownership), but makes no attempt to argue that the incentive and ability to exercise buyer-side market power (factors he concedes are appropriate to consider) is anywhere near as pervasive. Finally, Dr. Quinn suggests that once a resource enters the market as a result of buyer-side market power, it "reduces the capacity market clearing price for the indefinite

[36] Quinn Aff., ¶ 42.
[37] Graf Aff., ¶ 12.
[38] Quinn Aff., ¶ 44.
[39] *Id.*, ¶ 45.

future."[40] This assertion is unsupported, contradicted by Dr. Quinn's own statement that market dynamics will return to where they were at the time of the "uneconomic entry," and inconsistent with well-established changes in the supply curve in response to clearing price excursions.

Because P3 admits that symmetry is not expected or sensible as between buyer- and seller-side market power,[41] despite the attempts by its witness to establish asymmetry, its issue here ultimately boils down to the broader contention that PJM's buyer market power mitigation scheme is not adequate—a contention addressed elsewhere in these reply comments. Thus, its requests for a paper hearing specifically on the issue of asymmetry, which is premised on the existence of a factual dispute[42] must be rejected.

3. Just and reasonable rates for capacity are those sufficient to ensure resource adequacy, not those that promote or reward irrational investor confidence

Just and reasonable rates for capacity are those sufficient to ensure resource adequacy, but no greater. Investor confidence is certainly one relevant factor in whether rates are just and reasonable, but the Commission must not lose sight of *why* investor confidence matters—the need to attract or retain sufficient supply to meet a resource adequacy standard. If investor confidence is understood as an end in itself, it will lead the Commission toward approving ever-higher rates that are more and more disconnected from reality.

NRG makes an assertion that is characteristic of the attitude of many protestors in this proceeding: "[w]hether or not there is a reliability difference between the existing MOPR and the proposed MOPR, that is not a refutation of PJM's 2018 assertions that out-of-market subsidies will suppress the rates of the market that the Commission is responsible for."[43] In other words,

[40] *Id.*
[41] P3 Protest at 89.
[42] *Id.* at 97–99.
[43] NRG Protest at 11.

whether lower rates would ensure reliability is irrelevant to whether those rates and just and reasonable; all that matters is that the rates are lower than they would be if state policies did not influence them. But the ultimate objective of rates for capacity—resource adequacy—cannot be set aside as immaterial lest the Commission be completely unmoored in its determinations about what constitute just and reasonable rates.

As the report of Drs. Kathleen Spees and Samuel Newell attached to PIOs' initial comments demonstrates, allowing the revenues earned through state policies to be reflected in rates does not undermine the ability of those rates to attract new investment, or retention of resources as needed.[44] This is because the Variable Resource Requirement ("VRR") curve allows prices to rise when capacity becomes scarce. It does not matter if many supply offers are near-zero (as is already the case given that this is the typical offer for existing facilities not nearing end of life)[45]—the price is set by the marginal resource that requires a higher price for retention or to justify entering the market. The price cannot fall lower than what that resource requires to enter or remain. It is therefore nonsensical to suggest that low prices will deter *needed* capacity entry. Low prices will deter *unneeded* capacity entry, however. This is not a problem, it is the way the market is supposed to work.[46]

This fundamental point also addresses the contention of several protestors that the focused MOPR doesn't properly balance investor and consumer interests, or fails to adequately

[44] Brattle Aff. at 19–20.
[45] *See* Cain Aff., ¶ 25 ("As long as a resource owner expects a net benefit from clearing the capacity market, it will typically offer as a price-taker, i.e. at zero."); *see also* Samuel Newell et al., *Fourth Review of PJM's Variable Resource Requirement Curve*, at 58, Brattle Group (Apr. 19, 2018) (noting that the supply curve has a "flat slope . . .in the low-price range")
[46] Brattle Aff. at 19 ("Capacity prices will be lower under PJM's focused MOPR approach than they would be if MOPR-Ex were maintained. These lower capacity prices are not a problem from a market design, reliability, or economic perspective. Low prices would be produced only when supply is long, new entry is not needed, and retirements can be accommodated.").

consider the former.[47] According to the affidavit of P3 witness Dr. Quinn, PJM's filing fails to address the balance between investor confidence and accommodation of state policies, by "giv[ing] no consideration to where those [state] actions will influence investment decisions."[48] This statement completely misses the fundamental point of PJM's robust case for the focused MOPR, which is that state actions *should* affect investment decisions in the region.[49] If states are supporting the entry of certain resource types, then investors *should* take note that less other new capacity is needed to meet the region's reliability requirement.[50] PJM's statement that state policies are a "reality to be acknowledged" is fundamental to its reassessment of what will result in just and reasonable prices for capacity. PJM is not elevating accommodation of state interests over investor confidence, but instead insisting that investors base their decisions on real market conditions, which include state policies.

Next, Dr. Quinn asserts that PJM has failed to consider "the possible harm that could occur if resources that rely solely on market revenues lose confidence that they have a reasonable opportunity to recover invested capital."[51] But Quinn's discussion of the harm of lost investor

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[47] *See, e.g.*, Calpine/LS Power Protest at 21–24; EPSA Protest at 54–60.
[48] Quinn Aff., ¶ 15.
[49] *See, e.g.*, Transmittal Letter at 6–10.
[50] Calpine and LS Power complain that PJM never explains "how unsubsidized resources can be expected to fairly compete against subsidized resources in the RPM auction." Calpine/LS Power Protest at 22. One answer is that Calpine and LS Power could instead build more of the kinds of projects that produce environmental attribute revenue streams, so as to reduce their "missing money" requirement and gain a competitive advantage in the capacity market. As Brattle observes, "[t]he fix occurs when generators shift their investment portfolios toward the types of electricity resources that customers and states want to buy." Brattle Aff. at 19. Both Calpine and LS Power have a track record of developing renewable energy projects; indeed, just as few weeks ago LS Power announced the launch of a significant new renewable energy and storage development company, Rev Renewables. LS Power Press Release, *LS Power Launches Rev Renewables to Propel the U.S. Energy Industry Toward a More Sustainable Future* (Aug. 11, 2021), https://www.lspower.com/ls-power-launches-rev-renewables-to-propel-the-u-s-energy-industry-toward-a-more-sustainable-future/. As LS Power CEO Paul Segal declared, "The rising demand for clean energy solutions presents a once-in-a-lifetime opportunity for Rev Renewables to deploy its human and capital resources into storage, solar and wind projects." *Id.* Rev Renewables CEO added that "The establishment of Rev Renewables is a significant milestone and extension of LS Power's renewable energy focus. I am excited to work with our impressive team to drive Rev's continued expansion as we embark on this *mission-critical journey to decarbonize our nation's grid*." *Id.* (emphasis added). Clearly, LS Power has confidence in the prospects for renewable energy project development.
[51] Quinn Aff., ¶ 15.

confidence is utterly disconnected from the purpose of the capacity market. As the Commission has explained in the context of another Regional Transmission Organization ("RTO"), "[t]he function of the [capacity market] is not to maintain specific prices for suppliers; it is to maintain prices at a level that will enable ISO-NE to meet its reliability targets on average, over time."[52] Dr. Quinn offers nothing more than speculation to support his assertion that investors would lose confidence *to the extent* that the capacity market's ability to maintain resource adequacy is impaired. This is the objective that investor confidence must be measured against, not whether investors have sufficient confidence that they can continue to build as if state policy resources do not exist. That level of investor confidence is not desirable, and rates chasing unfettered investor confidence will not be just and reasonable. Insofar as the Commission views the aim of investor confidence as capturing its obligation to protect consumers,[53] that can only be the case (if at all) if the Commission concerns itself with investors' willingness to develop projects actually needed to meet the reliability requirement.

Dr. Quinn asserts that a "foundational element of the investor confidence concern" is that "resource owners and investors do not know when and how much state supported capacity will enter the market."[54] But state policies are in fact quite transparent regarding the quantity and timing of new resource entry needed to meet state policy goals, as economist James Wilson has previously testified.[55] If this lack of foresight is truly the foundation of Dr. Quinn's investor

[52] *ISO New England Inc. & New England Power Pool Participants Comm.*, 158 FERC ¶ 61,138 (2017).
[53] *See, e.g.*, *ISO New England Inc.*, 173 FERC ¶ 61,161, at P 47 (2020).
[54] Quinn Aff., ¶ 20.
[55] Protest of Clean Energy Advocates, Affidavit of James F. Wilson in Support of the Protests of DC-MD-NJ Consumer Coalition, Joint Consumer Advocates, and Clean Energy Advocates, at P 23, Docket No. ER18-1314 (May 7, 2018) ("with regard to resources with state policy support of some kind, states generally pursue lengthy regulatory processes before any procurement of new resources to meet state mandates. In most cases, state policies result in quantities of new capacity that are relatively small and known well in advance of the RPM auctions in which they first participate. To the extent the market has had ample time to see that these resources were coming, it is reasonable to assume that the incremental resources are reflected in market participants' various entry and exit

confidence concern, it is a shaky one. The uncertainty that Dr. Quinn asserts will undermine investor confidence pervades competitive wholesale markets—state policies are in many ways more predictable than changes in fuel costs and supplies, for example. Nor are changes in the application of MOPR the only regulatory flux that investors face—the last decade has seen numerous changes to the capacity markets including the introduction of capacity performance, and the introduction of competition from new resource types such as demand response, energy storage and distributed energy resources, as a result of Commission action. These changes, as well as the overall complexity of the market, make it challenging for investors to anticipate capacity market prices, and therefore to factors such revenues into their financing models.[56] Any assertion that eliminating the Expanded MOPR introduces some regulatory uncertainty that doesn't otherwise exist is baseless.[57] As discussed further below, any claims that investors have relied on broad buyer-side market power mitigation is unreasonable.

4. Focused MOPR will not undermine the right to a reasonable opportunity to recover investments

Several protestors that invest in or develop generation facilities contend that PJM's focused MOPR will interfere with their "legal right to an opportunity to earn a return on their

decisions, and do not affect price appreciably."), Accession No. 20180507-5222; *see also* Brattle Aff. at 21 ("Investors in new power plants can review the outlook of state RPS mandates as an indicator of the minimum growth in renewable supply that should be expected (while considering that nearly all PJM states have increased their RPS mandates at several points as their programs have proven cost effective and as environmental commitments have strengthened).").

[56] *See, e.g.*, Jordan Kwok, *Considering the Evolution of PJM's Capacity Market: Suggestions for RPM reforms in a post-MOPR World*, at 9, Charles River Associates (May 2021) (noting that "rule stability is an important element to increasing investor confidence but has not been achieved in practice"), https://media.crai.com/wp-content/uploads/2021/05/26155913/CRA-Whitepaper_Kwok_RPM-Next_5-26-21_Final-1.pdf; ISO/RTO Council, *Resource Investment in the Golden Age of Energy Finance*, at 18–19, Market Reform (noting that banks discount capacity market revenue by 50-70% when determining whether to finance projects, based on price volatility) (May 2015), https://www.eenews.net/assets/2017/05/23/document_ew_01.pdf.

[57] *See* Brattle Aff. at 22 ("Regardless of whether investors anticipate the full extent or particulars of any states' policy mandates, these policies are part of the broader market context in which all PJM capacity resources have chosen to invest. They chose to bear the risks and rewards associated with changing market conditions and regulations").

investments."[58] The Commission has repeatedly explained that this "opportunity" does not equate to a guarantee, even in the context of cost-based rates, much less market-based rates.[59] According to the Oxford English Dictionary, an opportunity is "a set of circumstances that makes it possible to do something,"[60] and the Commission has explained that opportunity to recover investments in competitive markets "is provided through authority to charge market-based rates for services."[61] The Commission has also been clear that the phrase "'reasonable opportunity' [does not] include situations in which a resource seeks to remain in the market even when the market price is signaling that it is not needed."[62] In other words, the opportunity to recover investments cannot be used as a shield against competition.[63] An expansive MOPR that mitigates offers that do not reflect exercises of buyer-side market power is

[58] Calpine/LS Power Protest at 26; *see also* Joint Protest of Carroll County Energy LLC and South Field Energy LLC, at 7, 9, Docket No. ER21-2582 (Aug. 20, 2021) ("Carroll County/South Field Protest"), Accession No. 20210820-5099; EPSA Protest at 32–35; Cogentrix Protest at 15–16.

[59] *See, e.g.*, *ISO New England Inc. & New England Power Pool Participants Comm.*, 158 FERC ¶ 61,138 (in approving a renewable energy resource exemption to the MOPR in ISO-NE, holding that "the Commission is only required to ensure that Generators have an opportunity to recover their costs — it need not guarantee recovery of costs."); *Pac. Gas & Elec. Co.*, 91 FERC ¶ 63,008, 65,112 (2000) ("even in a pure cost-of-service environment, Hope and Carolina Power do not unconditionally guarantee return of/on investment. Those cases stand for the more limited ratemaking principle that rates must provide an opportunity for return of/on investment."); *Fed. Power Comm'n v. Hope Nat. Gas Co.*, 320 U.S. 591, 603 (1944) ("regulation does not [e]nsure that the business shall produce net revenues") (quoting *FPC v. Nat. Gas Pipeline Co.*, 315 U.S. 575, 590 (1942)).

[60] Google Dictionary result, indicating Oxford Languages as underlying source.

[61] *Pacific Gas and Electric Co.*, 91 FERC ¶ 63,008, at 65,111.

[62] *ISO New England, Inc. & New England Power Pool Participants Comm. New England Power Generators Ass'n*, 138 FERC ¶ 61,027, 61,128.

[63] *See ISO New England Inc. & New England Power Pool Participants Comm.*, 158 FERC ¶ 61,138 ("No individual supplier has an entitlement to a specific capacity price. The Commission's aim when using competitive markets as a regulatory mechanism is to protect competition to ensure just and reasonable rates, not to protect individual competitors."); *see also* Thomas O. Barnett, *Competition Law And Policy Modernization: Lessons From The U.S. Common-Law Experience*, U.S. Dep't Of Justice, Antitrust Division (Nov. 16, 2007) ("[O]ne firm's lost profits do not by themselves show that competition has suffered--indeed, one firm's inability to garner sales typically indicates no more than the superiority of other firms' products and the greater value captured by consumers who choose to buy them. We do well to remember that when antitrust laws are used to undo the results of the competitive process, it is consumers who ultimately lose."), http://www.justice.gov/atr/speech/competition-law-and-policy-modernization-lessons-us-common-law-experience.

a shield against competition, plain and simple.[64] PJM's focused MOPR, in contrast, will mitigate only actual exercises of buyer-side market power, thus ensuring that rates for capacity are not inflated. Market-based rates that reflect mitigation of seller and buyer-side market power provide a reasonable opportunity for recovery of investment.

None of the parties raising concerns regarding their opportunity to recover their investment explain what level of return on investment they should have an opportunity to earn.[65] Nor do they substantiate the degree to which that return is actually threatened by any lower capacity prices that may result from the focused MOPR, especially considering the higher energy and ancillary service prices that are likely to result from reduced capacity over-procurement.[66] The protests are devoid of evidence that support a statutory, much less a constitutional, claim that these suppliers are deprived of any right or opportunity to recover their investment. These protestors instead ask the Commission to simply take their word that any reduced capacity prices as a result of the focused MOPR categorically interferes with their opportunity to recovering their investment. Such bare assertions cannot be sufficient to justify an Expanded MOPR, or rejection of PJM's focused MOPR, lest the Commission is to abjure its duty to protect

[64] Ari Peskoe has observed the MOPR approved in the Commission's December 2019 order amounts to "a walled garden that distorts prices to benefit merchant developers and then sweetens the deal for this favored class of investors by ordering PJM to purchase more capacity than it needs." Ari Peskoe, *FERC's Clean Energy Boycott Distorts PJM Prices and Discards History*, Harvard Environmental & Energy Law Program (Jan. 7, 2020), https://eelp.law.harvard.edu/2020/01/fercs-clean-energy-boycott-distorts-pjm-prices-and-discards-history/.

[65] The Commission held in *Bridgeport Energy, LLC*, 113 FERC ¶ 61,311 (2005), that there was "no basis for a generator operating under market-based rates authority to claim that for it to remain available in a competitive market, it must receive energy revenues equivalent to a full cost-of-service, including depreciation and a return of and on capital." *See also Pub. Serv. Co. of Okla.*, 54 FERC ¶ 61,021, at 61,032 (1991) ("[T]he Commission has long recognized that sales at levels that recover avoidable costs, with some contribution to fixed costs, reflect "the normal competitive process at work.").

[66] *See* Transmittal Letter, Attach. C, Aff. of Peter Cramton on Behalf of PJM, ¶ 15 ("When the minimum offer price excludes some energy resources from capacity revenues, the practical result is available supply, supporting reliability, exceeds the reserve level cleared in the capacity auction. This shifts revenues from the energy and reserves markets to the capacity market, increasing the role of the capacity revenues in investment decisions. This result moves the market further from the ideal where the capacity revenues reflect the financial cost of the obligation to deliver energy and reserves during shortages.") ("Cramton Aff.").

consumers. A similar defect arises with assertions regarding the role of "investor confidence" as a decisional factor in this case, *see supra* at 12-16. To the extent the owners of the Carroll County and South Field facilities face dim revenue prospects, it is more likely to be the result of their decision to enter a market that was already experiencing a glut of capacity. The plants entered in 2018 and 2021, respectively, when the immediately preceding Base Residual Auctions had cleared reserve margins of 24% (2020/21 BRA)[67] and 22% (2021/22 BRA).[68] As Brattle describes it, "the much larger driver of low capacity prices [in the recent auction] was another large increase in the volume of new gas combined-cycle plants that cleared the market at 5,627 ICAP MW (approximately 4,300 MW of uninstalled capacity ("UCAP")). . . . If investors feel that they have earned too little in the capacity market, they can more accurately blame their merchant competitors for the low prices (rather than state policymakers)."[69]

The desire by certain parties to be insulated from the effects of state policies on market prices does not extend to all state policies—far from it. Carroll County and South Field Energy, who have submitted a protest asserting that their investment recovery would be harmed by the focused MOPR, are both located in Ohio and have benefitted substantially from that state's energy policies. For example, in 2019 the state legislature slashed energy efficiency standards, and reduced the renewable portfolio standard from 12.5% by 2027 to only 8.5%.[70] Ohio also has one of the most stringent setback laws for wind resources in the nation—a change enacted in 2014.[71] Thus, Carroll County and South Field Energy have benefited from state policy changes

[67] PJM, *2020/2021 RPM Base Residual Auction Results*, at 1, https://www.pjm.com/~/media/markets-ops/rpm/rpm-auction-info/2020-2021-base-residual-auction-report.ashx.
[68] PJM, *2021/2022 RPM Base Residual Auction Results*, at 1, https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2021-2022/2021-2022-base-residual-auction-report.ashx.
[69] Brattle Aff. at 21–22.
[70] The law changed the energy efficiency standards from a 22 percent reduction from 2008 levels by 2027 to only 17.5%. Amended Substitute H.B. No. 6, 133rd General Assemb. (Ohio 2019); *see also* OH ST § 4928.64(B)(2).
[71] Amended Substitute H.B. No. 483, 130th General Assemb. (Ohio 2014); *see also* OH ST §§ 4906.20, 4906.201.

that inflate customer demand for their products and impede market entry for their competitors. While these examples are specific to Ohio, more generally throughout the PJM region, fossil fuel resources benefit materially from a variety of state policies, including from royalty reductions, favorable tax treatment, and subsidies to linking infrastructure.[72]

These upsides of state policy are part of the same investment picture as the downsides fixated upon by certain parties to this proceeding, and wholesale market rates are not unjust and unreasonable simply because they don't asymmetrically correct for *only* state policy's downward effects on rates. Rates that reflect both upward and downward pressure from state and federal policies do not deprive investors of an opportunity to recover their costs, but are instead part of the overall context in which investment decisions in competitive markets are rightly made. The expanded MOPR applies in a discriminatory manner only to state policies and only to certain kinds of state policies—the Commission must rectify this lopsided treatment by ending the fool's errand of trying to insulate its wholesale markets from the effects of state policy.

5. Any investor reliance on continued over-mitigation of perceived buyer-side market power or state policy resources was not reasonable

Several protestors argue that the investor community relied upon the Commission's history of mitigating buyer-side market power in deciding to enter the market, and could not have anticipated such an about-face.[73] As explained in the preceding section, investors in the PJM market are entitled only to a reasonable opportunity to recover their costs, which as the Commission has consistently described it, is far from a guarantee that they will. Such investors know that they are entering a market that is heavily affected by regulations at the federal, state,

[72] *See generally* Protest of Clean Energy Advocates, Exhibit D: Doug Koplow, *Energy Subsidies within PJM: A Review of Key Issues in Light of Capacity Repricing and MOPR-Ex Proposals*, Docket No. ER18-1314 (May 7, 2018), Accession No. 20180507-5222.
[73] *See, e.g.*, EPSA Protest at 63–67; Carroll County/South Field Protest at 3–6.

and local level. Indeed, the Commission frequently makes significant changes to market designs that affect underlying financial interests; such is the nature of investing in a highly regulated sector.[74] It is hard to imagine how any reliance interest could be created in such an environment as a general matter; the specific facts here make it even more implausible, as described below.

At the outset, however, it bears noting that a reliance interest (even if it were legitimate) does not prevent the Commission from changing course. Instead, courts have held that reasoned decisionmaking under the Administrative Procedures Act requires the Commission to acknowledge and carefully consider the reliance interest affected by any change in its position.[75]

While those claiming injured reliance interests paint the Commission's MOPR doctrine as a continuous and predictable trajectory towards broader mitigation, this is not the case. Less than five years ago, FERC approved an exemption from buyer-side market power rules in the ISO New England Capacity Market for resources supported by state policy—an order affirmed by the D.C. Circuit Court of Appeals.[76] Until the Commission's June 2018 order,[77] the Commission had never endorsed the concept that the MOPR could apply to existing resources, and renewable energy, storage, demand response, and energy efficiency resources had never been subject to the MOPR in PJM.

Even in that 2018 order, the Commission expressed a commitment to avoiding the "double payment" problem by providing a path for state-supported resources to obtain capacity obligations through a resource-specific Fixed Resource Requirement ("FRR"). The Commission ultimately abandoned that commitment in the December 2019 order, but until then it was not

[74] *New England Power Generators Ass'n, Inc. v. FERC*, 757 F.3d 283, 295 (D.C. Cir. 2014) (rejecting claims premised on economic harm to market participants noting that it was "FERC's prerogative" to make judgments that would alter underlying economic advantages, and concluding: "[t]hat it is unfortunate does not make it arbitrary.").
[75] *See, e.g.*, *Encino Motor Cars LLC v. Navarro*, 136 S.Ct. 2117 (2016).
[76] *See ISO New England Inc. & New England Power Pool Participants Comm.*, 158 FERC ¶ 61,138; *NextEra Energy Resources LLC v. FERC*, 898 F.3d 14 (D.C. Cir. 2018).
[77] *Calpine Corp. v. PJM*, 163 FERC ¶ 61,236 (2018) ("June 2018 Order").

clear just how extensively the Commission intended to shut state-supported resources out of the market. PJM's own Request for Rehearing of the December 2019 order describes it as being "in marked contrast from the Commission's past rationale used for the MOPR," which had "allow[ed] substantial offer flexibility within guardrails designed to limit impacts from carefully circumscribed offers posing the greatest threat of interference with efficient price formation. Instead, the December 19 Order flips this approach and effectively applies the MOPR to all resources, unless an exemption . .. applies."[78]

In short, the December 2019 order was a massive, disruptive, and unprecedented change to the buyer market power mitigation scheme in PJM. Over 25 entities challenged that order, and subsequent orders on rehearing and compliance—claims that are still pending in the 7th Circuit Court of Appeals. The order has led to significant backlash from state regulators and multiple investigations of whether the Fixed Resource Requirement was a feasible escape from MOPR.[79] One major load-serving entity in PJM decided to elect the FRR, in part due to the MOPR, and its exit from the capacity market likely played a major role in the lower prices observed in the most recent auction.

No reasonable person looks at that regulatory turmoil and decides to make an investment that relies on the prices that would result from such a controversial order.[80] Doing so is an assumption of substantial risk.

Take for example the claimed reliance interests of investors in the Carroll County and South Field combined cycle plants.[81] According to these parties, they had to make initial long-term

[78] PJM Request for Rehearing of Dec. 2019 order, at 6, 8.
[79] PJM Transmittal Letter at 13–14.
[80] *See* Brattle Aff. at 21–22 (describing how the obvious unsustainability of Expanded MOPR would deter investment and ability of investors to assess risk).
[81] Carroll County/South Field Protest at 3–6.

investment decisions in 2011 and 2012, even though the plants did not come online until 2018 and 2021.[82] At the time of these initial investment decisions, the MOPR did not apply to the vast majority of new resources supported by state policy, but instead only to natural gas plants. Renewable portfolio standards were already common among PJM states, including Carroll County and South Field's home state of Ohio, which at the time required its load-serving entities to meet 12.5% of their load with renewable energy resources by 2025. For the next eight years, this general regulatory environment continued: state renewable energy policies strengthened while PJM's buyer-side market power rules continued to apply only to the one resource type widely viewed as actually being able to affect the market price—natural gas. This was the regulatory environment in which Carroll County and South Field's investors continued to sink money into the plants. It was only happenstance that around the time the projects came online, FERC issued its disruptive orders radically expanding the MOPR—the timeline simply does not support an argument that these two plants relied upon the status quo Expanded MOPR or anything close to it.

B. PJM's Approach to Buyer Side Market Power is Just and Reasonable

PJM has explained at length why its extensive experience with the 2011 and 2018 Revisions to the MOPR[83] have caused it to reconsider continuation of the legacy and expanded versions of the MOPR.[84] Chief among these motivations is the evidence that application of the MOPR to any resource that could possibly lower capacity clearing prices, regardless of whether such resources are actually exercising buyer-side market power, is leading to universally

[82] *Id.* at 2.
[83] *See PJM Interconnection, LLC v. PJM Power Providers Group*, 135 FERC ¶ 61,022 (2011) ("April 2011 Order"); *clarified on reh'g by* 137 FERC ¶ 61,145 (Nov. 17, 2011) ("November 2011 Order"); *reh'g. granted by* 135 FERC ¶ 61,228 (Jun. 13, 2011); *reh'g denied by* 138 FERC ¶ 61,160 (Mar. 6, 2012); *reh'g denied by* 138 FERC ¶ 61,194 (Mar. 15, 2012) ("March 2012 Order"); *pet'n for rev. denied sub nom New Jersey Bd. of Pub. Util. v. FERC*, 744 F.3d 74.
[84] Transmittal Letter at Sec. II.

counterproductive outcomes: it applies even when state subsidies are economic, discourages welfare-enhancing correction of market externalities that have nothing to do with the exercise of buyer-side market power,[85] disconnects market outcomes from underlying supply,[86] replaces offers reflecting competitive costs with inaccurate minimum price floors,[87] leads to improper entry and exit signals,[88] results in excess and unnecessary capacity on the system,[89] amplifies the "missing money" problem by exerting downward pressure on the energy market,[90] raises the cost to consumers without increasing reliability,[91] erodes the efficiency of the market,[92] and ultimately "exacerbates the very price suppression issue it seeks to mitigate."[93] As a result, "Expanded MOPR created more problems than it was intended to solve."[94]

PJM has thus appropriately proposed a Focused MOPR that only applies to an actual exercise of buyer-side market power, which occurs "when a Capacity Market Seller has the economic incentive and ability to suppress market prices, and 'requires uneconomic behavior to lower market offers below the competitive level to suppress prices."[95] As Dr. Graf points out the first two elements are critical for obvious reasons, as without the *ability* to suppress prices a seller would not logically uneconomically lower their offer, "as doing so would be unprofitable," and in order to have an *incentive*, the expected benefit to the seller from such depressed prices

[85] *Id.* at 8; Graf Aff., ¶ 17.
[86] Graf Aff., ¶ 16.
[87] *Id.*, ¶ 18.
[88] PJM Transmittal Letter at 8–10.
[89] *Id.* at 15–16; Graf Aff., 16.
[90] PJM Transmittal Letter at 15; Cramton Aff., ¶ 37.
[91] PJM Transmittal Letter at 17; Cramton Aff., ¶ 74.
[92] Graf Aff., ¶ 18.
[93] PJM Transmittal Letter at 17. It is worth noting that several parties raised concerns regarding the potential for the legacy and expanded MOPR to produce these exact outcomes in the 2011 and 2018 MOPR proceedings. *See, generally* November 2011 Order; June 2018 Order; *Calpine Corp. v. PJM*, 169 FERC ¶ 61,239 (2019) ("December 2019 Order" or "2019 Order"). This further bolsters the justification for PJM and FERC to reconsider the rationale for continued mitigation of capacity market offers beyond the narrow confines of an actual exercise of buyer-side market power. PJM Transmittal Letter at 17.
[94] PJM Transmittal Letter at 23.
[95] *Id.* (emphasis removed).

must exceed its cost of offering them at a loss.[96] Further, without requiring there be an incentive to artificially distort capacity market prices, legitimately low offers reflecting out of market revenue streams designed to cover resource costs that cannot be recovered through the PJM markets might inappropriately be treated as uneconomic.[97] In order to meet the final element of an *exercise* of buyer-side market power, there must be *uneconomic behavior* to suppress capacity market prices – i.e., submission of a below-cost offer.[98] As explained by Dr. Graf, in light of the long-term planning, capital investment, and multi-year commitment to below-cost operations that would be required to actually exercise buyer-side market power, while such market behavior is theoretically possible, the likelihood of its occurrence poses relatively low risk to the capacity market and justifies a focused MOPR that more appropriately balances the "multiple objectives of minimizing false positives (over-mitigation), minimizing false negatives (under-mitigation), and minimizing administrative burden to PJM and market participants."[99]

PJM's revised Tariff includes a Focused MOPR that defines the exercise of buyer-side market power as:

> anti-competitive behavior of a Capacity Market Seller with a Load Interest, or directed by an entity with a Load Interest, to uneconomically lower RPM Auction Sell Offer(s) in order to suppress RPM Auction clearing prices for the overall benefit of the Capacity Market Seller's (and/or affiliates of Capacity Market Seller) portfolio of generation and load or that of the directing entity with a Load Interest . . . A bilateral contract between the Capacity Market Seller and an entity with a Load Interest with the express purpose of lowering capacity market clearing prices shall be evidence of the Exercise of Buyer-Side Market Power.[100]

This provision is enforced in two ways. In light of the low risks to the market and desire to minimize administrative burdens, the primary method of compliance continues the current

[96] Graf Aff., ¶ 7.
[97] *Id.,* ¶ 8.
[98] *Id.*, ¶ 9.
[99] *Id.*, ¶ 15.
[100] Transmittal Letter, Attach. A, Revised Tariff Redline Definitions at 33.

method by which sellers "self-certify" whether their facilities should be subject to the MOPR.[101] In addition, where a reasonable basis exists, PJM and the Independent Market Monitor ("IMM") may initiate a fact-specific inquiry into whether a seller may trigger an Exercise of Buyer-Side Market Power.[102] This review consists of two screens: the first is an impact test to determine whether the resource in question is *able* to materially impact the clearing price for the area in which it is located; the second is an *incentive* test that measures (a) whether the resource has a "Load Interest" (including affiliates or other entities in contractual privity) that (b) could receive a "net benefit to their portfolio of generation and load due to the submission of an offer that is below the resource's avoidable going forward costs."[103] Data provided to PJM to perform this test would be similar to that used for determining the unit-specific floor price and would be used to compare the expected cost of the resource with the expected benefit to the seller as reflected by the net short position in the relevant Locational Deliverability Areas ("LDA")/RTO multiplied by the price change from offering the resource below cost.[104] Only if a resource passes both of these tests and submits an uneconomic offer would the MOPR be applied.

PJM's Focused MOPR thus addresses the problems caused by the currently overbroad application of the MOPR by narrowly tailoring it to accurately mitigate the actual exercise of buyer-side market power and, given the low risks to the market, prioritizes an administratively simple method of compliance while reserving the right to conduct objective, fact-specific inquiries into suspected instances where buyer side market power might be exercised. PJM's

[101] *Id.* at 26–27. Capacity suppliers including Exelon, PSEG, and American Municipal Power confirm the effectiveness of the self-certification mechanism in deterring the exercise of buyer-side market power. *See* Exelon/PSEG Comments at 4–5; Comments of American Municipal Power, Inc., at 7–10, Docket No. ER21-2582 (Aug. 20, 2021), Accession No. 20210820-5125 ("AMP Comments").
[102] PJM Transmittal Letter at 30–31.
[103] *Id.* at 37–38.
[104] *Id.* at 38. Dr. Graf also sets out a number of examples of resources that would not be considered to trigger the incentive test. Graf Aff., ¶¶ 25–26.

extensive rationale clearly examines and considers the competing objectives of preventing over-mitigation or under-mitigation in the capacity market as well as and minimizing administrative burden for all parties and strikes a just and reasonable balance.

C. PJM's Approach to BSMP is not prohibited by prior FERC decisions

Contrary to the allegations of protesting parties, the Focused MOPR is not an unwarranted departure from decades of precedent.[105] Assertions that PJM is obligated to impose a mitigation scheme beyond the boundaries of the Focused MOPR[106] rely on a mischaracterization of the history of PJM's Minimum Offer Price Rule. The idea advanced by some that revisions made by PJM to the MOPR in 2011[107] and the Commission's expansion of the MOPR in 2018[108] mandate the terms or conditions by which PJM must achieve its primary responsibility – i.e., delivering reliable electricity at just and reasonable rates – overstate the breadth of the 2011 changes and misinterpret that judicial cases upholding them.

These challenges center primarily on arguments that certain past decisions changing market rules for the treatment of state-sponsored resources or self-supply in PJM and other capacity markets were made because they reflected fundamental market truths—that tests focused on the actual incentive and ability to mitigate the exercise of buyer side market power are insufficient to protect the market from price suppression or that some state supported resources deemed to be "uneconomic" means that all resources receiving state policy revenues

[105] *See, e.g.*, Protest of the Independent Market Monitor for PJM, at 8, 10, Docket No. ER21-2582 (Aug. 20, 2021), Accession No. 20210820-5218 ("IMM Protest"); EPSA Protest at 31–38; Cogentrix Protest at 17–26; P3 Protest at 35–40.
[106] *See, e.g.*, Protest of the Independent Market Monitor for PJM, at 8, 10, Docket No. ER21-2582 (Aug. 20, 2021), Accession No. 20210820-5218 ("IMM Protest"); EPSA Protest at 31–38; Cogentrix Protest at 17–26; P3 Protest at 35–40.
[107] These revisions were first proposed in 2011 and were reviewed and revised pursuant to several FERC Orders and an appeal before finally going into effect in 2014. *See generally* April 2011 Order, November 2011 Order, March 2012 Order.
[108] *See infra,* n. 14

are "uneconomic."[109] But these challenges mistake the aim of a particular market tool for the aim of the market itself and ignore that prior to the 2018 expansion of MOPR, market rules were adjusted by the RTO to help ensure that the capacity market would produce sufficient reliability at a just and reasonable rate in light of the economic realities of supply and demand at the time. Resource adequacy at just and reasonable rates is the constant goal of the capacity market, but supply and demand inherently shift as the economy changes, which is why market intervention tools like mitigation rules, VRR curves, or myriad other factors are *variables* that PJM must adjust and balance to achieve the goal of the market[110] and not fixed constants detached from economic reality to which the market must adjust.

Arguments that PJM and FERC must treat as immutable market rules favoring merchant fossil fuel generators and penalizing other competitors in the face of a substantially changed economic reality and detached from the fundamental rules of supply and demand[111] undermine the ultimate goal of the capacity market and must be rejected. If there is any precedent established by the perpetual litigation around buyer-side mitigation rules in the PJM, NYISO, and ISO-NE capacity markets, it is that no definition of the terms or the breadth of their application has been "carved in stone."[112] PJM—and the Commission—have a duty to "consider varying interpretations and the wisdom of its policy on a continuing basis" to ensure that they strike an appropriate balancing of competing interests to ensure that the MOPR is consistent with the purpose of the Reliability Pricing Model ("RPM").[113] In addition to its experience and expertise implementing the MOPR and running the RPM, PJM has sought and incorporated

[109] *See, e.g.,* IMM Protest at 8, 10; EPSA Protest at 31–38; Cogentrix Protest at 17–26; P3 Protest at 35–40.
[110] *NextEra Energy Res. v. FERC*, 898 F.3d at 23.
[111] Brattle Aff. at 18–19.
[112] *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc*., 467 U.S. 837, 863 (1984).
[113] *Id.* at 863–864; *NextEra Energy Res.*, 898 F.3d at 21.

feedback from a wide variety of market participants, experts, members of the public, and members of the Commission as part of its stakeholder process, has explained its rationale, and provided ample support for its decision to scale back to a more focused MOPR. PJM "reasonably balanced the potential for limited price suppression against competing interests in concluding that" the Focused MOPR is "consistent with the purpose of [its] capacity market."[114]

D. PJM's Proposed Definition of Exercise of Buyer Side Market Power Is Just and Reasonable

1. Ability, Incentive, and Exercise Tests.

Opponents of the Focused MOPR object out of the gate to the inclusion in its definition of requirements that buyer-side market power be established through actual demonstration of ability and incentive to suppress capacity market prices.[115] Such objections are based on assertions made during the 2011 MOPR proceedings that impact tests used to establish ability to materially affect capacity market prices were found to be easily gamed and ineffective and could ignore the potentially harmful impact of multiple below-cost offers.[116] Opponents also argue that FERC found incentive tests to be too easy to circumvent.[117] These arguments take the determinations by FERC out of the history and context of the 2011 PJM MOPR revisions, which are critical to assessing the current relevance of that proceeding to this matter.

PJM's proposed revisions to the original 2006 MOPR at issue in the 2011 proceeding were hastily assembled in response to concerns raised in an expedited complaint filed by PJM

[114] *NextEra Energy Res.*, 898 F.3d at 21.
[115] EPSA Protest at 40–42; Calpine Protest at 15–20; IMM Protest at 7, 14; P3 Protest at 76–77.
[116] Calpine Protest at 15–20; EPSA Protest at 40–42; P3 Protest at 76–77; Cogentrix Protest at 20; April 2011 Order at PP 101–108.
[117] Calpine Protest at 15–20; EPSA Protest at 40–42; P3 Protest at 76–77; *PJM*, 135 FERC 61,022 at PP 86–90 (2011).

Power Providers Group ("P3") regarding two state programs in New Jersey and Maryland[118] designed to support the entry of new gas generation.[119] The programs in question were generally similar: New Jersey's statutory program launched a state initiative whose stated intent was to develop "the construction of new, efficient generation" resources to address the failure of RPM to provide the large additions of generation that were necessary to address New Jersey's "electrical power capacity deficit" caused by transmission system overloads and aging generation facilities.[120] Generation resources bid competitively for long-term contracts with the state to build new capacity resources at a specified rate whose terms also required those resources to attempt to clear the PJM RPM.[121] To assure that it would do so, New Jersey "intended to offer the capacity into the [BRA] at a price below their actual cost."[122] After

[118] *See* S. 2381, 214th Leg. (N.J. 2011), authorizing the establishment of a Long-Term Capacity Agreement Pilot Program (LCAPP); *In re Whether New Generating Facilities are Needed to Meet Long-Term Demand for Standard Offer Service*, Request for Proposals for Generation Capacity Resources Under Long-Term Contract, Case No. 9214 (M.P.S.C. Dec. 29, 2010).

[119] April 2011 Order at P 1. To remind this Commission of the timeframe of the 2011 MOPR revisions (and perhaps cast a comparably favorable light on the considerably more robust stakeholder process conducted by PJM and years-long consideration of the issues currently at hand, including the extensive briefing by all parties in the still-pending litigation regarding the 2018-2020 revisions to the MOPR), the Maryland program was passed on December 29, 2010 and the New Jersey law was passed on January 28, 2011. On February 1, 2011, in response to the Maryland and New Jersey programs, P3 filed a complaint demanding changes to PJM's existing MOPR, which it alleged was ineffective as a deterrent to buyer-side market power. On February 9, 2011, PJM held an "informational conference call for stakeholders" regarding the P3 Complaint, and submitted the proposed MOPR revisions to its OATT largely in line with P3's demands *a mere two days later,* on February 11, 2011. Despite requests from multiple intervenors to reject PJM's filing and the P3 complaint as premature due to the lack of a stakeholder proceeding, and recommendations that the Commission should avoid unintended consequences of such significant changes to the intersection of RPM protocols and state policies by allowing a hearing or additional procedures to provide "a reasonable opportunity to analyze and reply to the changes proposed by PJM and P3", the Commission denied all such requests and issued its initial Order Accepting Proposed Tariff Revisions, Subject to Conditions, and Addressing Related Complaint on April 12, 2011, with an effective date for the proposed changes of April 13, 2011. *Id.* at PP 1–24; *NJ Bd. of Pub. Util.*, 744 F.3d at 87–89.

[120] *NJ Bd. of Pub. Util.*, 744 F.3d at 87. *NJ Bd. of Pub. Util. v. FERC*, 744 F.3d 74, at 87 (3rd Cir. 2014). *See also* The Brattle Group, *Second Performance Assessment of PJM's Reliability Pricing Model: Market Results 2007/08 through 2014/15* (Aug. 26, 2011), pp. 2, 59, 69 *available at* https://www.pjm.com/~/media/committees-groups/committees/mrc/20110818/20110826-brattle-report-second-performance-assessment-of-pjm-reliability-pricing-model.ashx (noting that the earlier capacity market structure had failed to recognize locational reliability challenges in certain import-constrained areas of PJM, especially the northern New Jersey, Delmarva, and Baltimore-Washington areas and discussing that new entry was not proving to be cost competitive with existing entry, which was of great concern to states facing the need to meet recent EPA environmental regulations that were likely to cause widespread retirements).

[121] *Id.*

[122] *Id.* at 88–89.

clearing, the resource would settle any difference between the clearing and contract price via payments from or to the state.[123] Maryland's program was nearly identical to the New Jersey program and was ultimately determined to be pre-empted by the FPA in *Hughes v. Talen.*

At the time that these programs came into effect, PJM had a limited MOPR that subjected resources to mitigation if they failed three screens: a conduct, impact, and incentive (or 'net-short') test. The conduct screen identified offers that were below the 'threshold' price of net cost of new entry ("CONE") for the relevant LDA. Such below-threshold offers were then subject to an 'impact screen' to determine whether the offer could substantially affect clearing prices, determined by rerunning the auction to determine whether the offer would reduce the clearing price by 20-30% or $25/MW-day, whichever was greater. Failing offers would then be subject to the final "incentive screen" to determine whether the seller was net-short and thus had an incentive to reduce the clearing price, calculated on the seller's actual retail load minus the seller's portfolio of supply.[124] A resource failing all three screens was then subject to a MOPR of 80-90% of estimated net CONE.[125] This narrow MOPR also applied only to new resources and specifically exempted from the MOPR nuclear, coal, and hydroelectric resources, as well as "any planned resource being developed in response to a state regulatory or legislative mandate to resolve a projected capacity shortfall, so long as it was established pursuant to a state evidentiary proceeding.[126] It also had broad exemptions for self-supply. PJM noted that the original MOPR was never triggered during its effect, which it cited in 2011 as a basis for asserting the existing

[123] *Id.*
[124] April 2011 Order at P 75.
[125] *NJ Bd. of Pub. Util. v. FERC*, 744 F.3d*Id.* atPP 85–86.
[126] *Id.* at P 86.

rule was insufficient to mitigate market power, including proposed changes to the impact and incentive screens and the state resource and self-supply exemptions.[127]

Context, as they say, is king, and that the RPM itself was facing challenges in providing sufficient capacity in constrained regions is the most important lens through which the 2011 MOPR revisions must be reviewed, because concerns about potential price suppression carry more weight when one is struggling to keep the lights on. The economic realities of supply and demand and the market rules in effect in 2011 were very different than they are today, when PJM has had years of excess capacity[128] and state generation policies and consumer demand have substantially shifted to require specific electricity attributes that RPM's generic MW-day product does not provide.[129]

Opponents' assertions that the elements of the exercise of buyer-side market power rule as proposed by PJM in this proceeding have already been considered and rejected by PJM and FERC as ineffective and easily gamed are both factually incorrect and ignore the critical difference in the changed economic outlook and reliability needs facing PJM today. As a preliminary matter, the order of and the rules for each screen was different in 2011. Under PJM's original 2006 MOPR, the conduct rule– which was triggered by any offer below the MOPR level – came first.[130] As a result, any resource failing the first screen was assumed to be offering in at

[127] *Id.* at 86-87. As Dr. Graf's testimony points out, absence of evidence should not be taken as evidence of absence in this context, since the actual exercise of buyer-side market power is very difficult in a market like PJM, which is very elastic. Graf Aff. at PP 11-15. It also lines up in principle with the IMM's preferred MOPR proposal, which also relies on a buyer-side market power screen – a net long test that he states has never been violated during the years it was in effect. IMM Protest at 17-20. The IMM fails to explain why his proposed screens are less subject to gaming than the ones proposed by PJM, so it would appear that the IMM's criticism of PJM's screening proposal is more of degree than of kind. Given the boundaries of the 205 filing, PJM does not have to choose the most ideal option, so long as the one it does choose is just and reasonable.

[128] *See, e.g.,* James Wilson*, Overprocurement of Generating Capacity in PJM: Causes and Consequences,* Wilson Energy Economics, at 1, 15 (Feb. 2020), https://www.sierraclub.org/sites/www.sierraclub.org/files/blog/Wilson%20Overprocurement%20of%20Capacity%20in%20PJM.PDF ("Feb 2020 Wilson Study").

[129] Brattle Aff. at 18-19.

[130] *NJ Bd. of Pub. Util. v. FERC*, 744 F.3d at 84-86.

an uneconomic level, and any perceived ability to get "through" a subsequent screen would inherently mean that an uneconomic resource was entering the market, making the benefit assessment of subsequent screens inherently different than the one currently proposed by PJM. Additionally, the impact screen at issue required that each resource have a *substantial* impact of at least $25/MW-day or 20-30% change in clearing price. In 2011, PJM argued that such an impact screen ignored that even small effects on the clearing price from below-cost offers could harm competition and deter entry or spur retirement. The Commission found that the existing rule "would decrease the market clearing price by a significant amount" and "allows offers that are indisputably uneconomic to escape mitigation."[131] It also permitted multiple uneconomic offers to enter the market without limit, at potentially greater cumulative harm. Opponents to the 2011 rule change pointed out that the impact test serves as an important check on over-mitigation, ensuring that offers that would have little or no impact on clearing prices aren't prevented from clearing and thereby keeping high-cost, older resources online longer than they should be.[132] The New Jersey Rate Counsel suggested reducing the threshold level from 20-30% to 5-10% and a modification to set a cumulative impact limit.[133] While the Commission acknowledged these and other concerns, they stated that even if it accepted that a below-market offer with no material effect on prices should not be mitigated because it does no harm, allowing several offers to clear at $25/Mw-day, or 20 to 30 percent below the actual entry costs would suppress clearing prices and "harm[] the long-term viability of the RPM."[134] The Commission also pointed out that changes to PJM's proposal were inappropriate within the context of a 205

[131] *PJM*, April 2011 Order at P 101.
[132] *Id.* at P 98.
[133] November 2011 Order at P 58–59.[133] November 2011 Order at PP 58–59.
[134] April 2011 OrderApril 2011 Order at P 106.

filing.[135] Most importantly, the Commission relied on PJM's "ample evidence that circumstances have changed" and that what were once unrecognized or theoretical "weaknesses in the current MOPR rules" justified a change to the rules.[136]

However, unlike the old MOPR rule, PJM's proposed Focused MOPR conducts the ability test first and screens out anything lacking a "material" – not substantial – potential impact. This is a logical first step. Additionally, when viewed through a lens of a systemic glut of capacity and enormous shifts in consumer demand and state support for clean energy resources in particular, PJM needs to find a way to better ensure that RPM reflects all existing supply. To do otherwise would reduce RPM to a "shadow market" whose prices are totally disconnected from actual supply and demand, would overburden consumers across all PJM states with excessively high costs for resources that do not contribute to reliability, and would reduce benefits to investors from deadweight on the system—a result that would be inherently unjust and unreasonable.[137] Under these circumstances, screening out offers with potentially immaterial impacts on capacity prices helps RPM better serve its purpose of ensuring adequate low-cost supply.

Similarly, the incentive (net-short) screen at issue in 2011 was also different since it only measured the effects of the seller's own portfolio and could easily miss benefits that would accrue to affiliated or other entities with whom the seller was contracting.[138] At the time, opponents of the rule change raised concerns about the potential for over-mitigation and proposed changes to the rule to apply the net-short test not only to resources owned by net-

[135] *Id.* at P 108.
[136] *Id.* at PP 104–108.
[137] Brattle Aff. at 6-8.
[138] April 2011 Order at PP 75–76.

buyers but to those owned by their counter-parties.[139] FERC noted that while "there may be ways to adjust the net-short requirement so as to alleviate some of PJM's concerns about gaming, PJM's proposal represents an appropriate approach. . ."[140] PJM's current proposal adopts the earlier proposed fix to the net-short loophole to ensure that all parties in privity with the buyer would be part of the analysis.[141] While protestors repeat concerns about unidentified potential for gaming, they have not provided examples of how the currently proposed rule, which closes the only identified loophole, will be insufficient to the task, especially in light of the changed economic reality and the low risk to the RPM that anyone will actually pursue this strategy.

Finally the proposed final test of the Focused MOPR– determination of whether an offer level is economic – not only comes at the end of the screen, but extends beyond the preliminary default use of the MOPR Floor Offer Price to include a unit specific MOPR Floor Offer price or any additional rationales that might support a finding that a resource offer is competitive.[142] As P3's expert acknowledges, when taken together, "PJM's focus on an actor's incentive and ability to garner a portfolio benefit from out-of-market action is a reasonable economic standard."[143]

i. PJM's approach to the Exercise of Buyer-Side Market Power does not give it or IMM an unacceptable level of discretion

Some protests have objected to PJM's proposed buyer-side market screens as being too subjective and giving PJM and the IMM too much discretion in determining whether a resource meets the elements of an Exercise of Buyer-Side Market Power.[144] These elements are set forth in Section h-2)(2)(B) of the proposed Tariff and generally require: ex ante testing to determine

[139] *Id.* at P 83.
[140] November 2011 Order at P 52.
[141] P3 witness Dr. Quinn acknowledges that circumvention of the net short test can be avoided if PJM carefully identifies the relevant portfolio." Quinn Aff., ¶ 35.
[142] Graf Aff., ¶ 24.
[143] Quinn Aff., ¶ 35.
[144] P3 Protest at 78–80; IMM Protest at 13–14; Vistra Protest at 19–21; Quinn Aff., ¶ 39.

the extent to which a shift in the supply curve would affect RPM prices, comparing a sellers expected cost with its economic benefit, and determining whether there is a sell offer from a resource that would cause a material effect on capacity market prices and where the expected cost savings to the expected net short position of the resource exceed its expected market revenues.[145] A non-exhaustive list of considerations PJM and the IMM may consider in making this determination include whether the resource is acquired by a capacity market seller "through a competitive and non-discriminatory procurement process open to new and existing resources;" whether the resource is "demonstrated as consistent with or included in" a self-supply seller's RERRA-approved long-range resource plan so long as it does not "direct the submission of an uneconomic offer to deliberately lower market clearing prices;" and directing that "compensation in support of characteristics aligned with well-demonstrated customer preferences" shall not be the sole basis for a determination of Buyer-Side Market Power.[146]

These provisions hardly provide PJM and the IMM with "unfettered discretion"[147] and are very similar to other provisions requiring unit-specific review that have been accepted by the Commission in the past. In 2011, the IMM raised similar objections to the review process for evaluating self-supply pricing proposals regarding the consideration of non-PJM market factors and "subjective and inconsistent standards of review;" P3 similarly argued that the proposal "relies on ambiguous terms that would require clarification"; and others objected that there was insufficient specificity as to what market revenue streams would be considered with a sell offer and too much discretion in making determinations about legitimate competitive advantages.[148] The Commission rejected these objections, noting that its April 2011 Order "required sell offers

[145] Transmittal Letter, Attach. A, Revised Tariff Redline Definitions at 103–106.
[146] *Id.* at Sec. h-2(B)(ii).
[147] Vistra Protest at 19.
[148] November 2011 Order at PP 224–245.

to be 'consistent with' the competitive, cost-based cost of new entry were the resource to rely on PJM market revenues; it did not require that such offers be 'equal to' that standard or dictate that no cost advantages or revenues outside of the PJM markets can be included in a sell offer.[149] The Commission added:

> Decisions based on these considerations will obviously involve the exercise of judgment and discretion on the part of the IMM and PJM. We find, however, that while such discretion should be minimized to the extent possible, some amount of discretion is unavoidable and perhaps even necessary when making the types of determinations proposed by PJM in its compliance filing. We agree with PJM that the guidance it provides on this process, including its plan to evaluate whether a subsidy, grant, or revenue is of the type customarily enjoyed by the type of seller at issue and whether the cost or revenue item pre-existed RPM, provides a more objective standard than evaluating whether a cost or revenue is simply "competitive."[150]

When doing a unit-specific analysis, some level of discretion is necessary and consideration of justifiable out of market revenues and other cost competitive advantages as part of that analysis is appropriate.

ii. There Is No Intent Test

Contrary to the assertions of several opponents,[151] PJM has not proposed any sort of test for intent to exercise buyer-side market power.[152] Rather, it is likely that such parties mistake the ability of parties to self-certify that they intend to comply with the Exercise of Buyer Side

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[149] *Id*.

[150] *Id.* at P 245; *see also* March 2012 Order at P 23 ("The April 12 Order, in requiring PJM to submit a revised review provision, including the objective standards by which a review would be undertaken, did not specify the precise manner in which this requirement must be satisfied. Nonetheless, we reaffirm here that the accepted tariff language is sufficiently objective, as contemplated by the April 12 Order, and appropriately balances the need to protect against uneconomic entry while also minimizing any burden placed on resources choosing to procure or build capacity under long-standing business models . . . . Further, Calpine, et al. provide no support for the assertion in a footnote that, should a complaint be filed with the Commission, no remedies would be available. We therefore deny Calpine's request for rehearing.").

[151] *See, e.g.*, P3 Protest at 74–76; IMM Protest at 10; Calpine and LS Power Protest at 17.

[152] Calpine and LS Power offer a particularly grisly analogy, suggesting that PJM's Focused MOPR would exonerate obvious offenders so long as they did not confess their crime and motive. Calpine/LS Power Protest at 16–17. While analogies to criminal law doctrines can illuminate certain issues, the gruesome description offered by Calpine and LS Power serves only to inflame the situation. Aside from the tone, this analogy is inapt, as PJM and Independent Market Monitor could conclude that buyer-side market power had been exercised absent affirmative evidence of intent to do so.

Market Power provisions as the standard by which compliance is measured.[153] Dr. Graf illuminates that intent in this context refers to "a Capacity Market Seller intends to offer a resource or technology believed to be uneconomic," not an intent to violate the rule.[154] PJM has also made clear that certifications are assumed to be made in good faith, with a presumption of innocence for Capacity Market Sellers who make such certifications.[155] However, in light of the confusion on this point, PIOs join Dr. Quinn in recommending that PJM issue clarifying statements to avoid the indirect imposition of an intent-based test.[156] Confusion aside, at its essence, the self-certification is primarily an attestation that a resource is not being offered at a price that is below cost, once all economically justifiable revenue streams are included. As such, there is little substantive difference between PJM's current MOPR self-certification and the one proposed under the Focused MOPR, nor any reason to believe that entities signing such certifications will not take them seriously or answer them dishonestly. Again, in light of the current goals of PJM's focused MOPR to be less exclusionary and the low-risk to RPM from the actual exercise of buyer-side market power, PJM's proposal is reasonable and should be approved.

2. PJM's Treatment of State Policies

Several protests also rely on the 2011 and other PJM and FERC proceedings as "precedent" for treating all state generation policy revenues as uneconomic out-of-market subsidies.[157] There, too, such assertions take such findings out of context and misunderstand the precedential value of the FERC Orders and the cases upholding them. While those citing to the

[153] Transmittal Letter;at 26-32; Graf Aff., ¶ 20.
[154] Graf Aff., ¶ 20.
[155] Transmittal Letter at at 29.
[156] Quinn Aff., ¶ 37.
[157] *See, e.g.,* Protest of the Independent Market Monitor for PJM, at 8, 10, Docket No. ER21-2582 (Aug. 20, 2021), Accession No. 20210820-5218 ("IMM Protest"); EPSA Protest at 31-38; Cogentrix Protest at 17-26; P3 Protest at 35-40.

2011 MOPR proceeding seem to believe it stands for the principle that no supply offer can be economic if it reflects state revenues, this reading lacks support in the record – or reality.[158]

The 2011 MOPR revisions included elimination of a provision that exempted the ability of a state to issue a legislative mandate to resolve a projected capacity shortfall *in the RPM*.[159] This provision was changed in direct response to two state programs that (1) directly targeted increasing capacity in the wholesale market; (2) directly set the rate for that resource that was different from the clearing price; and (3) *required the resource to bid below cost in order to clear.* In other words, the state programs in question were expressly designed to drive entry of knowingly uneconomic resources in order to increase capacity in the RPM. The Supreme Court addressed the Maryland program at issue in the 2011 proceeding in *Hughes v. Talen*, and held that such action crosses FPA's jurisdictional line between state primacy over generation and FERC primacy over wholesale markets, and as such is pre-empted. [160] That the 2011 Proceeding changed the rules to clarify that states were not allowed to deliberately manipulate prices in the RPM market is hardly surprising, but it fails to support the idea that PJM is required to impose an Expanded MOPR on all resources, regardless of likelihood of an actual incentive to suppress prices.

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[158] Several parties assert that prior Commission orders or judicial decisions have resolved the issue that states are buyers for the purpose of buyer-side market power mitigation rules. However, none of the citations resolve the issue. The D.C. Circuit's decision in *NextEra Energy Res.*, 898 F.3d at 18, notes that states participate in the market as "both buyers and sellers," in the background section of the decision, presumably replicating a description provided in the briefs; this does not constitute a court's reasoned determination that states are in fact buyers, as Vistra implies. Likewise, EPSA cites to two Commission orders that it claims support the notion that states are buyers. *See* EPSA Protest at p. 43 & fn. 189. In the quote provided from a 2009 PJM order, the Commission is merely describing PJM's own filing (which proposed to eliminate the MOPR in favor of case-by-case engagement by the IMM). And the Commission order that EPSA cites regarding NYISO's buyer-side market power rules discusses application of the MOPR to the New York Power Authority—a public power utility—which is actually a market participant, unlike the "state" as a more general law-enacting entity. *See New York Indep. Sys. Operator, Inc.*, 172 FERC ¶ 61,058, at P 16 (2020).

[159] April 2011 Order at P 124.

[160] *Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288 (2016).

To the contrary, at the same time PJM eliminated the state mandate exemption, it also explicitly "acknowledged the rights of states to pursue legitimate policy interests" and reiterated the rights of states to seek an exemption from the MOPR.[161] Additionally, it *expanded* the existing MOPR exemptions that already permitted zero-price offers for nuclear, coal, and hydroelectric facilities to also include wind and solar resources. The Commission based this decision on a close examination of the differences in lead time, construction costs, avoidable costs, and capacity value differences across the varying resources and concluded that that the nature of developing these other resources was very different and made them "a poor choice for any entity attempting to suppress capacity market prices."[162] In the end, the 2011 MOPR ultimately only applied to gas CT and CC units that the Commission determined were the most likely resources to *actually* be used for the purpose of suppressing capacity market prices, a rationale upheld on review.[163]

Those who characterize the 2011 MOPR Proceeding as the precedent from which the 2018 Expanded MOPR logically flowed might not have read the full decision or appreciated the context in which it was issued – when PJM was still struggling to maintain sufficient capacity throughout RPM – or the specific nature of the state program that led to the decision. However, FERC considered and rejected the same arguments now being advanced by IMM, P3 and others to expand the MOPR to all types of resources on the grounds that "[b]elow-cost offers from gas, nuclear, hydroelectric, wind, or solar facilities all have the same 'price suppression' impacts."[164] In the end, the 2011 MOPR was narrowly tailored to apply only where the Commission confronted what was ultimately deemed to be pre-empted state activity involving a resource type

[161] April 2011 Order at P 143.
[162] November 2011 Order at PP 109–111.
[163] April 2011 Order at PP 152–157; November 2011 Order at PP 109–111; *NJBPU,* 744 F.3d at 106–107.
[164] *NJBPU*, 744 F.3d at 106; April 2011 Order at PP 145–157.

where price suppression in the capacity market was demonstrated as being likely to occur, not to any state action involving any resource type where such impacts theoretically could, but were less likely to occur. This is not the dramatic expansion opponents of PJM's Focused MOPR would make it out to be, and was in line with the intention of the original MOPR that it be very narrowly applied.

Nor is there evidence of a one-way expansion of MOPR to all state revenues across the other RTOs. For example, the Commission granted a 2015 complaint that NYISO's categorial application of buyer-side mitigation rules to state policy revenues supporting renewable resources were unjust and unreasonable and required NYISO to develop rules to accommodate them.[165] In 2017, the Commission found that "ISO-NE has shown, based on substantial record evidence, including expert testimony and economic theory," that its "narrowly-tailored renewables exemption, in combination with ISO-NE's sloped demand curves, balances our responsibility to promote economically-efficient prices, while accommodating states' ability to pursue legitimate policy objectives."[166] In 2018, the Commission denied requests to impose buyer-side mitigation rules on the Midwestern Independent System Operator, finding "unpersuasive that it would be economic for LSEs to procure capacity in the bilateral market at above-market prices in order to suppress prices in the Auction" and dismissing "as unlikely arguments that an LSE would pursue such a strategy to suppress Auction Clearing Prices in order to eventually suppress prices in the bilateral market" – a decision it upheld in 2020.[167]

[165] *New York Pub. Serv. Comm'n*, 153 FERC ¶ 61,022, at PP 47–51 (2015).
[166] *ISO New England Inc. & New England Power Pool Participants Comm.*, 158 FERC ¶ 61,138, at PP 6, 68.
[167] *Midcontinent Indep. Sys. Operator, Inc.*, 162 FERC ¶ 61,176, at P 75 (2018); *reh'g denied,* 170 FERC ¶ 61,215 at P 127 (2020).

As PIOs and many other parties have observed, [168] it is the Commission's June 2018, December 2019, and April 2020 Orders currently on appeal that abandoned years of precedent of a narrowly-tailored MOPR balancing competing interests and in line with the economic demands facing the RPM to require application of the MOPR to new and existing resources that receive out-of-market payments, regardless of resource type, and with few or no exceptions.[169] In the Orders, the Commission summarily dismissed all concerns about the disconnect of the decision from actual resource adequacy conditions or the consequences to RPM of ignoring the increasing demand for clean energy generation among or the associated costs to consumers, pointing out instead that states would have to "appropriately bear the costs of [those] decisions," . . . including possibly having to pay twice for capacity.[170] Commissioner LaFleur described the Commission's proposed intervention as "the most sweeping changes to the PJM capacity construct since the market's inception more than a decade ago" with an inordinately short timeframe and without the ability to engage with states regarding the replacement rate.[171] Commissioner Glick described the Commission's actions as "regulatory hubris."[172] The decision led Dominion Energy Virginia to exercise the FRR Option, citing the expense that would be incurred in its efforts to meet its requirements under the Virginia's clean energy mandate if it remained in RPM due to the expanded MOPR.[173] New Jersey opened a formal investigation

[168] *See also* Harvard Answer at 6.
[169] *See* Req. for Reh'g of Clean Energy Advocates, at 15–17, Docket Nos. EL16-49 et al. (Jan. 21, 2020), Accession No. 20200121-5328.
[170] December 2019 Order at P 41 (citing *NJBPU*, 744 F.3d at 96–97 (quoting *Connecticut PUC*, 569 F.3d at 481)).
[171] June 2018 Order (LaFleur, Comm'r, dissenting at P 1).
[172] Dec. 2019 Order (Glick, Comm'r, dissenting at P 58).
[173] In testimony before the Virginia State Corporation Commission, Dominion Energy's Director of Strategic Planning Glenn Kelly links the decision to elect FRR to FERC's decision to impose the Expanded MOPR. See Tr. of Hr'g, Vol. 2, at 244:4–12, Case No. PUR-2020-00035 (Oct. 27, 2020 Virginia State Corp. Comm'n) (testifying that "if the MOPR goes through [] as written" it was "not really a matter of if, it's a matter of when" Dominion would elect the FRR) ("10-27-2020 VCC Tr."), https://scc.v TR.irginia.gov/docketsearch/DOCS/4q7301!.PDF.

exploring resource adequacy alternatives to RPM,[174] and the Maryland Energy Administration commissioned a study from The Brattle Group estimating the impact of MOPR on Maryland and examining possible alternatives to RPM in the event that the Expanded MOPR was not reconsidered.[175] The Commission has opened its own investigation into whether the current resource adequacy construct—including the application of minimum offer price rules – continue to be just and reasonable in light of the future economic landscape.[176] Taking notice of these developments and assessing the potential impact of them on the long term stability of the RPM is PJM's *duty*. That PJM actively engaged with states, consumers, stakeholders, and the Commission since the December 2019 Order was issued, and based on the extensive and seismic opposition to the MOPR from critical partners, re-evaluated the wisdom of continuing with such an imbalanced policy is to its credit. That PJM's current proposal was the product of a formal stakeholder process, with broad participation from interested parties and the public, instead of rushed issuance without such painstaking input (unlike its 2011 revisions, discussed *supra* at n.120) is to be commended.

a) State Policy Revenues Are Not Inherently Uneconomic

As discussed by PIOs extensively in their Initial Comments, the idea that a state's generation policy revenues given to non-state owned resources turns a state into a buyer or that

[174] *See* Staff of New Jersey Bd. of Pub. Util. & Brattle Group, Alternative Resource Adequacy Structures for New Jersey, Staff Report on the Investigation of Resource Adequacy Alternatives, Docket #EO20030203 (June 2021).
[175] *See* Maryland Energy Admin. and Kathleen Spees et al., *Alternative Resource Adequacy Structures for Maryland: Review of The PJM Capacity Market And Options for Enhancing Alignment With Maryland's Clean Electricity Future* (Mar. 2021), https://energy.maryland.gov/Reports/Alternative%20Resource%20Adequacy%20Structures%20for%20Maryland%20Final%20Brattle%20Study%20March%202021.pdf; Maryland Energy Admin., *Maryland Energy Administration and the Brattle Group Release Study on PJM Capacity Market and Minimum Offer Price Rule* (Mar. 30, 2021), https://news.maryland.gov/mea/2021/03/30/maryland-energy-administration-and-the-brattle-group-release-study-on-pjm-capacity-market-and-minimum-offer-price-rule/.
[176] Supplemental Notice Technical Conference on Resource Adequacy in the Evolving Electricity Sector, Docket No. AD21-10 (Mar. 9, 2021)

the aim of state generation policies is to reduce capacity prices[177] lacks support in theory or fact.[178] As pointed out in 2017 by Commissioner Bay:

> The theory underlying the MOPR also rests on multiple assumptions — assumptions that remain untested. The MOPR is not applied to the state, which may not actually be a buyer and which is acting on behalf of its citizenry, but to the resource, which is offering to sell capacity to the market and which may be a commercial entity. The theory, in other words, assumes such a congruence of interests between the state and the resource that the resource is mitigated for the conduct of the state. Tellingly, while the Commission applies elaborate screens to detect the exercise of seller market power, it does not apply similar screens to detect buyer-side market power in capacity markets. The Commission simply assumes it exists. The Commission has not explored or tested these assumptions in its orders, and it does not know whether they are true.[179]

Since the RTOs and FERC first started their ill-advised forays into treating state support to generators they do not own as an exercise of buyer-side market power, the criticisms and evidence against it has piled up. Prominent and experienced energy sector economists, utility commissioners, state legislators, attorneys, and other practitioners, have been asking when we will end this snipe hunt.[180]

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[177] *See, e.g.,* Vistra Protest at 4 ("instances where the state support provided yields benefits to the state associated with depressing prices below competitive outcomes—in other words, the savings that result from the depressed prices exceed the costs of the support resources receive under the program.") *See generally* IMM Protest, Calpine/LS Power Protest, EPSA Protest.

[178] Brattle Aff. at 1–2.

[179] *N.Y. Pub. Serv. Comm'n et al*., 158 FERC ¶ 61,137 (2017) (Bay, Comm'r, concurring, at *10).

[180] S*ee, e.g.,* Burcin Unel and Sarah Ladin, *Ending the snipe hunt for buyer-side power in PJM and other capacity markets*, Utility Dive (June 21, 2021) at https://www.utilitydive.com/news/ending-the-snipe-hunt-for-buyer-side-power-in-pjm-and-other-capacity-market/602090/. For just a small sample of such criticisms *see also* Commissioner Allison Clements Statement Regarding Response to PJM's MOPR Compliance Filing, Docket No. EL16-49-004 (Jan. 19, 2021); Post-Technical Conference Comments, Docket No. AD 21-10, https://s3.documentcloud.org/documents/20691066/state-legislative-comments-to-ferc.pdf (submitted by State Legislators, including signatures from legislators from Maryland, Indiana, New Jersey, North Carolina, Pennsylvania, and West Virginia); Robert Walton, *New Jersey looks to exit PJM capacity market, worried MOPR will impede 100% carbon-free goals*, Utility Dive (Mar. 31, 2020), https://www.utilitydive.com/news/new-jersey-looks-to-exit-pjm-capacity-market-worried-the-mopr-willimpede/575160/; *New England states push for governance changes in ISO-NE, ahead of anticipated MOPR reform*, Utility Dive (June 7, 2021) (quoting Chair Glick and Connecticut Department of Energy and Environment Commissioner Katie Dykes) at https://www.utilitydive.com/news/new-england-states-push-iso-ne-governance-changes-mopr-caspr-reform/601342/; Michael Goggin & Rob Gramlich, *A Moving Target: An Update on the Consumer Impacts of FERC Interference with State Policies in the PJM Region*, Grid Strategies, LLC, 2–3, 5–6, 8–9 (May 2020),

As PIOs' experts, Dr. Kathleen Spees and Dr. Samuel Newell, who have decades of experience helping to design and evaluate capacity markets (including PJM) have compellingly explained:

> The original and proper economic purpose of the minimum offer price rule (MOPR) is to protect the capacity market from the exercise of buy-side market power. Buy-side market power can occur when a large net buyer of capacity develops (or contracts to develop) excess capacity resources and offers the additional supply into the market below cost in order to suppress market clearing prices. By taking a loss on that small "uneconomic" position, a large net buyer could then benefit from a much larger short position in the market. The MOPR was designed to prevent this behavior. The concept was to ensure that entities with the incentive and ability to engage in manipulative price suppression would be unable to do so by requiring their capacity market offers to reflect full resource costs. Thus uneconomic new resources sponsored by large net buyers would fail to clear (or would set prices at a higher level) and prevent the would-be gaming entity from achieving the benefits of manipulative price suppression.
>
> More recently, the current Expansive MOPR (MOPR-Ex) has repurposed the original MOPR to exclude from the capacity market resources that earn revenues for supporting states' environmental and other policy goals. Resources developed to meet policy goals add supply in the market, which can cause lower capacity prices and displace other types of capacity that might otherwise have been built or retained. Advocates of MOPR-Ex assert that these outcomes unfairly reduce revenues to merchant capacity suppliers, undermine incentives for capacity investments, and threaten system reliability. Applying MOPR to policy resources, they assert, restores capacity prices to the "correct" level that would prevail in the absence of state policies. These arguments rest on flawed economic logic.
>
> There is no sensible economic rationale for applying MOPR to all policy resources. States have any reasons to support capacity supply resources including to limit the harms of climate change, address environmental externalities, improve public health, create jobs, and support economic growth. The policy support awarded to such resources reflects their contributions to state policy objectives; they create environmental attributes or other benefits that states wish to buy and are remunerated for producing those benefits. Such resources are not "uneconomic" because their value is not derived from a scheme of manipulative capacity price suppression. Further, MOPR-Ex has not "leveled the playing

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https://gridprogress.files.wordpress.com/2020/05/a-moving-target-paper.pdf (noting similar estimates from ICF International and Charles River Associates); Miles Farmer & Rob Gramlich, *Whether to FRRexit: Information States Need on the Costs and Benefits of Departing the PJM Capacity Construct*, Miles Farmer PLLC & Grid Strategies LLC, at 8 (May 2020), https://gridprogress.files.wordpress.com/2020/05/whether-to-frrexit-paper7.pdf; Joshua Macey & Robert Ward, *MOPR Madness*, 42 Energy L.J. 67 (Oct. 18, 2020) ("MOPR Madness"), https://www.eba-net.org/assets/1/6/6_-_%5BMacey___Ward%5D%5B67-122%5D.pdf; Jay Morrison, *Capacity Markets: A Path Back to Resource Adequacy*, 37 Energy L.J. 1, 23–28 (2016) ("Path Back to Resource Adequacy"), https://www.ebanet.org/assets/1/6/18-1-60-Morrison_FINAL.pdf.

> field" because it fails to address the environmental and public health externalities that are the primary reason for most of the PJM states' policies in question. MOPR-Ex also does not attempt to undo the effects of all local, state, and federal policies that have always shaped the resource mix, including supporting the development of existing fossil plants and reducing the delivered cost of fossil fuels.[181]

Because the state is not a buyer and therefore cannot exercise buyer-side market power by definition, PJM's current proposal to eliminate the MOPR for state subsidies that are not pre-empted is thus far more in line with precedent that existed from 2006 until 2020. Protestors that maintain this fallacy have provided considerable argument but no actual evidence or rational economic theory to explain how states exercising their explicit authority over generation are serving to manipulate PJM's capacity market. They fail entirely to explain any of the elements of how state policy resources automatically turn the state into a buyer, with a load, that is deliberately trying to suppress capacity market prices for the profit of the state. Nor do they even explain, much less establish with any actual evidence, how it is that all state policies result in uneconomic suppression or that actual market conditions warrant, much less require, such a drastic intervention.[182]

3. Objections to PJM's Conditioned State Support Do Not Establish That It Will Lead to Unjust and Unreasonable Rates

A number of protestors raise objections to the proposed procedures for Combined State Support. Some of them raise points with which we agree. For example, the IMM is correct that PJM's proposed definition of Conditioned State Support, insofar as it directs bidding behavior,

[181] Brattle Aff. at 1 (citations omitted).

[182] Although protestors argue that without artificially high prices in the capacity markets merchant investment will not be able to compete and reliability will be threatened, aside from unsupported allegations, there is no actual evidence in the record of this proceeding showing how merchant gas providers will not *actually* be able to recoup their initial investment, much less that they will lack an *opportunity* to do so. To the contrary, the most recent BRA had a large influx of new gas resources even at the lowest clearing price in over a decade. Protestors have pointed to the recent BRA as evidence that the Commission need not rush to fix MOPR; by implication, they agree that lower clearing prices do not prevent merchant gas generation from competing. This makes sense—in a capacity market with a sloped demand curve, if gas resources are necessary to meet reliability, they will be the marginal resources and will be guaranteed to receive their "missing money." Brattle Aff. at 19-20.

does not actually match the test for pre-emption in *Hughes* and could inappropriately subject to the MOPR offers that would not actually be preempted.[183] While the IMM also admits that states will so easily be able to draft around this possibility as to render it meaningless, he nevertheless argues that the provision should be rejected.[184]However, the IMM's objection to Conditioned State Support ultimately centers on his view that states must be treated as having "market power" and all state support as inherently uneconomic, regardless of purpose, a view that does not comport with fundamental market theory.[185]

Vistra also argues that the Conditioned States Support definition would result in over-mitigation because the standard is indifferent to whether the incremental cost of the support outweighs any cost savings and argues that PJM is ill suited to make findings as to whether a state program is pre-empted under *Hughes*—points with which we also agree.[186] However the bulk of Vistra and Dr. Quinn's objections to Conditioned State Support provision are, like the IMM, really objections to the fact that it does not treat state revenue streams as an exercise of buyer-side market power.[187]

We note that the PA PUC and OH PUC generally support PJM's proposal to limit the application of MOPR to instances of Conditioned State Support, but express concerns that the exemption for Legacy Policies could sanction existing violations of *Hughes*.[188] However, the PA PUC and OH PUC has failed to provide any current examples where this might be the case. Additionally, PJM's proposed Legacy Policy exemption certainly does not prevent any

[183] IMM Protest at 5–6.
[184] *Id.*
[185] *Id.* at 4–7; *cf.* Brattle Aff. at 1–2.
[186] Vistra Protest at 12-14; Quinn Aff. at ¶¶ 31–34.
[187] IMM Protest at 8-10; Vistra Protest at 3-4
[188] PAPUC/OHPUC Protest at 7-9.

negatively affected party from seeking redress in a court of law—which is best suited to properly weigh whether a state has actually exceeded its jurisdictional authority—nor does it even prevent a party from filing their own 206 with FERC if they desire. In other words, the Legacy Policy Exemption does not provide a shield for states that have crossed a jurisdictional line, so OH PUC and PA PUC's concerns should not prevent FERC from approving PJM's proposal.

E. PJM's approach does not accommodate some states at the expense of others or at the expense of reliability

1. Arguments that other states will be harmed or have their policies impinged are incorrect

PJM's focused MOPR is not primarily about accommodating state policies; it is about ensuring that rates are just and reasonable in light of the reality that resources are built or retained to satisfy the requirements of state policy and thus, RPM prices should reflect the existence of that capacity. Any argument that PJM is choosing to accommodate some states over others reflects a misunderstanding of the basis for PJM's filing, as well as series of factual errors about its likely effects. Notably, the joint protest of the Pennsylvania PUC and Ohio PUC does not take issue with PJM's approach to state policies as a general matter—that protest specifically endorses PJM's limitation of mitigation to state policy resources to circumstances where benefits are offered "in exchange for the sale of a FERC-jurisdictional product conditioned on clearing in any RPM Auction."[189] Those PUCs observe that "This condition preserves individual state authority without damaging the market as a whole."[190]

[189] PAPUC/OPUC Protest at 7.

[190] *Id.* at 8. More ambiguous statements of concern from state policymakers about the impacts of state policies on supposedly non-subsidizing states should not be read to supersede this more considered view from the duly-appointed regulators in those states.

Instead, arguments that the focused MOPR shifts the costs of state policies to other states are made primarily by market participants.[191] As noted by PJM, the effect of allowing wholesale rates to reflect compensation provided under state and local policies is to lower capacity costs for all consumers in PJM.[192] We did not find any party that disputed this effect, at least as a short-run matter. Some parties do assert a "cost shift" to electric market competitors of resources that earn revenues under state policies.[193] But what is portrayed as a cost-shift is simply a (possible) reduction in those competitors' revenue, not an increase in costs.

Nor are consumers or other states harmed in the long-run by wholesale rates that reflect the reality of state policies. Some have contended that states that choose to rely on "competitive markets" will no longer be able to as a result of the focused MOPR.[194] This argument relies upon the notion that without the Expanded MOPR, capacity prices will fall too low to incentivize investment in the region. But as experts from the Brattle Group explain, low prices will only occur in an environment of capacity abundance.[195] If some resources exit the market or delay entry based on lower prices, this is the appropriate response, not a problem. If the current glut of capacity in PJM ever abates, prices will rise as new entrants see opportunity in a leaner market. Concerns that lower prices in PJM's capacity market will cause reliability problems most often reflect a misunderstanding of how the downward sloping VRR curve works, or a misguided equation of the financial interests of individual suppliers with the health of the market overall.

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[191] *See, e.g.*, EPSA Protest at 21–26; P3 Protest at 50–51.
[192] PJM Transmittal Letter at 10 (quoting Graf Aff. at ¶ 17, n.3).
[193] Cain Aff., ¶ 38 ("The same sort of buyer-side effects push the cost of state policies to unsubsidized, competitive resources that do not receive state preferences and experience reduced revenue.").
[194] *See, e.g.*, Carroll County/South Field Protest at 11–13; EPSA Protest at 25 ("consumers in non-subsidizing states will ultimately bear the associated costs, either when their states are forced to subsidize resources as well or when PJM has to resort to RMR-type mechanisms.").
[195] Brattle Aff. at 18 ("If the capacity market consequently produces low prices, this is correctly signaling an oversupply of capacity, that no more investments are needed for resource adequacy, and that the least valuable resources should retire.").

P3 witness Dr. Quinn tries a different approach to arguing that states without clean energy policies may be harmed by PJM's proposed tariff, but this one is also misleading. Dr. Quinn notes that Professor Cramton's model results showing that capacity prices will rise at times to $300-450/MW-day under a narrow MOPR.[196] Dr. Quinn does not describe why he credits this particular result from Professor Cramton's modeling on the heels of several paragraphs questioning the validity of that model. Even worse, Dr. Quinn conveniently omits that Professor Cramton's model shows similarly high prices under the expanded MOPR, giving the false impression that the modeling results show high prices *only* with the focused MOPR.[197]

Parties also contend that focused MOPR might not necessarily cause resource adequacy shortfalls, but instead could result in different reliability problems depending on which resources retire. For example, the Natural Gas Supply Association ("NGSA") asserts that increased growth of intermittent resources will require "greater reliance on peaking units, such as fast start, fast-ramping and fast-stop units, that only run a few (yet critical) times per year," and that "these units will need to heavily rely on the capacity market for adequate revenue to maintain their financial viability as well as to incent capital investment."[198] NGSA is correct that resource capabilities like fast-start, fast-ramping, and fast-stop, will be essential to a reliable decarbonized grid, but it is a serious error to think that such resources should be compensated primarily through the capacity market, which doesn't compensate directly for any of these capabilities, but instead only for an undifferentiated year-round commitment to availability. It is hard to think of a worse mechanism for incentivizing the development and retention of resources with these

[196] Quinn Aff., ¶ 29.
[197] *See* Cramton Aff. at 16, Fig. 4.
[198] NGSA Protest at 8.

capabilities than the capacity market.[199] Fortunately, the Commission and PJM are both at work evaluating more efficient and effective mechanisms for such procurement.[200] Allowing continued inflation of capacity prices in a blind attempt to procure flexible resources serves no one's interest; indeed, over-procurement actually blunts the energy and ancillary service price signals that *do* reward flexibility.

2. The Commission is not obligated to prevent one state's policy from affecting another.

EPSA contends that the FPA, through its authorization of the Commission to prohibit "unduly discriminatory or preferential" rates, incorporates principles of "horizontal federalism."[201] These principles of horizontal federalism, EPSA contends further, "'protect[] against inconsistent legislation arising from the projection of one state regulatory regime into the jurisdiction of another state.'"[202] Absent an expanded MOPR, EPSA argues, PJM would allow states which support the development or retention of certain generation resources to "project" their policy choices relating to generation onto neighboring states, an outcome which is impermissible under the dormant commerce clause.

This argument finds no support in jurisprudence interpreting the Federal Power Act, misreads judicial precedent applying the dormant commerce clause, and ignores recent appellate decisions upholding state generation policies against both FPA and dormant commerce clause challenges. Tellingly, EPSA does not cite a single case construing the Federal Power Act's

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[199] *See generally* Michael Hogan, *Hitting the Mark on Missing Money: How to Ensure Reliability at Least Cost to Consumers* (Sept. 2016), at https://www.raponline.org/wp-content/uploads/2016/09/rap-hogan-hitting-mark-missing-money-2016-september.pdf.

[200] Notice of Technical Conference on Energy and Ancillary Services Markets, Docket No. AD21-10 (July 14, 2021), Accession No. 20210714-3026; PJM Transmittal Letter at 4 (noting PJM Board commitment to examining "PJM's procurement of additional reliability-based services, with a particular focus on reliability needs in the face of the changing resource portfolio and increased penetration of intermittent resource technologies.").

[201] EPSA Protest at 16–18.

[202] EPSA Protest at 17 (quoting *Healy v. Beer Inst.,* 491 U.S. 324, 336–337 (1989)).

prohibition against "discriminatory or preferential" rates as invoking principles of horizontal federalism.[203] To the contrary, the Seventh Circuit Court of Appeals (in a case brought by EPSA), rejected a dormant commerce clause challenge to state generator subsidies on the ground that far from *incorporating* court decisions interpreting the Dormant Commerce Clause, Section 824(b)(1) of the FPA reflects a decision by Congress to permit states to regulate the generation mix within its borders notwithstanding effects on other states, including through "cross-subsidies" between generators:

> The commerce power belongs to Congress; the Supreme Court treats silence by Congress as preventing discriminatory state legislation. Yet Congress has not been silent about electricity: it provided in § 824(b)(1) that states may regulate local generation. In *Prudential Insurance Co. v. Benjamin*, 328 U.S. 408, 66 S.Ct. 1142, 90 L.Ed. 1342 (1946), the Court rejected a constitutional challenge to a statute that permits states to close their borders to insurance written in other states—a statute that even permits states to supersede national legislation on the topic of insurance. Section 824(b)(1) does not go that far; it does not authorize express discrimination. But it does mean that the balancing approach of decisions such as *Pike v. Bruce Church, Inc*., 397 U.S. 137, 90 S.Ct. 844, 25 L.Ed.2d 174 (1970), which ask whether a state's interest is strong enough to justify an interstate effect, does not apply to a state's regulation of electric capacity or a cross-subsidy between carbon-emitting generation and carbon-free generation.[204]

Even if dormant commerce clause precedent applied directly (and is not limited by the FPA's assignation of generation authority to states), EPSA misreads it. In *Healy*, the Supreme Court held that Connecticut could not prohibit out-of-state shippers from selling beer at higher wholesale prices *within* Connecticut than in other states—in effect, reaching out to regulate the prices offered by out-of-state sellers in those other states.[205] From this principle, EPSA attempts to claim that states are prohibited from offering compensation to *in*-state generators, or imposing

[203] *See* EPSA Protest at 17–18, n.85.
[204] *Elec. Power Supply Ass'n v. Star*, 904 F.3d 518, 525 (7th Cir. 2018).
[205] *Healy v. Beer Inst., Inc.*, 491 U.S. 324 (1989).

portfolio standards on in-state utilities, to promote generation that has reduced environmental impacts on *in*-state citizens, because those policies may tend to reduce capacity prices received by generators in other states. Nothing in *Healy*'s prohibition against states' efforts to regulate conduct *outside* their borders prevents states from regulating or incentivizing *in*-state conduct in a manner that has incidental effects on commerce in other states. So long as "the statute regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits."[206] Appellate courts applying *Healy* have repeatedly held that efforts to regulate the *in*-state side of an interstate transaction do not run afoul of *Healy*'s prohibition on extraterritorial projection of state policy.[207] In short: State programs that "promot[e] increased production of renewable power generation in the region, thereby protecting its citizens' health, safety, and reliable access to power...are well within the scope of what Congress and FERC have traditionally allowed the States to do in the realm of energy regulation."[208]

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[206] *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970).

[207] *See Rocky Mountain Farmers Union v. Corey*, 913 F.3d 940, 952 (9th Cir. 2019); *S. Goldmen & Co. v. N.J. Bureau of Sec.*, 163 F.3d 780 (3d Cir. 1999). EPSA wildly mischaracterizes the way most state clean energy policies work in its zeal to portray them as having impermissible effects on other states, stating: "New Jersey has no business dictating whether new fossil-fired generation is built – or existing fossil-fired generation continues to operate – outside the state's borders, and it certainly has no entitlement to see the resources that it elects to subsidize displace economic out-of-state resources." EPSA Protest at 24–25. EPSA points to no New Jersey policy that makes any "dictates" regarding the construction or operation of fossil-fuel facilities outside its borders. Nor does a shift to focused MOPR reflect a view that states are "entitled" to have the resources they support displace out-of-state resources; the focused MOPR simply allows resources to participate in the auction at their actual "missing money" level that reflects the revenues earned through sale of environmental attributes.

[208] *Allco Fin. Ltd. v. Klee*, 861 F.3d 82, 106–07 (2d Cir. 2017) (citing *New York v. FERC*, 535 U.S. at 24, 122 S.Ct. 1012 ("FERC has recognized that the States retain significant control over local matters even when retail transmissions are unbundled."); *Ark. Elec. Co-op. Corp.*, 461 U.S. at 377, 103 S.Ct. 1905 ("[T]he regulation of utilities is one of the most important of the functions traditionally associated with the police power of the States."); *Entergy Nuclear*, 733 F.3d at 417 (" '[S]tates have broad powers under state law to direct the planning and resource decisions of utilities under their jurisdiction. States may, for example, order utilities to build renewable generators themselves, or ... order utilities to purchase renewable generation.'") (quoting S. Cal. Edison Co., 71 FERC ¶ 61,269 at *8 (1995)) (alteration in original).)

Aside from the spurious claim that the Commission is responsible for enforcing a version of the dormant commerce clause that courts do not recognize, the Commission is also not obligated to prevent consumers in one state from being affected by other states' policies. The lack of judicial support for EPSA's broad horizontal federalism is unsurprising given that its adoption would lead to absurd results. EPSA insists that FERC is tasked under the FPA with imposing "a strong MOPR or something like it" to "protect" states from any effects of other states' internal policies for in-state generation.[209] If this were true, FERC would have to develop some kind of mitigation strategy for *any* benefit a generator received as a result of state law (including property tax exemptions, eminent domain authority for pipeline construction, or industrial development support), or indeed *any* regulation of in-state generation that could be shown to impact wholesale market clearing prices—upward or downward. Other states could complain, as EPSA contends Pennsylvania and Ohio have, that the impact of these benefits or regulations will be "export[ed]" to other states via the capacity market.[210] But it is absurd to suggest FERC can (much less should) comb through state laws to search for every possible state policy that could impact an in-state generator's wholesale market bid in an effort to cabin any price impacts on other states' generators.

Notably, not even the expanded MOPR previously ordered by the Commission preferred by EPSA adopted such a sweeping principle. The prior Order excluded "generic industrial development and local siting support" from mitigation.[211] But as Clean Energy Advocates pointed out in their request for rehearing on this order, "a public entity seeking to maintain the operation of an otherwise uneconomical resource"—and thus have the same purported price

[209] EPSA Protest at 16, 19.
[210] *See* EPSA Protest at 24.
[211] December 2019 Order at ¶ 83.

suppression impacts on generators in other states that EPSA complaints about—can do so through 'industrial development' and 'siting' subsidies or tax rebates."[212] EPSA now offers a novel justification for an expanded MOPR not as a mechanism of protecting the whole *market* from distortion but protecting *states* from other states' policies, but this justification either invites the same invidious discrimination between state policies or an unlimited mandate for FERC to replace generator bids with administratively-determined prices whenever a generator benefits from an in-state policy.

More fundamentally, EPSA's insistence that an expanded MOPR is necessary to protect state sovereignty under federalism principles is a category mistake. The wholesale price mitigation EPSA now advocates for is both an over- and under-inclusive remedy for the putative constitutional violation EPSA identifies: An expanded MOPR both affects the rates received by generators outside of states with supposedly objectionable policies *and* allows the state programs to continue operating, notwithstanding any legal deficiency. If a state subsidy violates the Federal Power Act or attempts to discriminate against or regulate out-of-state generators in violation of the Commerce Clause, the appropriate remedy is not a price floor in the wholesale market, but a judicial order invalidating the state program.[213] Indeed, EPSA has repeatedly attempted to avail itself of such judicial remedies in recent years, asserting overreach on both states' and FERC's behalf, without success.[214]

P3 joins EPSA's argument and further contends that the Commission's duty under the FPA is to serve as a neutral arbiter among states. But the cases cited by P3 regarding the

[212] RFR at 59.
[213] *See Hughes,* 136 S.Ct. at 1299 n.13 (having invalidated Maryland's program, the Court declined to address whether the program is preempted because it "interferes with the capacity auction's price signals.
[214] *See EPSA v. Star*, 904 F.3d 518 (7d Cir. 2018) (rejecting EPSA challenge, on FPA and dormant commerce clause grounds, to state nuclear cross-subsidy); *FERC v. EPSA*, 577 U.S. 260 (2016) (rejecting EPSA challenge to FERC regulation of wholesale rates for demand response on grounds that it encroached on state authority to set retail rates).

Commission's role in cost allocation among the states do not stand for the broader proposition that the Commission must ensure a hermetic seal around each state.[215] They merely establish that where FERC has approved wholesale rates encompassing cost allocation, states may not seek to circumvent that allocation through their retail regulatory authority. This is dramatically different from the Commission proactively using its wholesale rate authority to go around negating every manner of state policy.

F. Replacement of the Expanded MOPR is urgently needed, and the Commission should not delay in accepting the just and reasonable approach before it.

1. The results of the 2022/23 Base Residual Auction do not obviate the need for MOPR reform, or its urgency.

Several commenters claim that results of the Base Residual Auction for the 2022/23 delivery year undermine the need for MOPR reform.[216] Commenters variously claim that the auction's low prices show the Extended MOPR does not artificially inflate prices, create a barrier to clean energy resources, or force procurement of redundant capacity.

A well-designed market will result in prices that accurately reflect supply and demand fundamentals. Compared with the 2021/22 BRA, the demand for capacity was lower: PJM's load forecast decreased by 2,418 MW, PJM adopted a new VRR curve that lowered Net CONE by 7.4% to 28.0% and reduced demand 1%, and a large utility choose to exit the market by opting for an FRR plan. Supply into the auction also increased simply by virtue of the auction being held two years later than usual, allowing for participation by new generation that otherwise wouldn't have met necessary milestones. Supply in many regions also increased thanks to greater availability of transmission import capacity. Given the number and magnitude of factors

[215] *See* P3 Protest at 50 & n.177.
[216] EPSA Protest at 14; P3 Protest at 29–31; Calpine/LS Power Protest at 21; Cogentrix Protest at 12.

pushing RPM prices lower, the results of the 2022/23 BRA can not be taken as demonstrating that the Extended MOPR did not raise prices relative to what they otherwise would have been.

On the contrary, there is concrete evidence that the Extended MOPR did artificially inflate 2022/23 results. Exelon's share of the Quad Cities plant—a facility with approximately 1,350 MW of capacity—did not clear due to the MOPR, which inevitably raised prices in the constrained ComEd zone and likely raised prices across the RTO region. According to Exelon and PSEG, approximately 188 MW of Exelon-owned energy efficiency resources also failed to clear due to MOPR.[217] Exelon and PSEG estimate that capacity prices in the ComEd zone increased by approximately $90 million for the 2022/23 Delivery Year as a result.[218] Exactly as predicted, the Extended MOPR has resulted in PJM procuring capacity that is known not to be needed at ratepayer's expense. Indeed, in light of PJM's chronic excess capacity,[219] the clearing prices in the 2022/23 BRA may still be inflated above a level that accurately reflects the regions' actual resource adequacy needs and supply situation.

Opponents of the Extended MOPR have consistently argued that the barriers it erects to new clean energy resources will become apparent over years, as new resources are built to meet states' clean energy policies.[220] Commenters ignore this, preferring to attack a straw man of their own construction claiming that effects would be seen immediately. The increase in wind

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[217] *See* Exelon/PSEG Comments at 9.
[218] *See id.* at 2.
[219] *See, e.g.,* Feb 2020 Wilson Study *See, e.g.*, North American Electric Reliability Corporation, *2021 Summer Reliability Assessment,* at 28 (2021) ("[PJM's] Installed capacity is almost double the Reference Margin Level."). *See also* James F. Wilson, *Over-Procurement of Generating Capacity in PJM: Causes and Consequences* (2020).

[220] *See, e.g.*, Catherine Morehouse, *PJM MOPR could cost market consumers up to $2.6B annually, report finds*, Utility Dive (May 19, 2020) ("But while it's widely been accepted by stakeholders that costs are not anticipated to rise in the next capacity auction, Grid Strategies' 'conservative' estimate finds that over the long term, the 'MOPR will result in billions or tens of billions of dollars in excess costs to electricity consumers across PJM,'…"), https://www.utilitydive.com/news/pjm-mopr-could-cost-market-consumers-up-to-26b-annually-report-finds/578183/.

and solar resources in the 2022/23 BRA is to be expected: BRAs are ordinarily conducted at one-year intervals, while the 2022/23 BRA was not held until three years after the 2021/22 BRA. All else equal, new wind and solar would be expected to be roughly triple the amount usually seen. The Extended MOPR exempted state supported clean energy resources entering interconnection agreements prior to December 2019, further reducing any effect in the 2022/23 BRA. Contrary to the assertions of EPSA witness Cain, the continued clearing by state-supported resources are largely an artifact of timing, not evidence that the Extended MOPR does not impact those policies.[221] Even protestor P3 concedes that 93% of the renewable resources offered into the 2022/23 BRA were exempt from the MOPR. All told, there was no expectation that Extended MOPR would have a significant effect on renewables in 2022/23. That the auction played out as expected and is not evidence that the Extended MOPR will not become a barrier to state clean energy policies.[222]

One element of the 2022/23 BRA *was* a surprise—approximately 4,300 MW UCAP of new gas combined cycle plants entered the auction at historically low prices that were less than 20% of the administrative net CONE.[223] That such a significant quantity of new combined cycle resources made such low capacity supply offers shows that the Commission's concerns, expressed in the December 2019 order, about resource adequacy and the viability of the merchant generation model in PJM should capacity prices decline have not panned out. While we have explained elsewhere that capacity prices will rise as needed to incent new entry, it appears that may not be necessary, and that new merchant entry will occur even at substantially

[221] EPSA Protest at 14; Cain Aff., ¶ 32.
[222] Commenters disingenuously present the increase in cleared nuclear power as evidence that the Extended MOPR is not a barrier to carbon-free energy. These comments gloss over the fact that nearly three quarters of the increase in nuclear was due to plants included in FRR plans and so unaffected by the MOPR. PJM, *RPM Commitment by Fuel Type by DY*, at BRA-FRR by fuel type tab (2021), https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/rpm-commitment-by-fuel-type-by-dy.ashx.
[223] Brattle Aff. at 21–22.

lower prices than previously expected. The Commission should view this particular auction result as an important piece of new information since its December 2019 order.

In short, the auction results do not show that MOPR reform should be delayed any further, but instead that the time for reform is now. As noted above, the effects of the MOPR are already being felt, most obviously by customers in the ComEd zone. If the Commission delays in remedying what is an unjust and unreasonable rate, such as by waiting until large quantities of offshore wind facilities procured pursuant to state programs do not clear, the pressure will be on the Commission to re-run auctions conducted under unreasonable tariffs will only increase. Moreover, each auction conducted under the MOPR will continue to clear unneeded new fossil-fuel-burning resources, furthering the capacity bubble that already exists in the region and leading to many disappointed (and perhaps litigious) investors.

2. State policies are not otherwise sufficiently accommodated by PJM's markets to justify continued unjustified barriers in the capacity market.

EPSA witness Cain claims that state-supported resources are "accommodated" elsewhere in PJM markets.[224] EPSA offers no explanation as to why this is relevant to whether the focused MOPR will result in just and reasonable rates for capacity, so perhaps it is intended merely as an airing of grievances. However, witness Cain makes assertions regarding the functioning of PJM's capacity market that bear correcting.

Witness Cain claims that the Extended MOPR only leads to purchases of excess capacity when the state subsidy involves payments for capacity. This is incorrect. When a state causes new generation to be built, regardless of the mechanism by which it does so, that generation exists and has real, measurable effects on the region's resource adequacy needs. The Extended MOPR causes excess capacity purchases by preventing the beneficial effects of state supported

[224] Cain Aff., ¶¶ 11–15.

generation from being considered in determining the amount of capacity needed. Capacity is purchased to meet a need that is, in actuality, met by the state-supported resource. The result is a resource adequacy construct based on fiction. While comforting fictions may inappropriately increase the confidence of investors, they cannot be the basis of just or reasonable tariffs.

Witness Cain offers the opportunity for non-capacity resources to receive bonus payments as somehow compensating for purchases of excess capacity. He supports this with an assertion that PJM's capacity market assigns reliability value to non-capacity resources.[225] In fact, PJM does not; the reliability value of merchant non-capacity resources is considered nowhere in PJM's resource adequacy planning.[226] From the point of view of PJM's capacity market and capacity cost to ratepayers, non-capacity resources in PJM have no value.

The claim that the revenue opportunity from bonus payments compensates state-supported resource owners from being excluded from the capacity market fares no better. In PJM's market, bonus payments are funded by penalties on capacity resources that underperform during Performance Assessment Intervals ("PAIs"). The Commission has already determined that the estimate of the number of expected PAIs used to calibrate those penalties is unreasonably high.[227] Because PAIs are in the denominator of the penalty calculation, the result is a penalty rate far too low to serve as witness Cain describes. Based on historical data, a capacity resource that never performed during any PAIs would still expect to earn close to 100% of its capacity revenue; a non-capacity resource that covered for this non-performing resource during every single PAI would expect to earn close to nothing in bonus payments. The capacity

[225] *Id.* at 35.
[226] PJM does consider the load offsetting ability of some non-capacity behind-the-meter resources, and the diversity benefits of neighboring RTOs, but neither of those are at issue here.
[227] Order Granting Compls. and Ordering Additional Briefing, at 65, Docket Nos. EL19-47, EL19-63 (Mar. 18, 2021), Accession No. 20210318-3045.

performance bonus/penalty structure is not an adequate substitute for market participation for either the excluded resource owner or overall efficient market operation.

3. The Commission Need Not Consider Alternative Proposals to Realize State Policy Objectives in Order to Approve the Just and Reasonable Rates PJM has Filed, Nor Delay Until Other Contemplated Market Reforms are in Place.

Commenters suggest several other approaches to MOPR reform. NGSA calls for a "comprehensive review" of PJM's markets and offers carbon pricing as their preferred solution.[228] NRG encourages "more holistic market-based solutions" and proposes integrating clean energy attributes into FERC jurisdictional markets.[229] The Ohio Consumers' Counsel would prefer reviving the resource-specific FRR approach.[230] The IMM puts forth their own MOPR proposal based on net avoidable cost rate and with a different set of exemptions and market screens.[231]

As a threshold matter, none of these proposals are properly before the Commission. Instead, the Commission must determine whether PJM's proposed tariff is just and reasonable, and not if alternatives are superior.[232] The Commission thus need not consider the merits of any proposed alternative approaches.

Even if the Commission were to consider them, some of the commenters' alternatives fall short of addressing the core problem that PJM's filing seeks to remedy—unjust and unreasonable capacity prices due to excessive mitigation of supply offers based on an expansive notion of buyer-side market power and "price suppression." Carbon pricing and the integration of environmental attribute procurement into centralized wholesale markets do not address this core

[228] NGSA Protest at 4–5.
[229] NRG Protest at 17–18.
[230] OCC Protest at 8–13.
[231] IMM Protest at 17–24.
[232] *See, e.g.*, *Cal. Indep. Sys. Operator Corp.*, 128 FERC ¶ 61,265, at P 21 (2009).

problem, but instead are presented by certain commenters as a means to displace existing state policy mechanisms. While these policies may show promise once better developed, and assuming states and local governments are not compelled to opt into them in order to avoid mitigation of offers affected by state policies, they are in no way a viable alternative to PJM's instant filing. Proposals to incorporate a resource-specific FRR[233] are responsive to the core problem addressed in PJM's filing, and are worth further consideration by PJM and its stakeholders as they seek to refine the capacity market's compatibility with the changing resource mix.

This proceeding happens during a period of rapid and accelerating transition in the electricity supply resource mix.[234] There is general consensus that planning and operations must be updated to adopt to this changing reality. Commenters take advantage of this situation to assert that retaining the Expanded MOPR is necessary to maintaining reliability through these changes.[235] Those assertions are incorrect for at least three reasons: (1) they are unsupported by the Commissions' earlier MOPR findings; (2) the Extended MOPR, or any market power mitigation tool, is ill-suited to managing reliability; and (3) the alleged reliability concerns have either already been addressed or are under active discussion in other forums.

Commenters attempt to retroactively paint the Expanded MOPR as intended to exclude allegedly less reliable renewable resources from the capacity market.[236] However, the Commission has never entertained such an argument. The relative reliability value of renewables vs. traditional resources is considered nowhere in either of the Commission orders

[233] See, e.g., Comments of the Organization of PJM States, Inc. at 4-5 (advocating development of a tailored resource-specific FRR for nascent technologies).
[234] *See, e.g.,* PJM Filing at 7 & n.12.
[235] Calpine Protest at 30 and throughout; PAPUC/OPUC Protest at 16–18; OCC Protest at 2.
[236] PAPUC/OPUC Protest at 16–18; OCC Protest at 2–3.

establishing the Expanded MOPR.[237] There is simply no evidence that the Expanded MOPR was intended to support reliability through the transition to a high renewables electricity supply.

This is wise, as the Expanded MOPR—or any market power mitigation tool—cannot serve this function. As NRG correctly notes, the MOPR is about rates, not reliability.[238] The Expanded MOPR inhibits state supported resources from participating in the capacity market based on those resources' administratively determined costs. Such a screen indiscriminately excludes both traditional and renewable resources. Data provided by P3 shows that in the 2022/23 BRA, out of 12,030 MW of capacity subject to the MOPR, only 633 MW came from solar, wind or hydro resources.[239] Only 5% of the resources subject to the MOPR are of the types that commenters assert could raise reliability concerns, while 95% were traditional generation or demand side resources. Retaining the MOPR to exclude specific technologies would be unjust and unduly discriminatory to the vast majority of resources affected. Conversely, there is no assurance the Expanded MOPR would function to exclude any particular technology. It may well be that the going-forward costs of variable resources drops to be lower than competing technologies; in this case, they would be unaffected by the MOPR. As P3 notes, 75% of the MOPR renewable resources cleared the auction,[240] giving the lie to any claim that the MOPR is suitable to address alleged reliably issues stemming from those technologies. Using the MOPR to manage resource adequacy through the transition to renewable power would be no better than relying on luck.

[237] See generally June 2018, December 2019, and April 2020 Orders.
[238] NRG Protest at 11.
[239] P3 Protest, Attach. I at Table 3. We note that Attachment I consists of spreadsheet excerpts with no documentation of any kind as to where the data originated. Thus, it is impossible for other parties to verify the accuracy of the data. However, the data P3 presents regarding quantity of resources subject to the MOPR in this past auction generally comports with the understood impacts in this initial auction.
[240] *Id.*

Finally, commenters allege that absent the MOPR, renewable resources will displace traditional supply with no regard for their different reliability characteristics. This is patently incorrect; as PJM has well recognized, the capacity market must value all technologies based on their actual contribution to maintaining resource adequacy. Under PJM's recently approved effective load carrying capability methodology, renewable resources are evaluated using a rigorous modeling of their intermittency and load characteristics.[241] These rules ensure that renewable resources may only replace thermal generation to the extent that they maintain equivalent reliability; in many cases this results in renewables only being awarded a small fraction of their nameplate output.

NGSA raises a variation on this theme, that the MOPR should be retained while any need for new ancillary services is determined. In fact, PJM has remained well ahead of any potential issues on this front, completing an extensive renewable integration study that concluded that the PJM system would not have significant reliability issues with up to 30 percent of its energy provided by wind and solar generation.[242] PJM has also anticipated new ancillary service needs by incorporating renewable variability into their process for determining quantities of reserves to be held.[243] Claims that the Extended MOPR should be retained pending development of new ancillary services should be seen for the delaying tactic they are.

G. Neither PJM nor the Commission are Estopped from Reconsidering the Ill-Conceived Expanded MOPR Through the Instant Section 205 Filing.

Finally, P3 contends that PJM's Section 205 filing is barred as a collateral attack on the Expanded MOPR and 2011 MOPR Orders.[244] Not so. Although the Commission may, as a

[241] *PJM*, 176 FERC ¶ 61,056.
[242] PJM, *Renewable Integration Study Report*s, https://www.pjm.com/committees-and-groups/closed-groups/irs/pris.aspx (last visited Sept. 7, 2021).
[243] *See Enhanced Price Formation in Reserve Markets of PJM*, at 58–59, Docket No. (Filed March 29, 2019 in ER19-1486 (Mar. 29, 2019), Accession No. 20190329-5252) at 58-59.
[244] P3 Protest at 37–53.

matter of policy, decline to consider petitions that seek to relitigate prior issues in the absence of intervening events or novel arguments, the Commission's statutory touchstone always remains—ensuring that rates are just and reasonable and it may, accordingly, reconsider prior decisions that have led to unjust or unreasonable rates. "FERC has a continuing obligation to ensure that…rates are just and reasonable…."[245] Accordingly, "[a] finding that a rate is just and reasonable in one proceeding does not foreclose a finding that a *different* rate is just and reasonable in a subsequent proceeding."[246]

As outlined by both PJM's original filing and stakeholder responses, there is ample evidence of the unworkability of the expanded MOPR following the Commission's December 2019 Order. The impact of the expanded MOPR on resources developed under an increasing number of state policies encouraging renewables and the likelihood, given this growth, of a "market" where a significant proportion of resources are subject to administratively set prices due to overly broad mitigation are well founded concerns that have gained new urgency in the past 18 months.[247] As discussed *supra* at page 58-60, P3's contention that the May 2021 BRA for the 2022–23 Delivery Year shows concerns about these impacts are unfounded is misleading. There is strong evidence to suggest the failure of nuclear resources to clear cost customers in the ComEd Zone $90 million in increased capacity prices and no evidence that renewable resources—the vast majority of which were not subject to the Expanded MOPR due to the exclusion of resources with interconnection agreements pre-dating December 2019—will not be impeded in their ability

[245] *The United Illuminating Co.*, 119 FERC ¶ 61,182, 62,158 (2007) (quoting *Texas Eastern Transmission Corp*., 893 F.2d 767, 774 (5th Cir. 1990)).
[246] *Ontelaunee Power Operating Co., LLC*, 119 FERC ¶ 61,181, 62,140 (2007) (citing *Tagg Brothers v. Moorhead*, 280 U.S. 420, 445 (1930)); *Texas Eastern Transmission Corp*., 893 F.2d 767, 774 (5th Cir. 1990) (a finding that a rate is reasonable in one proceeding does not foreclose a contrary finding in a subsequent proceeding); *Utah Power & Light Co*., 27 FERC ¶ 61,258, 61,485, *reh'g denied*, 28 FERC ¶ 61,088 (1984), *aff'd sub nom*. *Sierra Pacific Power Co. v. FERC*, 793 F.2d 1086 (9th Cir. 1986) (res judicata does not bar a party from seeking reconsideration of whether to roll in rates in a second rate case).
[247] *See* Comments of PIOs at 63–64 (discussing significant examples of new policies since 2019).

to clear the auction by application of the MOPR going forward.[248] P3 dismisses the exit of one major load serving entity ("LSE") from the capacity auction altogether—and the prospect of several states directing their LSEs to follow suit—as of secondary concern to price maintenance. P3 would apparently prefer *no* market to one which does not reflect its chosen policies.[249] But even if ensuring sufficiently high capacity prices were PJM's primary priority, there is evidence post-dating the December 2019 order showing the election of the FRR alternative by even one major LSEs dramatically decreases capacity prices—precisely the opposite effect the Expanded MOPR was intended to have.[250] And rather than being chastened for policies that "reject the premise of the capacity market,"[251] several states are instead considering rejecting the capacity market altogether. While PIOs disagree that election of the FRR and the resulting price effects are harmful,[252] those effects are clearly ones that PJM and the Commission are concerned with, and a valid basis to revisit the December 2019 order.

Although this evidence is sufficient to justify approval of PJM's Section 205 filing, it is not necessary. The Commission, having improperly adopted the view that all price suppression is a form of market manipulation, is not compelled to persist in this error indefinitely: "[T]he Commission is always free to reconsider and modify its previous rulings and practices, even if that results in a reversal of prior approaches."[253] P3 offers a string cite of instances where the

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[248] *See* supra at 58-60

[249] *See* P3 Protest at 44 (criticizing PJM for being more concerned with "perpetuation of PJM as an institution, rather than trying to fulfill PJM's basic function of being neutral and independent and enforcing the Tariff"). Besides begging the question as to whether MOPR creates a "neutral" auction, P3 fails to explain how a capacity auction with dramatically fewer participants promotes the accurate in-market price signals P3 claims to want.

[250] PJM Filing at 13–14.

[251] December 2019 Order at P 17.

[252] *See* Comments of PIOs at 66.

[253] *S. Co. Servs., Inc. Cajun Elec. Power Coop., Inc.*, 57 FERC ¶ 61,035, 61,125 (1991) (setting hearing, *sua sponte*, as to whether a previously approved provision in an interchange contract is just and reasonable based on newly discovered circumstances); *accord, e.g.*, *N. States Power Co. (Minnesota) & N. States Power Co. (Wisconsin)*, 59 FERC ¶ 61,100, 61,370 (1992) ("Even if we presume that we are acting in a manner inconsistent with our earlier order by granting WPPI's motion for summary rejection of Northern States' incremental loss proposal, we are free to

Commission, for its own convenience, dismissed successive complaints or requests for rehearing seeking re-litigation of previously decided issues.[254] Notably, however, only *two* of these cases cited by P3 resemble the procedural posture here, namely, a Section 205 filing that proposes a rate inconsistent with a prior Commission determination.[255] One (which did not bar "collateral attacks" but only found them to be "strongly discouraged" for purposes of "administrative efficiency") declined to let a party disrupt, by way of a Section 205 filing, a settlement agreement approved by the Commission to which the petitioner was a party.[256] In the other, the Commission declined to reverse its earlier position prohibiting "pancaked rates" between the Midcontinent Independent System Operator ("MISO") and PJM, finding that circumstances had not changed sufficiently to mitigate the concerns that lead to the prior order, and that insofar as MISO's filing could be construed to challenge the Commission's prior decision to eliminate such rate pancaking as incorrect, it was a collateral attack.[257] But on appeal, the Seventh Circuit found that it was "arbitrary" for the Commission to continue prohibiting MISO to charge for exports solely to PJM (but not other RTOs) on the basis of its earlier 2003 order.[258] In short: In the sole case cited by P3 in which the Commission dismissed, on collateral attack grounds,

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reconsider, modify, or even reverse our prior ruling if (as here) we provide a reasonable explanation for such action.").

[254] P3 Complaint at 37-38.

[255] The remaining decisions cited by P3 for the proposition that a prohibition on collateral attacks also applies to Section 205 proceedings are an ALJ order deferring ruling and providing the parties with an opportunity to present new facts and an argument for why the substantive principle ought to be changed, *Minn. Power & Light Co*., 13 FERC ¶ 63,014, 65,030 (1980); an order on rehearing affirming the Presiding Judge's prior decision to consider common issues in only one of two overlapping wholesale rate proceedings and apply the decision in one proceeding to the other, *Cent. Kan. Power Co.*, 5 FERC ¶ 61,291 at 61,621 (1978); and a footnote stating that "the policy against relitigation of issues (or requiring changed circumstances" applies to section 205 as well as section 206 filings but declining to apply the policy to the facts in *that* proceeding, *Entergy Servs., Inc*., 130 FERC ¶ 61,026, at P 38, n.48 (2010).

[256] *Cent. Vt. Pub. Serv. Corp*., 123 FERC ¶ 61,128, at P 35 (2008)

[257] *Midwest Indep. Transmission Sys. Operator, Inc.*, 133 FERC ¶ 61,221, at P 440 (2010).

[258] *Illinois Com. Comm'n v. Fed. Energy Regul. Comm'n*, 721 F.3d 764, 779–80 (7th Cir. 2013). On remand, the Commission conducted a paper hearing and concluded that circumstances had changed materially since its 2003 order to justify allowing certain forms of export pricing to PJM. *Midwest Indep. Transmission Sys. Operator, Inc*., 156 FERC ¶ 61,034 (2016).

arguments brought as part of a Section 205 petition, this refusal to reconsider its earlier decision was reversed by the reviewing court. Indeed, it makes little sense for the Commission to reject a Section 205 filing based on collateral estoppel, since every Section 205 filing is an effort by the utility to change the rate on file that the Commission had previously (by definition) found to be just and reasonable.

Ironically, P3 elsewhere suggests that the appropriate venue for FERC to address unjust and unreasonable aspects of the Expanded MOPR order is on judicial review.[259] But P3 ignores or mischaracterizes the current posture of ongoing proceedings. The Commission (along with numerous petitioners) sought an abeyance in the judicial proceeding addressing the lawfulness of the Expanded MOPR precisely so that PJM could submit (and the Commission could consider) the instant filing and avoid wasting *judicial* resources by determining whether the challenged Expanded MOPR would continue to apply to subsequent auctions. Far from insisting that such a filing would constitute an improper collateral attack, the Seventh Circuit granted this request, over objection.[260] As P3 itself states, the *purpose* for any policy discouraging collateral attacks is administrative efficiency and finality; the legality and reasonableness of the expanded MOPR continue to be contested in the courts and the issues raised by the December 2019 Order will require significant administrative resources to address with any finality. Invoking a policy discouraging "collateral attacks" to reject PJM's attempt, through a Section 205 proceeding, to bring this dispute to resolution would undermine the very purposes such a policy is designed to

[259] *See* P3 Protest at 39, 52.

[260] Like P3, the parties objecting to the abeyance insisted the Commission could only address the unjust and unreasonable aspects of the Expanded MOPR through a *sui sponte* Section 206 Petition and/or voluntary remand. *Id.* at 52. Proposed Briefing Schedule and Resp. to Mot. of American Municipal Power, Inc., *ICC et al. and Old Dominion Electric Cooperative et al. v. FERC*, Case No. 20-1645 (7th Cir. May 26, 2021), Docket No. 34. In granting an abeyance to allow the Commission to consider a Section 205 filing by PJM, the Seventh Circuit implicitly rejected this assertion.

serve and needlessly prolong both judicial proceedings *and* the perverse and detrimental impacts of the expanded MOPR through additional auctions.

III. CONCLUSION

In 2017, Commissioner Norman Bay wrote an exceptionally prescient and oft-cited concurring opinion in which he questioned the entire enterprise of minimum offer price rules:

> Despite the best intentions of the Commission, in my view, the MOPR has turned out to be unsound in principle and unworkable in practice. No other market in the United States is subject to the same construct in which a federal agency reviews state action and imposes an administrative price floor on supply offers from certain resources that have received state support. .... The premise of the MOPR appears to be based on an idealized vision of markets free from the influence of public policies. But such a world does not exist, and it is impossible to mitigate our way to its creation.
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> . . . .
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> Not surprisingly, as an institutional matter, imposition of the MOPR places the Commission in constant tension with the states. While there are times when the Commission must check state action that impermissibly interferes with the wholesale markets, it should endeavor to do so only when necessary. I believe that respect for federalism requires no less. In our constitutional order, states are rightly celebrated for being laboratories for experimentation. Among other things, those laboratories may incentivize the development of needed energy infrastructure, the deployment of innovative technologies, or the establishment of Renewable Portfolio Standards. Given their plenary police powers, states are free to use their authority to act on behalf of their citizens, as long as they do not "intrude on FERC's authority over interstate wholesale rates." The Commission should be especially mindful of state policy when it comes to electric generation because section 201(b)(1) of the Federal Power Act denies FERC jurisdiction "over facilities used for the generation of electric energy."[261]

It is worth lingering on the lack of any conceptual basis for the central premise of the current MOPR: that states can be treated as having buyer-side market power and that resource offers reflecting revenues earned under state programs are inherently "uneconomic" and must be mitigated in the RPM. The audacity of such market overreach is exceeded only by its complete

[261] *N.Y. Pub. Serv. Comm'n et al*., 158 FERC ¶ 61,137 (Bay, Comm'r, concurring).

lack of economic sense or support. In jurisdictions with high clean energy requirements, like Virginia, Maryland, District of Columbia, New Jersey, and Illinois, and others, implementation of the expanded MOPR would over time push increasingly large swaths of state-supported resources out of the RPM, while also requiring that all customers pay for capacity from a wholly superfluous set of the very kind of fossil fuel resources that those states wish to rely less upon. Taken to its logical conclusion, RPM would be so disconnected from the actual supply and demand for capacity as to operate as a shadow market of primarily redundant resources. Although the absurdity of such a fundamentally unjust, unreasonable, and unduly discriminatory rate structure appears to still be lost on several of the protesters, fortunately PJM has seen the light.

PJM's Focused MOPR proposal returns to first principles, with good reason. PJM has "presented ample evidence that circumstances have changed – that recent efforts have brought to the fore what were previously unrecognized, or, if recognized, only theoretical, weaknesses in the current MOPR rules."[262] As such, PJM is obligated to assess the economic landscape and recalibrate the various market tools at its disposal to ensure that the capacity market delivers resource adequacy at just and reasonable rates. That shifting scales can have real impacts for market participants is not lost on anyone, which is why PJM's decision to create a tailored MOPR that primarily lets the markets themselves work as they are designed, rather than trying to micromanage winners and losers, is a more sustainable solution both legally and economically.

Nor is PJM bound to the 2018–2020 Commission Orders regarding the PJM MOPR From its inception, the Commission has considered exemptions to the MOPR across the eastern

[262] April 2011 Order at P 108.

capacity markets and has sometimes accepted an exemption, despite the potential for price suppression, and vice versa.[263] As held by the D.C. Circuit:

> In those cases in which the Commission has considered exemptions to the minimum offer price rule, it considered exemptions using a fact-specific balancing test, factoring in the scope of the exemption, the existence of sloped demand curves, and the overall impact on the market, and only accepted exemptions that were appropriate based on the specific features of the market. The Commission engaged in the same type of analysis in the present case, and its conclusion is not contrary to precedent. This type of balancing requires an expert understanding of the market, which is well within the Commission's realm of expertise. We see no reason to disturb the Commission's balancing just because it came out in favor of the renewable exemption despite the potential for price suppression.[264]

PJM's careful fact-specific balancing across the various demands and structure of its market is well supported as a just and reasonable tariff rate by economic theory, market structure, supply and demand reality, and its own stakeholders. It should therefore be granted by the Commission.

Dated: September 7, 2021.

Respectfully submitted,

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[263] *See, e.g.*, *New York Pub. Serv. Comm'n*, 153 FERC ¶ 61,022, at P 10; April 2011 Order at PP 139, 152; *New Eng. States Cmte. on Elec. v. ISO New Eng. Inc.*, 142 FERC ¶ 61,108 at PP 32–35 (2013); *New York Indep. Sys. Operator, Inc.*, 122 FERC ¶ 61,211, at P 110 (2008).

[264] *NextEra Energy Res.*, 898 F.3d at 23; *see also ISO New England Inc.*, 143 FERC ¶ 61,150, at PP 197–197 (2013) (citing *Permian Basin*, 390 U.S. at 784: "In *Permian Basin*, … The Court found that the exact nature of the change required by the Commission did not matter because the Commission was allowed to change its mind. Nor may its order properly be set aside merely because the Commission has on an earlier occasion reached another result; administrative authorities must be permitted, consistently with the obligations of due process, to adapt their rules and policies to the demands of changing circumstances."); *New England Power Generators Ass'n, Inc.*, 757 F.3d at 293; *Nat'l Cable & Telecommunications Ass'n v. Brand X Internet Servs*., 545 U.S. 967, 981–82 (2005) ("Some of the respondents dispute this conclusion, on the ground that the Commission's interpretation is inconsistent with its past practice. We reject this argument. . . . "An initial agency interpretation is not instantly carved in stone. On the contrary, the agency ... must consider varying interpretations and the wisdom of its policy on a continuing basis," . . . That is no doubt why in Chevron itself, this Court deferred to an agency interpretation that was a recent reversal of agency policy.") (citations omitted); *River Runners for Wilderness v. Martin*, 593 F.3d 1064, 1075–76 (9th Cir. 2010).

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CERTIFICATE OF SERVICE

I hereby certify that the foregoing has been served in accordance with 18 C.F.R. § 385.2010 upon each party designated on the official service lists in these proceedings listed above, by email.

Dated: September 7, 2021.

/s/ Danielle Fidler
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