

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

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

**COMMENTS OF NATURAL RESOURCES DEFENSE COUNCIL,
SUSTAINABLE FERC PROJECT, SIERRA CLUB,
AND UNION OF CONCERNED SCIENTISTS**

Dated: August 20, 2021.

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
II.	PJM’S FOCUSED MOPR PUTS AN END TO THE UNJUST, UNREASONABLE, AND UNDULY DISCRIMINATORY RATES THAT RESULT FROM THE EXPANDED MOPR.....	3
A.	THE EXPANDED MOPR IS BASED ON FLAWED ECONOMIC LOGIC.....	5
1.	The State Policies at Issue Address Well-Understood Market Failures Such as Environmental Externality Costs	6
2.	The “Correct” Capacity Price Is the One that Aligns Supply with Demand (Not the Price That Would Prevail in the Absence of State Policies).....	8
3.	Capacity Markets with Sloping Demand Curves Cannot Simultaneously Produce Low Prices and Poor Resource Adequacy	11
4.	Merchant Investors Operate in a Context that Includes Environmental Policies from Which They Should Not Expect to be Indemnified.....	12
5.	Expanding Application of MOPR to Policy Resources Amplifies Regulatory Risks ...	13
6.	MOPR Should Be Applied for Its Narrow Original Purpose of Mitigating Market Power Abuses, Not Repurposed to Undo the Effects of State Policies.	14
B.	EXPANDED MOPR IMPOSES UNECONOMIC COSTS ON PJM CUSTOMERS AND SOCIETY AS A WHOLE.....	16
1.	Approximately 6,800 MW of Policy Resources Could be Excluded from Clearing the Capacity Market by 2030.....	16
2.	MOPR-Ex Could Impose Approximately \$1.7 Billion per Year in Excess Costs on Customers by 2030	19
3.	MOPR-Ex Imposes Excess Costs on Consumers in all States, with and without Substantial Policy Mandates.....	20
4.	MOPR-Ex Could Induce a \$1.7 Billion Transfer of Wealth from Customers to Capacity Sellers by 2030.....	21
C.	THE EXPANDED MOPR THREATENS TO UNDERMINE THE FUTURE OF COMPETITIVE WHOLESALE ELECTRICITY MARKETS	22
III.	PJM’S FOCUSED MOPR REASONABLY DEFINES THE EXERCISE OF BUYER-SIDE MARKET POWER REQUIRING MITIGATION, AND THUS LEADS TO JUST AND REASONABLE RATES	23

A.	PJM PROPERLY FOCUSES APPLICATION OF MOPR ON ACTUAL EXERCISES OF BUYER-SIDE MARKET POWER	24
1.	The minimum offer price rule should apply only to actual exercises of buyer-side market power	24
2.	PJM’s decision not to subject resources benefitting from state policies to MOPR is an appropriate reflection of jurisdictional lines and market realities	29
B.	PJM’S FOCUSED MOPR APPROPRIATELY WEIGHS THE RISKS OF OVER-MITIGATION AGAINST THE RISKS OF UNDER-MITIGATION AND REACHES A REASONABLE BALANCE.....	32
C.	FOCUSED MOPR WILL RESTORE THE CAPACITY MARKET TO ITS INTENDED FUNCTION AND ENSURE PRICE SIGNALS REFLECT TRUE RELIABILITY NEEDS	35
D.	PJM’S FILING WILL RESULT IN RATES THAT APPROPRIATELY INDUCE RESOURCE ENTRY AND EXIT, SUPPORT RESOURCE ADEQUACY AND RELIABILITY, AND PROMOTE INVESTMENT THROUGH STABLE, TRANSPARENT RULES.....	38
E.	FOCUSED MOPR WILL NOT REQUIRE CONSUMERS TO PAY EXCESSIVE RATES TO ENSURE RELIABILITY.....	44
F.	FERC SHOULD REJECT PJM’S ARGUMENT THAT THE PRESUMED HARMS OF THE FIXED RESOURCE REQUIREMENT WEIGH IN FAVOR OF ELIMINATING THE BROAD MOPR.....	46
IV.	THE COMMISSION SHOULD LOOK CRITICALLY AT FUTURE SECTION 205 FILINGS REGARDING CONDITIONED STATE SUPPORT.....	49
A.	PJM’S PROPOSED RELIANCE ON A PREEMPTION STANDARD TO DETERMINE THE APPROPRIATE APPLICATION OF MOPR TO RESOURCES RECEIVING STATE SUPPORT APPLIES A MARKET REMEDY TO A LEGAL ERROR AND IS LIKELY UNWORKABLE IN PRACTICE.....	50
B.	PJM’S PROPOSED CONDITIONED STATE SUPPORT DEFINITION IS BROADER THAN THE HOLDING IN <i>HUGHES</i> AND WOULD IMPROPERLY SUBJECT STATE PROGRAMS NOT PREEMPTED UNDER THE FPA TO MARKET MITIGATION ...	52
V.	A MORE LIMITED DEFINITION OF CONDITIONED STATE SUPPORT WILL PROVIDE MORE PREDICTABILITY TO MARKET PARTICIPANTS AND POLICYMAKERS and avoid unnecessary future proceedings.....	56
A.	PJM SHOULD ADDRESS INTERNAL INCONSISTENCIES IN THE FILING TO DETERMINE WHETHER THE PROPOSED DEFINITION OF CONDITIONED STATE SUPPORT REFLECTS A DRAFTING ERROR.....	57

B. STATE DIRECTIVES AS TO *OFFERS* SHORT OF A CLEARANCE REQUIREMENT SHOULD NOT BE INCLUDED IN THE DEFINITION OF CONDITIONED STATE SUPPORT 58

VI. FERC CAN REVERSE ITS DETERMINATIONS EXPANDING MOPR TO ALL STATE SUPPORTED RESOURCES AND IS JUSTIFIED IN DOING SO BY NEW DEVELOPMENTS AND INFORMATION..... 62

VII. CONCLUSION 67

**COMMENTS OF NATURAL RESOURCES DEFENSE COUNCIL,
SUSTAINABLE FERC PROJECT, SIERRA CLUB,
AND UNION OF CONCERNED SCIENTISTS**

Pursuant to Rule 211 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“FERC” or “Commission”),¹ the Natural Resources Defense Council, Sustainable FERC Project, Sierra Club, and the Union of Concerned Scientists (“Public Interest Organizations” or “PIOs”) submit this Comment in support of the July 30, 2021 filing² submitted by PJM Interconnection, LLC (“PJM”) under Section 205 of the Federal Power Act (“FPA”) in the above-captioned docket.

I. INTRODUCTION

Public Interest Organizations urge the Commission to approve PJM’s Section 205 filing to limit application of the minimum offer price rule (“MOPR”) based on a reasonable definition of the exercise of buyer-side market power. PJM’s filing would institute a “Focused MOPR” that effectively eliminates the application of the MOPR to resources supported by state and local policies, enabling these resources to offer into the capacity market at a price that represents their true costs and putting an end to the unjust, unreasonable and unduly discriminatory rates that result from the Expanded MOPR approved by the Commission in 2020. As described in PJM’s filing and elaborated upon below, the Focused MOPR will result in capacity prices that send accurate signals for new capacity resources to enter the market, and for existing ones to exit. It avoids requiring consumers to pay for unnecessary capacity. The Focused MOPR respects state

¹ 18 C.F.R. § 385.211 (2021).

² PJM Tariff Filing: Revisions to Application of Minimum Offer Price Rule (MOPR) (July 30, 2021) (“Transmission Letter”), Accession No. 20210730-5166.

authority over generation³ and ends improper use of FERC-jurisdictional markets to attempt to nullify state policy. PJM’s filing will lead to just and reasonable rates by anchoring the capacity market in economic fundamentals, including state policy decisions.

The proposed tariff contemplates application of the MOPR to resources receiving “Conditioned State Support”⁴ through future Section 205 filings. PJM styles their definition of Conditioned State Support as capturing state policies it believes would be preempted under criteria articulated in *Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288 (2016).⁵ However, it is far from clear that this definition can stand in for the judgment of a federal court, and even if it could, application of a buyer-side mitigation tool is an inappropriate remedy to address a state generation policy, as even PJM acknowledges such policies are not an exercise of buyer-side market power. By PJM’s own argument,⁶ applying the MOPR to resources receiving Conditioned State Support would lead to unjust and unreasonable rates: ignoring capacity from resources supported by state policy leads to excessive costs and procurement of unnecessary capacity. We strongly urge the Commission not to endorse the application of MOPR to Conditioned State Support as part of any order approving PJM’s current filing, and to look skeptically upon any future Section 205 filings applying this definition for the reasons stated in more detail below. However, because the current filing exempts all existing state policies, and the preconditions for future filings are extremely narrow and may never be triggered, these flaws do not make the proposed tariff unjust or unreasonable.

³ 16 U.S.C. § 824(b)(1).

⁴ “Conditioned State Support” is “any financial benefit required or incentivized by a state, or political subdivision of a state acting in its sovereign capacity, provided outside of PJM markets and in exchange for the sale of a FERC-jurisdictional product conditioned on clearing in any RPM Auction.” Transmittal Letter at 25.

⁵ *Id.*

⁶ *Id.* at 8.

The following comments do not address all aspects of PJM’s filing, but instead focus on PJM’s highly significant and transformative decision to eliminate the MOPR as applied to state policy resources, with limited potential exceptions.

II. PJM’S FOCUSED MOPR PUTS AN END TO THE UNJUST, UNREASONABLE, AND UNDULY DISCRIMINATORY RATES THAT RESULT FROM THE EXPANDED MOPR

PJM’s proposed Tariff revisions have the potential to finally bring to a close the years of delayed auctions and litigation between PJM, its member jurisdictions, stakeholders, and FERC regarding the inexorable creep of its MOPR. PJM CEO Manu Asthana nicely summarized the current state of the PJM Tariff when he stated:

[W]e at PJM believe that our MOPR rules as formulated today do not sufficiently accommodate state policies related to resource mix, nor do they accommodate long-standing self-supplied business models such as those pursued by public power entities. In fact today’s MOPR creates the potential for consumers to have to pay for resources to meet public policy objective[s], but then not receive a credit for the contribution of those resources to grid reliability. Simply put, we believe these MOPR rules are not sustainable in the long-run and should be reformed.⁷

Chairman Glick was a bit more direct in his assessment that FERC has “an obligation under the Federal Power Act to act where rates are terms of these markets are unjust and unreasonable. In my opinion as I’ve said several times before, they are, and certainly in PJM.”⁸ PJM’s 205 filing also offers the Commission a chance to reconsider the unjust, unreasonable, unduly discriminatory rates that have resulted from the string of FERC orders establishing PJM’s

⁷ Tr. of Technical Conference on Resource Adequacy in the Evolving Electricity Sector, at 33–34, Docket No. AD21-10 (Mar. 23, 2021) (comments of Manu Asthana) (“Tech. Conf. Tr.”), Accession No. 20210426-4004; *see also* Letter from Ake Almgren, Chairman of the PJM Board of Managers, to PJM Stakeholders Regarding Capacity Market Minimum Offer Price Rule and Initiation of the Critical Issue Fast Path Process (Apr. 6, 2021) (“April 6, 2021 Letter from the PJM Board”), <https://www.pjm.com/-/media/about-pjm/who-we-are/public-disclosures/20210406-board-letter-regarding-capacity-market-minimum-offer-price-rule-and-initiation-of-the-critical-issue-fast-path-process.ashx>. *See also* Tech. Conf. Tr. at 9 (Comments of Chairman Glick), 22 (Comments of Comm’r Christie), 29–30 (Comments of Comm’r Clements regarding the unworkability of the Expanded MOPR).

⁸ Tech. Conf. Tr. at 9.

current tariff and Expanded MOPR.⁹ As the Commission is aware, these orders are on appeal before the 7th Circuit Court of Appeal and have been held in abeyance until September 21, 2021,¹⁰ in anticipation of this filing by PJM.¹¹ PIOs' litigation in that matter is linked to the outcome in this case, since adoption of the proposed Tariff would largely moot the issues on appeal.¹² PIOs' arguments regarding the unjustness, unreasonableness, and undue discrimination that result from PJM's expanded MOPR have been extensively briefed in the filings in that docket and PIOs will not repeat them all here. Instead, PIOs focus on key issues that demonstrate why the economic theory underpinning the Expanded MOPR has always been irredeemably flawed and why the Commission must decisively reject it.

Although a finding that the Expanded MOPR does not result in just and reasonable rates is not necessary for the Commission to approve PJM's Section 205 filing, the reasons why such a finding would be justified are critical to understanding why PJM's transformative Proposed Tariff will produce just and reasonable rates, and why the Commission must reach determinations that differ from those contained in its recent orders.

⁹ *Calpine Corp. v. PJM*, 163 FERC ¶ 61,236 (2018) ("June 2018 Order"), *on reh'g*, 171 FERC ¶ 61,034 (2018) ("June 2018 Rehearing Order"); *Calpine Corp.*, 169 FERC ¶ 61,239 (2019) ("2019 MOPR Order" or "2019 Order"); *Calpine Corp. v. PJM*, 171 FERC ¶ 61,034 (2020) (Order Denying Rehearing); *Calpine Corp. v. PJM*, 171 FERC ¶ 61,035 (2020) ("April 16, 2020 Order on Rehearing and Clarification").

¹⁰ Order, Case No. 20-1645 (7th Cir. Jun. 9, 2021), ECF No. 136.

¹¹ To date there are at least 28 petitions seeking review of the Commission's PJM MOPR Orders currently before the 7th Circuit Court of Appeals. *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.

¹² PIOs incorporate herein by reference the same expert and legal criticisms leveled against its application in PJM by the members of Clean Energy Advocates participating in that proceeding, review of which is pending before the 7th Circuit Court of Appeals. *See, e.g.*, Protest of Clean Energy Advocates, Docket No. EL18-1314 (May, 7, 2018), Accession No. 20180507-5222; Protest of Clean Energy Advocates, Docket No. EL18-169 (June 20, 2018), Accession No. 20180620-5126; Req. for Reh'g of Clean Energy Advocates, Docket Nos. EL16-49 et al. (Jan. 21, 2020), Accession No. 20200121-5328; *Environmental Defense Fund v. FERC*, Pet. for Review, Case No. 20-3032 (7th Cir. Oct. 20, 2020).

A. THE EXPANDED MOPR IS BASED ON FLAWED ECONOMIC LOGIC

The Expanded MOPR, and the Commission’s recent orders approving that market rule, do not reflect sound economic reasoning. The economic theory underpinning the Expanded MOPR alleges that states with aggressive clean energy mandates are incenting the development of large quantities of new zero- or low-carbon resources to meet system-wide transition deadlines through a variety of programs and contract solicitations that the Commission describe as “subsidies.”¹³ Because these activities can sometimes lower near-term capacity market prices and/or displace “non-subsidized” resources, proponents of the Expanded MOPR argue that intervention is necessary to “protect” wholesale capacity market prices. The allegation is that without intervention, market prices will be too low for merchant capacity suppliers (particularly fossil fuel resources) to earn adequate returns on investment and that, over time, these low capacity market prices will lead to insufficient entry of new generating resources and exit of inefficient resources that will ultimately threaten reliability of the whole electric system.¹⁴ The proffered remedy is to negate any incentives provided to state policy resources by applying MOPR to every capacity supply offer that receives even a negligible or indirect benefit pursuant to state policy. This would force resources benefiting from state policies to bid at administratively determined rates that would reflect the higher prices that would prevail in the absence of state clean energy policies.¹⁵

As explained by the experts routinely employed to advise PJM on the economics of its markets and assist with the implementation of the PJM Tariff,¹⁶ these theories rest on flawed

¹³ Written Test. of Dr. Kathleen Spees and Dr. Samuel A. Newell, at 15 (Aug. 20, 2021) (attached as Ex. A) (“Brattle Aff.”).

¹⁴ *Id.*

¹⁵ *Id.* at 11–13.

¹⁶ Drs. Spees and Newell have worked extensively for PJM on the MOPR from its inception. *See id.* at 1–2.

economic logic.¹⁷ Simply put, “there is no sensible economic rationale for applying MOPR to all policy resources.”¹⁸ Moreover, applying the MOPR to policy-supported resources pushes them out of the capacity market, with a number of undesirable consequences, namely: (1) policy resources are deprived of revenues commensurate with the capacity value they provide; (2) incentives are created for retaining and developing uneconomic excess capacity supply that is not needed for reliability; (3) market clearing prices are artificially inflated and disconnected from actual supply-demand conditions, which effectuates a wealth transfer from customers to incumbent suppliers; and (4) these distortions become unsustainable over time as states across the PJM footprint pursue their clean energy and other policy objectives, leaving behind a capacity market totally disconnected from the reality of the resources actually operating on the grid.¹⁹

The attached affidavit of Dr. Samuel Newell and Dr. Kathleen Spees of The Brattle Group (“Brattle”) explains that a corrected economic analysis should consider the following fundamental economic principles:

1. The State Policies at Issue Address Well-Understood Market Failures Such as Environmental Externality Costs

The theory that state policy resources have “unacceptable market distorting impacts that would inhibit incentives for competitive investments in the PJM market over the long term”²⁰ is an overly simplistic and incomplete analysis that overlooks a well-understood fact that market forces often fail to account for negative externalities—i.e., a negative side effect of production that adversely affects a party not involved in the transaction who has no influence on whether the

¹⁷ *Id.* at 4 and *see generally id.* at 15–23.

¹⁸ *Id.* at 4.

¹⁹ *Id.* at 4–5.

²⁰ April 16, 2020 Order on Rehearing and Clarification at P 20; June 2018 Rehearing Order at PP 26–27; June 2018 Order at PP 153–154; 2019 Order at PP 37–38; Brattle Aff. at 4.

transaction occurs, but is nevertheless harmed by it.²¹ Absent intervention to address them, neither the purchaser nor the seller pays the full costs associated with the negative externality.²² When externalities are at play, markets fail to allocate resources efficiently and current market price of that good is not the economically “correct” one, such that what looks like “market forces” are really market failures.²³

Environmental externalities (for example, unregulated pollution emitted as a byproduct of fossil fuel electric generation) are a textbook example of market failures that have grievous harms such as asthma and early deaths.²⁴ Market pricing that does not account for such negative externalities would drive resource investments and operations toward an inefficiently large quantity of fossil-fuel fired power plants, imposing inefficiently large externality costs.²⁵

As explained by Brattle, market externalities can be addressed in one of two ways: command-and-control policies that directly regulate behavior, or market-based policies that align private incentives with social efficiency.²⁶ In the case of electricity markets, environmental externalities can be addressed through policy mechanisms such as pollutant pricing mechanisms, carbon pricing, or through clean energy attribute payments paid directly to resources. These policies deliberately reward non-polluters and discourage polluters by forcing generators to internalize the environmental costs of production, and both will have the effect of raising market prices for generators who pollute and lowering it for those who do not.²⁷ The Commission’s recent line of cases that would nullify state policy actions that it deems to provide a direct benefit (e.g., a Zero-Emission Credit (“ZEC”)), while expressing support and accommodation for policy

²¹ Brattle Aff. at 16.

²² *Id.*

²³ *Id.*

²⁴ *Id.*

²⁵ *Id.*

²⁶ *Id.* at 16–17.

²⁷ *Id.* at 17.

actions that impose a direct penalty (e.g., a carbon tax), ignores that these are two sides of the same economic coin with the same end result: narrowing the cost gap between non-emitting resources and fossil fuel resources.²⁸

When viewed through the proper lens, payments made to non-polluting resources as “subsidies” are not subsidies in the traditional sense of the term of propping up an “economically inefficient” market player. Rather, the incentives provided by states in this context are more appropriately described as compensation provided for the environmental benefits these resources provide that are necessary to correct a market failure.²⁹ Compensation for the environmental value of policy-supported resources should not be considered an illegitimate distortion of markets that must be excluded, but rather a correction that is needed to achieve a more efficient outcome.³⁰

2. The “Correct” Capacity Price Is the One that Aligns Supply with Demand (Not the Price That Would Prevail in the Absence of State Policies)

Advocates for expansive MOPR³¹ inaccurately characterize the low market prices of state policy resources as reflecting inappropriate “price suppression” that threatens the long-term capacity market supply and propose applying a MOPR to policy resources in order to “correct” market pricing signals.³² But compensating non-emitting resources for their environmental value simply lowers their net cost of production and makes them correctly appear more competitive as

²⁸ *Id.* While carbon pricing is often touted as the most efficient means of addressing externalities related to greenhouse gases, it is not always effective at addressing the problem if issues like leakage cannot be controlled, nor is carbon pricing the only economically efficient means of doing so. *Id.*

²⁹ *Id.* at 16–17.

³⁰ *Id.* at 5–6, 17–18.

³¹ The term “MOPR-Ex” is used throughout these comments as well as in the Brattle Aff. to describe the current MOPR in PJM. We recognize that this term was previously used by PJM to identify one of the two alternative tariff revisions filed in Docket No. ER18-1314, but have repurposed the term here as a simple descriptor for the status quo (“MOPR-Ex”).

³² Brattle Aff. at 4; April 16, 2020 Order on Rehearing and Clarification at P 348.

capacity providers with high energy and ancillary services value.³³ These resources should therefore be allowed to bid into the capacity market at a price that reflects their true value to the system; forcing them to ignore their environmental value simply perpetuates the market failure that allows fossil fuel resources to effectively underbid their true costs.³⁴

That the Reliability Pricing Model (“RPM”) consequently produces low prices is not a system reliability alarm that needs to be corrected; rather, the market’s current low prices correctly reflect that there is an oversupply of capacity in the market as discussed earlier, and correctly signals that the least valuable resources in the market—in this case, expensive fossil fuel generators who are utilized in the energy market with decreasing frequency—should retire.³⁵ In the face of years of excess supply in PJM,³⁶ the argument that an Expanded MOPR is necessary now to prevent the possibility of insufficient capacity in the future ignores the fundamental tenets of market theory, namely, that if supply becomes constrained in the face of increased demand, prices will rise to encourage greater investment.³⁷ The idea that an expansive MOPR will “correct” the market by artificially raising the prices of the most competitive resources in the system in order to prop up the least valuable generators stands elemental market economics on its head. Instead, the expansive MOPR forces policy resource prices higher and often out of the capacity market, even though the resources will be built and will operate on the system. In doing so, it drives capacity prices higher, reflecting “a fictional ‘need’ for capacity, causing consumers to pay real money for real capacity resources to fill that fictional need.”³⁸

³³ Brattle Aff. at 18.

³⁴ *Id.*

³⁵ *Id.* at 19–20.

³⁶ 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>.

³⁷ *Id.*

³⁸ Brattle Aff. at 19.

This in turn sends the wrong signals to investors to retain costly existing resources that would otherwise retire, would attract additional resources that are not needed for reliability, and sends signals to customers to scale back on electricity use due to artificially high prices and fictional scarcity—all of which depart entirely from the fundamentals of supply and demand.³⁹

The absurdly inefficient, unreasonable, and unsustainable nature of the Expanded MOPR becomes especially apparent when evaluated in the context of the PJM footprint, where **92% of customer demand is within states that have adopted some of the most ambitious clean energy requirements in the nation and whose policy resources could be excluded partially or entirely by the Expanded MOPR.**⁴⁰ Continued application of the Expanded MOPR in PJM would quickly turn the RPM into a “multi-billion-dollar-per-year parallel ‘shadow market’ that exists primarily as a means for customers to make duplicative payments to resources that are not needed for resource adequacy.”⁴¹ Such a result is the height of economic absurdity and paradigmatic of unjust and unreasonable rates.

Contrary to arguments used to support the Expanded MOPR, the “correct” price for capacity is one that aligns desired supply with actual demand, not the price and resource mix that would prevail in the absence of state policies. As Drs. Spees and Newell point out:

[T]he MOPR-Ex offers a costly solution to a non-problem. The grievance from the standpoint of incumbent fossil generators is that they cannot compete and win against the clean resources that states and consumers prefer. As a consequence, fossil generation owners will earn lower revenues than they would in a world where emissions do not matter or where state policies favored their resources. Failing to earn a return on investment may be problematic for the owners of such assets, but this is not a problem that the wholesale markets can or should fix. The fix occurs when generators shift their investment portfolios toward the types of electricity resources that customers and states want to buy.⁴²

³⁹ *Id.*

⁴⁰ *Id.* at 4–5, 19.

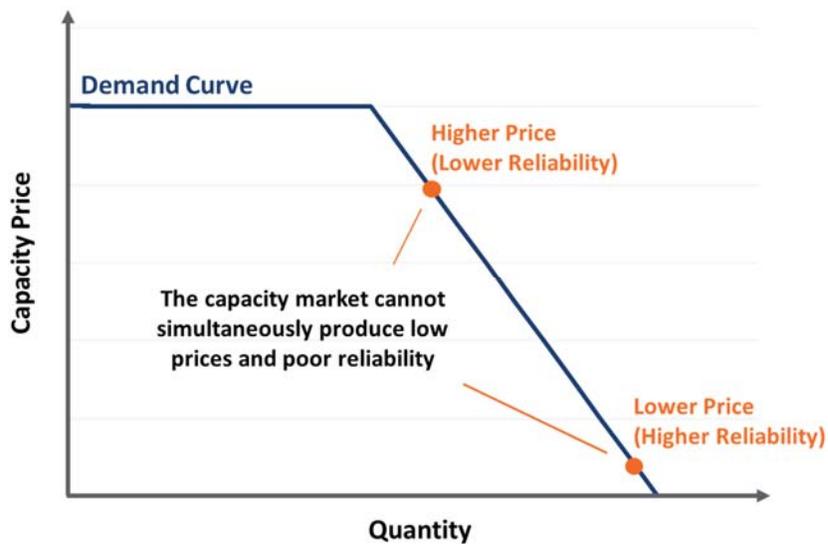
⁴¹ *Id.* at 19.

⁴² *Id.*

3. Capacity Markets with Sloping Demand Curves Cannot Simultaneously Produce Low Prices and Poor Resource Adequacy

Concerns that low prices resulting from a growth in state policy resources will threaten reliability by discouraging investment are deeply misguided;⁴³ indeed, this concern is a mathematical impossibility.⁴⁴ By their very nature, capacity markets with downward sloping demand curves cannot simultaneously produce low prices and poor resource adequacy, as reflected in the Figure 3 of Attachment A below:

FIGURE 1: CAPACITY MARKETS WITH DOWNWARD-SLOPING DEMAND CURVES CANNOT SIMULTANEOUSLY PRODUCE LOW PRICES AND POOR RESOURCE ADEQUACY⁴⁵



As discussed above, and reflected in the graphic above, if prices are low due to the entry of policy resources, this means that there is ample supply of capacity on the system. Low capacity

⁴³ *Id.* at 20.

⁴⁴ *Id.*

⁴⁵ *Id.*

prices signal that high-cost resources should retire and new entry is not needed; they do not reflect “price suppression” that demands imposition of an Expanded MOPR.⁴⁶

4. Merchant Investors Operate in a Context that Includes Environmental Policies from Which They Should Not Expect to be Indemnified

The financial woes merchant generators and expansive MOPR proponents attribute to state policy resources resulting in lower-than-expected returns on investment, while unfortunate for them, is not a concern from a market design perspective.⁴⁷ Merchant generation investors operate in a market and regulatory context that has always required them to face uncertainties associated with environmental regulations. Investors never should have expected to be indemnified against risks associated with these policies (nor should they be required to return revenues to customers when policy changes favor their investments). Additionally, energy and environmental policies incentivizing a clean energy transition have been discussed in PJM states for years; while some investors may have underestimate the speed and scale of this transition, “[n]o responsible investor in any power plant entering the PJM capacity market can have made its investment and been unaware of the downside risks associated with states’ environmental policies.”⁴⁸ A major purpose and oft-cited benefit of capacity markets is to shift the risk burden from consumers to investors, not the reverse, and there is no reason to indemnify investors who make poor decisions by imposing or maintaining an Expanded MOPR.⁴⁹

Finally, recent auction results put to rest the idea that low prices and the participation of state resources will drive away new merchant generator investment: despite the surprisingly low clearing price of \$50/MW-day, 5,627 MW of installed capacity (“ICAP”) (approximately 4,300

⁴⁶ *Id.*

⁴⁷ *Id.* at 21–22.

⁴⁸ *Id.* at 21.

⁴⁹ *Id.* at 22.

MW of uninstalled capacity (“UCAP”) of new gas combined-cycle plants cleared the market; in fact, over 35,000 ICAP MW of gas plants have entered the PJM capacity market since 2016.⁵⁰

“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).”⁵¹

5. Expanding Application of MOPR to Policy Resources Amplifies Regulatory Risks

Expanded MOPR proponents also argue that applying MOPR to policy resources is necessary to mitigate regulatory risk surrounding capacity investments.⁵² They assert that “price distortions” resulting from state energy policies “‘compromise the capacity market's integrity’ and create investor uncertainty because ‘investors cannot predict whether their capital will be competing against resources that are offering into the market based on actual costs or on state subsidies.’”⁵³

While elevated prices from an Expanded MOPR would offset some immediate issues, they “should not be conflated with less-risky prices On the contrary, a market whose price is artificially inflated by a rule as controversial and economically inefficient as MOPR-Ex is unsustainable.”⁵⁴ The pressure to eliminate or avoid MOPR is already well underway and will only increase as the sting of it reaches customers already reeling from the economic downturn, who will ask why they are paying so much for excess capacity. As further discussed below in Section III, several states whose consumers will bear the highest costs associated with the Expanded MOPR have already begun to turn to FRR-based alternatives to the capacity market. Investors are aware of and have expressed concerns around the uncertainty and unsustainability

⁵⁰ *Id.* at 21–22.

⁵¹ *Id.* at 22.

⁵² *Id.*

⁵³ *Calpine Corp.*, 171 FERC ¶ 61,034 at P 23 (citing to June 2018 Order at P 150).

⁵⁴ *Brattle Aff.* at 22.

of the PJM capacity market under MOPR-Ex.⁵⁵ The failure of PJM to accommodate state policy resources is simply unsustainable—from any perspective.⁵⁶

As noted repeatedly by Chairman Glick, investor uncertainty that could doom capacity markets is far greater from the imposition of MOPR than it is without it.⁵⁷ Most PJM state leaders view climate change as an existential threat they must address.⁵⁸ Were PJM to keep the Expanded MOPR, it would turn the capacity market into an impediment to achieving the majority of its states' widely supported and jurisdictionally permitted resource goals—a result that would actually engender far greater regulatory upheaval and investor uncertainty—and would be directly contrary to the purported desire of the Commission to foster and protect market competition.

6. MOPR Should Be Applied for Its Narrow Original Purpose of Mitigating Market Power Abuses, Not Repurposed to Undo the Effects of State Policies.

PIOs do not dispute that MOPR is an appropriate mechanism for its original purpose: prevention of manipulative price suppression by entities with buyer-side market power. But the valid rationale behind the original MOPR does not apply in the context of policy-supported clean

⁵⁵ Tech. Conf. Tr. at 33–34 (comments of Manu Asthana); *see also* April 6, 2021 Letter from the PJM Board at 1. *See also* Tech. Conf. Tr. at 9, 2 (comments of Chairman Glick and Commissioner Christie regarding sustainability concerns). *See, e.g., id.* at 182–84 (Comments of Betsy Beck, Director of Regulatory Affairs – Central and Western U.S., Enel North America, Inc.).

⁵⁶ Brattle Aff. at 22–23.

⁵⁷ April 16, 2020 Order on Rehearing and Clarification (Glick, Chairman, dissenting at P 101) (“The irony in all this is that the Commission asserts that it is acting to “save” the capacity market even as it sets the market on a course toward its eventual demise.”).

⁵⁸ *See, e.g.,* Catherine Morehouse, *State-federal tension 'at an all time high' between MOPR, net metering attack, says head Maryland regulator*, Utility Dive (May 22, 2020), <https://www.utilitydive.com/news/state-federal-tension-at-an-all-time-high-between-mopr-net-metering-atta/578471/>; 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-will-impede/575160/>; Michael Hawthorne, *Gov. J.B. Pritzker vows to fight climate change with clean energy. Only three other states mined more climate-changing coal than Illinois last year*, Chicago Tribune (Oct. 2, 2020), <https://www.chicagotribune.com/news/environment/ct-pritzker-coal-climate-change-20201002-66qb2kg4m5hfhpfam6ps3ms6vu-htmlstory.html>; Post-Technical Conference Comments (Apr. 26, 2021) (comments of State Legislators), Accession No. 20210426-5265.

energy investments for a number of reasons: (1) state policies are pursued for the purpose of addressing a means to pursue environmental, public health, economic growth, or employment objectives, not in order to suppress market prices; (2) addressing environmental externalities is not “uneconomic”—it is a necessary market correction; and (3) applying MOPR to state policy resources actually *causes* uneconomic behavior by incentivizing the retention of truly uneconomic, unnecessary resources.⁵⁹ As explained by Brattle:

There is no sensible economic rationale for applying MOPR to all policy resources. States have many 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 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.⁶⁰

In sum, MOPR-Ex advocates create a market solution in want of a problem, motivated primarily by a concern that incumbent fossil fuel generators may no longer expect to earn a satisfactory return on their investments. While certainly a potential concern for some incumbents, low capacity prices are not a problem from a societal or market design perspective.⁶¹ The real distortions of the RPM have come from its travels through the MOPR looking glass, not the presence of state policy resources in PJM’s capacity market.

⁵⁹ Brattle Aff. at 23.

⁶⁰ *Id.* at 4.

⁶¹ *Id.*

B. EXPANDED MOPR IMPOSES UNECONOMIC COSTS ON PJM CUSTOMERS AND SOCIETY AS A WHOLE

Brattle analyzed the impact of applying MOPR-Ex to state policy resources and determined that the overall effect excludes policy resources from clearing the capacity market and has several adverse consequences, namely: (1) Expanded MOPR will keep state policy resources from clearing the capacity market and induce the uneconomic retention of excess capacity resources; (2) Expanded MOPR will impose costs on all PJM consumers by causing them to pay higher capacity prices than is economically efficient and by requiring customers in states with policy resources to “pay twice” for capacity; (3) higher prices would effectuate a wealth transfer from customers to suppliers on the entire volume of capacity transacted in the market; and (4) supporting excess capacity results in excess societal costs or deadweight loss that benefits neither customers nor suppliers who bear the costs of maintaining the uneconomic excess supply.⁶² Further, the scale of these problems would grow along with the scope of the Expanded MOPR and as PJM states proceed toward fulfilling their various clean energy mandates.⁶³ Failure to address these current and impending harms to consumers and to the PJM capacity market results in rates that are unjust and unreasonable.

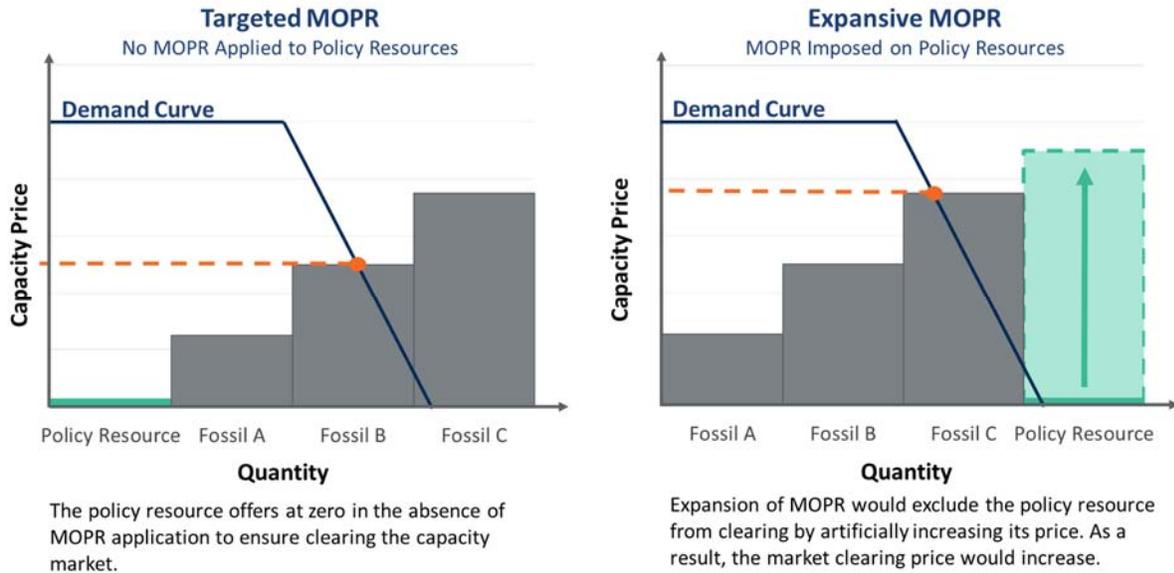
1. Approximately 6,800 MW of Policy Resources Could be Excluded from Clearing the Capacity Market by 2030

Applying MOPR to policy resources forces them to bid into the capacity market at administratively set prices designed to offset any benefits they receive as a result of state policies. The result is that capacity market prices increase for consumers and policy resources are pushed out of the capacity market as depicted in Figure 2 of Attachment A below:

⁶² *Id.* at 24–25.

⁶³ *Id.*

FIGURE 2: EXPANSION OF MOPR INCREASES THE CAPACITY CLEARING PRICE⁶⁴



Based on a review of the RPS and nuclear support programs of every state in the PJM footprint Brattle estimates that the total quantity of resources subject to the Expanded MOPR PJM-wide could be approximately 11,500 UCAP MW by 2030 (more if states continue to expand their policies), as set forth in Figure 4 of Attachment A below.

//

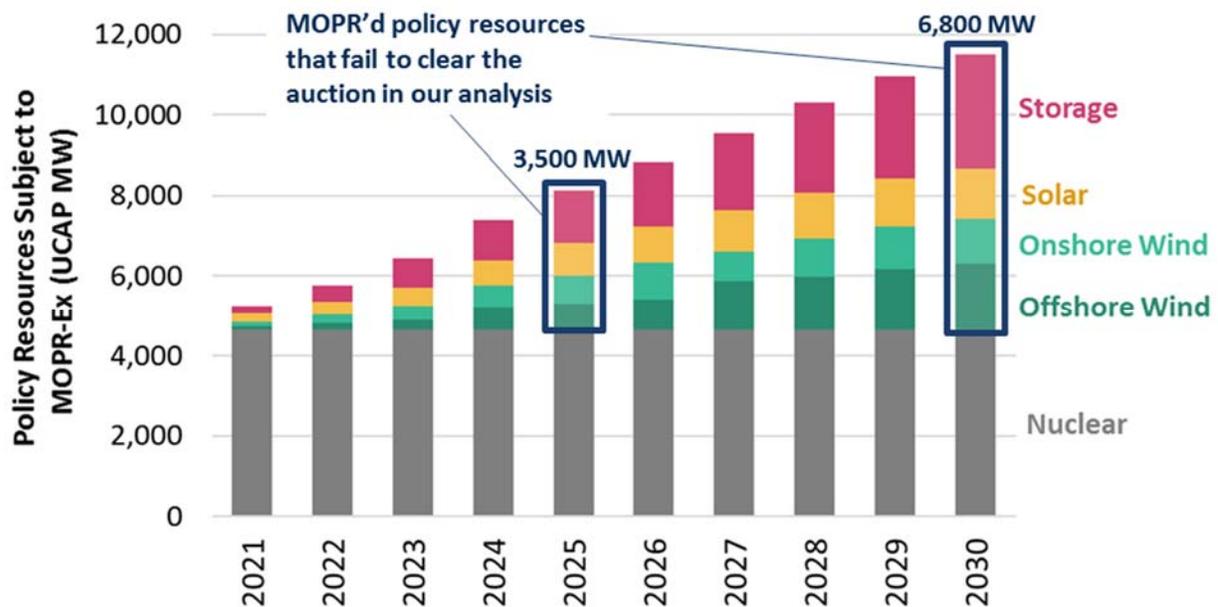
//

//

//

⁶⁴ *Id.* at 13.

FIGURE 4: VOLUME OF POLICY RESOURCES SUBJECT TO MOPR-EX⁶⁵



Not all of state policy resources will be precluded from clearing the capacity market. The majority of the resources in Figure 4 of Attachment A are multi-unit nuclear plants earning ZECs and able to offer at zero MOPR price and Brattle’s analysis assumed that all of those resources will clear the market in 2030.⁶⁶ However, at default MOPR price levels (and after adjusting for projected resource cost declines), new onshore wind, offshore wind, solar, and storage resources are unlikely to clear the market.⁶⁷ Overall, on a PJM-wide basis **approximately 3,500 UCAP MW of policy resources are at risk of not clearing by 2025, and up to 6,800 UCAP MW by 2030.**

Worse yet, Brattle estimates that the RPM will seek to fill a (fabricated) gap in supply needs by purchasing approximately 5,700 UCAP MW of higher-cost capacity from “marginal”

⁶⁵ *Id.* at 26.

⁶⁶ *Id.* at 25. However, Exelon recently announced that MOPR-Ex prevented its 1,403 ICAP MW Quad Cities nuclear plant from clearing the 2022/23 capacity auction and if it or other nuclear units would always or sometimes fail to clear the auction, then the true costs of MOPR-Ex would be higher than Brattle’s estimates. *Id.*

⁶⁷ *Id.* If some of these resources receive a lower MOPR price that allows them to clear the auction, then the true costs of MOPR-Ex could be mitigated from Brattle’s estimate. *Id.*

resources that have offered at relatively high prices in the capacity market and would not otherwise clear the market and that is not needed for reliability.⁶⁸ Such excess capacity resources could be high-cost aging fossil plants that require substantial re-investments to continue operating, or they could be new gas-fired power plants that require substantial new investments to be built. Regardless of what type of capacity is built to fill the phantom supply gap, every dollar spent to bring them online or keep them in service is a dollar of economic waste that is barely better for owners, (since every dollar earned must be spent to maintain the high-cost resource); and far worse off for customers who must pay for excess capacity that has no reliability value.⁶⁹ **By 2030, this excess capacity will amount to \$300 million per year in deadweight loss that benefits neither customers or suppliers.**⁷⁰

2. MOPR-Ex Could Impose Approximately \$1.7 Billion per Year in Excess Costs on Customers by 2030

As shown in Figure 5 of Attachment A below, **continuing to apply MOPR-Ex would impose a significant cost on customers across the PJM region, amounting to \$1.738 billion per year by 2025 and \$1.704 billion per year by 2030.**⁷¹ **These excess costs appear in two ways: (1) as an increase in capacity prices affecting all transactions; and (2) as an increase in contract payments to policy resources because they are deprived of capacity market revenues that go instead to unnecessary substitute resources.**

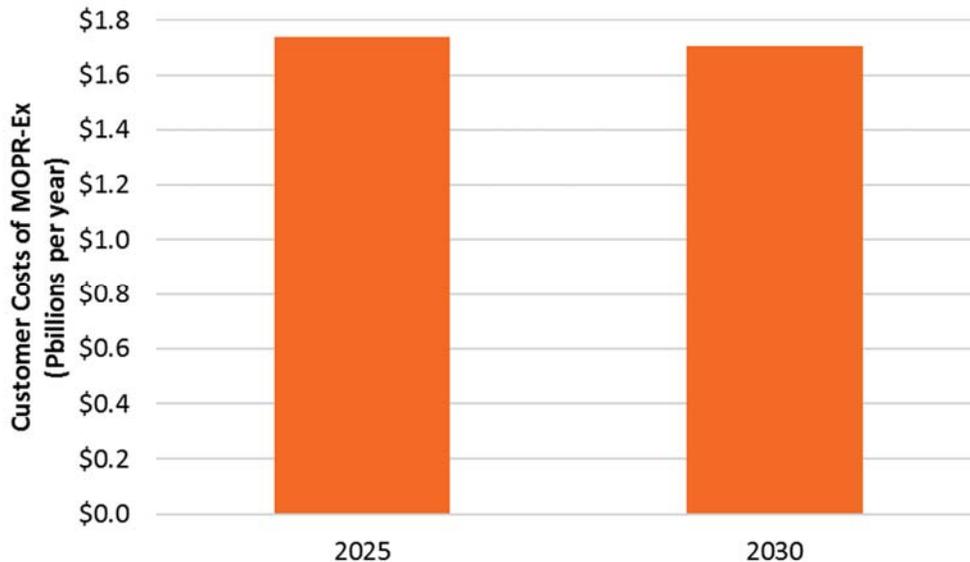
⁶⁸ *Id.* at 28.

⁶⁹ *Id.* at 28–29.

⁷⁰ *Id.*

⁷¹ *Id.* at 26–27; see also 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*, at Section II.C, Appendix A, and Figure 20 (June 2021) (“NJBPU Report”).

FIGURE 3: PJM-WIDE CUSTOMER COSTS IMPOSED BY MOPR-EX⁷²



3. MOPR-Ex Imposes Excess Costs on Consumers in all States, with and without Substantial Policy Mandates.

Customers in every state across the PJM footprint would bear a portion of the costs caused by MOPR-Ex, **with the largest costs imposed on customers in states whose policies support the largest UCAP MW volume of resources excluded from clearing the auction, who will pay both higher costs for capacity purchased from RPM and will “pay twice” for having to pay both for capacity mandated by state requirements and excluded from RPM due to MOPR-Ex and the excess capacity purchased to fill the “fabricated gap”, which makes up to 88% of 2025 customer costs and 80% of 2030 customer costs.⁷³ But even in states with no policy resources excluded, customers would face excess costs from the increased costs of capacity within RPM due to MOPR-Ex.⁷⁴**

⁷² *Id.* at 26.

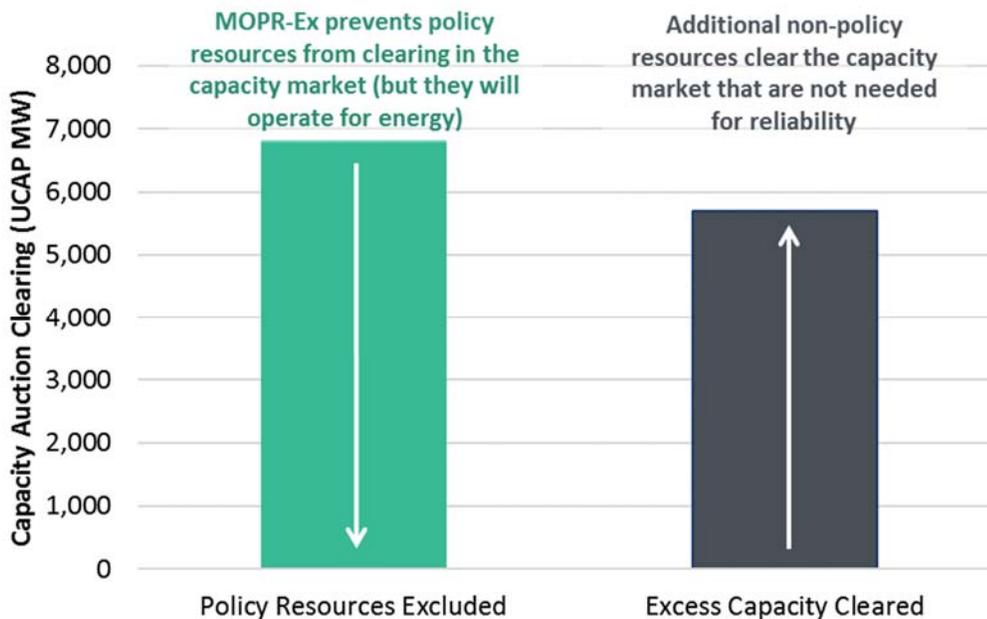
⁷³ *Id.* at 28.

⁷⁴ *Id.* at 27–28.

4. MOPR-Ex Could Induce a \$1.7 Billion Transfer of Wealth from Customers to Capacity Sellers by 2030

Incumbent capacity sellers are the primary beneficiaries of MOPR-Ex, who receive a \$1.7 billion transfer of wealth *per year* from customers. However, the approximately \$1.4 billion per year in net benefits that these incumbent players would enjoy by 2030 from maintaining MOPR-Ex are substantially below the \$1.7 billion per year increases in costs imposed on customers, due to the \$300 million deadweight losses spent to maintain aging fossil assets that would otherwise retire, as illustrated in Figures 6 and 7 of Attachment A below.⁷⁵ Thus even the net benefits to capacity suppliers as a result of the MOPR-Ex are substantially lower than the costs to consumers.

FIGURE 4: ESTIMATED CHANGES IN CAPACITY AUCTION CLEARING CAUSED BY MOPR-EX IN 2030



⁷⁵ *Id.* at 28–30.

FIGURE 7: IMPACTS ON PJM CUSTOMER COSTS AND CAPACITY SELLERS' NET REVENUES FROM IMPOSING MOPR ON POLICY RESOURCES BY 2030



In sum, continued application of MOPR-Ex would harm consumers more than it benefits suppliers, stands fundamental economic principles on their head, and threatens the viability of the PJM capacity market. In order to ensure just and reasonable rates, as well as salvage the RPM itself, PJM is right to abandon the decade-plus of ever-expanding MOPR application and return to the sole justifiable use of it as a narrowly focused tool whose sole function is to mitigate and prevent *actual* buyer-side market manipulation.

C. THE EXPANDED MOPR THREATENS TO UNDERMINE THE FUTURE OF COMPETITIVE WHOLESALE ELECTRICITY MARKETS

PJM’s Expanded MOPR threatens to undermine the benefits and eventually, the very existence of the RPM market.⁷⁶ Rates cannot justifiably ignore the connection between state requirements for supply and the mandatory reliability requirements of the capacity market

⁷⁶ *Id.* at 32–34.

(demand). Rates that impose MOPR on state policy resources in order to encourage delayed exit or new entry of fossil fuel generators, while prematurely forcing out and blocking entry of the clean energy resources necessary to meet state policy requirements, disconnect the capacity market from the demand of its customers or their desired supply, and are inherently unjust and unreasonable. As explained by Brattle:

Eventually, the scope and scale of an MOPR-Ex would become so great that it could exclude the large majority of all resources from participating, especially in states with the most ambitious climate goals. At the same time, the capacity market would continue to produce the high prices that would be necessary to retain excess capacity resources consistent with a fictional scenario as though the states' policies did not exist. This outcome is nonsensical and unsustainable. Rather than force customers to endure persistent, growing, and unnecessary excess costs, state policymakers would be forced to exit the capacity market entirely. In fact, state policymakers in New Jersey, Maryland, and Illinois have engaged in proceeding on the future of resource adequacy in the state for this very reason; and Dominion has already exited the market via the FRR alternative.⁷⁷

If capacity markets are to survive, independent system operators (“ISOs”)/ regional transmission organizations (“RTOs”) and FERC must accommodate state policies that are not designed or implemented to manipulate FERC wholesale markets, but rather to accomplish legitimate state objectives.

III. PJM’S FOCUSED MOPR REASONABLY DEFINES THE EXERCISE OF BUYER-SIDE MARKET POWER REQUIRING MITIGATION, AND THUS LEADS TO JUST AND REASONABLE RATES

PJM’s filing will produce just and reasonable rates because it would effectively mitigate only those offers that reflect the exercise of market power, rather than offers that reflect benefits related to state policy requirements. This avoids over-mitigation, excessive costs on consumers, and preserves states’ ability to regulate generation in order to protect public health.⁷⁸ As PJM

⁷⁷ *Id.* at 33.

⁷⁸ 16 U.S.C. § 824(b)(1) (states retain primary authority “over facilities used for the generation of electric energy”); *Huron Portland Cement Co. v. City of Detroit, Mich.*, 362 U.S. 440, 442 (1960) (“Legislation designed to free from

correctly explains, “[r]ather than a threat to be counteracted, state policies supporting certain resources within the PJM Region are a reality to be acknowledged.”⁷⁹

A. PJM PROPERLY FOCUSES APPLICATION OF MOPR ON ACTUAL EXERCISES OF BUYER-SIDE MARKET POWER

1. The minimum offer price rule should apply only to actual exercises of buyer-side market power

PJM’s filing represents a return to a sensible approach to mitigating buyer-side market power. It is a necessary corrective to the current “expanded MOPR,” which has become untethered from any rational concept of buyer-side market power, and instead has become a blunt instrument for negating any policy that has the potential effect of reducing wholesale capacity market prices.

Over the past decade, the Commission has struggled to consistently define buyer-side market power, or the circumstances justifying application of buyer-side market power mitigation.⁸⁰ The difficulty begins with the fact that buyers in the PJM capacity market, with its administrative demand curve, lack the means conventionally associated with an exercise of market power, such as forcing sellers to accept prices below the marginal cost, or withholding purchases in order to lower prices.⁸¹ Instead, the Commission has focused on whether buyers

pollution the very air that people breathe clearly falls within the exercise of even the most traditional concept of what is compendiously known as the police power.”).

⁷⁹ Transmittal Letter at 7.

⁸⁰ As former FERC chairman Norman Bay observed, the label of buyer-side market power “is imprecise and somewhat of a misnomer”; and “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.” *ISO New England Inc. and New England Power Pool Participants Comm.*, 158 FERC ¶ 61,138 (2017) (Bay, Comm’r, concurring). *See also* 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.eba-net.org/assets/1/6/18-1-60-Morrison_FINAL.pdf.

⁸¹ *See* Transmittal Letter, Attach. E, Aff. of Dr. Walter F. Graf on Behalf of PJM, ¶ 10 (“Graf Aff.”); Key Capture Energy, LLC Comments in Support of Compl., Attach. A, Aff. of Rob Gramlich in Support of Comments by Key Capture Energy, LLC, ¶ 10, Docket No. EL19-86-000 (Aug. 19, 2019), Accession No. 20190819-5174; *see also*

can affect the price by taking an action that influences the supply curve.⁸² Having already departed from mitigating only actions by buyers as buyers (such as withholding purchases) by introducing the MOPR at all (which applies solely to capacity *sellers*), the Commission must not also lose hold of the thread that a buyer must be directly involved in a capacity market offer if that offer is to be viewed as tainted by buyer-side market power.⁸³ As discussed in Section IV, *infra*, this is a necessary, though not sufficient condition, for mitigation.

Price floors should not be used as an all-purpose tool to counter perceived capacity price suppression⁸⁴ due to policies that provide revenues in exchange for environmental attributes or otherwise incentivize the development and retention of generation resources that are essential to meeting state policy objectives. Doing so invites arbitrary and discriminatory line-drawing, such as between state and federal policies that can benefit certain resources, between types of state policies depending on the mechanism used,⁸⁵ and between revenues earned outside of FERC-jurisdictional markets through policy mechanisms versus those earned through sales of

Richard B. Miller, Neil H. Butterklee, & Margaret Comes, “*Buyer-Side*” *Mitigation in Organized Capacity Markets: Time for a Change?*, 33 *Energy L.J.* 449, 450, 456 (2012) (“Buyer-Side Mitigation”) (arguing that “FERC should not intervene in capacity markets in order to establish what it believes to be a just and reasonable rate” and “[b]uyer market power, or monopsony power, occurs when a single buyer is able to control a market by limiting its purchases to reduce market prices in order to profit from that action.”), [https://www.eba-net.org/assets/1/6/16-449-Miller\[FINAL11.9\].pdf](https://www.eba-net.org/assets/1/6/16-449-Miller[FINAL11.9].pdf).

⁸² Graf Aff. ¶ 10.

⁸³ See *New York Indep. Sys. Operator, Inc.*, 172 FERC ¶ 61,058 (2020) (Glick, Comm’r, dissenting at P 1) (“Buyer-side market power mitigation should be all about and only about buyers with market power. Applying buyer-side market power mitigation to entities that are not buyers or buyers that lack market power is nonsensical.”)

⁸⁴ In fact, there is mixed evidence regarding whether state policies actually reduce capacity market prices. See, e.g., Transmittal Letter, Attach. C, Aff. of Peter Cramton on Behalf of PJM, ¶ 59 (“Cramton Aff.”) (reporting model results showing little difference in capacity prices between broad and narrow MOPR scenarios, thus providing evidence that the absence of a broad MOPR does not result in “price suppression”); Sylwia Bialek & Burcin Unel, *Efficiency in Wholesale Electricity Markets: On the Role of Externalities and Subsidies*, CESifo Working Paper No. 8673, at 25 (Nov. 2020), <https://www.cesifo.org/en/publikationen/2020/working-paper/efficiency-wholesale-electricity-markets-role-externalities-and> (arguing that “generation subsidies do not lead to price suppression in the capacity markets” and that MOPRs “are not supported by economic theory”);

⁸⁵ See generally Protest of Clean Energy Advocates, at App. B – Koplów Report, 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 (“Koplów Report”) (attached as Ex. D).

generation-related products to private actors.⁸⁶ Over-mitigation of perceived or redefined buyer-side market power causes significant harm to competition, and prevents the formation of just and reasonable rates. Suppliers may have legitimate reasons to submit bids below an administratively determined “competitive level,” including reasons to submit an offer of zero—indeed, “exercises of monopsony power are very difficult to differentiate from competition.”⁸⁷ Dr. Graf observes that “[m]arket Participants with no incentive to distort prices may disagree as to the profit-maximizing offer for a given resource, reflecting different understandings and forecasts of market fundamentals, future revenues, expected costs, and other factors.”⁸⁸ Applying the MOPR outside the confines of actual exercises of buyer-side market power guarantees over-procurement and prices higher than the actual marginal cost of capacity in the market—harms that PJM acknowledges are the result of the status quo expanded MOPR.⁸⁹

The Focused MOPR is therefore appropriately limited to guarding against the exercise of buyer-side market power.⁹⁰

PJM’s definition of buyer-side market power requires that a capacity market seller have a “load interest” in order to potentially have buyer-side market power.⁹¹ As defined by PJM, an

⁸⁶ See Req. for Reh’g of Clean Energy Advocates, at 47–48, Docket Nos. EL16-49 et al. (July 30, 2018), Accession No. 20200121-5328 (setting out argument that expanded MOPR arbitrarily discriminates between resources receiving benefits under state and federal policies); *id.* at 56–57 (noting lack of justification for treating revenues from sales of coal ash, steam heat, and other generation byproducts different from sales of environmental attributes pursuant to state policy).

⁸⁷ Morrison, Path Back to Resource Adequacy, 37 Energy L.J. at 32 (noting that “[l]ow bids could also ‘reflect the lower cost structure of the alleged predator, and so represent[] competition on the merits.’”); *see also* MOPR Madness at 107 (“MOPRs fail to reward marginal efficiencies, and that they do not permit resources to submit below-cost bids even when the supplier has a legitimate reason to do so. In ordinary markets, resources compete to reduce their own costs, secure favorable financing arrangements, hire cheap labor, and make accurate predictions about future market prices.”).

⁸⁸ Graf Aff. ¶ 8.

⁸⁹ See, e.g., Morrison, Path Back to Resource Adequacy, at 33 (“Mitigation of self-supply bids can very easily chill pro-competitive legitimate conduct unless very carefully limited to prevent abusive behavior.”).

⁹⁰ Cf. *Nat’l Ass’n of Regul. Util. Comm’rs v. FERC*, 475 F.3d 1277, 1280 (D.C. Cir. 2007) (noting that “FERC’s authority generally rests on the public interest in constraining exercises of market power”).

⁹¹ Transmittal Letter, Attach. A, Revisions to the PJM Open Access Transmission Tariff (Marked/Redline Format), at PDF page 10 (“PJM Redlined Tariff”) (“‘Buyer-Side Market Power’ shall mean the ability of Capacity Market

“Exercise of Buyer-Side Market Power” can likewise be committed only by capacity market sellers with a load interest or acting at the direction of a load interest.⁹²

Moreover, PJM’s filing appropriately recognizes that an offer reflecting revenues earned through state policy is not an exercise of buyer-side market power. PJM affiant Dr. Walter Graf explains that state “policies can be entirely supported on economic grounds as welfare-enhancing [and] . . . even if they have the ancillary effect of lowering market prices, there is no reason to suspect that they represent an exercise of buyer-side market power.”⁹³

Insofar as PJM anticipates applying the MOPR to resources specifically based on Conditioned State Support (pending future Commission approval), PJM makes clear that this has nothing to do with buyer-side market power but instead is based on a theory that certain kinds of state policies are impermissible and therefore should be mitigated.⁹⁴ As noted in Section IV, *infra*, we disagree that there is a legal or factual basis to mitigate state policies providing Conditioned State Support in the capacity market based on loose theories of preemption, particularly when indicia of buyer-side market power such as the incentive and ability to suppress market prices are absent. That said, we strongly agree with PJM⁹⁵ that there is also no basis for mitigating the vast majority of state policies based on a notion that they are tantamount to an exercise of buyer-side market power.

The fact that a capacity market seller may receive revenues as a result of a state or local policy that compensates for environmental attributes does not thereby create a load interest or

Sellers with a Load Interest to suppress RPM Auction clearing prices for the overall benefit of their (and/or affiliates) portfolio of generation and load.”).

⁹² *Id.* at PDF page 33 (Definitions – E – F).

⁹³ Graf Aff. ¶ 17. *See also* Transmittal Letter at 22 (setting out two bases for application of MOPR: “(1) the actual Exercise of Buyer-Side Market Power and (2) improper state actions that would have a direct effect on capacity market clearing prices”).

⁹⁴ *See* PJM Transmittal Letter at 22.

⁹⁵ Transmittal Letter at 8.

suggest that the seller is submitting capacity market offers at the “direction of a load interest.” That seller does not even have an incentive to lower the capacity market price, but instead benefits from higher prices as any seller would.⁹⁶ That seller may submit a relatively low offer because those revenues actually change the amount of money they require from the capacity market in order to undertake construction or remain in operation. This is a commercially reasonable offer, reflecting a competitive advantage held by the seller—it does not indicate market manipulation by a buyer, or at the direction of a buyer.

Simply put, in the case of state policies to provide incentives for certain types of generation, there is no buyer seeking to benefit from lower capacity market prices, and able to suppress them. It would be pure fiction to regard such state policies as instruments of buyer-side market power.⁹⁷ Even if the state policy were constructed in an unusual manner that does somehow control the resource offer, this says nothing about whether such an offer would actually affect the clearing price or whether any associated load would benefit, on net, from such an effect.⁹⁸

Declining to treat state policies as instruments of buyer-side market power is not inconsistent with the Commission’s obligation to ensure that market-based rates are just and

⁹⁶ See MOPR Madness, at 121 (“Unlike capacity offered by net buyers, subsidized resources benefit financially when capacity prices increase.”); *id.* at 72 (“[U]nlike price suppression caused by predatory pricing strategies, state subsidies do not threaten to drive independent power producers out of wholesale electricity markets. They simply generate a price signal that affects suppliers’ behavior.”).

⁹⁷ See *New York State Pub. Serv. Comm’n v. New York Indep. Sys. Operator, Inc.*, 158 FERC ¶ 61,137 (Bay, Chairman, concurring) (“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.”); see *New York Indep. Sys. Operator, Inc.*, 172 FERC ¶ 61,058 (2020) (Glick, Comm’r, dissenting at P 17) (rejecting previously articulated Commission view that states are quasi-buyers because they represent the interests of consumers and noting that “[s]tates regulate for a variety of reasons and acting as if any regulation is an exercise of market power fundamentally misunderstands the role Congress reserved for the states under the FPA. Philosophical market power—as distinguished from actual market power—should have no place in the Commission’s regulatory regime.”).

⁹⁸ See MOPR Madness, at 15–36 (detailing importance and evolution of “incentive” and “ability” in buyer-side market power mitigation schemes).

reasonable. To be sure, the Commission cannot unquestioningly accept a market-based rate as just and reasonable without having adequate measures in place to detect and protect against the exercise of market power.⁹⁹ But this does not resolve the question of what constitutes market power or the exercise thereof, and how to balance the risks of excessive mitigation of market power (false positives), and the risk of under-mitigation (false negatives). Cases such as *Tejas Power Corp.* cannot be read to suggest that where the market price diverges from some imagined objective measure of marginal cost, that price must have been affected ipso facto by market power. The existence of buyer-side market power cannot be assumed or inferred based on a Monday morning assessment of market outcomes; such an approach would have the Commission substitute the market outcome with its own judgment about proper rates.

2. PJM’s decision not to subject resources benefitting from state policies to MOPR is an appropriate reflection of jurisdictional lines and market realities

PJM’s Proposed Tariff does not assert an economic rationale for applying buyer-side mitigation measures to generators receiving revenues from a state policy or program, and would not subject such generators to MOPR.¹⁰⁰ However, based on its reading of *Hughes*, PJM nevertheless proposes to apply the MOPR to generators receiving Conditioned State Support, should the Commission approve this in response to a future Section 205 filing.¹⁰¹ PJM defines Conditioned State Support as:

...any financial benefit required or incentivized by a state, or political subdivision of a state acting in its sovereign capacity, that is provided outside of PJM Markets and in exchange for the sale of a FERC-jurisdictional product conditioned on clearing in any RPM Auction, where “conditioned on clearing in any RPM Auction” refers to specific directives as to the level of the offer that must be entered for the relevant Generation Capacity Resource in the RPM Auction or

⁹⁹ *Tejas Power Corp. v. FERC*, 908 F.2d 998, 1004 (D.C. Cir. 1990).

¹⁰⁰ Transmittal Letter at 23–24.

¹⁰¹ PJM Redlined Tariff at PDF page 102–03 (Proposed Tariff, Attachment DD, Section 5.14(h-2)(2)(A)); Transmittal Letter at 25, 42–43; Transmittal Letter, Attach. F, Aff. of Lisa Morelli on Behalf of PJM, ¶¶ 12, 14 (“Morelli Aff.”).

directives that the Generation Capacity Resource is required to clear in any RPM Auction. Conditioned State Support shall not include any Legacy Policy.¹⁰²

Further, Conditioned State Support would **not** include: “policies designed to procure, incent, or require environmental attributes, whether bundled or unbundled....; economic development programs and policies; tax incentives; state retail default service auctions; policies or programs that provide incentives related to fuel supplies; any contract, legally enforceable obligation, or rate pursuant to the Public Utility Regulatory Policies Act or any other state-administered federal regulatory program (e.g., Cross-State Air Pollution Rule).”¹⁰³ Because state policies designed to alter the generation mix within state boundaries are not an exercise of buyer-side market power, PJM’s proposed definition for Conditioned State Support, *i.e.* those state policies or programs that nevertheless trigger application of the minimum offer price rule, is a significant improvement over the status quo, subject to the concerns expressed in Sections IV and V, *infra*.

PJM’s rationale for the Conditioned State Support provision is that “the capacity market cannot accommodate state policies that provide state support conditioned on seller offer behavior that would . . . improperly interfere with the auction-clearing price.”¹⁰⁴ Referencing *Hughes*, PJM argues that a “bid to clear” requirement “makes the seller indifferent as to resource’s economics when submitting offer in the capacity market, and lets the state set the price of the FERC-jurisdictional product.”¹⁰⁵ Thus, PJM’s proposed tariff codifies its interpretation of the jurisdictional boundary between state authority over generation and FERC authority over

¹⁰² PJM Redlined Tariff at PDF page 16 (Definitions – C-D). Additionally, “‘Legacy Policy’ shall mean any legislative, executive, or regulatory action that specifically directs a payment outside of PJM Markets to a designated or prospective Generation Capacity Resource and the enactment of such action predates October 1, 2021, regardless of when any implementing governmental action to effectuate the action to direct payment outside of PJM Markets occurs.” *Id.* at PDF page 41 (Definitions – L – M – N).

¹⁰³ *Id.* at PDF page 103 (Proposed Tariff, Attachment DD, Section 5.14(h-2)(2)(A)(ii)).

¹⁰⁴ Transmittal Letter at 25–26.

¹⁰⁵ *Id.* at 42; Morelli Aff. at ¶ 14.

wholesale markets in FPA Section 201(b). PJM asserts that applying the MOPR to state resources with “a high likelihood of being nullified by the courts” is necessary because court review “may not be able to protect the market in a timely manner.”¹⁰⁶ PJM also argues that using a MOPR that only applies to certain resources may be more surgical in application than a pre-emption challenge that may ultimately strike down an entire law.¹⁰⁷

Because PJM does not believe it should be the final arbiter of when a state law or program is found to receive Conditioned State Support, the proposed Tariff establishes a three-step process for applying the MOPR to state resources whereby: (1) PJM makes a determination that a resource is receiving Conditioned State Support (or the resource self-certifies to this effect); (2) PJM submits notice to FERC of its intent to apply the MOPR to the resource pursuant to FPA Section 205; and if FERC approves of the 205 filing, (3) PJM will apply the MOPR to such resource and any other resource receiving such Conditioned State Support.¹⁰⁸

PJM’s proposal is a vast improvement over the unjust, unreasonable, and unduly discriminatory treatment of state policy resources under the Expanded MOPR and appropriately reflects the need to respect jurisdictional boundaries and market realities. As drafted, under the Legacy Policy exemption, the proposed Tariff would not apply to any existing state policies or laws. Further, the non-exclusive list of state policies explicitly not considered to be Conditioned State Support is itself extremely broad and includes state policies addressing the environmental externalities of generation. Finally, states are already aware of the *Hughes* case and, as the trigger for application of the MOPR to future resources centers around the way in which the contract is drafted, whether and under what circumstances the Conditioned State Support will

¹⁰⁶ Morelli Aff. at ¶ 14; Transmittal Letter at 43.

¹⁰⁷ Transmittal Letter at 43.

¹⁰⁸ *Id.*; PJM Redlined Tariff at PDF pages 102–03 (Proposed Tariff, Attachment DD, Section 5.14(h-2)(2)(A)).

ever be triggered is purely hypothetical. Such an intention does not have legal force and is not a “basis upon which to oppose” that tariff.¹⁰⁹ The Commission should accordingly clarify that its approval of the proposed Tariff—as PIOs urge—does not imply endorsement of any hypothetical future Section 205 filing.¹¹⁰

Additionally, while PIOs believe the future application of PJM’s proposed MOPR would be highly objectionable as described in further detail in Section IV below, PIOs are also mindful that the Focused MOPR is the product of compromise and that there is considerable pressure to ensure that the December 2021 auction is able to go forward as planned. Because the Conditioned State Support provision does not currently apply and quite possibly may never be triggered, PIOs cannot say that the PJM proposal is unjust or unreasonable and as such, and whether its adoption by the Commission is appropriate.

B. PJM’S FOCUSED MOPR APPROPRIATELY WEIGHS THE RISKS OF OVER-MITIGATION AGAINST THE RISKS OF UNDER-MITIGATION AND REACHES A REASONABLE BALANCE

PJM’s filing reflects careful consideration of the proper balance to be struck in mitigating the exercise of buyer-side market power. As PJM’s Senior Director of Economics, Dr. Walter Graf explains: “The design of market power mitigation mechanisms necessarily must balance multiple objectives of minimizing false positives (over-mitigation), minimizing false negatives (under-mitigation), and minimizing administrative burden to PJM and market participants.”¹¹¹

This view echoes the Commission’s most common approach to mitigation, in which the Commission recognizes its ability to “balance[e] the need to mitigate buyer-side market power

¹⁰⁹ See *id.*; See, e.g., *Carbon Pricing in Organized Wholesale Electricity Markets*, 175 FERC ¶ 61,036 (2021) (Danly, Comm’r, concurring in part and dissenting in part at P 1) (observing that “[a]ny party with a rate on file can submit a Federal Power Act section 205 filing at any time.”).

¹¹⁰ See Section IV below for further discussion regarding this point.

¹¹¹ Graf Aff. ¶ 15.

against the risk of over-mitigating competitive entry.”¹¹² Indeed, the Commission regularly weighs a broad array of costs of over-mitigation, including impacts on state policy interests, the costs of over procurement, the risk of “false positives,” negative impacts on price signals, and administrative burden, and balances those costs against the benefits of mitigation.¹¹³ The D.C. Circuit has recognized the Commission’s ability to balance the risks of under-mitigation against the risks of over-mitigation when reviewing market rules.¹¹⁴ In considering the focused MOPR proposed by PJM, the Commission should carefully consider the costs of over-mitigation presented by the Expanded MOPR, the evidence presented by PJM that the focused MOPR strikes a better balance.

An important factor in PJM’s proposal is its assessment that “it is reasonable to design a buyer-side market power mitigation mechanism that is more focused . . . [g]iven the lower risk of buyer-side market power relative to supplier-side.”¹¹⁵ Dr. Graf explains that the central challenge for a buyer seeking to exercise market power, through either new or existing resources, is that the buyer must succeed at suppressing prices for multiple years—long enough to recover whatever “uneconomic” investment they made in order to lower the clearing price.¹¹⁶ The difficulty in

¹¹² Br. of Resp’t FERC at 20, 22, Case Nos. 15-1452, 15-1454 (D.C. Cir. Sept. 27, 2016); Br. of Resp’t FERC at 13, 20, 35–36, Case Nos. 17-1110 et al. (D.C. Cir. Nov. 21, 2017).

¹¹³ *PJM*, 126 FERC ¶ 61,145, 61,887–88 (2009) (discussing Brattle Report describing over-mitigation as risk of “false positives”); *New York Pub. Serv. Comm’n v. New York Indep. Sys. Operator*, 154 FERC ¶ 61,088, at P 18 (2016) (describing decision as “balancing the risk of over-mitigation with the need to mitigate buyer-side market power”); *ISO New England Inc.*, 155 FERC ¶ 61,029, at P 43 (2016) (finding particular design choice will “help reduce concerns of over-mitigation”); *PJM*, 143 FERC ¶ 61,090, at P 26 (2013), *on reh’g*, 153 FERC ¶ 61,066 (2015); *Midwest Indep. Sys. Operator, Inc.*, 111 FERC ¶ 61,043, at P 78 (Apr. 15, 2005), *on reh’g*, 112 FERC ¶ 61,086 (2005); *Midwest Indep. Transmission Sys. Operator, Inc.*, 120 FERC ¶ 61,250, 62,034 (2007); *ISO New England Inc. & New England Power Pool Comm.*, 158 FERC ¶ 61,138, at P 26; *Consol. Edison Co. of New York, Inc.*, 150 FERC ¶ 61,139, at P 45 (2015).

¹¹⁴ *Wisconsin Pub. Power, Inc. v. FERC*, 493 F.3d 239, 262 (D.C. Cir. 2007) (“As FERC recognized in this case, ‘[t]he potential for over-mitigation would increase as BCA thresholds are tightened,’ and petitioners have failed to show that FERC acted unreasonably in choosing precisely what degree of over-mitigation risk was appropriate.”); *NextEra Energy v. FERC*, 898 F.3d 14, 22 (D.C. Cir. 2018) (“FERC is permitted to weigh the danger of price suppression against the counter-danger of over-mitigation, and determine where it wishes to strike the balance.”).

¹¹⁵ Graf Aff. ¶ 15.

¹¹⁶ *See id.* ¶¶ 11–12.

sustaining this price suppression strategy, given the predictable responses of other supply in PJM, makes such an endeavor very risky for the buyer.¹¹⁷ As explained by Professor Cramton, PJM’s downward sloping demand curve also lessens the price impact of any change in the supply curve, which decreases the odds of successfully exercising buyer-side market power.¹¹⁸

The declining and uncertain capacity value of renewable energy resources under PJM’s recently approved Effective Load Carrying Capacity (“ELCC”) rules further decreases the likelihood that renewable energy resources, in particular, could be successfully used to exercise buyer-side market power.¹¹⁹ Until very recently FERC had recognized that “wind and solar resources are a poor choice if a developer’s primary purpose is to suppress capacity market prices;”¹²⁰ ELCC makes this only more true. The low likelihood that a renewable energy resource—the primary beneficiary of state policies—could ever be used to successfully exercise market power makes it more likely that mitigating such resources would be a “false positive” and result in over-mitigation. The focused MOPR thus strikes the appropriate balance.

¹¹⁷ *Id.* Professor Joshua Macey has noted similar dynamics that deter efforts to engage in predatory pricing, which combined with the harms associated with over-enforcement, has led courts to be skeptical of predation claims. MOPR Madness at 54 (“Successful predation is difficult to execute. It generally requires that firms with market power sell a product at a loss. The period of losses naturally deters predatory pricing, because firms are reluctant to incur certain losses for the uncertain possibility of a future monopoly, especially since there is a risk that rivals will reenter the market once the firm raises prices back to a profitable level. In addition, it is extremely difficult to distinguish predatory pricing from other benign motivations for price cuts. Recognizing that firms are reluctant to sell at a loss and that over-enforcement would deter efficient price cuts, courts have created a high bar for successful predation claims.”) (citations omitted).

¹¹⁸ Transmittal Letter at 18; Cramton Aff. ¶ 30.

¹¹⁹ *See id.* at 18–19.

¹²⁰ *See PJM*, 135 FERC ¶ 61,022, at P 153 (2011), *reh’g denied*, 137 FERC ¶ 61,145 (2011), *aff’d sub nom, N.J. Bd. of Pub. Utils. v. FERC*, 744 F.3d 74 (3d Cir. 2014). FERC failed to adequately explain its departure from this prior rationale in the 2018 and 2019 PJM orders. June 2018 Order; 2019 MOPR Order.

C. FOCUSED MOPR WILL RESTORE THE CAPACITY MARKET TO ITS INTENDED FUNCTION AND ENSURE PRICE SIGNALS REFLECT TRUE RELIABILITY NEEDS

Capacity markets are intended to ensure reliability by addressing the “missing money” problem—ensuring generators have adequate income to meet peak energy usage.¹²¹ An efficient outcome to a capacity market auction—a price reflecting the actual marginal cost of providing capacity—is therefore achieved where “resources’ capacity market offers [] reflect all relevant costs minus all relevant revenues, including costs and revenues that are not derived directly from Commission-jurisdictional markets.”¹²² By mitigating only actual exercises of buyer-side market power, PJM’s proposed tariff will allow capacity prices to reflect revenues that resources earn through state policy mechanisms, which in turn leads to just and reasonable rates. The economic principles informing PJM’s proposal find broad support in the literature,¹²³ as well as clear endorsement by PJM’s membership.¹²⁴ PJM’s filing provides a compelling explanation, including testimony from three witnesses, for why the focused MOPR leads to correct price signals, given the inevitable presence on PJM’s system of resources supported by state policy. Under the current, expanded MOPR, if a state policy resource “is installed (or remains in service) and effectively provides a reliability service notwithstanding denial of capacity revenues, the auction presents an incorrect view of both the price and quantity of providing

¹²¹ *New York Indep. Sys. Operator*, 172 FERC ¶ 61,058 at P 5 (2020).

¹²² *See id.* (Glick, Comm’r, dissenting at P 7).

¹²³ *See, e.g.*, Todd S. Aagaard & Andrew N. Kleit, *A Road Paved with Good Intentions?: FERC’s Illegal War on State Electricity Subsidies*, 33 *Elec. J.* 1, 3–4, 6–7 (June 2020) (arguing that MOPR reforms lead to unjust and unreasonable rates), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3544876; Buyer-Side Mitigation at 450 (arguing that “FERC should not intervene in capacity markets in order to establish what it believes to be a just and reasonable rate”); Danny Cullenward & Shelley Welton, *The Quiet Undoing: How Regional Electricity Market Reforms Threaten State Clean Energy Goals*, *Yale J. Regul. Bulletin* (Nov. 8, 2019) (“Quiet Undoing”), <https://www.yalejreg.com/bulletin/the-quiet-undoing-how-regional-electricity-market-reforms-threaten-state-clean-energy-goals/>.

¹²⁴ *See* Transmittal Letter at 53.

reliability service in PJM.”¹²⁵ The focused MOPR would instead “leav[e] the excluded resource in the auction and allow[] it to clear,” thus sending “a lower price signal that is consistent with supply and demand fundamentals, given that the resource is (or will be) in service for the Delivery Year, and will be supporting reliability.”¹²⁶ As Chairman Glick has previously explained “[a] capacity construct that ignores those states’ public policies will produce price signals that do not reflect the factors that are actually influencing the development of new resources. Those misleading price signals will encourage the participation of the wrong types of resources or resources that are not needed at all.”¹²⁷

The Brattle Affidavit further supports approval of PJM’s filing on the basis that it will provide for more accurate price signals, noting that the “the correct capacity price is that which aligns supply and demand, given other policies and/or markets that policymakers have identified as necessary to address externalities and other policy priorities.”¹²⁸ These correct price signals reflect “that policy resources will be developed and operated regardless of whether or not they clear the capacity market,” and avoid “distort[ing] the capacity market by requiring the mandatory procurement of additional capacity on behalf of customers, beyond what is needed to meet the reliability standard.”¹²⁹ Consistent with Chairman Glick’s view that the capacity market prices should reflect “all relevant costs minus all relevant revenues,” Drs. Newell and Spees explain:

Compensating capacity resources for their environmental and other policy value lowers their net cost of providing capacity (regardless of whether that compensation is achieved through carbon pricing, clean energy payments, or some other mechanism). Clean energy resources correctly appear more competitive as capacity providers, just like resources with high energy and

¹²⁵ *Id.* at 8.

¹²⁶ *Id.* at 10.

¹²⁷ See *New York Indep. Sys. Operator*, 172 FERC ¶ 61,058 (2020) (Glick, Comm’r, dissenting at P 14).

¹²⁸ Brattle Aff. at 18.

¹²⁹ *Id.* at 19.

ancillary services value, and they should be allowed to clear the capacity market and be recognized for the resource adequacy value they contribute to the system.

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.¹³⁰

PJM’s filing recognizes this as well, explaining that “Application of the MOPR to any out-of-market revenue stream just because it is out-of-market requires a resource to offer at a level that suggests they need to collect the subsidy revenues they are already collecting again. This offer level is inconsistent with the level of revenues that the resource truly needs to collect from the capacity market and therefore inconsistent with the marginal cost of providing capacity.”¹³¹

The objective of accurate capacity prices is paramount over ill-defined concepts such as “market integrity” or “investor confidence” that the Commission has sometimes referred to when justifying broader application of the MOPR.¹³² Market integrity is not promoted through excessively administrative pricing constructs that arbitrarily discriminate between treatment of resources receiving state and federal policies, or treat non-FERC-jurisdictional revenues differently depending on their source. Likewise, “[i]nvestor confidence is a means to ensuring this end, but only under certain conditions. If a region is substantially over-supplied with generation capacity, the market should not give investors confidence that they will recover their investment costs—otherwise, the region will end up with more generation than it needs, paid for by customers, in contravention of FERC’s obligations to protect consumers.”¹³³

¹³⁰ *Id.* at 18.

¹³¹ Transmittal Letter at 10.

¹³² *See* Quiet Undoing at 13–14.

¹³³ *Id.* at 14.

As noted in the Commission’s recent policy statement on Carbon Pricing in Organized Wholesale Electricity Markets,¹³⁴ the Commission has long recognized rates to be just and reasonable where they result from supply offers that reflect state and local policies. The capacity market rules in PJM, as well as in ISO New England and New York ISO, are a significant and highly detrimental departure from that general practice, and must be replaced with rules along the lines of those brought forward by PJM in this proceeding. Rates must reflect rather than ignore economic reality, of which policy is an inextricable part.¹³⁵ Indeed, the effects of state, local, and federal policy on capacity rates are pervasive, as described in the report our organizations submitted in ER18-1314 by Doug Koplow, an expert on fossil fuel subsidies.¹³⁶ PJM’s filed revisions will move its capacity market closer to rates that reflect the actual marginal cost of capacity in the region and should be accepted.

D. PJM’S FILING WILL RESULT IN RATES THAT APPROPRIATELY INDUCE RESOURCE ENTRY AND EXIT, SUPPORT RESOURCE ADEQUACY AND RELIABILITY, AND PROMOTE INVESTMENT THROUGH STABLE, TRANSPARENT RULES

Because accurate capacity price signals reflect the “missing money” necessary to operators to meet a certain reliability threshold, they also act as an important signal that project developers look to when assessing the financial viability of a project, and that existing resource owners consider when deciding whether or not to make investments needed to continue operating their units reliably.¹³⁷ If capacity market prices are relatively high, this incents new entry and discourages exit of older, less efficient units. This is the desired response when

¹³⁴ *Carbon Pricing in Organized Wholesale Elec. Mkts.*, 175 FERC ¶ 61,036, at PP 9–10 (2021).

¹³⁵ *See ISO New England Inc. & New England Power Pool Comm.*, 158 FERC ¶ 61,138 (2017) (Bay, Comm’r, concurring) (“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.”).

¹³⁶ Koplow Report at 3.

¹³⁷ Transmittal Letter at 10 (“Likewise, the price would be consistent with the marginal cost of capacity when considering all relevant revenue streams that resources receive.”).

capacity is scarce. But when capacity is abundant, as it has been in PJM for a decade, relatively high prices send the wrong signal, and require consumers to overpay for capacity. Likewise, when resource investment is being increasingly supported by state policy mechanisms, capacity prices need not necessarily send a signal for additional investment.

Because the focused MOPR will result in proper price signals for needed entry and exit and as a result, it will ensure that there is sufficient capacity to ensure reliability on PJM's system. PJM's filing includes testimony by Professor Peter Cramton which concludes that the focused MOPR will ensure reliability at a lower cost than a much broader MOPR.¹³⁸ Professor Cramton reaches this conclusion based on an extensive modeling effort that looks at compensation across all of PJM's markets—a comprehensive assessment that refutes simplified notions that capacity markets must be solely responsible for ensuring resource adequacy. As Professor Cramton further observes, the excess capacity procurement resulting from the current expanded MOPR only exacerbates the “missing money problem” because “[b]y clearing resources that duplicate resources favored by state policy, the [Expanded] MOPR results in downward pressure on energy prices, the largest source of resource revenues.”¹³⁹ Indeed, investors do not make decisions based solely on a single-year clearing price, but instead based on their longer-term view of market value, including likely revenues in PJM's energy and ancillary service markets, as well as their own forecasts of how capacity market revenues might change over the economic life of the asset.¹⁴⁰

¹³⁸ *Id.* at 16–17 (citing Cramton Aff. ¶¶ 73–74).

¹³⁹ Cramton Aff. ¶ 37.

¹⁴⁰ See, e.g., James F. Wilson, *Forward Capacity Market CONEFusion*, 23 *The Elec. J.* 25, 29, 30 (Nov. 2010), <http://wilsonenec.com/dev/wp-content/uploads/2016/07/Capacity-Market-CONEFusion-Elec-Journal-as-posted.pdf>; ISO/RTO Council, *Resource Investment in the Golden Age of Energy Finance*, at 17–19, Market Reform (noting that investors pay the most attention the “fundamental strictures of supply/demand balance” rather than capacity market design, in making decisions) (May 2015), https://www.eenews.net/assets/2017/05/23/document_ew_01.pdf.

We agree that replacing the current rules with the focused MOPR will not adversely affect resource adequacy or reliability, and instead it will remove a market rule that intentionally overprocures capacity in PJM.¹⁴¹ Concerns that a focused MOPR as PJM has filed will cause a shortfall in supply are unfounded. It bears noting that the PJM region has consistently exceeded its installed reserve margin targets in the years prior to implementation of the Expanded MOPR.¹⁴² To the extent that capacity prices decline as a result of the focused MOPR, they cannot fall lower than the cost of the marginal unit needed to meet demand—accounting for all sources of revenue for that unit. If supply grows scarcer, and other sources of revenue are not available to increase such supply, then capacity prices will rise and attract new entrants. As explained in the attached Affidavit of Drs. Sam Newell and Kathleen Spees, “[b]y its nature, the downward sloping demand curve simply cannot produce market outcomes with low prices and low reliability at the same time,” and that where entry of policy resources causes low capacity prices, there is ample supply of capacity on the system.¹⁴³

To the extent that the shift to focused MOPR does place downward pressure on capacity prices, this may lead to the retirement of those resources most dependent on capacity market revenues to cover their going-forward costs, and may deter investment in new resources with

¹⁴¹ Michael Hogan & David Littell, *Get What You Need: Reclaiming Consumer-Centric Resource Adequacy*, Regulatory Assistance Program (“RAP”), at 2 (June 2020) (achieving resource adequacy also means not requiring consumers to pay for capacity beyond the point at “which the incremental cost of additional resources would exceed their incremental reliability value to consumers in reducing the risk of involuntary service interruptions.”) (“Get What You Need”), <https://www.raonline.org/wp-content/uploads/2020/06/rap-hogan-littell-consumer-centric-resource-adequacy-2020-june.pdf>. This view of resource adequacy is consistent with FERC’s own standards for determining whether capacity market demand curves will result in just and reasonable rates. *See, e.g., ISO New England, Inc.*, 161 FERC ¶ 61,035 at P 38 (2017) (establishing that the demand curve “should produce prices high enough to meet the reliability standard but not so high as to add unnecessary costs”).

¹⁴² Capacity Repricing or in the Alternative MOPR-Ex Proposal: Tariff Revisions to Address Impacts of State Public Policies on the PJM Capacity Market, at 35–39, Docket ER18-1314 (Apr. 9, 2018), Accession No. 20180409-5056.

¹⁴³ Brattle Aff. at 20–21. *See also* MOPR Madness at 121 (“[S]ubsidies do not prevent the capacity market from working. The capacity market is an administrative construct. When capacity is needed, the price of capacity will increase. This is axiomatic. The market is designed such that the capacity price increases whenever there is a capacity shortfall. This price increase will induce market entry whenever there are not enough resources available to meet expected peak demand.”).

relatively high net costs of new entry.¹⁴⁴ Among existing resources, those that exit will be those with higher net avoidable cost rates (going-forward costs),¹⁴⁵ which PJM witness Dr. Graf explains “reflects primarily annual fixed operating costs (net of other market revenues), which could be avoided by mothballing or retiring the resource.”¹⁴⁶ Notably, a supplier would not include sunk costs, such as the cost to construct the facility or costs of debt financing, in their capacity market offer. Doing so might “cause their offer not to clear the market,” in which case “the seller would lose market revenues while not avoiding paying sunk costs.”¹⁴⁷

If a resource is clearing the auction, but not earning sufficient revenues to cover its debt obligations or other sunk costs, the likely result is that the resource is sold or financially restructured, including write-downs of the value of the plant. It would not make any financial sense for such a plant to cease operations because of declining capacity market revenues—so long as the plant is making sufficient revenue to cover its going forward costs—as doing so would only end all prospect of further recovery of capital costs.¹⁴⁸

Resources with high net avoidable cost rates are those that face costly capital upgrades to continue reliable operation in the delivery year, anticipate low energy market revenues (perhaps due to a low capacity factor), or some combination thereof.¹⁴⁹ Relatively new, efficient facilities

¹⁴⁴ Brattle Aff. at 18–19.

¹⁴⁵ *Id.* at 28.

¹⁴⁶ Graf Aff. ¶ 30; *see also id.* ¶ 29 (“a competitive market participant should choose to offer their resources at prices that reflect economic costs (net avoidable going forward costs) as this offer level maximizes profits.”)

¹⁴⁷ *Id.* ¶ 30.

¹⁴⁸ *See* Comments of PJM Power Providers Group at ¶¶ 43–44, Docket No. EO18080899 (N.J. Bd. of Pub. Utils. Jan. 31, 2019), <https://www.nj.gov/bpu/pdf/publicnotice/zec%20comments/Comments.pdf> (“What would happen if the generation resource shuts down? It could avoid all of its going forward/avoidable costs, but then it would also lose the opportunity to earn \$74/MW-day to cover its sunk costs plus any return. . . . The economically rational course of action is to remain in commercial operation even if the resource is not earning the returns it wants. Any threat to shut down under conditions such as those in this example is simply not credible because the resource owner would not be carrying out its fiduciary responsibility to its shareholders and would be saddling shareholders with losses they would otherwise not have to bear.”).

¹⁴⁹ *See* Brattle Aff. at 28.

are least likely to have high net avoidable cost rates.¹⁵⁰ Thus, the units that may retire as a result of the focused MOPR would be those that contribute relatively little to the system's ability to integrate high levels of renewables and adapt to more variable load.

Furthermore, any concerns that lower capacity prices will not be sufficient to support the kinds of resources needed for reliability reflect a lack of confidence in existing capacity accreditation procedures and the reality that there are system needs not currently procured in the full suite of PJM markets.¹⁵¹ As to the first of these issues, the Commission has just approved PJM's new effective load carrying capability methodology for renewable and energy storage resources.¹⁵² As to the second, PJM's operating reserve demand curve enhancements will go into effect in under a year, which will substantially increase compensation offered for multiple reserve products, while at the same time increasing energy prices.¹⁵³ There is simply no reason for the Commission to credit concerns that MOPR is needed to maintain reliability, given the extensive work that PJM has undertaken on these two initiatives in recent years, and its intention to continue actively examining updates needed to its market design to ensure accurate capacity accreditation and possibly procure additional reliability attributes.¹⁵⁴

Finally, the focused MOPR will promote investor confidence by restoring a more market-based dynamic and reducing administrative pricing interference. As economist James F. Wilson has explained, before the current expanded MOPR was implemented, the PJM capacity market

¹⁵⁰ PJM's default Net Avoidable Cost Rate values for combined cycle and coal resource types illustrate this point. See PJM Redlined Tariff at PDF page 89 & 110 (Proposed Tariff, Attachment DD, Sections 5.14(h-1)(2)(B)(i), (h-2)(3)(B)). The Net Avoidable Cost Rate for combined cycle units, which are on average newer, more flexible, and have lower marginal costs than coal, is \$50/MW-day, compared to \$80/MW-day for coal.

¹⁵¹ See Pre-Conference Statement of Abigail Krich President, Boreas Renewables, LLC on Behalf of RENEW Northeast at 2–3, Docket No. AD21-10 (May 26, 2021), Accession No. 20210526-4004, <https://cms.ferc.gov/sites/default/files/2021-05/Panel-2-Abigail-Krich-President-Boreas-Renewables.pdf>.

¹⁵² *PJM Interconnection, L.L.C.*, 176 FERC ¶ 61,056 (2021).

¹⁵³ PJM, *Operating Reserve Demand Curves (ORDC) for Reserve Price Formation Project: Delivery Year 2021/2022*, Markets Implementation Committee (Apr. 7, 2021), <https://www2.pjm.com/-/media/committees-groups/committees/mic/2021/20210407/20210407-mic-info-only-operating-reserve-demand-curvesordc.ashx>.

¹⁵⁴ See, e.g., Transmittal Letter at 4; see April 6, 2021 Letter from the PJM Board.

showed robust entry and exit and relatively stable supply curves reflecting that “as market participants plan their entry and exit choices, they take into account the anticipated supply/demand balance and the anticipated actions of other market participants that affect that balance.”¹⁵⁵ Entry pursuant to state policies are among the actions that can be readily anticipated since it “typically result[s] from lengthy, transparent regulatory processes,” and thus “new zero carbon resources will typically be added to the market at a steady pace that is known to the market well in advance, and can easily be absorbed.”¹⁵⁶ Similarly, The Brattle Group explains that these policies and their impacts “should not have surprised generation owners, as states across the PJM region have long discussed and expressed their environmental policies, including the need to limit carbon emissions to address climate change.”¹⁵⁷ This healthy market dynamic would be restored by focused MOPR.

The focused MOPR would also replace a controversial rule that, while ostensibly intended to promote confidence among certain kinds of investors, in fact undermines the stability of the market. As The Brattle Group explains, investors would not “bank” on the temporarily elevated capacity market prices associated with the expanded MOPR, knowing that the policy is highly controversial and likely to be replaced in short order.¹⁵⁸ Other analysts have also noted that uncertainty around the PJM MOPR contributes to a poor regulatory environment, even for the merchant developers it seems intended to help.¹⁵⁹

¹⁵⁵ Protest of the Clean Energy Advocates, App. B - Affidavit of James F. Wilson in Support of the Protests of DC-MD-NJ Consumer Coalition, Joint Consumer Advocates, and Clean Energy Advocates ¶ 10, ER18-1314 (May 7, 2018), Accession No. 20180507-5222.

¹⁵⁶ *Id.* ¶ 35.

¹⁵⁷ Brattle Aff. at 21.

¹⁵⁸ *Id.* at 21–22.

¹⁵⁹ Bryndis Woods et al., *Risks Outweigh Rewards for Investors Considering PJM Natural Gas Projects*, Institute for Energy Economics and Financial Analysis, at 20–23 (Oct. 2020) (“[B]roader conditions of uncertainty around the future of PJM’s capacity market also negatively impact proposed gas plants since changes to the capacity market will affect regional financial outlooks. The upheaval and uncertainty created by FERC’s order amplifies the existing

E. FOCUSED MOPR WILL NOT REQUIRE CONSUMERS TO PAY EXCESSIVE RATES TO ENSURE RELIABILITY

Focused MOPR allows resources supported by state policy to compete for capacity supply obligations without administrative repricing of their offers, and will therefore avoid requiring consumers to buy unnecessary capacity through RPM, while also paying the full cost of equivalent capacity resources through state policy mechanisms. Focused MOPR will also avoid artificially elevated capacity prices caused by the current, expanded MOPR. Because the focused MOPR will continue to ensure reliability, the increased costs associated with the broader mitigation scheme approved in 2020 are unjust and unreasonable. PJM's focused MOPR will ensure that consumers are protected from excessive rates, consistent with the fundamental purpose of the FPA.¹⁶⁰

The evidence that current MOPR imposes excessive costs on PJM consumers is overwhelming. Early analyses indicated costs of approximately \$1-2.6 billion annually.¹⁶¹ More recent analyses that factor in growing state clean energy requirements and approved default offer price floors, among other refinements, place the total annual costs at \$3.4 billion by 2030

risk of overcapacity for gas plants by creating a risky and uncertain financial environment for developers and investors in proposed new power plants.”), https://ieefa.org/wp-content/uploads/2020/10/Risks-Outweigh-Rewards-for-PJM-Natural-Gas-Project-Investors_October-2020.pdf.

¹⁶⁰ *Fed. Power Comm'n v. Sierra Pac. Power Co.*, 350 U.S. 348, 355 (1956) (“That the purpose of the power given the Commission by [section] 206(a) is the protection of the public interest, as distinguished from the private interests of the utilities, is evidenced by the recital in [section] 201 of the Act that the scheme of regulation imposed ‘is necessary in the public interest.’”); *Pennsylvania Water & Power Co. v. Fed. Power Comm’n*, 343 U.S. 414, 418 (1952) (“A major purpose of the whole Act is to protect power consumers against excessive prices.”); *Xcel Energy Servs. Inc. v. FERC*, 815 F.3d 947, 952 (D.C. Cir. 2016) (“It is long-established that the ‘primary aim [of the FPA] is the protection of consumers from excessive rates and charges.’”) (quoting *Mun. Light Bds. of Reading & Wakefield v. FPC*, 450 F.2d 1341, 1348 (D.C.Cir.1971)); *Jersey Cent. Power & Light Co. v. FERC*, 810 F.2d 1168, 1177 (D.C. Cir. 1987) (“[F]rom the earliest cases, the end of public utility regulation has been recognized to be protection of consumers from exorbitant rates.”) (quoting *Washington Gas Light Co. v. Baker*, 188 F.2d 11, 15 (D.C.Cir.1950)).

¹⁶¹ 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), <https://gridprogress.files.wordpress.com/2020/05/a-moving-target-paper.pdf> (noting similar estimates from ICF International and Charles River Associates).

comprised of \$1.7 billion in excess costs, \$1.4 billion in transfer payments, and \$0.3 billion in economic inefficiencies.¹⁶²

The modeling work undertaken by PJM witness Cramton demonstrates that a more limited MOPR consistent with PJM's proposal will save consumers money: "The cost of the broad MOPR stems primarily from having some resources that provide reliability excluded from the capacity market. This exclusion causes the capacity price to clear too high and not correctly reflect the marginal value of reliability to consumers expressed by the capacity demand curve."¹⁶³ This analysis strongly confirms that the status quo, expanded MOPR, does not produce just and reasonable rates because it prevents the capacity price from responding appropriately to the excess supply of capacity, and requires consumers to pay for excessive capacity at a level that exceeds the reliability value received in return.¹⁶⁴

Notably, these increased costs are borne not only by consumers in states supporting resources that would be unable to clear that capacity auction as a result of expanded MOPR: "even customers that do not directly bear the costs of the excluded resource in their state-approved rates may still see a capacity cost increase, when (as would be expected) the auction commits a resource that had a higher Sell Offer than the excluded resource's original offer."¹⁶⁵

While all consumers in PJM will benefit by not paying inflated prices or for excessive reserve margins, consumers in states that do choose to support specific generation types will

¹⁶² Brattle Aff. at 26, 28–29.

¹⁶³ Cramton Aff. ¶ 73. As described above in Section II.B, The Brattle Group concludes that capacity prices would rise substantially as a result of the Expanded MOPR. They observe that Professor Cramton reached a different conclusion based on several factors, including a smaller assumed quantity of state policy resources subject to MOPR, and the fact that his model does not capture short-term price sensitivities and the concept that resources do not enter and exit based on the capacity price in a single year. *See* Brattle Aff. at 7–8.

¹⁶⁴ *See also* Cramton Aff. ¶ 61 ("broad MOPR brings in some extra resources without letting the capacity price decrease. The main result is a higher reserve margin. The additional resources might be desirable if they improved reliability; however, we will find they do not.").

¹⁶⁵ Transmittal Letter at 9–10.

benefit additionally because of the lower cost of meeting state policy requirements.¹⁶⁶ When resources supported by state policy are unable to earn revenues through the capacity market, consumers may be required to make up the difference.¹⁶⁷ While such costs are not the Commission’s responsibility, they are important for understanding why the status quo expanded MOPR is so unacceptable to many states and consumers.

F. FERC SHOULD REJECT PJM’S ARGUMENT THAT THE PRESUMED HARMS OF THE FIXED RESOURCE REQUIREMENT WEIGH IN FAVOR OF ELIMINATING THE BROAD MOPR

Given the problems described above and in PJM’s filing, it is unsurprising that numerous affected parties find the risks associated with the Expanded MOPR “intolerable.”¹⁶⁸ Some of these parties have thus opted out of the PJM capacity auction entirely. Dominion Energy Virginia’s election of Fixed Resource Requirement (“FRR”) beginning with the 2023/23 Base Residual Auction is the most obvious example,¹⁶⁹ but as Mr. Keech acknowledges, several states are also in the process of considering whether to require or incentivize load-serving entities to leave the PJM capacity market.¹⁷⁰ The New Jersey Board of Public Utilities Staff recently

¹⁶⁶ Brattle Aff. at 27–28.

¹⁶⁷ *Id.*

¹⁶⁸ Transmittal Letter at 12.

¹⁶⁹ 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.virginia.gov/docketsearch/DOCS/4q7301!.PDF>.

¹⁷⁰ In addition to the examples provided by Mr. Keech, there are signs that the District of Columbia is also evaluating alternatives to PJM’s capacity market. In December 2020, the District of Columbia Department of Energy and the Environment published a notice of funding for a “PJM Capacity Market Withdrawal Feasibility and Alternatives Study.” DC Department of Energy & Environment, *Notice of Funding Availability - PJM Capacity Market Withdrawal Feasibility and Alternatives Study* (Dec. 18, 2020) (“DC DOEE Notice of Funding Availability”), <https://doee.dc.gov/release/notice-funding-availability-pjm-capacity-market-withdrawal-feasibility-and-alternatives>.

released a final report in the Resource Adequacy Investigation confirming that it would pursue FRR should MOPR continue to apply to state policy resources.¹⁷¹

Although these opt-outs reflect the unsustainable nature of the expanded MOPR, PJM is incorrect when it states the election of FRR is itself a problem. PJM asserts that this election of FRR exacerbates price suppression because it requires a load-serving entity to opt out for 100% of its needs, and that the lower prices resulting from such a decision exceed the reduction that would result from the exercise of buyer-side market power for a small subset of those resources. Mr. Keech also asserts that FRR leads to the procurement of “uncompetitive” resources through non-market means, causing price suppression.¹⁷²

This is incorrect for two reasons. First, PJM wrongly equates lower capacity prices with “price suppression”—a pejorative term suggesting that rates are lower than they should be.¹⁷³ The lower prices that may result when a load-serving entity elects FRR reflects the reduced amount of demand in the auction, especially considering that the load removed from the auction must only contract for capacity meeting the installed reserve margin target, rather than the much higher levels of reserves that typically clear in RPM.¹⁷⁴ Lower prices in RPM as a result of FRR elections are not harmful, nor suppressed. Rather, they demonstrate PJM’s chronic oversupply problem, and that RPM prices are currently inflated rather than suppressed.

¹⁷¹ See NJBPU Report at 23 (“[I]f MOPR is not eliminated from the broader RPM capacity market in a timely fashion, then an auction-based, single-zone FRR could be pursued further to determine whether it is a viable option to reduce the impacts from the expanded MOPR.”).

¹⁷² Transmittal at 13; *id.*, Ex. D, Aff. of Adam J. Keech on behalf of PJM, ¶ 9.

¹⁷³ See, e.g., *Midwest Indep. Transmission Sys. Operator, Inc.*, 153 FERC ¶ 61,229, at P 110 (2015) (noting that “low prices, in and of themselves, do not demonstrate that a market is not just and reasonable.”); *Midcontinent Indep. Sys. Operator, Inc.*, 162 FERC ¶ 61,176, at P 60 (2018) (“[t]he low capacity prices, where they have arisen in MISO, accurately reflect MISO’s capacity surplus,” and are not necessarily indicative of an unjust and unreasonable construct) (“2018 MISO Order”).

¹⁷⁴ See 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>. If PJM believes that the FRR requirement for load-serving entities to opt out for 100% of its capacity needs is sub-optimal, then the solution is to allow a more flexible opt-out mechanism.

Second, FRR does not necessarily lead to procurement of uncompetitive resources, as PJM assumes. This explanation plays into outdated notions (which PJM rejects elsewhere in its filing), that state policies promote “uneconomic” resources, rather than compensating for the avoidance of environmental externalities and thus leading to a more competitive and efficient market.¹⁷⁵ This explanation further assumes that an FRR capacity plan will be assembled in a way that does not minimize costs consistent with other policy and planning objectives, and denigrates bilateral contracts as “non-market means” of meeting supply needs, regardless of how competitively procurements may be structured.¹⁷⁶ As NJBPU Staff recently observed, “The FRR alternative is not a single design option, but instead an open-ended opportunity for New Jersey to determine any and all features of how capacity needs could be met, within the parameters of the PJM Governing Documents.”¹⁷⁷ Indeed, the recent New Jersey Board of Public Utilities proceeding to explore alternative resource adequacy structures generated numerous ideas for how an FRR capacity plan could be constructed in a competitive manner, including through auction-based mechanisms. PJM’s assumption that an FRR will necessarily result in the procurement of uncompetitive resources through non-market means reflects a jaundiced view of any markets outside its own. PJM has offered many good reasons that the expanded MOPR results in rates that are not just and reasonable—the likelihood of more FRR elections as a result

¹⁷⁵ PJM Transmittal Letter at 8, n.19 (citing Graf Aff. ¶ 17).

¹⁷⁶ FERC has repeatedly rejected arguments that mandatory centralized capacity markets are the sole means of assuring just and reasonable rates for capacity. *See, e.g.*, 2018 MISO Order at P 57; *CXA La Paloma, LLC v. Cal. Indep. Sys. Operator*, 165 FERC ¶ 61,148, at P 76 (2018) (“While the Commission has opined on the benefits of specific features of the eastern RTO/ISO centralized capacity markets within the context of those specific regions and market designs, the Commission has not imposed a centralized capacity market in an RTO/ISO or found that it is the only just and reasonable resource adequacy construct to attract and retain sufficient capacity.”); *Southwest Power Pool, Inc.*, 164 FERC ¶ 61,092, at P 78 (2018) (approving resource adequacy construct in SPP based on bilateral contracts).

¹⁷⁷ *See, e.g.*, NJBPU Report at 22.

of the expanded MOPR is not one of them. FERC should reject PJM’s rationale that expanded MOPR is harmful because FRR is harmful.

To be clear, PIOs agree with PJM that state and utility interest in FRR is a reliable indicator of how unacceptable and unsustainable the expanded MOPR is from the perspective of stakeholders responsible for complying with state energy policies while keeping electric bills affordable. Just as then-Commissioner Glick

anticipated, “The more the Commission interferes with state public policies under the pretext of mitigating buyer-side market power, the more it will force states to choose between their public policy priorities and the benefits of the wholesale markets that the Commission has spent the last two decades fostering.”¹⁷⁸ By addressing a key point of tension between states and PJM, the focused MOPR will help to improve coordination within and expansion of RTOs, while also allowing PJM and its stakeholders, as well as states, to focus on the many complex tasks needed to preserve reliability and affordability as the resource mix changes and extreme weather events proliferate. A clear and durable change in the Commission’s position regarding the ability of RTOs to “assert[] their primacy over state policy preferences” will go a long way towards establishing “conditions under which states with divergent environmental policies can cooperate in regional electricity markets,” especially in the western United States.¹⁷⁹

IV. THE COMMISSION SHOULD LOOK CRITICALLY AT FUTURE SECTION 205 FILINGS REGARDING CONDITIONED STATE SUPPORT

Although the application of MOPR to any state programs classified as Conditioned State Support under the proposed tariff is purely hypothetical at this point, the proposed definition of Conditioned State Support creates the possibility of Section 205 filings imposing a MOPR that

¹⁷⁸ See *New York Indep. Sys. Operator*, 172 FERC ¶ 61,058 (Glick, Comm’r, dissenting at P 19).

¹⁷⁹ Quiet Undoing.

would be unjust, unreasonable, and unduly discriminatory. If accepted, the approach proposed by PJM would inappropriately incorporate a preemption standard as a market mitigation tool, misapply *Hughes*, and be practically unworkable. It may also unduly restrict states' authority under the FPA to regulate generation within their borders or exercise their traditional police powers to ensure the health and safety of their citizens. FERC should view any subsequent Section 205 filings identifying policies or programs—such as Conditioned State Support and imposing a MOPR on recipient operators—with considerable skepticism.

A. PJM'S PROPOSED RELIANCE ON A PREEMPTION STANDARD TO DETERMINE THE APPROPRIATE APPLICATION OF MOPR TO RESOURCES RECEIVING STATE SUPPORT APPLIES A MARKET REMEDY TO A LEGAL ERROR AND IS LIKELY UNWORKABLE IN PRACTICE

PJM's proposal to apply a market mitigation remedy to a federal preemption problem is fundamentally misguided. First, PJM states that it is introducing the reformed MOPR to restore it to its original purpose of addressing "the exercise of buyer-side market power."¹⁸⁰ However, PJM does not assert that Conditioned State Support, as defined, is an exercise of buyer-side market power: there is no threshold requirement (as there is for the buyer-side MOPR) that the state (presumably as representative of consumers) or any load-serving entities has an incentive to suppress prices in order to benefit as buyers of FERC-jurisdictional products by offering the Conditioned State Support to operators or even that the Conditioned State Support-affected offer has the ability to affect market clearing prices. Rather, PJM proposes imposing the MOPR on Conditioned State Support recipients "[t]o protect against state actions improperly interfering with clearing prices in the capacity market."¹⁸¹

¹⁸⁰ Transmittal Letter at 1.

¹⁸¹ *Id.* at 42.

Instead, PJM is proposing that its Tariff protect FERC’s jurisdiction by mitigating any state policies or programs that PJM believes are preempted by the FPA, and to do so by incorporating the putative standard for federal preemption articulated in *Hughes* as the trigger for market mitigation. But neither PJM nor the Commission is institutionally suited to applying preemption doctrine, much less through the vehicle of market pricing. Whether a state action exceeds congressionally established boundaries is traditionally a matter for courts which apply a “presumption that Congress does not intend to supplant state law.”¹⁸² Tasking one of the two competing regulatory authorities under the FPA—the Commission—to determine if states have overstepped their role is akin to asking a baseball coach to serve as umpire in their own team’s games. Because courts, and not the Commission or PJM, are the final arbiter of the meaning of the FPA, any standard in the PJM Tariff tied to the constitutional boundaries of state authority will need to be updated if and when the preemption standard evolves. *Hughes* itself was viewed by many as a major change in the U.S. Supreme Court’s preemption jurisprudence under the FPA and Natural Gas Act;¹⁸³ further legal developments risk causing significant uncertainty among market participants and states with respect to future capacity auctions. Tying the PJM Tariff to potentially shifting jurisprudence goes against the goal of sustainability that the PJM Board and several Commissioners have stressed as central to the goal of MOPR reform.¹⁸⁴

Moreover, the procedure PJM has proposed for addressing the application of the MOPR to resources potentially receiving Conditioned State Support raises practical concerns. The

¹⁸² *De Buono v. NYSA-ILA Med. & Clinical Sevs. Fund*, 520 U.S. 806, 814 (1997).

¹⁸³ See Steven Ferrey, *Supreme Court Shifts Supremacy Doctrine—Preempting State Sustainability?*, 50 *Ariz. State L.J.* 515 (2018).

¹⁸⁴ April 6, 2021 Letter from the PJM Board. See also Tech. Conf. Tr. at 9 (Comments of Chairman Glick), 22 (Comments of Comm’r Christie); Letter from Mark Takahashi, Chairman of the PJM Board of Managers, to Members (July 7, 2021) (noting that PJM’s proposal “creates a sustainable market design”), <https://www.pjm.com/-/media/about-pjm/who-we-are/public-disclosures/20210708-board-letter-communicating-critical-issue-fast-path-minimum-offer-price-rule-decision.ashx>.

proposed Tariff does not specify a deadline for PJM to submit a Section 205 filing to FERC requesting approval for application of the MOPR. Instead, PJM indicates it will make such a filing with “sufficient time to act.”¹⁸⁵ Ms. Morelli estimates this will be “about 110 days” prior to an auction but does not identify a firm deadline—which must be within the 150-day deadline for operators to file bids. There is some tension between this proposed timeline—which asks FERC to make a fact-specific determination in less than four months about an issue that has merited multiple Court of Appeals decisions—and PJM’s assertion that a self-certification process is necessary to avoid the “overly burdensome and unworkable” alternative of PJM making a similar evaluation.¹⁸⁶ To be sure, PJM’s proposal would have the RTO, not FERC, identify possible Conditioned State Support as part of its Section 205 filing. Nevertheless, PJM’s proposal to address preempted state policies through a market mitigation measure would put FERC in the challenging position of resolving a contested legal issue on an abbreviated timeline and place a considerable burden on other stakeholders who would have even less time to comment on the Section 205 filing.

B. PJM’S PROPOSED CONDITIONED STATE SUPPORT DEFINITION IS BROADER THAN THE HOLDING IN *HUGHES* AND WOULD IMPROPERLY SUBJECT STATE PROGRAMS NOT PREEMPTED UNDER THE FPA TO MARKET MITIGATION

Even if FPA preemption were the appropriate standard for determining when to apply the MOPR to a capacity resource receiving state support, the standard for preemption offered by PJM in the proposed Tariff and transmittal letter is a misreading of *Hughes* and would impose the MOPR on state policies and programs that are unlawful under the FPA. FERC should signal

¹⁸⁵ Transmittal Letter at 44.

¹⁸⁶ *See id.* at 30.

that it will not rely on such a definition in any future Section 205 filings seeking to apply the MOPR to resources receiving state support.

The Proposed Tariff and supporting documents misstate the holding of *Hughes*. Both the Transmittal Letter and the Morelli Affidavit characterize *Hughes* as prohibiting any state program that conditions support on clearing the relevant RTO capacity market. The Transmittal Letter states that “Indeed, the U.S. Supreme Court has found that ‘condition[ing] payment of funds on capacity clearing the auction’” to be a “‘fatal defect,’ because that ‘improperly sets the rate [a seller] receives for interstate capacity sales to PJM.’”¹⁸⁷ But this is not what *Hughes* held. The Court did not hold that conditioning payment on sales is fatal because it sets the price received by the capacity seller in the interstate market. The above sentence from the Transmittal Letter misleadingly quotes the Court’s characterization of the district court’s holding (“the District Court issued a declaratory judgment holding that Maryland’s program improperly sets the rate CPV receives for interstate wholesale capacity sales to PJM”) as the “fatal defect.”

Rather, the remainder of the above quote—implying that the Maryland program was struck down solely because it conditioned payments on clearing the RTO market—is dicta. After striking down Maryland’s program (significantly, not the tariff governing recipient operators’ participation in the capacity market, see below) the Court addressed the broad array of other state policies not implicated by its decision, presumably to illustrate the narrowness of its holding. The Court opined that “[s]o long as a State does not condition payment of funds on capacity clearing the auction, the State’s program would not suffer from the fatal defect” that invalidates Maryland’s program.¹⁸⁸ The Court is offering guidance for future hypothetical programs to avoid a similar fate; not conditioning the program on capacity market sales is a *sufficient* condition—

¹⁸⁷ *Id.* at 25, nn.82–83 (citing *Hughes* at 1299, 1296).

¹⁸⁸ *Hughes* at 1299.

not a *necessary* one—for state programs to encourage changes to the generation mix while escaping preemption. Both the Transmittal Letter¹⁸⁹ and the Morelli Affidavit¹⁹⁰ make the same mistake, conflating the Court’s articulation of a safe harbor from preemption as the basis for finding Maryland’s program unconstitutional. Maryland’s program was rejected “*only* because it disregards an interstate wholesale rate,”¹⁹¹ not because it required participation in the capacity market as a condition of receiving state funds. The program in *Hughes* guaranteed a price for capacity. Conditioning a payment on clearing the market is not equivalent to setting the price a seller receives. One could envision any variety of programs that offered state payments where clearing the capacity market was a condition of receiving those payments but where the price received by the seller for that capacity still varied with the market-clearing price.

Hughes’s holding is narrow and fact-specific: Maryland’s program incorporating contracts for differences intended to alter incentives for market entry from those arising from the relevant RTO capacity market through a contract-for-differences that supplanted the market-determined price for new generators violated the FPA. *Hughes* did not address whether state generation policies not aiming at increasing resource adequacy in the capacity market, such as those designed to procure environmental benefits that are not subject to FERC’s jurisdiction, would be similarly preempted and did not address whether incentives for market participation by states seeking to obtain these benefits that fall short of dictating the total price received by individual generators for capacity would be similarly preempted.

¹⁸⁹ Transmittal Letter at 42.

¹⁹⁰ Morelli Aff. at P 14.

¹⁹¹ *Hughes* at 1299 (emphasis added),

States that choose to support or incentivize generation have every right to receive the benefits of that generation.¹⁹² For regions that participate in PJM’s capacity market, this means state-supported resources must clear the market in order to be counted as contributing to resource adequacy. State clean energy policies will continue to face the need to ensure their state-supported resources are accounted for in the capacity market. Far from attempting to restate a FERC-jurisdictional rate, a state requirement to clear a capacity auction is nothing more than the state ensuring that customers get what they are paying for. Applying MOPR based on a simplistic bid and clear requirement ignores this reality and the difference between the policy in *Hughes* and state policies that are not “aiming at resource adequacy prices in wholesale markets” but are more firmly tied to state generation rights and traditional state police powers over human health and the environment.

PJM’s misinterpretation of the decision in *Hughes* reinforces why its proposal to apply a market mitigation remedy to a preemption problem is misguided. *Hughes* was a pre-emption case where the judiciary was making the determination as to whether a state action exceeded Congressionally established boundaries. *Hughes* did not involve nor answer whether it is appropriate for PJM or FERC to make such calls. Indeed, the Court in *Hughes* specifically declined to decide whether the challenged program’s effect on capacity auction’s price signals—as distinct from effectively setting the rate received by *program participants* for wholesale sales made through the capacity market—was grounds for finding Maryland’s program preempted.¹⁹³ *Hughes* is solely concerned with whether an individual seller’s receipt of a state-

¹⁹² *New Jersey Bd. of Public Utilities* is not the contrary. There, the Third Circuit held that states *could* be required to bear the costs of capacity incentive programs, but did not hold that they *must* do so. *N.J. Bd. of Pub. Utils. v. FERC*, 744 F.3d at 97. To the contrary, the Court found FERC’s treatment of state programs “mildly disturbing” but that it did not cross the “high bar” of the “arbitrary and capricious” standard appropriate to judicial review. *Id.* at 102.

¹⁹³ *Hughes* at 1299, n.13.

determined price for interstate capacity sales violates the FPA, not whether the subsidy interferes with the capacity market more broadly. The preemption standard announced in *Hughes* determines whether a state program is lawful under the FPA and whether *the state* can authorize payments pursuant to that program consistent with the FPA and U.S. Constitution, not whether the capacity market prices resulting from an auction affected by such payments are just and reasonable. PJM's proposal to apply this standard in the context of market mitigation is accordingly misguided and the Commission should make clear that future attempts to do so will be viewed unfavorably.

V. **A MORE LIMITED DEFINITION OF CONDITIONED STATE SUPPORT WILL PROVIDE MORE PREDICTABILITY TO MARKET PARTICIPANTS AND POLICYMAKERS AND AVOID UNNECESSARY FUTURE PROCEEDINGS**

As stated above, PIOs do not believe the MOPR is an appropriate remedy for any future perceived or actual jurisdictional infringement by states through payments to generators. However, if PJM maintains its intention to file Section 205 petitions imposing the MOPR on resources benefiting from Conditioned State Support, it should revise the definition of Conditioned State Support to provide greater clarity and certainty to states and minimize the unjust and unreasonable consequences associated with the Conditioned State Support MOPR. PJM's definition of Conditioned State Support identifies two types of state directives as triggering a Section 205 petition: "[1] specific directives as to the level of the offer that must be entered for the relevant Generation Capacity Resource in the RPM Auction or [2] directives that the Generation Capacity Resource is required to clear in any RPM Auction." This first trigger, including all directives as to "offer level," is inconsistent with PJM's description of the Conditioned State Support in the supporting materials, which describe the trigger as being

directives as to “offer *price* level.”¹⁹⁴ This discrepancy suggests a drafting error in the Tariff language filed. However, whether or not PJM intended to use “offer level” or “offer price level,” the inclusion of this triggering condition goes well beyond the scope of preemption under *Hughes*, is at odds with PJM’s statements during the stakeholder process and introduces an ambiguous, unworkable standard. It should therefore be struck.

A. PJM SHOULD ADDRESS INTERNAL INCONSISTENCIES IN THE FILING TO DETERMINE WHETHER THE PROPOSED DEFINITION OF CONDITIONED STATE SUPPORT REFLECTS A DRAFTING ERROR

Although the definition of Conditioned State Support in the Tariff itself defines “conditioned on clearing in any RPM Auction” to include “directives as to the level of the offer that must be entered for the relevant Generation Capacity Resource,”¹⁹⁵ in its Transmittal Letter PJM purports to quote this definition as including, instead, “directives as to the *price* level at which a Generation Capacity Resource must be offered in the RPM Auction.”¹⁹⁶ In her affidavit in support of the proposed Tariff, Ms. Morelli similarly characterizes Conditioned State Support as applying to “state-specified directives as to the *price* level at which the market seller must offer a resource into the market.”¹⁹⁷

¹⁹⁴ There also appears to be a drafting error (or at least a logical inconsistency), of less consequence, in PJM’s description of what state programs will *not* be subject to the Conditioned State Support MOPR. In describing the MOPR, PJM’s proposed Tariff states:

Government policies or programs that do not provide payments or other financial benefit outside of PJM markets *and* do not provide payment or other financial benefit in exchange for the sale of a FERC-jurisdictional product conditioned on clearing in any RPM Auction do not constitute Conditioned State Support. (Proposed Tariff Definitions, *emphases added*).

But any government policy that does not “provide payments or other financial benefit” would also, by definition, not provide those payments in exchange for the sale of FERC-jurisdictional product; if there are no payments, those payments cannot be in exchange for or conditioned on anything. This sentence should be revised to eliminate the initial phrase: “do not provide payment or other financial benefit outside of PJM markets.”

¹⁹⁵ PJM Redlined Tariff at PDF page 16 (Definitions – C-D).

¹⁹⁶ Transmittal Letter at 25 (emphasis added).

¹⁹⁷ Morelli Affidavit ¶ 12 (emphasis added).

Omitting the word “price” inherently broadens the scope of what may trigger a Section 205 filing to apply the MOPR. For example, because states will reasonably wish to structure contracts that result in prudent expenditures of taxpayer or ratepayer funds that comply with tariff requirements, contract terms might logically include generalized directions to bid in a commercially reasonable manner or to not exceed tariff rate caps, neither of which would “improperly interfere with bidding in PJM’s capacity market and FERC’s rate-making authority”¹⁹⁸ nor run afoul of *Hughes*.¹⁹⁹ A Section 205 filing seeking to apply the MOPR to a resource receiving a state subsidy subject to these types of directions would not fulfill PJM’s stated purpose for the Conditioned State Support MOPR, i.e., mitigating offers from resources who receive subsidies in violation of *Hughes v. Talen*.

For similar reasons, the use of “offer level” in the proposed definition of Conditioned State Support undermines, in part, PJM’s stated intention to increase certainty among states and resources about the application of MOPR. While state policymakers can more easily assess which terms are covered by a restriction on the “price level that must be offered,” the more general “level of the offer that must be entered” could cover anything from price to amount of capacity. Such generality is impermissibly vague.²⁰⁰

B. STATE DIRECTIVES AS TO OFFERS SHORT OF A CLEARANCE REQUIREMENT SHOULD NOT BE INCLUDED IN THE DEFINITION OF CONDITIONED STATE SUPPORT

The definition of Conditioned State Support included in the Proposed Tariff is in tension with many of the concerns raised by both PJM and PIOs during the stakeholder process. At the

¹⁹⁸ *Id.*

¹⁹⁹ 136 S.Ct. 1288, 1298 (“So long as a State does not condition payment of funds on capacity clearing the auction, the State’s program would not suffer from the fatal defect that renders Maryland’s program unacceptable.”); *Village of Old Mill Creek v. Star*, 2017 WL 3008289, at *12 (N.D. Ill. 2017).

²⁰⁰ *California Indep. Sys. Operator Corp.*, 123 FERC ¶ 61,283 at PP 55, 57 (2008).

outset of the stakeholder process, PJM emphasized that it “[wa]s not the appropriate entity to determine whether states are attempting to exercise buyer-side market power,” because “[i]nterpreting state statutes is not [their] area of expertise” and such “issues are ones which uniquely involve the interaction of state and FERC authority.”²⁰¹ PIOs strongly agree that PJM should not place itself in the role of interpreting and policing state policies.²⁰² However, after acknowledging that PJM is not institutionally suited to interpreting state policies with respect to *market* power and removing any earlier rationale for applying MOPR to state resources based on the need to mitigate buyer side market power, PJM instead shifted to a preemption rationale for a Conditioned State Support MOPR, stating that recipient resources “may improperly interfere with bidding in PJM’s capacity market and FERC’s rate-making authority.”²⁰³

PJM informed stakeholders it would apply the MOPR to state resources PJM believed to be pre-empted under its reading of *Hughes v. Talen*.²⁰⁴ In subsequent discussions, PJM representatives focused on the belief that this meant payments by a state to a resource “provided in exchange for the sale of a FERC jurisdictional product conditioned on clearing in any RPM auction.”²⁰⁵ As PIO member Sustainable FERC noted in its presentation to the Board at that

²⁰¹ Adam Keech, *PJM’s Initial Proposal: MOPR*, PJM, at 8 (Apr. 28, 2021) (“PJM’s Initial Proposal, MOPR PPT”), <https://www.pjm.com/-/media/committees-groups/cifp-mopr/2021/20210428/20210428-item-04-pjms-initial-proposal-minimum-offer-price-rule.ashx>. In light of this, PJM initially proposed that state policy be presumed to be in good faith – i.e., not an exercise of buyer-side market power—that could be overcome by a complaint to FERC pursuant to Section 206. *Id.* at 12.

²⁰² See, e.g., Protest of Clean Energy Advocates, Docket No. EL18-1314, at 33–35 (May, 7, 2018), Accession No. 20180507-5222; Req. for Reh’g of Clean Energy Advocates, at 45–46, Docket Nos EL-16-49 et al. (Jan. 21, 2020), Accession No. 20200121-5328.

²⁰³ PJM, *Summary of the Updated PJM MOPR Proposal*, at 1 (June 30, 2021), <https://www.pjm.com/-/media/committees-groups/cifp-mopr/2021/20210630/20210630-cifp-mopr-pjm-proposal.ashx>.

²⁰⁴ See PJM, *Matrix Post Meeting*, at Tab 3: Package Matrix, Row 7, at PJM Column (June 7, 2021), <https://www.pjm.com/-/media/committees-groups/cifp-mopr/2021/20210607/20210607-matrix-post-meeting.ashx>.

²⁰⁵ PJM, *Matrix Post Meeting*, at Tab 3: Package Matrix, Row 3, at PJM Column (June 16, 2021), <https://www.pjm.com/-/media/committees-groups/cifp-mopr/2021/20210616/20210616-matrix-post-meeting.ashx>.

meeting, considerable debate and disagreement among the stakeholders had arisen as to what would constitute “conditioned on clearing.”²⁰⁶

Rather than amending the definition to further clarify what “conditioned on clearing” meant, PJM’s final proposal for stakeholder and Board consideration adds a further vague term to the “conditioned state support” definition, expanding it to include not only state policies that directed resources to clear the capacity auction but also “directives as to the price level at which a resource must be offered in the capacity market.”²⁰⁷

FERC should jettison this additional trigger from the final definition of Conditioned State Support. As PJM admitted in the stakeholder process and materials in support of the Proposed Tariff, the application of the MOPR to state policy resources cannot be justified on economic theory and admits that the basis for this is its attempt to create a standard based on what it believes to be pre-emption doctrine.²⁰⁸ But parsing state policy to determine whether a resource is given directives as to the “level of the offer that must be entered” is exactly the kind of unique interaction of state and FERC authority that PJM explicitly stated it was ill-suited to do with reference to the former *economic* justification for the MOPR’s application to state subsidies.²⁰⁹ I Reliance on the phrase “directives as to the level of the offer” still leaves PJM in the position of interpreting detailed state policy against an impermissibly vague standard. PIOs maintain that *both* triggers—the clearance requirement and directives to offer level—go beyond what was held preempted in *Hughes*. But to the extent that the Commission disagrees insofar as the application of *Hughes* is at issue, then the trigger for pre-emption should be limited solely to directives to

²⁰⁶ PJM, *Critical Issue Fast Path – Minimum Offer Price Rule, Minutes* (June 30, 2021), <https://www.pjm.com/-/media/committees-groups/cifp-mopr/2021/20210630/20210630-minutes.ashx>.

²⁰⁷ PJM, *Summary of the Updated PJM MOPR Proposal*, at 1 (June 30, 2021), <https://www.pjm.com/-/media/committees-groups/cifp-mopr/2021/20210630/20210630-cifp-mopr-pjm-proposal.ashx>.

²⁰⁸ Morelli Aff. ¶ 12; Transmittal Letter at 25.

²⁰⁹ PJM’s Initial Proposal, MOPR PPT at 8.

clear the market (a more straightforward binary condition), and the provision regarding bidding directives, which goes well beyond any reading of *Hughes* and invites far more interpretive discretion with respect to state laws and policies, should be struck. Doing so is essential if the Focused MOPR is to provide accurate and reliable guidance to state policymakers on how statutes or regulations can be drafted so as to avoid crossing the line that PJM has established.

Striking this provision is a minor modifications that does not raise any of the concerns with Commission changes to Section 205 identified by courts.²¹⁰ The D.C. Circuit has cautioned that modifications may no longer be minor if they employ a rate design that follows ‘a completely different strategy’ than, or is ‘methodologically distinct’ from, a proposed rate,²¹¹ or if the changes impact stakeholders without providing an opportunity to introduce relevant evidence as part of the comment process.²¹²

None of these concerns are at issue here. Whether the “directives as to price level” language remains does not affect the proposed tariff rate design, which is to align the application of MOPR with the standard for preemption under *Hughes* and the FPA and cannot be considered “a completely different strategy” or “methodologically distinct” from the rate proposed by PJM, which ultimately tasks the Commission with making this determination. This criterion for application of the MOPR is also impermissibly vague, increasing the likelihood that rates would be unjust and unreasonable. Striking the provision would avoid the type of friction and instability between states and PJM that has plagued the MOPR and led to this entire proceeding. Finally, the structure of the Conditioned State Support provision asks FERC to make the final calls regarding whether MOPR is appropriately applied to a state policy that PJM has determined

²¹⁰ *NRG Power Marketing, LLC v. FERC*, 862 F.3d 108, 110 (D.C. Cir. 2017); *Western Resources, Inc. v. FERC*, 9 F.3d 1568, 1579 (D.C. Cir. 1993).

²¹¹ *Id.* at 115 (citing *Western Resources* at 1578, 1579).

²¹² *Id.* at 116–117.

meets these terms. A modification to this provision would therefore serve primarily as notice to others as to whether PJM will file future Section 205 petitions. Stakeholders will have the opportunity to comment on any such Section 205 petition, obviating the concerns about stakeholder input raised in *NRG Marketing*.

VI. FERC CAN REVERSE ITS DETERMINATIONS EXPANDING MOPR TO ALL STATE SUPPORTED RESOURCES AND IS JUSTIFIED IN DOING SO BY NEW DEVELOPMENTS AND INFORMATION

The Commission has well-established authority to “reconsider and modify its previous rulings and practices, even if that results in a reversal of prior approaches.”²¹³ This authority is a natural product of the Commission’s “continuing obligation to ensure. . . rates are just and reasonable,” in each proceeding in the development of a case or rule.²¹⁴ Courts specifically recognize that the Commission’s views and determinations on what’s in the public interest may permissibly change—with or without changed circumstances—when the reviewed issue touches on Commission policies in flux.²¹⁵ Over time, courts understand and expect an agency’s “relevant experience and expertise” to expand and its approach to become more nuanced and refined.²¹⁶ Where new evidence and changed circumstances reveal error in a prior finding, an agency has both “the power *and the duty*” to modify that ruling.²¹⁷ As long as the Commission is

²¹³ *S. Co. Servs., Inc. & Cajun Elec. Power Coop., Inc.*, 57 FERC ¶ 61,035, 61,125 (1991); *OXY USA, Inc. v. FERC*, 64 F.3d 679, 690 (D.C. Cir. 1995) (“The fact that a rate was once found reasonable does not preclude a finding of unreasonableness in a subsequent proceeding.”); *Tagg Bros. & Moorhead v. U.S.*, 280 U.S. 420, 445 (1930) (“Every rate order made may be superseded by another.”); see *Northeast Utils. Servs. Co.*, 68 FERC ¶ 61,041, 61,138 (1994) (“we are not obliged to be bound by the earlier decision on this point by our predecessor agency.”); see also *N. States Power Co. (Minn.) & N. States power Co. (Wis.)*, 59 FERC ¶ 61,100, n.12 (1992) (“Even if we presume that we are acting in a manner inconsistent with our earlier order. . .we are free to reconsider, modify, or even reverse our prior ruling if (as here) we provide a reasonable explanation for such action.”).

²¹⁴ *OXY USA, Inc.*, 64 F.3d at 690.

²¹⁵ *Greater Bos. Television Corp. v. FCC*, 444 F.2d 841, 852 (D.C. Cir. 1970); *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 57 (1983)(citing *Greater Bos. Television Corp. v. FCC*, 444 F.2d 841, 852 (D.C. Cir. 1970)).

²¹⁶ *Williams Gas Processing-Gulf Coast Co. v. FERC*, 475 F.3d 319, 326 (D.C. Cir. 2006)(citing *Nuclear Energy Inst., Inc. v. EPA*, 373 F.3d 1251, 1296 (D.C. Cir. 2004)); *Massachusetts v. EPA*, 549 U.S. 497, 524 (2007).

²¹⁷ *Tagg Bros. & Moorhead*, 280 U.S. at 445 (emphasis added).

careful to “supply a reasoned analysis” acknowledging the change in policies or standards as deliberate for a reviewing court, overturning a prior ruling is well within the Commission’s discretion.²¹⁸

In this filing, PJM has asked the Commission to modify its previous position from the 2019 Expanded MOPR Order, and accompanying orders on rehearing. Significant new information and developments have occurred since those orders that justify reevaluating the Commission’s prior position. The proposed modifications to MOPR are a nuanced solution that reflect the insight and experience gained from observing the constantly evolving developments in renewable energy policy and implementing the Expanded MOPR.

First, state policies supporting renewable energy continue to grow. The Expanded MOPR has not deterred states from developing subsidies and renewable standards. Significant examples of new policies since the 2019 Order include:

State, Year	Action	Relevant provisions re state-supported resources
Maryland, 2019	Maryland Clean Energy Jobs Act, MD PUB. UTIL § 7-703 ²¹⁹	Renewable Portfolio Standards (“RPS”) increased from 25% in 2020 to 50% in 2030 Solar requirement increased from 2.5% in 2025, to 14.5% in 2030 Offshore wind requirement had previously been a quantity to be determined by PSC, not to exceed 2.5%; now minimum quantity of 1.2 gigawatts
New Jersey, 2019	Executive Order 92 ²²⁰	Increased offshore wind goal from 3,500 megawatts (“MW”) by 2030 to 7,500 MW by 2035
New Jersey, 2019	New Jersey Board of Public Utilities, Orders in Docket Nos. EO18121338, EO18121339,	Awarding zero-emission credit payments for Salem I, Salem II, and Hope Creek nuclear units—representing approximately 3,700 MW

²¹⁸ *State Farm*, 463 U.S. at 42.

²¹⁹ S.B. 516, 2019 Reg. Sess. (Md. 2019), <https://mgaleg.maryland.gov/2019RS/bills/sb/sb0516E.pdf>.

²²⁰ Exec. Order No. 92 at 3 (N.J. 2019), <https://nj.gov/infobank/eo/056murphy/pdf/EO-92.pdf>.

	EO18121337 (April 18, 2019) ²²¹	
District of Columbia, 2019	Act A22-0583 ²²²	Increased RPS from 50% by 2032 to 100% by 2032; solar requirement increases from 5.5% in 2032 to 10% in 2041
Ohio, 2019	Creates Ohio Clean Air Program (H.B. 6) ²²³ H.B. 128 (revised electric utility service law; repealed portions of H.B. 6; terminating portions relating to nuclear facilities) ²²⁴	1) Provides revenues for two nuclear facilities and two coal plants, payments to solar facilities that had already obtained certificates of construction 2) Reduced the state’s target for clean energy from 12.5 by 2026 to 8.5 percent
Virginia, 2020	Virginia Clean Economy Act ²²⁵	1) Schedule for retirement of electric generating units located in the Commonwealth that emit carbon 2) 100% RPS by 2050 3) 3,100 MW of energy storage capacity by 2035 4) 5,200 MW offshore wind by 2034
Delaware, 2021	An Act to Amend Title 26 of the Delaware Code Relating to Renewable Energy Portfolio Standards ²²⁶	Increased RPS from 25% in 2025, with solar requirement of 3.5% to 40% in 2035, with solar requirement of 10%

States’ continued interest and eagerness in supporting renewable energy development represents a new resource reality with significant resource adequacy impacts that the Expanded MOPR fails to accurately reflect. As state policies supporting renewable development continue to grow, the Expanded MOPR would grow more out of step with the reality of the market. PJM acknowledges this fundamental disconnect as a circumstance driving its filing of the Focused MOPR.²²⁷

²²¹ Order Completing the ZEC Proceeding, Docket Nos. EO18121338 et al. (N.J. Bd. of Pub. Utils. Apr. 18, 2019), https://publicaccess.bpu.state.nj.us/DocumentHandler.ashx?document_id=1222716.

²²² DC B22-0904, 2017–2018 Leg. Sess., 22nd Council (Washington D.C. 2019), <https://legiscan.com/DC/text/B22-0904/2017>.

²²³ H.B. 6, 133rd Gen. Assemb. (Ohio 2019), <https://legiscan.com/OH/text/HB6/2019>.

²²⁴ H.B. 128, 134th Gen. Assemb. (Ohio 2021), <https://legiscan.com/OH/text/HB128/2021>.

²²⁵ H.B. 1526, 2020 Sess. (Va. 2020), <https://lis.virginia.gov/cgi-bin/legp604.exe?201+sum+HB1526>.

²²⁶ S.B. 33, 151st Gen. Assemb. (Del. 2021), <https://legis.delaware.gov/BillDetail?legislationId=48278>.

²²⁷ Transmittal Letter at 7–8.

Second, as discussed above in Section II.G., states and utilities are increasingly considering leaving the PJM capacity market in reaction to the Expanded MOPR. Notably, Dominion Energy Virginia already elected FRR in response to Expanded MOPR rules.²²⁸ At least four PJM jurisdictions are seriously evaluating FRR:

- In early 2020, the New Jersey Board of Public Utilities initiated an Investigation of Resource Adequacy Alternatives,²²⁹ which has included FRR as a primary focus of consideration, including a November 2020 work session on FRR designs,²³⁰ and evaluation of the costs and benefits of FRR.²³¹ The final report was recently released and concluded that “New Jersey should continue to explore the option to implement a New Jersey or multi-state ICCM under the FRR structure.”²³²
- The Maryland General Assembly convened a FERC Legislative Working Group to explore the impacts of MOPR and the FRR option, many members of which also filed comments at the Commission regarding PJM’s June 2020 compliance filing.²³³ The Maryland Energy Administration recently published an assessment, *Alternative*

²²⁸ See PJM, *2022/2023 Planning Period Parameters for Base Residual Auction*, at cell H56 (May 17, 2021), <https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2022-2023/2022-2023-planning-period-parameters-for-base-residual-auction.ashx>; 10-27-2020 VCC Tr. at 244:4–12 (Dominion Energy’s Director of Strategic Planning Glenn Kelly 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).

²²⁹ Order Initiating Proceeding, Docket No. EO20030203 (N.J. Bd. of Pub. Utils. Mar. 27, 2020).

²³⁰ Notice of Work Session, Investigation of Resource Adequacy Alternatives, Docket No. EO2003020 (N.J. Bd. of Pub. Utils. Oct. 28, 2020).

²³¹ Notice of Work Session, Investigation of Resource Adequacy Alternatives, Docket No. EO2003020 (N.J. Bd. of Pub. Utils. Mar. 9, 2021).

²³² NJBPU Report at 4.

²³³ Joint FERC Order Work Group, *House Economic Matters Committee and Senate Finance Committee Agenda* (Oct. 21, 2020), <http://www.mgaleg.maryland.gov/pubs-current/ECM%20-%20Meeting%20Material%20-%20October%202021,%202020.pdf>; *Calpine Corp. v. PJM*, 173 FERC ¶ 61,061, at P 62 (2020).

Resource Adequacy Structures for Maryland, which evaluates two different structures for the FRR in Maryland.²³⁴

- In December 2020, the District of Columbia Department of Energy and the Environment published a notice of funding for a “PJM Capacity Market Withdrawal Feasibility and Alternatives Study.”²³⁵
- The Clean Jobs, Workforce and Contractor Equity Act—legislation introduced in both houses of the Illinois General Assembly—grants authority to the Illinois Power Agency to conduct a capacity auction if a utility in the state elects the FRR, and establishes criteria for development of a procurement plan.²³⁶

As noted above, election of the FRR is not a negative development, the avoidance of which requires elimination of the Expanded MOPR. But insofar as the Commission wishes to maintain the attractiveness of centralized capacity markets, the broad demonstrations of interest in the election of FRR since the Expanded MOPR was approved must be considered when determining the reasonableness of the Expanded MOPR and PJM’s proposed replacement.

Third, the Expanded MOPR continues to be a controversial policy that destabilizes needed investment in capacity development. Sophisticated investors must make long-term investment decisions while assessing both market and regulatory risk.²³⁷ Transparent and predictable state policies aid investors in making informed decisions about what resources will

²³⁴ See 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*, at 28–29, Brattle Group (Mar. 2021), https://brattlefiles.blob.core.windows.net/files/21870_alternative_resource_adequacy_structures_for_maryland_-_review_of_the_pjm_capacity_market_and_options_for_enhancing_alignment_with_marylands_clean_electricity_future.pdf.

²³⁵ DC DOEE Notice of Funding Availability.

²³⁶ S.B. 1718, 102 Gen. Assemb., (Il. 2021–2022) & H.B. 804, 102 Gen. Assemb., (Il. 2021–2022) (proposed new subsection (k) to 20 Ill. Comp. Stat. Ann. 3855/1-75).

²³⁷ Brattle Aff. at 21 (“Merchant generation investors operate in a market and regulatory context that has always included environmental regulations from which they should not expect to be indemnified any more than they should be charged when regulations work in their favor.”).

provide the greatest return. The fact that the Expanded MOPR is controversial among state legislators²³⁸ and inconsistent with growing state policies supporting renewable energy creates uncertainty and investment risk. The role of the Commission and the RTOs is to design markets that harmonize with and react to shifts in market and regulatory conditions while ensuring that there are sufficient generation resources at any given time. The continued divergence between the Expanded MOPR and state policies will increasingly undermine capacity investment.

The regulatory and policy landscape that led to the Expanded MOPR has rapidly developed and provided new information in the time since the 2019 Order and will continue to change in the future. In light of these developing circumstances, it is both permissible and appropriate for the Commission to reconsider and modify its approach in ruling on PJM's proposed MOPR modifications.

VII. CONCLUSION

The Commission should accept PJM's Proposed Tariff, which represents a critical course correction that is necessary to ensure that price signals in the capacity market reflect real-world supply and demand fundamentals, rather than inflating those prices to a level above that needed to ensure resource adequacy. The Commission has before it an ample evidentiary record supporting acceptance of this Tariff and comprehensive departure from the Commission's earlier determinations that resulted in the unsound and unjust capacity market rates currently found in PJM. Eliminating the application of the MOPR to state policy resources, as PJM's Proposed Tariff would achieve, is legally sound—nothing in the Federal Power Act or judicial interpretations thereof requires the Commission to nullify state policies in an effort to achieve the

²³⁸ See 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).

level of capacity prices that would exist in a vacuum. Nor does the imperative of system reliability call for such artificially elevated prices—the capacity market design under PJM’s revisions will continue to allow prices to rise to the cost of the marginal unit needed to meet the resource adequacy standard; it will simply also account for the resource adequacy contributions of state policy resources, rather than ignoring them.

PIOs have significant concerns about whether MOPR should ever be applied to resources benefiting from state policies if the capacity market is to properly reflect the actual costs and supply on the system. In particular, we disagree that an approximate formulation of a Federal Power Act preemption standard is an acceptable or workable basis upon which to decide which resources should be subject to mitigation. However, PJM’s filing does not call upon the Commission to decide that question at this time. By contrast, the instant filing does present an opportunity for the Commission to provide further guidance to states and market participants about the circumstances in which PJM would submit a future Section 205 filing, by clarifying PJM’s definition of conditioned state support.

For the reasons stated above, we urge the Commission to accept PJM’s Proposed Tariff, which will result in rates that are just and reasonable, and not unduly discriminatory.

Dated: August 20, 2021.

Respectfully submitted,

/s/ Cullen Howe

Cullen Howe
Senior Renewable Energy Advocate
NATURAL RESOURCES
DEFENSE COUNCIL
40 West 20th Street
New York, NY 10011
347-232-3652
chowe@nrdc.org

/s/ Thomas Rutigliano

Thomas Rutigliano
Senior Advocate
Sustainable FERC Project
1125 15th Street NW, Suite 300
Washington DC 20005
trutigliano@nrdc.org

/s/ Daniel Franz

Daniel Franz
Legal Fellow
Earthjustice
1001 G Street NW, Suite 1000
Washington, DC 20001
(202) 667-4500
df Franz@earthjustice.org

/s/ Casey A. Roberts

Casey A. Roberts
Sierra Club
1536 Wynkoop Street, Suite 200
Denver, CO 80202
(303) 454-3355
casey.roberts@sierraclub.org

/s/ Michael Jacobs

Michael Jacobs
Union of Concerned Scientists
2 Brattle Square
Cambridge, MA 02138-3780
mjacobs@ucsusa.org

/s/ Danielle Fidler

Danielle Fidler
Staff Attorney, Clean Energy Program
Earthjustice
1001 G Street NW, Suite 1000
Washington, DC 20001
202.667.4500
dfidler@earthjustice.org

/s/ Megan Wachspress

Megan Wachspress
Staff Attorney
Sierra Club Environmental Law Program
2101 Webster St., 13th Floor
Oakland, CA 94612
megan.wachspress@sierraclub.org

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: August 20, 2021.

/s/ Daniel Franz

Daniel Franz

Legal Fellow

Earthjustice

1001 G Street NW, Suite 1000

Washington, DC 20001

(202) 667-4500

dfranz@earthjustice.org