UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C.	)	
	)	Docket Nos. EL18-178-000
PJM Interconnection, L.L.C.	)	ER18-1314-000
	)	ER18-1314-001
Calpine Corporation, et al.,	)	EL16-49-000
Complainants,	)	(Consolidated)
v.	)	
PJM Interconnection L.L.C,	)	
Respondent.	)	

REPLY ARGUMENT OF THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

The New Jersey Board of Public Utilities ("Board" or "NJBPU") hereby submits its Reply Argument in the paper hearing proceeding established in the above-captioned docket. The Federal Energy Regulatory Commission ("FERC" or "Commission") established this paper hearing proceeding by Order on June 29, 2018.[1] On October 2, 2018, the Commission accepted initial testimony, evidence, and/or argument, including the Initial Argument of the NJBPU.[2] Without prejudice to the Board's rehearing request,[3] which remains pending, the Board respectfully requests that the Commission accept this Reply Argument and give it due consideration.

[1] *PJM Interconnection, L.L.C.*, 163 FERC ¶ 61,236 (2018) ("June 29 Order" or "Order").
[2] Initial Argument of the NJBPU, Docket No. EL16-49, *et al.* (October 2, 2018) ("NJBPU Initial Argument").
[3] Request for Rehearing of the NJBPU, Docket No. EL16-49, *et al.* (July 30, 2018) ("NJBPU Rehearing Request").

I. Background

On April 9, 2018, pursuant to Section 205 of the Federal Power Act ("FPA"), 16 U.S.C. § 824d, PJM Interconnection, L.L.C. ("PJM") proposed two separate revisions to its Reliability Pricing Model ("RPM") capacity market rules in its Open Access Transmission Tariff ("Tariff"):[4] "Capacity Repricing," and "MOPR-Ex."[5] In response, the Commission's June 29 Order rejected the PJM Capacity Filing; consolidated it with an existing complaint of Calpine, *et al.*;[6] granted the Calpine Complaint, in part; and found certain RPM rules "allow resources to suppress capacity market clearing prices, rendering the rate unjust and unreasonable."[7] The June 29 Order further "reject[ed] Calpine's proposed Tariff revisions, even as an interim remedy;" and instead instituted an FPA Section 206 proceeding *sua sponte* to determine the just and reasonable replacement rate.[8] In a preliminary finding, the Commission offered a potentially just and reasonable two-part replacement rate, which included 1) an "expanded MOPR,"[9] and 2) a "resource-specific FRR [Fixed Resource Requirement] Alternative"[10] ("FRRa"). The Commission acknowledged that many implementing details of its proposed replacement rate still "need to be addressed" and "request[ed] that these topics be addressed in the paper hearing."[11] In response to a motion of the Organization of PJM States, Inc.

[4] Capacity Repricing or in the Alternative MOPR-Ex Proposal: Tariff Revisions to Address Impacts of State Public Policies on the PJM Capacity Market, at 1, Docket No. ER18-1314 (April 9, 2018) ("PJM Capacity Filing").
[5] *See* June 29 Order at PP 35-42; s*ee also* NJBPU Initial Argument at § I. Generally, PJM's Minimum Offer Price Rule ("MOPR") sets an administrative offer floor "to address concerns that certain resources may have the ability to suppress market clearing prices by offering supply at less than a competitive level." *See* June 29 Order at P 9 (internal citations omitted).
[6] Complaint Requesting Fast-Track Processing, Docket No. EL16-49 (Mar. 21, 2016) ("Calpine Complaint").
[7] June 29 Order at P 149.
[8] *Id.*
[9] *Id.* at P 158.
[10] *Id.* at P 160.
[11] *Id.* at P 164.

("OPSI"),[12] the Commission extended the deadlines in this proceeding; establishing November 6, 2018 for replies.[13]

The Board timely requested rehearing of the June 29 Order.[14] The Board challenged that the Commission impermissibly overstepped into state jurisdiction by attempting to frustrate longstanding state policies regarding generation.[15] The Board also challenged that the Commission lacked sufficient evidence to overturn the existing RPM rules.[16] The Board further objected to the Commission's proposed timeline for decision making as arbitrary for failing to recognize five major ongoing, overlapping, and intertwined capacity market proceedings that each represents important aspects of the problem.[17] The Board further challenged that this expedited timeline would also arbitrarily limit the participation of states.[18]

On October 2, 2018, NJBPU submitted its Initial Argument. The Board asserted that an expanded MOPR would be punitive, unjust, and unreasonable unless it is accompanied by some accommodating approach to state policies.[19] The Board explained the relationship between the proposed replacement rate and existing timelines for regulatory action imposed by state law, noting that unreasonable deadlines for states must not be accepted.[20] The Board's Initial Argument also seeks further clarity on the jurisdictional divide between state and federal rates.[21] The Board

[12] Organization of PJM States, Inc., Motion for Extension of Filing Deadline, Docket No. EL16-49, et al. (July 27, 2018).
[13] Notice of Extension of Time, Docket No. EL16-49, *et al.* (Aug. 22, 2018).
[14] *See* NJBPU Rehearing Request.
[15] *Id.* at § B.
[16] *Id.* at § A.
[17] *Id.* at § C (citing *Motor Vehicle Mfs. v. State Farm Mut. Ins. Co.*, 463 U.S. 29, 43 (1983) ("an agency rule would be arbitrary and capricious if the agency . . . failed to consider an important aspect of the problem.")).
[18] *Id.* at § D.
[19] NJBPU Initial Argument at § II.
[20] *Id.* at §§ III.A, III.B.
[21] *Id.* at 25-26.

cautioned the Commission against approving rules that may unintentionally allow economic withholding.[22]

Nothing in the Board's Initial or Reply Argument should be read to prejudice the Board's position on rehearing in any way. These arguments are presented in the alternative. Should the Commission deny the Board's Request for Rehearing, and determine that some replacement rate is necessary, the Board asks that the Commission provide due consideration to the arguments below.

II. The Commission Must Respect State Policies.

A. The Commission Should Not Change the Scope of the MOPR.

1. The Commission Must neither Depart From Prior Precedent nor Discriminate Against Valid State Policies.

The Commission must not arbitrarily depart from precedent or allow unduly discriminatory results by subjecting certain policies to the MOPR and exempting others. No valid state policy should be subject to the MOPR. Expansion of the MOPR to cover these resources would "impermissibly intrude upon the states' authority over generation resources."[23] The Commission has allowed economic impacts associated with state policies to be included in capacity offers in the past, including costs stemming from environmental regulations. The Commission has not offered a reasonable explanation for its departure from past precedent. To reach an acceptable and nondiscriminatory result, the Commission must avoid "picking and choosing which policies to frustrate and which to willfully ignore."[24] Without some rational basis, distinguishing between legitimate public policies that have similar effects on the offers of generating units is arbitrary and unduly discriminatory.[25]

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[22] *Id.* at § III.C.
[23] NJBPU Rehearing Request at 6.
[24] June 29 Order, at 6 (Glick, Comm'r, dissenting).
[25] *See BP Energy Co. v. FERC*, 828 F.3d 959, 967 (D.C. Cir. 2016) ("No undue discrimination exists where there is 'a rational basis for treating [two entities] differently' and such differential treatment is 'based on

Public policies affect generation resources in different ways, but the totality of the resulting costs or benefits are reflected in the generation unit's offer; thus, requiring similar treatment from the Commission. Policies that grant tax advantages, or provide other types of cost reduction could allow resource owners to submit lower offers than they otherwise would without the policy. State attribute programs, which provide attribute payments instead of cost reductions, could have the same effect on unit offers.[26] Absent any evidence of actual price suppression, the June 29 Order determines that the state attribute programs, such as Zero Emission Credit ("ZEC") Programs, must be mitigated to ensure that resources do not "submit offers into the PJM capacity market that do not reflect their actual costs."[27] Arguably, energy tax programs "artificially reduce[] the price of natural gas, oil, and coal, which in turn has allowed resources that burn these fuels—including many of the so-called 'competitive' resources that stand to benefit from [the June 29] order—to submit 'suppressed' bids into PJM's markets for capacity, energy, and ancillary services."[28] By disregarding the potential cost implications of tax programs, or other cost reducing policies, the Commission arbitrarily discriminates against state attribute programs.

The Commission cannot claim ignorance of the existence and effect of these cost-reducing public policies, which it exempts from mitigation. The issue is plainly presented in the record before the Commission.[29] The Clean Energy Advocates provided fifteen, well-cited pages of specific cost-reducing public policies effecting unit offers in PJM.[30] In his dissent, Commissioner Glick further explains the "[g]overnment subsidies [that] pervade the energy markets and have for more than a

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relevant, significant facts which are explained.'" (alteration in original) (quoting *Complex Consol. Edison Co. of N.Y., Inc. v. FERC*, 165 F.3d 992, 1012-13 (D.C. Cir. 1999)).

[26] Neither PJM nor the Commission have documented any evidence of actual price suppression caused by such programs. *See* NJBPU Rehearing Request at 3-6.

[27] June 29 Order at P 153.

[28] *Id.* at 7 (Glick, Comm'r, dissenting)

[29] NJBPU Rehearing Request at 3-4 (citing June 29 Order at P 149).

[30] Protest of the Clean Energy Advocates, at Appendix B, Koplow Report, at 32-47, Docket No. ER18-1314 (May 7, 2018) ("Clean Energy Advocates Protest").

century."[31] Commissioner Glick then goes on to reference more than 100 years of tax policy favoring the fossil fuel industry.[32] By exempting these policies from mitigation, the Commission implicitly endorses these policies as valid. Such treatment must equally apply to state public policy attribute payments. The environmental policies of the State of New Jersey are equally valid; therefore, any rate that mitigates New Jersey's programs, while exempting similar policies, unlawfully discriminates.

Moreover, the Commission has historically treated state public policies similar to other external factors impacting resource offers.[33] The Commission has been permissive; even acknowledging that states "may seek to encourage renewable or other types of resources through their tax structure, or by giving direct subsidies."[34] The Commission also recognized that "use of the tax structure" or "giving direct subsidies" "may allow states to affect the price of renewables or other alternatives."[35] The Commission acknowledged that "states may allow the alternative generation to be more competitive in a cost comparison with fossil-fueled generation."[36] During restructuring, the Board urged the Commission to address environmental concerns in the federal wholesale markets, rather than leaving states to individually shape policies that could have a competitive effect.[37] The Commission did not take action at the federal level and left states, like New Jersey, to individually shape their environmental policies.[38] Indeed, in several subsequent decisions, the Commission has

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[31] June 29 Order, at 6 (Glick, Comm'r, dissenting).
[32] *Id.* (citing Molly Sherlock, Cong. Research Serv., *Energy Tax Policy: Historical Perspectives on and Current Status of Energy Tax Expenditures* 2-3 (May 2011), *available at* https://fas.org/sgp/crs/misc/R41227.pdf)
[33] Clean Energy Advocates Protest, at Appendix B, Gramlich Affidavit, § V (explaining that FERC has traditionally allowed public policies to affect prices, consistent with typical markets).
[34] *S. Cal. Edison Co.*, 71 FERC ¶ 61,269, 62,080 (1995).
[35] *Id.*
[36] *Id.*
[37] *See* Comments of NJBPU and New Jersey Department of Environmental Protection, at 9-10, Docket Nos. RM95-8, RM94-7-001 (Jan. 30, 1996).
[38] *In the Matter of the Energy Master Plan Phase II Proceeding to Investigate the Future Structure of the Electric Power Industry*, Order Adopting and Releasing Final Report on Restructuring the Electric Power

allowed state environmental policies to directly affect wholesale markets.[39] Thus, Commission action to now mitigate a subset of these state policies is a substantial departure from long-standing acceptance of state environmental policy.

The Commission should accord its decision with prior precedent and not discriminate against valid state policies. The Commission offers no rational basis for why some state policies should be respected and preserved, while others are vilified. New Jersey's attribute programs are just as valid as the cost-reducing subsidies referenced above. New Jersey's attribute programs and restructured regulatory framework are just as valid as the "traditional" vertically-integrated regulatory framework.[40] No rational basis exists for discriminating against certain restructured-state attribute programs that were previously supported by the Commission.[41]

Industry in New Jersey, NJBPU Docket No. EX94120585Y, at 15-16 (Apr. 30, 1997). In the adopted and released report, the Board makes its recommendations to the Legislature regarding restructuring, including discussion of the need for emissions and generation portfolio standards should federal action not address the issue.

[39] *California Indep. Sys. Operator Corp.*, 145 FERC ¶ 61,254, at PP 5, 34 (2013) (allowing California Independent System Operator to lower its bid floor from negative $30/MWh to negative $150/MWh to account for additional revenues received by variable energy resources, including production tax credits and renewable energy credits ("REC")); *ISO New England Inc.*, 146 FERC ¶ 61,084, at P 32 (2014) (rejecting argument that REC revenues are out-of-market revenues, and approving calculation of capacity price screen including REC revenues); *ISO New England Inc.*, 158 FERC ¶ 61,138, at P 4 (2017) (denying rehearing of an approved exemption of 200MW of renewable resources from the MOPR); *Elec. Power Supply Ass'n v. Star*, Nos. 17-2433, 17-2445, 2018 U.S. App. LEXIS 25980 (7th Cir. Sep. 13, 2018) (recognizing that "ZECs can influence the auction price only indirectly, by keeping active a generation facility that otherwise might close and by raising the costs that carbon-releasing producers incur to do business.").

[40] Protest of the NJBPU, at 7-21, Docket No. ER18-1314, *et al.* (May 7, 2018)("NJBPU Protest").

[41] *See, e.g.*, *BP Energy Co. v. FERC*, 828 F.3d 959, 967 (D.C. Cir. 2016) ("No undue discrimination exists where there is 'a rational basis for treating [two entities] differently' and such differential treatment is 'based on relevant, significant facts which are explained."(alteration in original) (quoting *Complex Consol. Edison Co. of N.Y., Inc. v. FERC*, 165 F.3d 992, 1012-13 (D.C. Cir. 1999)).

2. Attribute Compensation Programs Correct for Long-Standing Deficiencies in FERC's Market, Are Economically Efficient, and Should Not be Mitigated.

Environmental attribute programs like those enacted in New Jersey, and other restructured states, should not be mitigated; these programs efficiently correct for the externalities that are present, but not accounted for, in the Commission's markets. During restructuring, as noted above, the Board sought a federal market solution that would address New Jersey's environmental concerns.[42] Absent federal action, the Board recommended that New Jersey retain its right to take action at the state level to ensure that New Jersey continued to benefit from a diverse portfolio of resources and meet its environmental goals.[43] The state legislature incorporated this recommendation into New Jersey's restructuring law.[44] The Board has acted on that authority for nearly twenty years,[45] including administration of a Renewable Portfolio Standard ("RPS"), and the issuance of RECs.[46] New Jersey's offshore wind legislation, dating back to 2010,[47] and New Jersey's recently enacted ZEC legislation,[48] continue the state's efforts to address emissions and promote a diverse portfolio of resources.

Programs that compensate resources for the attributes they provide are efficient to the extent they correct for externalities not otherwise accounted for in competitive markets. Externalities exist

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[42] Comments of NJBPU and New Jersey Department of Environmental Protection, at 9-10, Docket Nos. RM95-8, RM94-7-001 (January 30, 1996).
[43] *In the Matter of the Energy Master Plan Phase II Proceeding to Investigate the Future Structure of the Electric Power Industry, Order Adopting and Releasing Final Report*, at 15-16, NJBPU Docket No. EX94120585Y (April 30, 1997) (NJBPU adopting recommendations regarding restructuring in the State of New Jersey).
[44] Electric Discount and Energy Competition Act of 1999, L.1999, c.23, § 38, codified at N.J.S.A. 48:3-87. (incorporating Renewable Portfolio Standards, Environmental Disclosure Requirements, etc.); *Id.* at § 2, codified at N.J.S.A. 48:3-50(a)(7) (stating that it is the policy of New Jersey to "[p]rovide diversity in the supply of electric power throughout this State.").
[45] *Id.* New Jersey's RPS pre-dates the RPM Capacity Market.
[46] N.J.A.C. 14:8-2.9.
[47] Offshore Wind Economic Development Act, N.J.S.A. 48:3-87, *et seq.* ("OWEDA").
[48] Zero Emissions Credit Act, N.J.S.A. 48:3-87.3 to 48:3-87.7 ("New Jersey ZEC Legislation").

when societal costs, such as those stemming from fossil-fuel emissions, are not internalized into a market construct. Without some penalty or other public policy correcting for the externality, market sellers will not take into account these social costs and the resulting market outcomes will be inefficient.[49] "[S]uch taxes and subsidies are complementary to the ordinary workings of competitive markets, and help to guide private economic supply and demand decisions towards socially efficient outcomes…."[50] Assuming these externalities remain unaccounted for, the selection of capacity resources with the lowest marginal cost does not reflect the societally-efficient market clearing. State policies look to reflect these societal costs, filling a void in the Commission's regulatory structure.[51] Without addressing the increased economic efficiency brought to the markets by state programs, the Commission will fail to reach a just and reasonable result.

B. Any Expansion of the MOPR Must Be Paired With a Workable Accommodation of State Policies.

As set forth in the Board's Initial Argument, any replacement rate that includes a MOPR for existing resources, with few or no exceptions, must also include an accommodation for state policies.[52] The Board explained the dramatic economic impacts of a stand-alone MOPR, which

[49] *See* Protest of Exelon Corporation, Willig Declaration at P 31, Docket No. ER18-1314 (May 7, 2018) ("Exelon Protest"). Robert D. Willig is "Professor of Economics and Public Affairs Emeritus at the Woodrow Wilson School of Public and International Affairs and the Economics Department of Princeton University." *Id.* at P 1.

[50] Willig Declaration at P 38.

[51] Other commenters have proffered similar arguments, which require response from the Commission. *See e.g.* Comments of the Institute for Policy Integrity at New York University School of Law § II.A, Docket No. EL16-49, *et al.* (October 2, 2018) ("NYU Comments"); Initial Brief of Exelon Corporation, at 13-14, Docket No. EL16-49, *et al.* (October 2, 2018) ("Exelon Initial Brief"); Comments of Joint Consumer Advocates, at 9-10, Docket No. EL16-49, *et al.* (October 2, 2018)("Consumer Advocate Comments"); Comments of the Clean Energy Advocates Separately Addressing the Scope of the Expanded MOPR, at § II.b, Docket No. EL16-49, *et al.* (October 2, 2018); June 29 Order, at 6 (Glick, Comm'r, dissenting) (citing Sylwia Bialek & Burcin Unel, Institute for Policy Integrity, *Capacity Markets and Externalities: Avoiding Unnecessary and Problematic Reforms*, at 12 (2018)).

[52] NJBPU Initial Argument at § II.

would result in unjust and unreasonable rates.[53] Many other initial arguments echoed this assertion, including the PSEG Companies,[54] Exelon,[55] FRR-RS Supporters,[56] OPSI,[57] consumer advocates,[58] and NYU.[59] The Board also supported accommodation during the transition period to the proposed FRRa construct, explaining the improper price signals and substantial inflated costs that would result from careless implementation.[60] The Board continues to urge that the Commission recognize the need for accommodation of state policies.

Although the Board's Initial Argument supported the need for accommodation, the Board did not opine on the proper method of accommodation. With certain clarifications, discussed in sections III and IV *infra*, the Board largely considers the "FRR-RS" proposal to be a workable accommodation.[61] Of the proposals provided to the Commission, the Board views the FRR-RS proposal as most closely matching the Commission's first principles of capacity markets at the most reasonable cost to customers.

The Commission has recently stated that it looks to the first principles of capacity markets when evaluating "the larger issue of how to address the impact of state policies on wholesale markets."[62]

> A capacity market should facilitate robust competition for capacity supply obligations, provide price signals that guide the orderly entry and exit of capacity resources, result in the selection of the least-cost set of resources that possess the

[53] *Id.*
[54] *See* Comments of the PSEG Companies, at § I.A. Docket No. EL16-49, *et al.* (October 2, 2018).
[55] *See* Exelon Initial Brief at § I.
[56] *See* Joint Brief of Consumer Advocates, NGOs, and Industry Stakeholders ("FRR-RS Supporters"), at § I, Docket No. EL16-49, *et al.* (Oct. 1, 2018) ("FRR-RS Initial Brief").
[57] *See Argument of OPSI.* Docket No. EL18-178. October 2, 2018, at § II.A.
[58] *See* Consumer Advocate Comments at § II.B.1.i.
[59] *See generally* NYU Comments at §§ II.B, III.B.
[60] NJBPU Initial Argument at 9-10.
[61] *See* FRR-RS Initial Brief.
[62] *ISO New England Inc.*, 162 FERC ¶ 61,205, at P 21 (2018) ("CASPR Order").

> attributes sought by the markets, provide price transparency, shift risk as appropriate from customers to private capital, and mitigate market power.[63]

The FRR-RS proposal satisfies these principles and can provide a workable accommodation for state programs; preventing against unreasonably high rates associated with punitive mitigation.

The FRR-RS proposal would facilitate robust competition and provide competitive price signals. In opposition to the carve-out approach of the FRR-RS, many commenters have relied on static models of RPM, which hold supply and demand curves constant and simply add or remove MW to achieve results, to show large shocks in RPM prices that would result from a carve-out paradigm. Such simplistic models do not adequately capture market participant behavior; dynamic market participants will alter their capacity offers to react to market conditions and limit impacts on capacity prices.[64] Further ensuring robust competition, RPM is designed to ensure resource adequacy, regardless of the implementation of an accommodative solution. The key source of this assurance lies in RPM's sloped demand curve tracking the cost of new entry. Neither the Board nor the FRR-RS Supporters propose to change this aspect of RPM.[65] This downward-sloping demand curve provides a durable market mechanism that is sufficient to support developer expectations and long-term investment decisions.[66]

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[63] *Id.* Market power mitigation is not discussed in this section, but in section III.A *infra*.

[64] *See Comments of Clean Energy and Consumer Advocates* ("CE and CA Comments"), at Attachment C, Wilson Affidavit, P 43, Docket No. EL16-49, *et al*. (Oct. 2, 2018) ("When certain additional resources are expected to enter or exit the market (be it 'competitive' or sponsored resources), market participants will take these changes into account in planning the timing of retirements, other new entry, and other actions that affect the balance of supply and demand … If the additional resources or retirements are anticipated well in advance, it is reasonable to expect that they are fully anticipated and absorbed by market participants' adjustments, and have minimal, if any, impact on capacity prices.").

[65] A proceeding to determine the exact shape and location of the demand curve are currently pending before the Commission in the "Quadrennial Review." No proposals in the PJM stakeholder process proposed to change the sloped nature of the RPM demand curve. *See* Docket No. ER19-105; *see also* Quadrennial Review Package/Proposal Matrix, Special Market Implementation Committee, at row 9-10 (September 12, 2018), *available at* https://www.pjm.com/-/media/committees-groups/committees/mic/20180912/20180912-item-01b-quadrennial-review-matrix.ashx

[66] Willig Declaration at P 45 ("PJM's capacity market sets an explicit reliability requirement and establishes a capacity market demand curve that tracks the administrative estimate of the cost of new entry … It is the

The FRR-RS proposal will also select the least-cost resources with the attributes sought by the market; provide price transparency; and retain the appropriate risk for suppliers relative to consumers. In determining which attributes are sought by the market, the Commission should recognize valid state policies as a preference sought by the marketplace. This approach is consistent with the Commission's recognition of state environmental policies.[67] Any punitive mitigation, in contrast to the FRR-RS proposal, would fail to select the "least-cost" set of desired resources. The FRR-RS proposal meets the Commission's transparency principle by delineating the costs resulting from market competition and those resulting from state policies.[68] Regarding risk distribution, the FRR-RS proposal appropriately retains existing risks borne by capacity suppliers relative to captive ratepayers. A punitive mitigation strategy would shift the risk of achieving environmental policy goals to ratepayers, which is unnecessary to ensure transparency. Unlike the ratepayers, competitive suppliers are active market participants with access to a number of mechanisms to mitigate and hedge any price risk. The FRR-RS proposal strikes the appropriate balance between risk-shifting and transparency by assigning the cost of 'carved-out' resources to the associated load, while retaining robust competition for the remainder of the capacity obligation. Accordingly, and with the clarifications discussed below, the FRR-RS proposal could be a just and reasonable replacement rate.

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existence of this durable market mechanism that provides resource developers the market expectations to support long-term investment decisions.").

[67] *See* Comments of NJBPU and New Jersey Department of Environmental Protection, at 9-10, Docket Nos. RM95-8, RM94-7-001 (Jan. 30, 1996).

[68] June 29 Order at P 162 (The Commission "expect[s] this bifurcated approach to provide significant benefits through increased transparency for investors, consumers, and policymakers … Further, the bifurcated capacity construct should make more transparent which capacity costs are the result of competition in the capacity market and which capacity costs are being incurred as a result of state policy decisions.").

III. Any Expansion of MOPR Should be Based on Reasonable Definitions.

A. The Definition of a Competitive Offer.

Should the Commission adopt the two-part replacement rate, the MOPR must be re-affirmed as a competitive offer. Reaffirming the MOPR as a competitive offer will satisfy another capacity market first principle: mitigation of market power.[69] Mitigation of market power is especially critical in light of the noncompetitive results associated with the most recent Base Residual Auction ("BRA"), as discussed below.

Both the Illinois Attorney General[70] and PJM's Independent Market Monitor ("IMM")[71] have identified auction behavior in the 2021/2022 BRA that produced noncompetitive results. "A properly calculated [Market Seller] offer cap ("MSOC") as part of the MOPR requirement is critical to preserve competitive results in the RPM auctions and to address[] market power."[72] In the Capacity Performance proceeding, the Board explained that "abandoning market power mitigation up to Net CONE ["Cost of New Entry"]" "would constitute an unjustified burden on consumers, one contrary to competitive RPM market outcomes that have consistently demonstrated the actual net cost of new entry to be substantially below the administratively determined Net CONE."[73] As the Commission accepted in the Capacity Performance proceeding, the current MSOC allows resources to bid up to Net CONE*B; any such offer "shall not, in and of itself, be deemed an exercise of

[69] CASPR Order at P 21.
[70] *Initial Brief of the People of the State of Illinois* ("IL OAG Brief"), Docket No. EL18-178, at McCullough Affidavit (Oct. 2, 2018).
[71] PJM Independent Market Monitor, Analysis of the 2021/2022 RPM Base Residual Auction, at 2, August 24, 2018 ("IMM 2021/2022 BRA Report").
[72] IL OAG Brief at McCullough Affidavit, at P 54.
[73] Protest of Joint Consumer Representatives, at 18-19, Docket No. ER15-623 (Jan. 20, 2015) ("CP Comments"). NJBPU was a member of the Joint Consumer Representatives. *Id.* at 1.

market power in the RPM market."[74] Despite this tariff provision, persuasive evidence in the record indicates that the current MSOC does not adequately prevent the exercise of market power.

The most recent RPM auction results illustrate the Board's ongoing concerns and require Commission action.[75] "If the identified noncompetitive offers had been capped at net [Avoidable Cost Rate ("ACR")] in the 2021/2022 RPM BRA and everything else had remained the same, total RPM market revenues for the 2021/2022 RPM Base Residual Auction would have been $8,070,050,631, a decrease of $1,230,826,475, or 13.2 percent, compared to the actual results."[76] These noncompetitive results are the result of the inflated MSOC based on the approved Net CONE*B definition of a competitive capacity offer.[77]

In this docket, the Commission has the opportunity to eliminate opportunities for market power abuse such as those exploited in the 2021/2022 BRA. The Commission would accomplish this goal by setting the MOPR price level to net ACR. In contrast to the existing MSOC of Net CONE*B, correct calculation of ACR illustrates verifiable going-forward costs of the generator, which is the marginal cost of capacity.[78] Bids under the current MSOC account for risk of taking on a capacity commitment, including risk premiums based on the opportunity costs of foregoing bonus payments.[79] The level of risk premium is dependent on assumptions in RPM, which have been

[74] PJM Tariff, attachment DD § 6.4(a).
[75] *See* IMM 2021/2022 BRA Report at 2 ("The market design for capacity leads, almost unavoidably, to structural market power in the capacity market... Market power is and will remain endemic to the structure of the PJM Capacity Market … Issues with the definition of the offer caps in the 2021/2022 BRA resulted in noncompetitive offers and a noncompetitive outcome… for the 2021/2022 [Net CONE*B] was not the correct offer cap.").
[76] *Id.* at 20.
[77] *Id.* at 2.
[78] Summary of the Sustainable Market Rule Proposal of the IMM for PJM, at 2, Docket No. EL16-49, et al. (October 31, 2018), at 2, *available at* http://www.monitoringanalytics.com/filings/2018/IMM_Summary_of_Position_Docket_No__EL18-178_ER18-1314_EL16-49.pdf.
[79] PJM Interconnection, L.L.C., Balancing Ratio Determination at 14-16, March 7, 2018, available at https://www.pjm.com/-/media/committees-groups/committees/mic/20180307/20180307-item-09a-market-seller-offer-cap-balancing-ratio-determination.ashx

shown to be incorrect.[80] Allowing this risk premium to be included in capacity market bids without mitigation allows market sellers to exploit this unmitigated price range to create noncompetitive RPM outcomes.[81] PJM's tariff unjustly and unreasonably sanctions noncompetitive offer behavior up to the Net CONE*B level.[82] Setting the competitive offer to net ACR would eliminate the assumptions required to calculate the Net CONE*B MSOC and would ensure that actual marginal costs set the price for capacity.

Setting the competitive offer to Net ACR is the appropriate level for both new and existing resources to ensure that actual marginal costs set capacity prices. PJM's proposal would unreasonably distinguish between new and existing resources and would inflate prices over the marginal costs necessary to set competitive prices. PJM proposes to 1) allow existing units not subject to the MOPR to continue to offer up to Net CONE*B, 2) utilize net going-forward ACR in calculating repricing for existing MOPR-ed units, and 3) utilize ACR including construction cost for new MOPR-ed units.[83] It is a mistake to differentiate the definitions of competitive offers for new versus existing units. The definition of a competitive offer should be the same for all resource types.[84] The correct level, to mitigate the exercise of market power and ensure marginal costs set RPM prices, is net ACR.[85] Accordingly, the Board agrees with the IMM that "[u]se of higher offers for new resources based on the full cost of entry, as proposed by PJM, would constitute a

[80] *See* IMM 2021/2022 BRA Report at 2 ("Those assumptions were not correct for the 2021/2022 BRA and net CONE times B was not the correct offer cap as a result.").
[81] McCullough Affidavit, at PP 24-29.
[82] *See* PJM Tariff, attachment DD § 6.4(a).
[83] Initial Brief of the IMM, at 15-16, Docket No. EL16-49, *et al.* (October 2, 2018) ("IMM Initial Brief").
[84] *Id*. at 16 ("Prior attempts to distinguish between the definition of competitive offers of new entrants and the competitive offers of existing resources were a mistake, as is PJM's continued application of that approach in its repricing proposal.").
[85] *Id.* ("A competitive offer in the capacity market is the marginal cost of capacity, or net ACR, regardless of whether the resource is planned or existing.").

noncompetitive barrier to entry and would create a noneconomic bias in favor of existing resources."[86]

In two of three aspects, PJM's proposal is unjust and unreasonable. It would retain the ability to exercise market power by allowing unmitigated offers up to Net CONE*B, which allowed last year's uncompetitive auction outcomes. By including construction costs of new units in the re-priced level, PJM would further erect barriers to entry for the very types of construction-cost-intensive units required to meet ongoing clean energy goals. The remaining just and reasonable alternative is that which the Board has previously advocated: net ACR. The Commission should take this opportunity to re-evaluate the competitive price in PJM's capacity market and approve rules that "are designed to account for this structural non-competitiveness by limiting participant offer prices to the Net ACR of the specific resource."[87] Any finding to the contrary would be unjust and unreasonable.

B. The Definition of Material Subsidy.

As challenged in its Initial Argument, the Board urges the Commission to adopt reasonable definitions in this proceeding. The Board views PJM's newly developed "entitled to" test for application of the MOPR a potentially workable solution under any two-part replacement rate.[88] PJM's new standard only qualifies out-of-market revenues as Material Subsidies when "the material resource [is] 'receiving or entitled to receive'" such payments.[89] As the Commission is aware, timing of the application of the MOPR was a focus of the Board's Initial Argument.[90] The Board

[86] *Id.*
[87] CP Comments at 17.
[88] Initial Submission of PJM, at § II.A.2.c, Docket No. EL16-49, *et al.* (October 2, 2018) ("PJM Initial Submission").
[89] *Id.* at 25.
[90] NJBPU Initial Argument at 11-22.

appreciates PJM's acknowledgement of the unique timing circumstances inherent in the New Jersey ZEC Legislation.[91] The Board urges the Commission to recognize PJM's "entitled to" standard as a reasonable path forward.

Unfortunately, other initial arguments retain the overly broad language that the Board opposes. Specifically, the Board opposes, and others request, MOPR application to "*formal or informal* arrangements to *seek,* recover, accept or receive any… material payments."[92] The Board continues to assert that "this language would have the unjust effect of applying the MOPR to resources that, in the end, may not receive State funds at all."[93] No justification exists for applying mitigation to resources that have yet to receive any alleged subsidy. For these reasons, and those set forth in detail in the Board's Initial Argument, any such expansive proposed definition of "nonmarket revenue" or "Actionable Subsidy" must not be accepted.[94]

Similarly, in its Initial Argument and in its Protest to PJM's initial proposal, the Board objected to the use of a 1% threshold. Rather than burden the record on Reply, the Board reasserts those objections and urge's the Commission's consideration of those arguments. No justification exists for determining that 1.1% is a material subsidy worthy of mitigation.

IV. The Commission Must Answer Outstanding Questions on FRRa.

A. Selecting Commensurate Load.

One of the crucial questions in the June 29 Order is determining the commensurate load associated with the FRRa resource.[95] The Commission, in implementing the FRRa rate, is rightfully concerned that the locational qualities of RPM are retained. Locational price signals are a crucial

[91] PJM Initial Submission at 26-27.
[92] *See, e.g.,* IMM Initial Brief at 17 (emphasis added) (The IMM refers to these payments as "nonmarket revenue"); *see also* NJBPU Initial Argument at 13-15.
[93] NJBPU Initial Argument at 13-14.
[94] *See, e.g.,* IMM Initial Brief at 17.
[95] *See* June 29 Order at P 166.

element of RPM, dictating areas where new capacity is needed. These price signals are ensured through PJM's use of Locational Deliverability Areas ("LDAs" or "zones"). Each LDA has a defined capacity requirement based in part on the amount load and transfer capability into that zone.[96] This "transfer capability" determines the amount of capacity that may be reliably imported into any LDA, allowing lower-priced generation outside of the LDA to serve load inside the LDA up to the transfer capability limit. PJM also has "nested" (or "parent") LDAs, which are larger geographic areas that contain other "child" LDAs. For instance, the PS, PS-North, DPL-South, and other child LDAs exist in the Eastern MAAC ("EMAAC") parent LDA. The selection of commensurate load must be workable within these existing boundaries, and retain the locational price signals critical to RPM. States should have the opportunity to take an active role in this process, but a just and reasonable default selection methodology is also required.

Whether the default election or a state-specific election is utilized, locational elements must be retained. The default mechanism is required in the case where a state does not possess the legislative authority to provide oversight into a newly-developed FRRa paradigm. As a default mechanism, the FRR-RS Supporters advocate a system where "PJM would simply deduct the UCAP of the FRR-RS resource(s) from the capacity procurement requirement for the *applicable zone*."[97] The Board views this approach as workable, with the clarification that, as a default mechanism, the "applicable zone" would be that zone in which the resource physically resides. Should an FRRa resource exceed the capacity procurement requirement for its applicable zone, any extra available UCAP MW should be applied to the parent Locational Deliverability Area in the state. By carving

[96] *See* PJM Interconnection, L.L.C., 2021/2022 RPM Base Residual Auction Planning Period Parameters, at 4, *available at* https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2021-2022/2021-2022-rpm-bra-planning-parameters-report.ashx?la=en.
[97] FRR-RS Initial Brief at 9.

out the commensurate load in the same physical location as the FRRa resource, this approach appropriately retains the locational price signals inherent in RPM.

This default mechanism will provide a pathway for states to ensure that locational price signals are retained and noncompetitive behavior is avoided.[98] Another proposed default mechanism is a process for the FRRa resource to bilaterally contract with a Load Serving Entity ("LSE") in a state. Although Commission review of any wholesale bilateral contract will occur, the structure of bilateral contracts may affect retail auction results. As discussed below, if a state has the jurisdiction to sanction bilateral contracts as the desired FRRa compensation and load-election mechanism, a state should be free to do so. However, as a default, bilateral contracts may contain myriad provisions, which the Commission may deem just and reasonable, but which also may have negative effects on state-jurisdictional retail markets. Therefore, the Board does not favor the bilateral contracting mechanism as a default market rule.

If a state possesses the authority to determine the commensurate load, it should be free to exercise that authority, in line with existing transfer capability. State commissions should be free to assign the MW to the load within their states as they see fit. The Board shares the view of the Clean Energy Advocates and Consumer Advocates that any default method "may be appropriately overridden by state regulation to account for the unique features of each state's policy mix and system of retail rate regulation."[99] Despite the Board's preference for the default mechanism discussed above, "[t]he Commission should avoid imposing a single structure by which load and FRR-RS resources must be matched, regardless of state regulation. It should also avoid placing any

[98] *Id.* at Attachment A.
[99] CE and CA Comments at 9.

limits on how load is matched with FRR-RS capacity where such limits are not required in order to ensure resource adequacy."[100]

B. FRRa Rate.

In determining the structure for compensating FRRa resources, the Commission must provide clear guidance to states. This clarity should prevent unnecessary litigation and promote the accommodation and cooperative federalism desired by both the Commission and the states.[101] The Commission should defer to states that have the statutory authority to set rates for their carved-out FRRa resources. However, the Board recognizes that some states may not possess the necessary authority to compensate the FRRa resources. Default just and reasonable rules are therefore required. Notably, such a default already exists in PJM's tariff. This tariff provision can serve as a model for the Commission's FRRa rate provisions.

Schedule 8.1 of PJM's Reliability Assurance Agreement contains the existing FRR rules for "assessing FRR charges to competitive retail suppliers in retail choice states."[102] Section D.8 of the Schedule 8.1 provides that,

> where the state regulatory jurisdiction requires switching customers or the LSE to compensate the FRR Entity for its FRR capacity obligations, such state compensation mechanism will prevail. In the absence of a state compensation mechanism, the applicable alternative retail LSE shall compensate the FRR Entity at the capacity price in the unconstrained portions of the PJM Region . . . provided that the FRR Entity may, at any time, make a filing with FERC under Section 205 of the [FPA] proposing to change the basis for compensation to a method based on the FRR Entity's cost or such other basis shown to be just and reasonable.

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[100] *Id.* at 9-10

[101] See *Hughes v. Talen Energy Mktg., LLC*, 136 S.Ct. 1288, 1300 (2016) (The FPA is recognized as a "collaborative federalism statute [that] envisions a federal-state relationship marked by interdependence . . . .")(Sotomayor, J., concurring); *see also FERC v. Elec. Power Supply Ass'n.*, 136 S. Ct. 760, 780 (2016) (noting that under the FPA "federal and state powers [are] 'complementary. . . [.]'").

[102] Initial Comments of FirstEnergy Solutions Corp., at 10, Docket No. EL16-49, *et al.* (October 2, 2018) ("FES Comments").

A similar approach would set forth a just and reasonable default structure to be accepted as part of an accommodative solution. Such an approach would retain an appropriate deference to states, "and would reflect the fact that [FRRa] rates will be paid solely by the state's retail ratepayers."[103] States should be able to select the basis for their determined rate structure, including "cost-based pricing, competitively procured pricing, environmental attribute pricing and/or other state-established compensation mechanism,"[104] as provided by the FRR-RS Supporters. If states are unwilling or unable to make such a rate determination, the capacity resource would receive RPM revenues equal to the unconstrained portion of the PJM region, the default market rate. If the resource feels another compensation mechanism would be just and reasonable, the FRRa resource would retain the right to file under section 205 to seek an alternative compensation method.

For a default rate to work in practice where a state is unwilling or unable to take additional regulatory action, PJM must provide settlement to LSEs that will integrate into retail auction processes. To achieve this, PJM must be able to determine a Final Zonal Capacity Price[105] that LSEs can utilize in these retail auction mechanisms. As a default mechanism, the Board supports rules mandating the determination of an "average" capacity rate for a state.[106] Such a rate would, essentially, take the total payments required to FRRa and RPM resources serving a state's load, and divide them by the total MW capacity procurement requirement of a state. This mechanism would provide an average capacity price to be paid across all zones in one state. This mechanism appropriately preserves wholesale price signals (resources would still be paid the constrained clearing prices, the cost of which is recovered through the average rate) while allowing states to integrate FRRa resources into existing processes.

[103] *Id.*
[104] FRR-RS Initial Brief at Attachment A.
[105] *See* PJM Tariff Attachment DD § 5.14(f).
[106] *See, e.g.*, FES Comments at 11-12.

Similar to the deference provided states in the other 'default' provisions advocated above, the Commission should also allow states, should they so choose, to assign the FRRa costs to a particular subset of load. Although not the Board's preferred option, such deference would allow those states that approve of bilateral contracting to regulate specific LSE arrangements with FRRa resources, and assign those costs and MW to that LSE. In accordance with the Board's concerns expressed above, a state should be required to specifically approve any bilateral contract to ensure appropriate coordination with existing retail regulations. State oversight also ensures that any affiliate relation issues are addressed. Such an outcome provides maximum flexibility to states, while still achieving the Commission's goals articulated in the June 29 Order.

The Commission should also not allow resources to withhold their capacity from the FRRa paradigm if they trigger the MOPR. The Board's initial argument explains the issues that could be caused if a resource is able to forego participation in the FRRa construct and instead elect the MOPR.[107] With the default rules discussed above, no resource should have adequate reason not to participate in the FRRa construct if it triggers the MOPR. Existing retail auction processes should be able to accommodate carved-out resources if an average state capacity price is determined for LSE use. The Commission should look to promote maximum use of the FRRa construct, to guard against punitive, price-inflationary results. The default mechanisms provided above, along with the requirement for any resource triggering the MOPR to participate in the FRRa, will provide a just and reasonable outcome.

[107] NJBPU Initial Argument at 23-25.

V. Elements That Would Render a Replacement Rate Unjust and Unreasonable.

A. Clean MOPR.

As the Board has repeatedly advocated in this proceeding,[108] and in related proceedings,[109] the Commission should uphold its preliminary determination that a stand-alone, "clean" MOPR fails to be just and reasonable. Arguments in support of punitive mitigation and inflated prices should be dismissed by the Commission. Absent from the record is any demonstration that higher prices are needed for new entry. In fact, the record demonstrates that capacity prices are precipitously falling, with the most recent review demonstrating that the administrative estimate of CONE has decreased between 22 and 41 percent.[110] "These basic market fundamentals, and not any state policy support, permit new capacity suppliers to enter the market at lower prices than the current Net CONE model would otherwise predict."[111] Any punitive mitigation, therefore, would serve to artificially, and unreasonably, inflate prices, to the detriment of ratepayers.

Other arguments for a "clean" MOPR fail to withstand scrutiny. P3 claims that state policy "decisions belong to the state and the state must be prepared to accept the consequences of those decisions, lest the entire region suffer."[112] On the merits, P3 does not address the fact that safeguards in RPM remain in place, including the sloped demand curve that will illustrate shortage conditions and appropriately incentivize new entry as needed, even after load is removed through the FRRa. The Board maintains that power providers, such as P3, will react to the changed market conditions and appropriately offer their marginal costs to return RPM to equilibrium; not allowing unreasonable price suppression.

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[108] NJBPU Initial Argument at § II.
[109] *Supra* n. 36.
[110] NJBPU Initial Argument at 9, n. 48.
[111] *Id.* at 9.
[112] *Initial Brief of the PJM Power Providers Group* ("P3"). Docket No. EL16-49, et al. October 2, 2018, at 5 ("P3 Brief").

P3 also asserts that "there is no basis for these decisions to influence the prices received by competitive suppliers over the entire PJM footprint… if the policymakers in [New Jersey] want to take such an action, it should be done without prejudice to other market participants."[113] P3 ignores the instances cited above where the Commission has explicitly allowed such state actions to influence wholesale market outcomes.[114] P3 also ignores the fundamental irony presented in certain of its arguments; market participants are prejudiced by P3's penalty-free carbon emissions at the expense of societal benefit. That irony is not lost on the Board, which has advanced New Jersey's environmental public policies in an effort to correct these market inefficiencies. As discussed above, the public policies at issue actually bring societal efficiencies and internalize costs that have been ignored in RPM.[115] They do not warrant an unjust and unreasonably punitive mitigation. Therefore, the Commission should reject arguments for a "clean" MOPR.

B. Extended RCO

PJM's "Extended RCO" proposal would fail to yield a competitive price, or reach a just and reasonable outcome, for similar reasons to those advanced by the Board in protest to PJM's Capacity Repricing proposal.[116] PJM's expert explains the main feature of Extended RCO:[117]

> Determination of a competitive auction clearing price and quantity based on economic supply offers (i.e. excluding uneconomic resources that elect the RCO rather than submitting an economic offer determined under the Minimum Offer Price Rule ("MOPR")) and all load subject to the Variable Resource Requirement on the power system (i.e., including in the auction load deemed associated with resources that elected the [FRRa]).

[113] P3 Brief at 14-15.
[114] *Supra* n.37.
[115] *Supra* at § II.A.2.
[116] NJBPU Protest at 29-30.
[117] PJM Initial Submission at § II.E., Affidavit of Hung-Po Chao, Ph.D. at P 6 ("Chao Affidavit").

Extended RCO, like Capacity Repricing, is a wealth-transfer to merchant generators from retail load, without adequate factual support in the record. Despite PJM allowing units to be committed to serve load through its RCO (PJM's FRRa) mechanism, Extended RCO would have *more* punitive and unreasonable price effects on customers from a pricing perspective. A stand-alone, or "clean," MOPR sets the RPM clearing price by excluding FRRa units from the supply stack, this approach is identical to Extended RCO. The Board's opposition to a "clean" MOPR as punitive is stated above and well documented in the record. Extended RCO goes on to charge the units selecting RCO an "infra-marginal rent" payment, funded by those units selecting the RCO in the first instance. This additional rent adds insult to injury; it is an unjust, unreasonable, and discriminatory rate intended to thwart valid state policies.

PJM supports Extended RCO with expert statements that do not withstand scrutiny. One pillar of support is PJM's discussion of substitution effects, identified as occurring when "a subsidized uneconomic resource displaces an economic resource that submitted an infra-marginal offer."[118] PJM asserts that a subsidized resource must be uneconomic, since such state payments allow below-cost offer submissions into the market. However, PJM's expert overlooks instances where the Commission has allowed environmental attribute programs in the determination of a competitive offer.[119] The first principles of capacity markets, including the principle of seeking the "least cost" set of resources which "possess the attributes sought by the markets,"[120] is also ignored by PJM's expert, despite PJM's prior reliance on these principles.

PJM contests that, in the presence of subsidized offers, "market distortions" "reduce the long-run efficiency" of the market.[121] In contrast, the Board asserts that Extended RCO, by defining the

[118] *Id.* at P 12.
[119] *Supra* n.37.
[120] CASPR Order at P 21.
[121] Chao Affidavit at P 8.

relevant market demand as "all load subject to the [VRR] Curve," instead introduces market distortions that are inconsistent with the Commission's first principles. Under the Commission's proposed carve-out approach to accommodation, all load subject to the VRR Curve no longer needs to be served through RPM. Doing so fails to account for the Commission's goal of selecting the 'least-cost' set of resources. PJM's Extended RCO proposal would needlessly expand the amount of load in RPM, as if the FRRa paradigm did not exist, and would fail to account for the fact that only the remaining load (e.g. load that is not served under an FRRa paradigm) needs to be met competitively. In the long-run, PJM claims its Extended RCO would bring efficiency, but the Board disagrees. By clearing RPM at a level that does not account for FRRa resources, prices in the Extended RCO paradigm would be needlessly inflated and disconnected from market fundamentals. In fact, the logical outcome of Extended RCO would be for prices to signal retention or new construction of capacity up to the existing VRR curve level, with no consideration given to the carved-out resource or the reduction of commensurate load. These price signals would endure over long periods of time, despite the capacity commitment imposed on the carved-out resource, and the fact that FRRa MW do not need to be cleared in RPM. The result is a direct wealth transfer from consumers to merchant generators, with the apparent goal of setting prices responsive to a MW level that is above the level needed for reliability. This price increase provides no commensurate benefit; the sloped demand curve will retain competition, and the inflated prices do not lead to any further capacity resources committed to serve load. The Commission must not support such an unjust and unreasonable approach.

PJM's expert also explains, "[u]nder competitive conditions, each capacity resource would be indifferent to whether it is paid its offer price for undertaking a capacity commitment, or paid

nothing with no capacity commitment."[122] Dr. Chao goes on to assert that "[b]y logical extension, the resource should also be indifferent whether it is paid the *market* price for undertaking a capacity commitment or paid the *infra-marginal rent* with no capacity commitment."[123] PJM uses this statement to justify their Extended RCO payments, but the Board rejects the extent to which PJM relies on this "logical extension." The resources 'crowded out' of RPM, which no longer possess the mix of economics and attributes desired by the markets, should accept the outcome where they are "paid nothing with no capacity commitment." Critically, this determination must be made relative to the amount of load *remaining* in RPM. PJM should not continue to price resources as though the FRRa paradigm would not exist. Under the Commission's proposed accommodation the size of the remaining competitive market is appropriately altered so that customers are not exposed to needless payments. PJM's expert explains that these conditions are competitive. An outcome where PJM fails to account for the load that is carved out of the auction, such as the Extended RCO, would fail to be just and reasonable.

PJM's expert further attempts to note that "high quality infra-marginal rents" are essential to functioning markets. The Board asserts that PJM's expert has not sufficiently distinguished between "high quality" infra-marginal rents, and simply "higher" infra-marginal rents. Extended RCO will increase prices for customers, but PJM has not demonstrated how or why these prices are needed. Other than cursory statements, PJM has not explained why the need for "high quality infra-marginal rents" overrides the current safeguards which exist in RPM to ensure competitive outcomes. As discussed above, RPM's sloped demand curve retains these competitive pressures. In contrast, Extended RCO unreasonably defines a "competitive" outcome as if the entire VRR curve needs to be served through the auction competitively, which is no longer the case through the FRRa paradigm.

[122] *Id.* at P 17.
[123] *Id.* (emphasis supplied).

An attempt to re-construct these higher infra-marginal rents—based on a phantom level of consumer demand, and no illustration of market need—will not produce just and reasonable results.

The IMM explains the magnitude of these higher payments that would arise from PJM's Extended RCO. In a scenario where 11,777 MW, the amount of highly-at-risk generation in PJM, were subject to PJM's Extended RCO clearing mechanism, total auction outlays would have increased 17.4%, or $1,618,990,923, compared to the actual results.[124] In a more extreme scenario, where all 23,741 MW of at-risk PJM generation were carved-out and subject to Extended RCO, total auction outlays would have increased 90.8%, or $8,441,346,767 compared to the actual results.[125] PJM has not made any showing of benefits commensurate with this potential cost increase.[126] The Commission should therefore reject PJM's proposed Extended RCO paradigm, and the resulting unjust and unreasonable cost impacts.

VI. The Commission Should Holistically Approach Changes to the Capacity Market, Including any Replacement Rate.

To reach a reasoned decision, the Commission should consider the capacity market replacement rate holistically. If the Commission fails to evaluate an important part of the problem, the decision will be arbitrary and capricious.[127] Many important aspects of the PJM capacity market are currently under Commission evaluation. As in many other proceedings, the Board continues to

[124] IMM Initial Brief at Attachment A, 18.
[125] *Id.* at 16.
[126] *Illinois Commerce Comm'n v. FERC*, 576 F.3d 470, 477 (7th Cir. 2009) (requiring cost allocations to be "at least roughly commensurate" with benefits).
[127] *NorAm Gas Transmission Co. v. FERC*, 148 F.3d 1158, 1165 (D.C. Cir. 1998) ("In previous cases, we have rejected agency orders when the Commission neglected to deal with an important part of the problem . . . [.]") (citing *Laclede Gas Co. v. FERC*, 997 F.2d 936, 945-48 (D.C. Cir. 1993); *North Carolina Util. Comm'n v. FERC*, 42 F.3d 659 (D.C. Cir. 1994)); *see also Motor Vehicle Mfs. v. State Farm Mut. Ins. Co.*, 463 U.S. 29, 43 (1983) ("an agency rule would be arbitrary and capricious if the agency . . . failed to consider an important aspect of the problem.").

contend that "these proceedings should not be viewed in separate silos, but in a coordinated manner that recognizes their significance to the matters pending the Commission's consideration."[128]

Including this docket, the Board counts no fewer than six ongoing proceedings that each relate directly to RPM. These major revisions include: the Commission's action in these dockets; the non-consolidated but related "Clean MOPR" filing;[129] PJM's Fuel Security Initiative;[130] the various resilience proceedings;[131] PJM's Quadrennial Review;[132] and the seasonal capacity proceeding.[133] The interrelated nature of these proceedings makes stakeholder evaluation nearly impossible. The outcome of any one of these proceedings will be seriously and directly influenced by action in any of the others.

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[128] NJBPU Rehearing Request at 9.

[129] *See* Complaint Seeking Fast Track Processing, Docket No. EL18-169 (May 31, 2018) ("Clean MOPR Complaint").

[130] *See Fuel Security Phase 1 Analysis Results*. PJM presentation to Special Markets and Reliability Committee. (November 1, 2018), *available at* https://www.pjm.com/-/media/committees-groups/committees/mrc/20181101-fuel-security/20181101-fuel-security-phase-1-analysis-results.ashx ("Fuel Security Results"); *see also Valuing Fuel Security*. PJM. (Apr. 30, 2018), *available at* http://www.pjm.com/-/media/library/reports-notices/special-reports/2018/20180430-valuing-fuel-security.ashx/ ("Valuing Fuel Security").

[131] *See Grid Resilience and Resilience Pricing*, 162 FERC ¶ 61,012 (2018); *see also* Request for Emergency Order Pursuant to Federal Power Act Section 202(c). First Energy Solutions Corp. (Mar. 29, 2018), *available at* https://statepowerproject.files.wordpress.com/2018/03/fes-202c-application.pdf (hereinafter "First Energy 202 Request); *see also Trump Prepares Lifeline for Money-Losing Coal Plants*. Jennifer A Dlouhy, Bloomberg. (May 31, 2018), *available at* https://www.bloomberg.com/news/articles/2018-06-01/trump-said-to-grant-lifeline-to-money-losing-coal-power-plants-jhv94ghl (citing https://www.documentcloud.org/documents/4491203-Grid-Memo.html).

[132] *See* PJM Interconnection, L.L.C., Periodic Review of Variable Resource Requirement Curve Shape and Key Parameters, Docket No. ER19-105 (October 12, 2018) ("PJM Quadrennial Review Filing"); *see also* VRR Curve Key Parameter (Quadrennial) Review, PJM Preliminary Recommendations. PJM. (Apr. 24, 2018), *available at* http://www.pjm.com/~/media/library/reports-notices/special-reports/2018/20180424-pjm-quadrennial-review-preliminary-recommendations.ashx.

[133] *See ODEC, et al. v. PJM Interconnection, L.L.C.*, Docket No. EL17-32 (December 23, 2016) and *AEMA v. PJM Interconnection, L.L.C.*, Docket No. EL17-36 (January 5, 2017).

The interrelationship of these proceedings is readily apparent. For one, in the June 29 Order, the Commission asks specific questions about the nature of the demand curve,[134] which is among the primary considerations of the Quadrennial Review.[135] For two, seasonal resources, many of which receive state attribute payments, must be incorporated into the FRRa construct; such action is futile without conclusion of the outstanding seasonal capacity paper hearing and 206 proceeding.[136] In that docket, the Board's post-technical conference comments specifically mention the overlapping capacity market issues, including noting that the FRRa replacement rate will determine whether "barriers to entry" for seasonal resources exist, a critical component of the Commission's consideration.[137] The Board went on to note "that a reasoned decision must take into consideration whether, in recent proceedings such as the [June 29 Order], the Commission has itself erected further barriers to participation for Seasonal Resources," such as a punitive MOPR opposed by the Board above.[138] For the Commission to grant the Clean MOPR, a third related proceeding,[139] the Commission would have to reverse large portions of the June 29 Order that advocate for

[134] June 29 Order at P 169 ("Additionally, we request comment on … whether any changes to the demand curve would be necessary to accommodate the resource-specific FRR Alternative.").
[135] *See* PJM Quadrennial Review Filing at 1 ("In particular, this filing proposes adjustments to the existing Variable Resource Requirement ("VRR") Curve…").
[136] *See Order on Complaints and Establishing Technical Conference*, 162 FERC ¶ 61,160 (2018) (establishing an investigation on a complaint under FPA section 206); *see also Order Dismissing Rehearing and Clarification*, 164 FERC ¶ 61,116, at P 22 (2018) ("… the Commission did not impose a new rate. The Commission did not make any conclusive finding or require any substantive change in Capacity Performance… Rather, the Commission merely directed its staff to establish a technical conference to examine further whether the existing rate remains just and reasonable and not unduly discriminatory or preferential, as required by the FPA.").
[137] *Post-Technical Conference Comments of the NJBPU.* Docket No. EL17-32, et al. July 13, 2018, at 5 ("Post-Technical Conference Comments") ("Here, the Commission has requested information on the existence of 'barriers to entry,' which impact the participation of Seasonal Resources in PJM's capacity market. The Notice further requests comment on the implementation challenges associated with the market changes arising from this proceeding. Unfortunately, the [June 29 Order] does not determine a replacement rate for the market recently found to be unjust and unreasonable… A significant number of Seasonal Resources are also state-sponsored, directly linking these two initiatives.")(internal citations omitted).
[138] *Id.*
[139] *See* Clean MOPR Complaint.

accommodative rather than punitive mitigation.[140] A fourth open matter is the resilience docket, where it remains unclear whether the Commission will require a resilience rate or whether a state-determined FRRa rate will be sufficient.[141] The Board continues to assert that "[t]he fact that these initiatives share underlying questions pertaining to their justness and reasonableness inexorably connects any Commission ruling" on these matters.[142] On November 1, 2018, PJM announced the results of its Fuel Security study, a fifth matter.[143] Implementing fuel-security requirements into the capacity market, as PJM has preliminarily proposed to do,[144] stands directly in contrast to the increased level of state resource election envisioned by the FRRa alternative in the instant docket. All of these matters relate to the instant proceeding, the sixth capacity-related proceeding.

The capacity market is not the only market in flux. Energy market revisions are also pending the Commission's consideration.[145] Further modifications to the energy market are under review in the PJM stakeholder process, where PJM is proposing to raise prices in the energy market.[146] While these revisions are not specifically targeted at the capacity market, the resulting increased net

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[140] *See* NJBPU Initial Argument at 5 (citing June 29 Order at PP 149, 159).

[141] *See, e.g. Order Terminating Rulemaking Proceeding, Initiating New Proceeding, and Establishing Additional Procedures*, 162 FERC ¶ 61,012 (2018), at P 18 ("…evaluate whether additional Commission action regarding resilience is appropriate at this time."); *see also Comments and Responses of PJM*. Docket No. RM18-1, et al. March 9, 2018, at 6, 74-80 (PJM "[r]equest[s] that all RTOs … submit a subsequent filing, including any necessary proposed tariff amendments, for any proposed market reforms and related compensation mechanisms to address resilience concerns within nine to twelve months from the issuance of a Final Order in this docket. PJM, together with its stakeholders, is already actively evaluating such potential reforms that advance operational characteristics that support reliability and resilience, including… (iii) improvements to energy price formation that properly values resources based upon their reliability and resilience attributes…").

[142] Post-Technical Conference Comments at 7.

[143] *See* Fuel Security Results.

[144] *See* Valuing Fuel Security at 1-2 ("PJM could then model [locations where additional fuel security is needed] as constraints in the capacity market, just as PJM models transmission constraints today when determining the parameters that form the locational requirements in the capacity auction… Ideally, if analysis indicates the need for constraints, PJM would implement them by the May 2019 Base Residual Auction.")

[145] *See Order Instituting Section 206 Proceeding and Commencing Paper Hearing Procedures and Establishing Refund Effective Date*, 161 FERC ¶ 61,295 (2017).

[146] *See Energy Reserve Simulations Update*. PJM presentation to the Energy Price Formation Senior Task Force (September 26, 2018), *available at* https://www.pjm.com/-/media/committees-groups/task-forces/epfstf/20180926/20180926-item-04-simulation-results-pjm-proposal.ashx.

revenue in the energy market should be accounted for in RPM.[147] Commission evaluation must ensure that the end result, after accounting for these myriad changes, is just and reasonable.[148] The FPA is a public interest statute that looks to the effect on ratepayers.[149] If the Commission does not coordinate changes, the likely outcome is an unreasonable increase in payments from ratepayers in both the capacity market and in the energy market.

For the Commission to reach a reasoned decision, all important aspects of the problem must be evaluated.[150] As shown by the Board above and in many other instances, the outstanding and overlapping revisions require a coordinated response. If viewed separately, a just and reasonable outcome in one silo may be contradicted or otherwise altered by a separate, but intricately related, proceeding. Moreover, the Commission's actions may not sustain legal scrutiny. Stakeholders may begin to lack confidence in market outcomes, which could then undermine decades of work establishing the wholesale markets. The Commission must avoid such an outcome. Instead, the Commission should broadly evaluate PJM's capacity market, and ensure that any decision reached appropriately considers all the relevant factors, as required by law.[151]

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[147] *See e.g.*, PJM Tariff, attachment DD § 5.10(a)(v), available at https://agreements.pjm.com/oatt/5151

[148] *Federal Power Commission v. Hope Natural Gas Co.*, 320 U. S. 591, 602 (1944) ("Under the statutory standard of 'just and reasonable' it is the result reached not the method employed which is controlling .... It is not theory but the impact of the rate order which counts.").

[149] *Pa. Water & Power Co. v. Fed. Power Com.*, 343 U.S. 414, 418 (1952) ("A major purpose of the whole Act is to protect power consumers against excessive prices."); *Pub. Util. Dist. No. 1 v. FERC*, 471 F.3d 1053, 1058 (9th Cir. 2006) ("The protection the FPA accords consumers is therefore indirect: By assuring that wholesale purveyors of electric power charge fair rates to retailers, the FPA protects against the need to pass excessive rates on to consumers."), aff'd in part and rev'd in part sub nom. *Morgan Stanley Capital Grp., Inc. v. Pub. Util. Dist. No. 1*, 554 U.S. 527 (2008).

[150] *Supra* n. 127.

[151] *Id.*

VII. CONCLUSION

The Board respectfully requests that the Commission accept the Board's Reply Argument in this paper hearing.

Respectfully submitted,

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Dated: November 6, 2018
Newark, New Jersey

CERTIFICATE OF SERVICE

I hereby certify that, on this 6th day of November, 2018, I have caused the foregoing document to be served upon each party designated on the official service list compiled by the Secretary in this proceeding, by email.

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