EARTHJUSTICE

June 24, 2020

Via Electronic Mail
Secretary Aida Camacho-Welch
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
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board.secretary@bpu.nj.gov

Re: *Investigation of Resource Adequacy Alternatives*; NJBPU Docket No. EO20030203

Dear Secretary Camacho-Welch:

Enclosed for filing please find the **Natural Resources Defense Council and Sierra Club (Collectively, "Public Interest Organizations" or "PIOs") Response to Comments Regarding Resource Adequacy Alternatives** in the above referenced matter. These comments are being submitted pursuant to the Secretary's Notices dated March 27 and April 17, 2020. Thank you for your consideration and assistance.

Respectfully submitted,

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BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITY

In the Matter of	**)**	
Investigation of Resource	**)**	**Docket No. EO20030203**
Adequacy Alternatives	**)**	

PUBLIC INTEREST ORGANIZATIONS' RESPONSE TO COMMENTS REGARDING RESOURCE ADEQUACY ALTERNATIVES

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For Natural Resources Defense Council

June 24, 2020

TABLE OF CONTENTS

I. SUMMARY

Pursuant to the New Jersey Board of Public Utility's ("BPU" or "Board") April 17, 2020 Supplemental Notice for Written comments, the Natural Resources Defense Council ("NRDC") and the Sierra Club (collectively, "Public Interest Organizations" or "PIOs") submit this response to the initial comments filed in the above-captioned matter.

While those filing initial comments in this investigation of resource adequacy alternatives disagree about the nature and extent of challenges with utilizing the Fixed Resource Requirement ("FRR"), no party puts forward any alternative to the FRR that will enable New Jersey to avoid the harm caused by the Minimum Offer Price Rule ("MOPR") imposed by the Federal Energy Regulatory Commission ("FERC"). All other proposed solutions rely upon economic analyses that ignore future cost impacts, optimistic assumptions of favorable litigation outcomes, heretofore-nonexistent levels of PJM Interconnection, LLC ("PJM") stakeholder collaboration, or would require New Jersey to fundamentally upend its own clean energy regulatory structure in favor of untested policy mechanisms. As explained herein, PIOs urge the Board to prepare for the likely significant harms of the MOPR by commencing the FRR election process.

II. ACCURATE INFORMATION ABOUT FRR IS CRITICAL TO THE BOARD'S DECISION MAKING PROCESS

Our initial comments strove to debunk some key elements of inaccurate information circulating regarding the FRR, such as the core assumption in the Monitoring Analytics study that a New Jersey FRR entity would only import the minimum amount of capacity possible, rather than using the full amount of import capability allowed.[1] Some of the initial comments submitted in this proceeding contained what we view as inaccurate facts or representations of the

[1] *Initial Comments of PIOs Regarding Resource Adequacy Alternatives*, at 10–14 (May 20, 2020) ("PIOs Initial Comments").

FRR. Some of these inaccuracies amount to unfounded myths about the FRR that seem to be advanced to discourage the Board from considering this option, while others reflect ambiguities in PJM's rules or misconceptions about the flexibility inherent in the FRR construct. Our response to these initial comments seeks to provide accurate information necessary to inform the Board's decision-making process.

A. FRR is neither a rejection of markets nor a reversal on restructuring

Commenters NRG Energy, Inc. ("NRG") and the Electric Power Supply Association ("EPSA") claim that FRR is equivalent to a return to a vertically integrated utility model or monopoly service.[2] They are incorrect. FRR rules say nothing about asset ownership or retail structure. The FRR rules require only that the FRR entity commit assets "in their Capacity Exchange resource portfolio"[3] sufficient to meet obligations. This portfolio explicitly includes capacity obtained through bilateral contracts.[4] FRR entities need own no generation, but merely must have contractual arrangements sufficient to meet their zone's reliability needs.

The only market the FRR rejects is the deeply flawed Reliability Pricing Model ("RPM"), which is hardly deserving of the term "market" given that nearly all inputs are administratively determined.[5] The FRR allows New Jersey to instead construct its own market design to fulfill the resource adequacy needs of the state's consumers. PJM's rules allow considerable flexibility for different FRR procurement structures, notwithstanding that the FRR has primarily been used by vertically integrated utilities in the past.

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[2] *Comments and Responses of NRG*, at 26–28 (May 20, 2020) ("NRG Initial Comments"); *Comments of the EPSA*, at 6–7 (May 20, 2020) ("EPSA Initial Comments").
[3] PJM Manual 18: PJM Capacity Market ("PJM Manual"), at Section 11.4.1: Resource Portfolio (May 28, 2020).
[4] *Id.* at Section 11.3: Capacity Plan.
[5] *See, e.g.*, *Order on Rehearing and Clarification*, 171 FERC ¶ 61,035, Glick dissent P 3 (Apr. 16, 2020) ("In so doing, the Commission turned the 'market' into a system of bureaucratic pricing so pervasive that it would have made the Kremlin economists in the old Soviet Union blush.").

Building on their straw man, EPSA presents costs in Virginia as somehow indicative of New Jersey's outcomes.[6] The many differences between New Jersey and Virginia make this a patently false comparison. Despite EPSA's claim, the FRR does not require New Jersey to adopt anything similar to Virginia's Integrated Resource Plan. Opting for FRR will not require New Jersey utilities to build, own, or operate generation, nor will it require reversion to a vertically integrated model or cost-based rates.

Several parties, including Calpine Corporation ("Calpine") and its retail division, assert that FRR will stunt retail competition in New Jersey. As described in our initial comments,[7] the FRR rules provide for considerable flexibility that allow the Board to design FRR implementation in a way to ensure a level playing field essential for a viable retail choice market. Although an FRR entity must procure capacity on behalf of load that has opted for an alternative supplier, the state has full authority over cost allocation to alternative suppliers[8] and can ensure that the FRR entity cannot charge retail suppliers for that capacity in a manner that will impair competition. Nothing prevents the BPU from establishing a structure identical to that in place now under RPM, where all load serving entities in New Jersey pay for capacity at the same daily rate, and are free to seek competitive advantage through hedging those costs or self-supply.

[6] EPSA Initial Comments at 6.
[7] PIOs Initial Comments at 6.
[8] PJM, *Reliability Assurance Agreement Among Load Serving Entities in the PJM Region ("RAA")*, FERC Docket No. ER10-2710-006, at 8.1.D(8) (Sept. 17, 2010).

B. FRR does not restrict New Jersey's access to capacity throughout the PJM region

FRR does not involve closing the state's borders to imports,[9] or shrinking the geographic boundaries within which the state's utilities can procure capacity.[10, 11] Contrary to these claims, FRR is subject to the same transmission constraints that govern RPM auctions. The same amount of zonal capacity is required under both approaches, and under both approaches the remaining capacity needs can come from either in or out of the zone.

The impact of transmission constraints on FRR is usually discussed in terms of the amount of imports, but the important value is how much capacity must be purchased from within a limited area. Imports are valuable insofar as they provide competition and reduce market power of local capacity sellers. Increased imports only bring benefits when they displace more expensive or dirtier local resources. An FRR entity (or any procurement authority acting on that entity's behalf) needs to procure no more capacity from constrained regions than would be procured on their behalf under RPM. Because RPM will generally purchase more capacity than an FRR plan, the amount of capacity imported may be higher under RPM, but this merely reflects that RPM can result in New Jersey importing capacity surplus to reliability needs.

PJM is broken up into Load Delivery Areas ("LDAs"), which are regions where transmission limits become meaningful.[12] PJM expresses the amount of transmission into an LDA as a Capacity Emergency Transfer Limit, ("CETL") which is the amount of power PJM

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[9] NRG Initial Comments at 22

[10] Advanced Energy Economy ("AEE"), American Wind Energy Association ("AWEA"), the Mid-Atlantic Renewal Energy Coalition ("MAREC"), and the Solar Energy Industries Association ("SEIA"), *Comments in Response to Board Investigation of Resource Adequacy Alternatives*, at 5 (May 20, 2020) ("AEE Initial Comments").

[11] Electing the FRR does not mean leaving PJM, and will not affect New Jersey's ability to benefit from savings in the energy market, and reliability services more generally, as asserted by the Natural Gas Supply Association ("NGSA"). *Comments of the NGSA* at 6 (May 20, 2020) ("NGSA Initial Comments").

[12] *See also Comments of PJM on the Board Staff's Investigation of Resource Adequacy Alternatives*, at 12–17 (May 20, 2020) ("PJM Initial Comments").

expects the transmission system to be able to deliver to the LDA under emergency conditions.[13] Each zone also has either a Reliability Requirement (for RPM) or a Capacity Obligation (for FRR), which both reflect the amount of capacity needed by the zone.

RPM auctions are designed to procure at least enough capacity to meet the Reliability Requirement while constrained to import no more than the CETL. So, the least amount of in-zone capacity is procured when the auction clears just the Reliability Requirement and uses the entire CETL for imports. In this case, in-zone capacity purchased is Reliability Requirement − CETL.

FRR plans must meet a Minimum Internal Resource Requirement ("MIRR"), which has been the source of some confusion. The MIRR is the same constraint used in RPM auctions, but expressed as a percentage. It is calculated as:[14]

$$MIRR = \frac{Reliability\ Requirement - CETL}{Zonal\ Peak\ Load\ Forecast\ adjusted\ for\ reserves\ needs}$$

This equation merely takes the same lower bound on internal capacity used in RPM and expresses it as a percentage of the zone's capacity needs. The final FRR Capacity Obligation is adjusted from this due to cost allocation based on recent weather.[15] This adjustment may cause FRR and RPM transmission constraints to vary very slightly. Nonetheless, as shown in the table below, [16] the amount of capacity that New Jersey must purchase internally is virtually identical under FRR and RPM.

[13] PJM Manual 14B: PJM Region Transmission Planning Process, at C.2.1.4: General Procedures (Aug. 2019).
[14] PJM Manual, Section 11.2: Load Obligations.
[15] *See id.*, discussion of Zonal FRR Scaling Factor.
[16] PJM, *Capacity Market (RPM)* (Data from PJM RPM BRA planning parameters.), https://www.pjm.com/markets-and-operations/rpm.aspx. Where not provided by PJM, FRR Requirement and MIRR calculated using Manual 18 formulas. Where not provided, Zonal FRR Scaling Factor set to 1.00.

		Under RPM			Under FRR			
Year	Zone	Reliability Requirement	CETL	Minimum Internal Resources	FRR Requirement	MIRR	Minimum Internal Resources	FRR-RPM Difference
2022-23	PSEG North	6131	3777	2354	5306.8	44.40%	2356	0.1%
	PSEG	11557	7445	4112	10249.1	40.20%	4120	0.2%
	EMAAC	36302	9752	26550	32567.4	81.50%	26542	0.0%
2021-22	PSEG North	5810	3180	2630	4994.7	52.66%	2630	0.0%
	PSEG	11501	6902	4599	10110	45.10%	4560	-0.9%
	EMAAC	35994	9000	26994	32447	83.20%	26996	0.0%
2020-21	PSEG North	6023	4264	1759	5236.9	33.60%	1760	0.0%
	PSEG	11797	8001	3796	10623.3	36.10%	3835	1.0%
	EMAAC	36921	8800	28121	33065.9	85.00%	28106	-0.1%
2019-20	PSEG North	6375	3827	2548	5354.8	47.60%	2549	0.0%
	PSEG	12174	7856	4318	11165.1	40.20%	4488	3.9%
	EMAAC	37633	8856	28777	33742	85.30%	28782	0.0%
2018-19	PSEG North	6379.1	3761	2618.1	5377.8	48.70%	2619	0.0%
	PSEG	12416.1	7926	4490.1	10978	40.80%	4479	-0.2%
	EMAAC	38535.2	8375	30160.2	34902.8	86.40%	30156	0.0%

In summary, switching to FRR creates no new transmission constraints for New Jersey. Opting for FRR creates no new market power issues with regards to availability of supply or concentration of ownership.

AEE recommends completing a capacity deliverability study as part of the Board's assessment of whether to pursue the FRR. We agree that information on capacity deliverability may be helpful. We also note that much of the information relevant to capacity deliverability for FRR purposes is already publicly available. Zonal FRR requirements, transmission limits, and internal resource requirements are published by PJM annually as part of the RPM auction resource parameters. The location and Unforced Capacity ("UCAP") of all generation capacity

resources is published by PJM annually as the RPM Resource Model.[17] The location and UCAP of demand response and energy efficiency is published after each auction as the RPM Auction Results Report,[18] with fine-grained data on demand response available in the Monthly Demand Response Activity Reports.[19]

C. FRR presents fewer costs and risks relative to RPM than commenters assert

Further building on their incorrect claim that FRR requires utility ownership of generation, EPSA goes on to argue that FRR inherently shifts all investment risk back onto consumers.[20] As discussed in section A, above, this is simply not true. There is nothing in the FRR rules that would require New Jersey ratepayers to assume developers' investment risk. On the contrary, an FRR plan based on competitive procurement of bilateral contracts would preserve all of the competition, cost discipline, and risk allocation benefits associated with deregulated markets.[21]

Certain parties note that under the FRR, the FRR entity bears all risk of resource non-performance.[22] This is true under PJM's rules, but, as JCP&L points out, is easily remedied through contracts that pass those penalties on to the supplier. We agree with JCP&L that capacity supply contracts should not leave the electric distribution companies ("EDCs") liable for performance penalties due to their supplier's shortfalls. In short, the fact that PJM's rules

[17] *Id.*
[18] *Id.*
[19] *Id.*
[20] EPSA Initial Comments at 7.
[21] Any shift of investment risk would arise in the case of contracts for capacity that last longer than one year, which is one option for the Board to consider but not required by the FRR. Moreover some shift of investment risk onto consumers may be beneficial from a policy perspective, insofar as it allows the clean energy resources necessary to meet New Jersey's goals to be achieved at a lower cost.
[22] *Comments of LS Power Development, LLC ("LS Power")*, at 14 (May 20, 2020) ("LS Power Initial Comments"); *Jersey Central Power & Light Co. ("JCP&L") Comments on March 27, 2020 Notice*, at 2–3 (May 20, 2020).

may assign risk in one way is far from determinative about whether the FRR entity or the capacity provider ultimately bears the cost of that risk.[23]

Rate Counsel expresses concern that although an FRR entity can update its FRR plan prior to each delivery year, the FRR entity would nonetheless incur costs associated with changing the initial five-year FRR plan.[24] However, the comments filed by PJM in this proceeding confirm that PJM rules do not require an FRR entity to submit an FRR plan to cover the full five years.[25] Thus, any New Jersey FRR entity would have considerable flexibility in changing the resources making up its FRR plan from year to year.

Rate Counsel suggests that the FRR poses additional risks of overprocurement due to load forecasting errors, which may lead the FRR entity to contract for capacity that turns out not to be necessary. Although we agree with Rate Counsel that PJM's load forecasts have turned out to be consistently too high, the overprocurement risk associated with these flawed load forecasts is not unique to FRR. Utilities purchasing capacity through RPM are likewise stuck with paying for capacity that turns out not to be necessary when expected load growth does not materialize.[26] It appears that FRR may actually provide utilities with greater flexibility to address overprocurement associated with load forecasting. Simply by virtue of the fact that FRR

[23] In addition, we note that PJM's comments in this proceeding highlight that were alternative retail suppliers to provide their own capacity rather than paying the FRR entity for capacity, those suppliers bear the risk of nonperformance for the resources they have provided (though as with the FRR entity itself, the retail supplier may in turn assign that risk to capacity providers). *See* PJM Initial Comments at 12.

[24] *Rate Counsel's Resp. to Staff Req. for Written Comments*, at 19 (May 20, 2020) ("Rate Counsel Initial Comments").

[25] PJM Initial Comments at 9 ("While the election of the FRR is for a minimum duration of a five-year term, FRR Plans are submitted to PJM per annum, one month prior to the BRA for the applicable delivery year. This means that the resources that comprise an FRR Entity's FRR Plan may change from one delivery year to the next. Additionally, FRR Plan resources do not necessarily need to be procured by the FRR Entity for the full five-year FRR election term at the outset of the FRR election.").

[26] Rate Counsel's belief that risks associated with excessive load forecasts are worse for FRR than in RPM may relate to its belief that an FRR entity must contract for five years of capacity at a time, thus requiring them to rely on forecasts that are eight years out rather than simply three years out. However as explained in PJM's comments, an FRR entity need not submit an FRR plan covering five years of capacity, notwithstanding the minimum five year election for the FRR.

requires procurement of less capacity than RPM, FRR entities enjoy some protection from load forecast errors. Additionally, the daily unforced capacity obligation applicable to an FRR entity is calculated based on peak load forecasts finalized just before the delivery year, rather than those forecasts that inform the Base Residual Action ("BRA"). This may mean that an FRR entity can effectively release capacity procured for the delivery year that turns out not to be necessary to meet the daily unforced capacity obligation. Thus, contrary to Rate Counsel's concerns, FRR reduces exposure to load forecast errors and provides more options to hedge those errors.

LS Power and Rate Counsel both assert that the lower amount of capacity procured under the FRR is not an advantage relative to the higher capacity that must be procured through RPM, because the higher amount of capacity procured through the RPM is associated with a relatively lower price due to the downward sloping demand curve.[27] These arguments confuse cause and effect. By design, RPM procures more capacity when the market is oversupplied. That does not imply that the capacity market somehow reverses the laws of supply and demand such that buying less causes prices to rise. Absent exercise of market power, purchasing less capacity leads to lower capacity prices. Purchasing less capacity at a lower price will lead to a lower overall cost.

Rate Counsel suggests that an FRR entity could be placed in a difficult situation where PJM designates a new LDA shortly before an auction, thereby leaving the FRR entity only a few weeks to modify its FRR capacity plan to conform to the new minimum internal resource requirements.[28] However, PJM's FRR rules provide an FRR entity special allowance to exit the

[27] Rate Counsel Initial Comments at 6; LS Power Initial Comments at 12–13.
[28] Rate Counsel Initial Comments at 20.

FRR even within the initial five-year commitment period, in the event a new LDA is created.[29] This provision helps to avoid the concern expressed by Rate Counsel about an FRR entity suddenly needing to acquire significantly more internal capacity than previously anticipated.

D. FRR will not be detrimental to the development of clean energy and demand-side resources, either in New Jersey or in the broader region

Several parties suggest that the FRR may be detrimental to the state's overall objectives of promoting clean energy development, or to the participation of certain clean energy resource types in any capacity procurement structure adopted by the state for implementing the FRR. Some of these critiques draw upon myths regarding the FRR, such as the geographic area for which capacity resources can be drawn, with the notion that FRR is tantamount to a return to cost of service ratemaking. Other critiques serve to highlight important FRR procurement design issues that must be considered by the state so as to allow full participation by the range of resources needed to ensure reliability at low cost as the state decarbonizes its electric sector.

Arguments that FRR will depress renewable energy development are based on erroneous conclusions drawn from limited data and lacking context. For example, NRG points to differences in interconnection queues between RPM and FRR zones and suggests that these differences indicate that the FRR tends to slow renewable energy development, but this is a correlation without relevance. NRG appears not to have considered that the higher rates of renewable energy projects in interconnection queues in RPM areas is more likely to be the results of state policies driving renewable energy development than the RPM itself. These data do not show that FRR has an adverse effect on renewable energy development, much less that an

[29] RAA at 8.1.D(5) ("[A]n FRR Entity may terminate its election of the FRR Alternative prior to meeting its minimum five year commitment without penalty for any Delivery Year after the first Delivery Year of its minimum five year FRR commitment for which the Office of the Interconnection will be required to establish a separate Variable Resource Requirement Curve by giving written notice two months prior to the Base Residual Auction for the Delivery Year.").

FRR implemented in conjunction with state clean energy policies would somehow perform worse on that metric than RPM.

AEE urges the Board to consider how the election of FRR in New Jersey could affect the market for renewables and increase emissions overall in the rest of PJM, since renewable energy projects may not be built if they are unable to obtain a capacity commitment due to lower regional demand that would result from New Jersey entities electing FRR.[30] Several studies, including those published by Monitoring Analytics, have now shown that the use of the FRR in one or more PJM states will lead to a significant decline in BRA clearing prices throughout the region.[31] While it is possible that these reduced prices and the lower cleared quantities throughout the region could adversely affect clean energy development to some extent, we think the possible adverse effects suggested by AEE are likely overstated. In general, renewable energy projects rely far less on capacity market signals to decide whether or not to enter the market when compared to fossil fuel resources that make up a far larger share of their revenues through the capacity market.[32] As such, a decrease in RPM prices is more likely to discourage entry by new gas-fired resources, and accelerate retirement of coal-fired resources, than it is to slow the development of renewable energy. This means the net effect of a New Jersey FRR will be lower emissions throughout the region, rather than increased emissions.

E. The risk of being locked into FRR is less than portrayed

Some parties suggest that due to the initial five-year term required for the FRR, New Jersey could find itself "stuck" in the FRR even when market design has improved significantly

[30] AEE Initial Comments at 26–27.

[31] *See* PIOs Initial Comments, Attach. B at 8.

[32] *See* Monitoring Analytics, *2019 State of the Market Report for PJM*, at Table 7-38: Proportion of units recovering avoidable costs: 2011 through 2019 (2019) (showing that only 2% of coal plants cover their costs through the energy markets, and only two thirds of combined cycle gas plants cover their avoidable costs) ("2019 State of the Market Report").

due to either litigation or a miracle of stakeholder collaboration. This argument suggests there is something inherently inferior about the FRR, when compared to a MOPR-free RPM. However the initial comments that we filed discussed a number of advantages offered by the FRR for a state working to achieve ambitious decarbonization goals. These include the ability to contract with less fossil capacity, and to elect the physical nonperformance option which allows for portfolio-wide assessment of resource performance that better matches the dynamics of a high renewable portfolio. These benefits of FRR remain even if the MOPR is overturned or significantly narrowed in its scope. Moreover, if the PJM RPM is reformed to a degree that it would be advantageous for New Jersey utilities to return to it, nothing prevents PJM from also reforming the FRR rules to allow a return to RPM before the end of the five-year FRR election period.[33]

III. THE BPU MUST TAKE SERIOUSLY THE RISKS POSED BY THE MOPR AND PREPARE THE FOUNDATION FOR IMPLEMENTING THE FRR OPTION

The MOPR threatens potentially devastating impacts on New Jersey's clean energy requirements. The exact timing of these impacts is uncertain: they may be triggered by a FERC ruling on PJM's compliance filing that pushes New Jersey's nuclear fleet out of the capacity market; MOPR may be applied to the Basic Generation Service ("BGS"); or reforms to PJM's overall capacity construct are not achieved in time to avoid material harm to New Jersey's offshore and storage goals. Because of this uncertainty, it is critical for the Board to commence preparing the necessary foundation for a well-designed FRR so that it may be quickly used if and when it is needed.

[33] New Jersey could void the five-year term requirement by enacting a State Regulatory Structural change, as defined in the RAA at Schedule 8.1.C.

A. The MOPR will adversely affect New Jersey's ability to achieve its clean energy goals, even if the precise timing and degree of harm is not fully clear

Several parties simply ignore the impact of the MOPR altogether, despite the Board's clear intention in initiating this proceeding to understand the impact of the MOPR on state policy and the state's options for achieving its goals notwithstanding this punitive market rule.[34] It is unclear what such parties hope to achieve through ignoring the primary impetus for the entire proceeding and acting as though the MOPR does not exist.[35]

Even among those parties who acknowledge the MOPR's potential for harm, some incorrectly suggest that impacts on state clean energy goals would be insignificant because only a small amount of offshore wind is affected,[36] storage is not a capacity resource due to other market rules,[37] or because they assume that the commission will approve PJM's compliance filings in their entirety.[38] The assertion that only offshore wind is affected reflects an extremely optimistic view of how the MOPR will be implemented, in that it assumes that all other future renewable energy resources and storage supported by state policy will be able to obtain unit-

[34] *See generally* Cogentrix Energy Power Management, LLC ("Cogentrix"), *Cogentrix Resp. to Req. for Written Comments* (May 20, 2020) ("Cogentrix Initial Comments"); EPSA Initial Comments; LS Power Initial Comments.
[35] Contrary to the suggestions of some initial commenters, continued participation in RPM will not facilitate achievement of New Jersey's clean energy goals. These parties assert that RPM has driven significant reductions in emissions, and will continue to do so. *See*, *e.g.*, Cogentrix Initial Comments at 3; EPSA Initial Comments at 4; Comments of the PJM Power Providers Group ("P3"), at 9–10 (May 20, 2020) ("P3 Initial Comments"). In fact, many reductions in emissions in the PJM region have been associated with state clean energy policies such as those required by New Jersey law. To the extent PJM's markets have driven emission reductions, this has largely been associated with the replacement of coal generation facilities by gas generation facilities. These emission reductions ignore upstream greenhouse gas emissions associated with fossil gas production. Moreover, achieving New Jersey's greenhouse gas reduction goals indisputably requires lowering the emissions intensity of generation far below that associated with gas generation.
[36] *Calpine Resp. to Req. for Written Comments* at 4–5 (May 20, 2020) ("Calpine Initial Comments").
[37] *Comments on behalf of the Independent Energy Producers of New Jersey ("IEPNJ")*, at 2 (May 20, 2020).
[38] LS Power goes so far as to suggest that the MOPR will not result in the delayed retirement of coal-fired power plants. *See* LS Power Initial Comments at 6. In fact, coal-fired plants in PJM depend heavily on capacity revenues to cover their going forward costs. As shown in the independent market monitor's 2019 state of the market report, only 2% of coal units fully recover their avoidable costs through the energy and ancillary service markets alone. *See* 2019 State of the Market Report at Table 7-38: Proportion of units recovering avoidable costs: 2011 through 2019. Because the MOPR will increase capacity prices while decreasing competition from clean energy resources, coal generating facilities will absolutely benefit from the MOPR and delay their retirement accordingly.

specific offer floor prices that allow them to clear. This is far from certain, as discussed in more detail below.

IEPNJ asserts there will be no real harm to New Jersey because energy storage has very little capacity value. However this commenter is perhaps unaware, or at least ignores, that FERC has found that the 10-hour duration requirement upon which this assertion is based may be unjust and unreasonable.[39] As a result, PJM has initiated a stakeholder process to reevaluate the capacity value of storage resources, which may result in significantly higher capacity valuation for this resource type.[40] When considering how the MOPR will harm New Jersey's ability to achieve its clean energy goals, the Board must look forward to how energy storage resources will contribute to the resource adequacy picture, rather than how they have until very recently been allowed to contribute.

Other parties advocate for an approach that waits to see how FERC responds to PJM's compliance filings. But parties suggesting we already know the impact of the MOPR will be minimal[41] are misleading the Board. First and foremost, regardless of what FERC does with the compliance filings, it is undisputed that offshore wind resources will not clear the auction, and therefore New Jersey consumers will pay twice for the associated amount of capacity.

Second, PJM has proposed a compliance approach that leads to relatively low net Avoidable Cost Rates ("ACR") values for the Salem and Hope Creek nuclear facilities. Low net ACR values are likely to allow those facilities to clear the auction notwithstanding being subject to the MOPR as a result of the New Jersey's Zero-Emission Certificate ("ZEC") program. FERC

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[39] PJM, *Order on Compliance Filing, Instituting Section 206 Proceeding, and Establishing Paper Hearing*, 169 FERC ¶ 61,049 PP 141–142 (Oct. 17, 2019).

[40] PJM, *Effective Load Carrying Capability for Limited Duration Resources and Intermittent Resources: Problem / Opportunity Statement* (2020), https://www.pjm.com/-/media/committees-groups/task-forces/ccstf/postings/problem-statement.ashx?la=en.

[41] *See* Calpine Initial Comments at 4–6.

may or may not approve PJM's proposal. Even if FERC does approve it in the interim, numerous parties, including those who have downplayed the impact of the MOPR here, have suggested to FERC that while it may approve low net ACR values for the short run, it will be necessary to revisit elements of the compliance filing promptly following the next auction.[42] Thus, any reduced harm of the MOPR associated with FERC's initial approval of low net ACR values for the nuclear facilities could be fleeting, and the Board would need to be prepared to implement the FRR option.

Third, PJM proposed that capacity resources seeking unit-specific offer floor prices should be allowed to demonstrate that a longer asset life is appropriate for their resource. This would result in lower offer floor prices than the default established in PJM's proposed tariff. This flexibility regarding asset life will be essential to whether or not solar and onshore wind resources are able to clear the capacity auction. However, it is far from certain that FERC will accept PJM's proposal to allow this flexibility. Moreover, even if FERC does allow for this flexibility, the Independent Market Monitor has now stated that it views it as very unlikely that any resource will be able to demonstrate an asset life longer than 20 years.[43] Thus, the Board cannot accept the repeated assumptions that future clean energy resources will escape MOPR through a unit-specific exception.

Fourth, PJM has proposed as part of its second compliance filing that default service auctions conducted in the same manner as the current BGS auction should not trigger application of the MOPR, notwithstanding language in FERC's order on rehearing issued in April 2020. If FERC does not accept this aspect of PJM's compliance filing, then the impact of the MOPR

[42] *See, e.g.*, FERC Docket Nos. ER18-1314-003 and ER18-1314-004, *Comments of the EPSA*, at 9 (May 15, 2020); FERC Docket Nos. ER18-1314-003 and ER18-1314-004 *Comments of the P3*, at 9 (May 15, 2020).
[43] FERC Docket Nos. ER18-1314-003, EL16-49-000 and EL18-178-000, *Comments of the Independent Market Monitor for PJM*, at 16 (May 15, 2020).

could be far more severe. Due to the uncertainty regarding the BGS, the Board must commence laying the groundwork for the use of the FRR now.

Contrary to suggestions of some parties,[44] the 2022/23 BRA results are unlikely to provide much additional useful information about the impact of the MOPR, beyond that revealed by FERC's order on compliance. Nearly all renewable energy resources offering into that auction will be covered by the exemption for existing Renewable Portfolio Standard resources, so the auction will not be informative about the ability of future non-exempt renewable energy resources selling RECs for state compliance purposes to participate in RPM. As such, the BPU should not "wait and see" what the results of that auction are before building an actionable framework for the FRR.

Finally, some parties advocate for inaction on FRR based on the likelihood that the MOPR orders will be overturned in court.[45] While we share the opinion that the orders are vulnerable to being overturned, it is very risky for New Jersey to rely upon this potential in planning to achieve its clean energy goals. Even if a court remands based on certain flaws in the MOPR order, the decision could be on a narrow ground which would allow FERC to reimpose the MOPR after supplying additional rationale or undertaking a brief additional notice and comment process. If New Jersey takes a wait-and-see approach on litigation, it could find itself flat-footed two or three years down the road if FERC is able to maintain the MOPR or significant components of the current policy despite litigation.

[44] EPSA Initial Comments at 6–7
[45] *See*, *e.g.*, *Institute for Policy Integrity Comments*, at 8 (May 20, 2020).

B. The Board must reject false or partial solutions to the MOPR, and focus on the FRR, which is the only remedy within its unilateral control

The initial comments present a range of purported solutions that will not address the root problems caused by the MOPR. While we agree that some of the policies proposed may have merit, it is critical for the Board to distinguish between policies that address the urgent issue at hand and those that represent longer-term or more contingent solutions, and to prioritize its efforts accordingly.

All of these proposals share common features: they will take time to develop, are not certain to succeed, and are not under New Jersey's control. Many, but not all of them, would also require New Jersey to make major changes to its energy legislation, abandon resource specific procurements, and more-or-less start from scratch in designing clean energy policy.

The Board should not consider the alternative paths suggested by other commenters as justifying not proceeding with the FRR option. Should New Jersey end this proceeding without a robust path to exiting RPM, it would likely be many years before the Board seriously revisits the option. This would leave the MOPR as a *fait accompli* while the measures purported to compensate for it remain uncertain.

For example, some parties advocate the adoption of carbon pricing mechanisms as a way to resolve conflict between state policies and PJM's resource adequacy mechanism.[46] For reasons discussed in our initial comments, carbon pricing is not a solution to the problems created by PJM's resource adequacy construct.[47] While carbon pricing can improve the relative competitiveness of clean energy resources, it will not allow those resources to displace carbon-

[46] *Initial Comments of Competitive Power Ventures, Inc.*, at 3 (May 20, 2020); EPSA Initial Comments at 13; NGSA Initial Comments at 2–4; *Initial Comments of Vistra Energy*, at 1–4 (May 20, 2020).
[47] *See* PIOs Initial Comments at 34–35.

emitting resources in the capacity market so long as clean energy resources remain subject to the MOPR due to the receipt of even the smallest level of incentive under state or local law.

Carbon pricing can only be viewed as a stand-alone solution to the current energy policy quagmire only insofar as the state acquiesces to rely *solely* upon carbon pricing to achieve state clean energy goals rather than the clean energy standards and incentive programs already enshrined in state law and widely recognized to be highly effective at driving decarbonization.[48] It also requires faith that a carbon price level established under state law would be effective to incent the rapid decarbonization needed to avoid the worst of the climate crisis. Only the comments filed by EPSA are candid that carbon pricing would have to *replace* other state policies in order to eliminate the conflict with PJM's market rules.[49]

Using carbon pricing to avoid the MOPR would require New Jersey to abandon years of regulatory and legislative work, and rebuild its clean energy policy largely from scratch. The delay and risk this would bring would serve those threatened by New Jersey's transition to clean energy, but otherwise bring no benefit to the state. New Jersey should not be required to upend its regulatory structure for clean energy needed to achieve critical public health and environmental objectives. While carbon pricing may be a valuable supplement to existing state policies, and can drive emission reductions,[50] the Board should not be misled that it will somehow solve the problem of the MOPR.

Further, as noted by several parties, a carbon price is ineffective without mechanisms to address leakage. While PJM is undertaking a stakeholder process to determine whether a

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[48] *See, e.g.*, David Roberts, *At last, a climate policy platform that can unite the left*, Vox (May 27, 2020), https://www.vox.com/energy-and-environment/21252892/climate-change-democrats-joe-biden-renewable-energy-unions-environmental-justice (noting emerging consensus favoring the use of standards to drive decarbonization in lieu of market-based mechanisms such as carbon pricing).

[49] EPSA Initial Comments at 13 ("Any RTO carbon price should thus be designed to displace duplicative state laws—or risk that a carbon price would merely be a potentially costly redundancy.").

[50] *See* AEE Initial Comments at 34.

leakage mechanism is reasonable, and how it should be designed, such a mechanism is years from implementation, even assuming it is approved by FERC. As such, carbon pricing initiated by a single state such as New Jersey will not be an effective mechanism without cooperation by FERC and PJM.

Several parties, including the American Council on Renewable Energy ("ACORE") and NRG, advocate moving towards a full retail choice model that deemphasizes or eliminates the role of the BGS auction, thus empowering retail suppliers to serve as counterparties in power purchase agreements with clean energy resources.[51] While we see merit to improving the stability and credit worthiness of retail suppliers, and ensuring that such suppliers have the incentive to hedge the prices they pay for electricity, we fail to see how this proposal addresses the immediate problems created by the MOPR. So long as retail suppliers enter into any kind of contract or agreement with clean energy resources in order to meet state clean energy goals, those resources would be subject to the MOPR.

NRG advocates that New Jersey seeks to resolve the conflict between its policies and PJM's market rules by implementing a forward clean energy market ("FCEM").[52] The FCEM purports to avoid the impact of the MOPR by creating a centralized tool for the sale and purchase of environmental attributes. This would somehow not be subject to the MOPR, even though those purchasing attributes through the centralized market would often be doing so to satisfy state mandates. This would presumably be through the FCEM being filed with FERC by PJM, as a multilateral state arrangement would still be subject to the MOPR. Even if PJM

[51] *Initial Comments of ACORE*, at 1–2 (May 13, 2020); NRG Initial Comments at 2–14. *See also* Rob Gramlich & Frank Lacey, *Who's the Buyer: Retail Electric Market Structure Reforms in Support of Resource Adequacy and Clean Energy Deployment*, Grid Strategies LLC (prepared for Wind Solar Alliance) (Mar. 2020), https://windsolaralliance.org/wp-content/uploads/2020/03/WSA-Retail-Structure-Contracting-FINAL.pdf.
[52] NRG Initial Comments at 14–15.

stakeholders agreed to file a FCEM, this would then require FERC to approve a tariff that aims to largely undo one of their signature orders. Like a carbon price, the FCEM would require massive changes to New Jersey statutory law, including likely the elimination of any resource specific procurement targets. Given the urgency of New Jersey's clean energy goals, the pursuit of such an ethereal mechanism for resolving the state federal tension and PJM's market seems like an unacceptable long shot.

EPSA urges the BPU to advocate for adoption of a new capacity market construct at PJM similar to the Competitive Auctions for Sponsored Policy Resources ("CASPR"), as adopted by ISO New England.[53] What EPSA fails to acknowledge in making this recommendation is that the CASPR construct has failed to promote the integration of state-supported resources into ISO New England's regional capacity market. Neither of the two auctions conducted since CASPR was implemented have resulted in a single trade in the substitution auction intended to be the primary mechanism for state-supported resources to enter the market.[54] Thus the Board should not devote any efforts to advancing a CASPR-like construct at PJM, but should instead focus its efforts on more fundamental change to the capacity market that places recognition of the reliability value of state policy resources as a primary consideration, rather than a secondary one.

Finally, P3 advocates for using the BGS auction as a means to achieve the state clean energy goals.[55] However, the BGS auction itself is under threat of being subject to the MOPR as a result of FERC's April 2020 order on rehearing. Although PJM has proposed in a compliance

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[53] ISO New England Inc., *Order on Tariff Filing*, 162 FERC ¶ 61,205 (Mar. 9, 2018), https://www.ferc.gov/CalendarFiles/20180309230225-ER18-619-000.pdf.
[54] *See* ISO New England, *Forward Capacity Market (FCA 13) Result Report*, https://www.iso-ne.com/static-assets/documents/2018/05/fca-results-report.pdf; ISO New England, *Press Release: New England's Forward Capacity Auction Closes with Adequate Power System Resources for 2023-2024* (Feb. 5, 2020), https://www.iso-ne.com/static-assets/documents/2020/02/20200205_pr_fca14_initial_results.pdf.
[55] P3 Initial Comments at 4–5.

filing that default service auction mechanisms that are technology neutral would not be subject to the MOPR, transforming the BGS as suggested by P3 would remove it from the exemption proposed by PJM, even if FERC were to accept this narrower view of what it ordered in April 2020. As such, using the BGS procurement as a tool to achieve state clean energy goals is no solution to the MOPR, and could be tantamount to jumping from the frying pan into the fire, as it would subject the entire BGS structure to the MOPR, with serious consequences for New Jersey's retail choice framework.

IV. PROPOSED PATH FORWARD

While commenters disagree about the nature and extent of challenges with utilizing the FRR, no party puts forward any alternative to FRR that will enable New Jersey to avoid the harm caused by the MOPR. All other proposed solutions rely upon economic analyses that ignore future cost impacts, optimistic assumptions of favorable litigation outcomes, heretofore-nonexistent levels of PJM stakeholder collaboration, or would require New Jersey to fundamentally upend its own clean energy regulatory structure in favor of untested policy mechanisms.

Several of the initial comments, including those submitted by the New Jersey Conservation Foundation, New Jersey League of Conservation Voters, New Jersey Sustainable Business Council, and by Public Service Enterprise Group ("PSEG") and Exelon Generation Company, LLC ("Exelon"), set out constructive ideas to design the FRR in a way that avoids some of the pitfalls regarding market power and affiliate abuse. In this section, we incorporate features from those filings, and clarify our position that New Jersey must prepare to use the FRR option to leave PJM's capacity market. In our proposed structure, an FRR plan would be implemented through a state agency, or a third-party under contract with the state to run open

capacity procurements. We adopt New Jersey Conservation Foundation's proposal that these procurements be run *before* EDCs elect the FRR alternative, and that the decision to elect or not be based on procurement results. Once an EDC commits to FRR, those procurements would result in short-term, standardized bilateral contracts between capacity suppliers and the EDCs.

While we agree that legislation could clarify and expand upon the Board's powers with respect to utility capacity procurement, we believe that it is critical for the Board to explore and further develop options that do not require further legislation, given the delay associated with the legislative process. As described in section IV.D below, the Board has authority to require one or more utilities to elect the FRR and to supervise the process to ensure competitive outcomes consistent with state policy goals.

A. FRR Elections should be carefully timed to minimize risk and avoid excess MOPR costs

There are many uncertainties about the exact extent and timing of MOPR's harm to New Jersey consumers and energy policies. What is clear is that PJM's capacity market going forward will be governed by a set of rules designed by FERC with the specific purpose of thwarting a transition to clean energy generation by requiring consumers to pay twice for renewable energy capacity.

It is therefore critical that the Board lay the necessary foundation for one or more of its EDCs to elect the FRR. Depending on the final version of the MOPR, each EDC may not need to implement an FRR construct until the failure of state-supported resources to clear the RPM forces the issue. However, that day may not be far off, given that the Ocean Wind project is scheduled to come online in 2024, and the FRR election for that delivery year will likely fall somewhere in 2021 or early 2022.

Many comments have pointed out that opting for FRR will not be easy or risk free. Although we are more sanguine regarding the potential for the FRR than most, we do not dismiss these worries. Nor is remaining in RPM risk free. The costs of the MOPR are uncertain, but will most likely increase over time as more and more state-supported resources are excluded from the market. Even absent the MOPR, RPM itself will become more problematic as New Jersey's clean energy mix diverges from the traditional generation fleet RPM was designed for.

To balance these risks, we respectfully suggest the BPU develop a process that will result in New Jersey EDCs committing to FRR based on comparing the results of periodic, *ex ante* FRR procurements with predicted RPM outcomes, as initially proposed by the New Jersey Conservation Foundation. The FRR procurement and forecasted RPM outcomes can be compared based on either financial or environmental outcomes, or a combination of those considerations. This process might result in different EDCs opting for FRR at different times, given the different internal resource requirements and attendant market power issues applicable to each zone.

An *ex ante* procurement has the key benefit of preserving the utility (or other procurement entity) option to stick with RPM should insufficient quantities of resources offer into the RFP, or do so at an overall price that is too high. While conducting a procurement prior to electing the FRR will add time to the state's overall process for making this transition, it could still enable one or more New Jersey utilities to elect the FRR in time for delivery year 2024-25, when the first offshore wind resources are scheduled to come online.

In designing such a procurement and setting out the criteria for results that will result in FRR election, the Board should include expected cost savings associated with the achievement of state policy through the FRR, rather than simply comparing capacity prices. For example, the

FRR will produce savings to consumers associated with the purchase of offshore wind renewable energy credits, since offshore wind projects will be able to receive capacity revenues under FRR but not RPM. When comparing between the two, those savings should be subtracted from the overall cost of capacity purchased through an FRR.

As the quantity of resources affected by the MOPR increases, an *ex ante* procurement becomes more likely to succeed in attracting offers that will comprise a portfolio less expensive than procuring capacity through RPM, especially when the avoided increased costs of achieving state policy goals are also considered.[56] We propose that the first *ex ante* procurement be held in time to drive the FRR decision for the 2024 delivery year, when the first large tranche of offshore wind is scheduled to come online. EDCs that remain in RPM should run additional *ex ante* procurements every year in which the quantity of capacity affected by the MOPR has materially increased since the prior *ex ante* procurement. This process will give the utility or other procurement entity the maximum amount of flexibility and information needed to achieve the best result for consumers prior to making the decision to elect for FRR.

This will likely result in initially pursuing the FRR only for a subset of EDCs. After reviewing the initial comments, we agree that this is likely to be the optimal approach. Doing so will enable the state to ensure that state-supported resources are able to obtain capacity revenues in exchange for the resource adequacy value they provide, while avoiding or minimizing market power and affiliate preference challenges to the greatest extent possible. Measures to address market power and affiliate abuse, as discussed in our initial comments, should nonetheless be developed as backstop measures to protect consumers. An additional benefit of the <u>*ex ante*</u> procurement proposal is that it could be used to test whether cost savings might be achieved on a

[56] *See* PIOs Initial Comments at 24–25.

broader basis, i.e., by having more utilities elect the FRR if the results of the procurement show that doing so would benefit consumers.

B. FRR Design Concerns

The initial comments highlight a number of issues that must be analyzed to determine the optimal FRR program design, including which elements of that design could be determined through the results of a procurement process versus which ones must be established at the outset and written into the procurement. The most significant elements to be established are as follows:

- What criteria would cause a utility to elect FRR upon review of RFP responses, and if those criteria should be purely objective (e.g., cost), or provide for Board evaluation when considering whether the results of an RFP justify election of the FRR.
- How to appropriately forecast BRA prices for comparative purposes. We recommend the Board engage a consultant in order to assess the cost of FRR versus the cost of remaining in RPM across the applicable time horizon for the FRR procurement (e.g., 5 years). The Brattle Group's evaluation of various resource adequacy policy options for New York provides a general rubric for how the Board might conduct such an analysis.[57] Just as Brattle assessed the cost of status quo maintenance of NYISO's capacity market with current buyer-side mitigation rules in comparison to various alternative resource adequacy arrangements, the Board's assessment should include a forward-looking assessment of FRR costs that includes any variation in state policy costs. In

[57] *See* Sam Newell et al., *Quantitative Anaylsis of Resources Adequacy Structures*, The Brattle Group (May 29, 2020), http://documents.dps ny.gov/public/MatterManagement/MatterFilingItem.aspx?FilingSeq=246485&MatterSeq=60430.

contrast to a simpler backward-looking comparison of the FRR to last year's BRA prices, such an analysis would capture the future costs of the MOPR over the entirety of the relevant time horizon.

- What the duration of capacity contracts in an FRR plan should be (contract lengths could conceivably range from sub annual to five years or more; a portfolio could be composed of contracts of a uniform length, or be assembled with a variety of different contract durations).
- Details of retail supplier cost allocation, hedging, and self-supply.
- Whether the procurement should explicitly include policy goals or be technology-neutral.

We propose that the Board seek to engage a consultant with experience in capacity procurement design and implementation in order to evaluate different options for these and other design criteria.

It is clear from the initial comments that a wide range of parties have concerns about utilities that elect FRR employing the procurement process in a manner that disadvantages certain generation owners or resource types. We believe that these concerns can be addressed by having a nonutility, independent entity drive the procurement process. Doing so will provide greater confidence in the fairness of the results of such procurement, as well as increasing the likelihood of such procurements with standing review under FERC's *Edgar/Allegheny* standards.[58] Consequently, separate from the consultant engaged to design the *ex ante* procurement proposed above, we propose that the Board issue a request for information ("RFI") to solicit interest from entities that may actually conduct and manage the procurement process, in

[58] *See* PIOs Initial Comments at 24–25.

the same manner as the Board has engaged NERA to oversee the BGS process. This RFI will enable the Board to assess the possible costs and feasibility associated with an independent administrator for the FRR procurement. As part of such an RFI, the Board could solicit recommendations from interested entities on procurement design features that could further enhance the efficiency of FRR procurement. For example, the Board could seek to understand whether such a procurement entity could facilitate procurements across multiple states electing to pursue FRR, asking interested parties to provide input on the potential efficiencies of such a process (e.g., shared procurement for external capacity and capacity located within the overlapping EMAAC LDA) as well as potential governance challenges (e.g., need to agree upon consistent procurement terms and a process for allocating the capacity secured through such a procurement between states).

C. Accommodations for Demand Side Measures

Advanced Energy Management Alliance ("AEMA") raises several potential issues with how demand response, energy efficiency, and distributed energy resources (DR, EE, and DERs, respectively) could continue to participate should New Jersey utilities use the FRR option. We share AEMA's belief that EE, DR, and DERs will play an important role in meeting New Jersey's Clean Energy Goals, and that the BPU should ensure that those resources "continue to grow and thrive"[59] under any future resource adequacy construct.

Most of AEMA's concerns stem from worries that using the FRR option would be similar to returning to a vertically integrated utility structure. Based on its members' experience operating in such environments, AEMA expresses concern such a structure could run counter to the interests of end-use customers currently providing capacity, exclude third-party suppliers,

[59] *Initial Comments of AEMA* at 4 (May 20, 2020) ("AEMA Initial Comments").

result in artificial caps on DR, force participation through restrictive retail tariffs, or bundle products in ways unfavorable to EE, DR, and DERs.[60]

AEMA's concerns are addressed by our recommended approach of implementing FRR through a central capacity procurement run by a state agency or other third party. Based on the issues AEMA identifies, we suggest procurement details that would support DR, EE, and DERs, including:

- Capacity procurements should be open to any entity that is capable of supplying PJM capacity and demonstrates sufficient creditworthiness.
- Capacity should not be procured bundled with energy. Some clean resources (e.g., wind) are better at providing energy than capacity, while others (e.g., emergency demand response) are close to capacity-only resources. Separate auctions for capacity and energy allow each resource type to provide its maximum benefit. This approach would require separating current full-requirements auctions into multiple procurements, but this approach remains consistent with BPU authority under BGS.
- Technical requirements should match PJM's to the maximum extent possible. For example, PJM has detailed specifications for demand response notification time, measurement and verification, metering, and so on. Absent a compelling reason to vary from these, New Jersey should adopt PJM's specifications for capacity purchased for FRR plans. Capacity delivery should also be administered through PJM systems. Not only will this help to ensure that the capacity procured can satisfy the FRR obligation, but it will also minimize administrative burden for

[60] AEMA Initial Comments at 7–10, 14.

suppliers, the state, and utilities. Varying from PJM specifications may be justified in particular cases where concrete benefit can be shown--e.g., realizing the pooling and risk management benefits of the FRR Physical Option--but there should be a strong preference for standardization.

- Opting for FRR should not imply any changes to retail Demand-side management ("DSM") tariffs, or create any new restrictions on retail customers' ability to participate in wholesale markets. DSM programs administered through the utilities should participate in state procurements on equal terms to other similar resources.
- Although AEMA advocates for a technology-neutral approach, we suggest instead that that New Jersey evaluate if there is benefit in structuring capacity procurements to support state policy goals.

Most importantly, should New Jersey decide to move forward with the FRR option, it is critical to provide opportunity for stakeholder input on details of how EE, DR, and DERs are best incorporated into the FRR procurements and plans. This need not require drawn out proceedings, and could be accomplished simply through an additional request for comments in this proceeding once an overall resource adequacy framework has been identified.

D. Exercising the FRR option does not require new legislation

The BPU has a variety of authorities under existing law to mandate implementation of the FRR option across all or a portion of the state.[61] Of these options, we recommend that the BPU supplement its clear authority under the Electric Discount and Energy Competition Act

[61] *See* RAA Article 1 – Definitions (FRR Service Area) and Schedule 8.1.B; PJM Initial Comments at 5–6.

("EDECA")[62] to fully regulate basic generation service[63] by reclaiming its authority to regulate capacity procurement by third party service providers as well. The BPU can accomplish this by making a determination pursuant to the procedures set forth in N.J.S.A. 48:3–56(d) that sufficient competition is no longer present in the electric capacity market. Factors informing such a determination include: ease of market entry; presence of other competitors; availability of like or substitute services; or public safety and welfare purposes.[64] Upon such a determination, the Board would have full and clear authority to mandate and set requirements for an FRR construct applicable to all Load-Serving Entities ("LSEs") within the chosen FRR Service Area. *Id.*

There is a decade of support for a determination that the capacity market in New Jersey is not competitive, and, as pointed out by Rate Counsel, this is not the first time the Board has considered implementing FRR in response to a FERC MOPR order exacerbating New Jersey's "disappointing experience" with PJM's capacity market.[65] The extensive record from a 2010-2011 Board investigation documented the same combination of market power and high transmission constraints that continue to impede generation development and capacity market competition in New Jersey today.[66] Along with the historical record, the recent complaint filed by the PJM Market Monitor against PJM's RPM offer caps, as well as its recent State of the Market reports, provide ample support for the Board to determine that the New Jersey capacity

[62] N.J.S.A. 48:3–49 *et seq.*
[63] N.J.S.A. 48:3–51 ("'Basic generation service' . . . is not a competitive service and shall be fully regulated by the board.").
[64] N.J.S.A. 48:3–56(c).
[65] *See* Rate Counsel Initial Comments at 17; *see generally* BPU Docket Nos. EO11050309 and EO09110920, *Board Staff Report on New Jersey Capacity, Transmission Planning and Interconnection Issues* (Dec. 2011), https://nj.gov/bpu/pdf/announcements/2011/capacityissues.pdf.
[66] Rate Counsel Initial Comments at 17 ("Nothing has substantially changed since that time".).

market is not currently competitive.[67] As Rate Counsel points out, recommendations regarding such a determination would need to be submitted to the legislature for review pursuant to N.J.S.A. 48:30–56(k).[68] But absent legislative intervention within 90 days, such recommendations would be deemed approved. Given the inevitable and likely prohibitive cost impacts of the MOPR on the development of the clean energy capacity required to meet New Jersey's clean energy law requirements,[69] there is no reason to expect the legislature to oppose such a determination.

In lieu of pursuing approval to reclassify the capacity market as non-competitive, the BPU could establish required standards for an FRR procurement mechanism run by an independent third party pursuant to its authority under N.J.S.A. 48:3–56(f), which authorizes the Board to "adopt, by rule, regulation or order, such fair competition standards, affiliate relation standards, accounting standards and reports as are necessary to ensure that electric public utilities or their related competitive business segments do not enjoy an unfair competitive advantage over other non-affiliated purveyors of competitive services and in order to monitor the allocation of costs between competitive and non-competitive services offered by an electric public utility." Because capacity ownership in New Jersey is concentrated and includes significant affiliate ownership, the BPU could justify such a mechanism as necessary to protect against affiliate abuse. The Board could implement prudency standards with respect to capacity purchases by

[67] *See* FERC Docket No. EL19-47, *Complaint of the Independent Market Monitor for PJM*, at 2 (Feb. 21, 2019) ("structural market power is endemic" in PJM); 2019 State of the Market Report, at 8 (concluding that the capacity market is "not competitive").
[68] *See* Rate Counsel Initial Comments at 12.
[69] *See, e.g.*, Global Warming Response Act, N.J.S.A. 26:2C–37 *et seq.*; Offshore Wind Economic Development Act, N.J.S.A. 48:3–49 *et seq.*; Clean Energy Act, N.J.S.A. 34:1A–85 *et seq.*

incumbent utilities pursuant to its authority over basic generation service[70] and its authority to fix rates.[71]

By adopting state regulations providing for an FRR procurement mechanism pursuant to a finding by the Board that they are necessary to prevent discriminatory application of the Minimum Offer Price Rule, the Board could apply rate regulation mechanisms even with regard to competitive electric power suppliers.[72] Alternatively, to avoid any challenge that the BPU is regulating rates for competitive electric power suppliers beyond the authority expressly provided under EDECA in contravention of N.J.S.A. 48:3–45(a), the Board could let the participation of any competitive electric power supplier in such independent procurement mechanism remain voluntary. In the event that a competitive supplier did not choose to procure its own capacity or elect to participate in the independent capacity procurement, the applicable FRR entity could file under Section 205 to propose to change the default compensation mechanism for capacity procurement to equal its costs under the independent procurement mechanism we have suggested herein. To be clear, however, neither of these options would be necessary should the Board issue a finding pursuant to N.J.S.A. 48:3–56(d) that capacity sales are not a competitive service. Although new legislation is not required, should the BPU prefer legislative direction, the BPU could recommend legislation to expressly provide the Board authority to regulate the procurement of capacity by all suppliers, including the authority to direct any LSE to adopt FRR, to provide rules and regulations with respect to any such FRR procurement (inclusive of capacity

[70] *See* N.J.S.A. 48:3–57(d) ("The charges assessed to customers for basic generation service shall be regulated by the board and shall be based on the reasonable and prudent cost to the supplier of providing such service.").
[71] *See* N.J.S.A. 48:2–21(b). Basic generation service is not a competitive service and therefore the Board has rate-setting authority with regard to such service. *See* N.J.S.A. 48:3–51 ("Basic generation service is not a competitive service and shall be fully regulated by the board.").
[72] *See* N.J.S.A. 48:3–56(e) ("Nothing in this act shall limit the authority of the board, pursuant to Title 48 of the Revised Statutes, to ensure that electric public utilities do not make or impose unjust preferences, discriminations, or classifications for any services provided to customers.").

ultimately served by competitive electric power suppliers), and for such procurement to initially be executed by an independent third party or state agency subject to the Board's direction prior to being included in an FRR plan.[73] Should the Board pursue such action to clarify its authority to implement FRR, we recommend that any such legislation be narrowly focused upon capacity procurement.[74] Folding in a re-examination of the state's broader clean energy laws, as PSEG and Exelon have suggested,[75] could create market uncertainty and open up additional issues that could delay and complicate the state's ability to implement FRR.

V. NEW JERSEY SHOULD SIMULTANEOUSLY PURSUE IMPROVEMENTS TO PJM'S MARKETS THROUGH STAKEHOLDER PROCESS/REGIONAL LEADERSHIP

Many commenters suggest New Jersey seek improvements to PJM's markets rather than pursue an FRR plan.[76] We wholeheartedly agree that PJM market reform is necessary—indeed, a ground-up redesign of PJM's resource adequacy approach might be the best possible outcome of this saga.

However, we vehemently disagree that such an approach is sufficient to resolve impending MOPR impacts. It would be folly for New Jersey to bet its energy future on a process it has little to no influence over. Absent fundamental changes to PJM's approach to resource adequacy and its governance, continued participation in RPM will allow those opposed to a clean energy future to hold New Jersey at risk.

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[73] Rather than providing that capacity service is not "competitive," as PSEG and Exelon have suggested, we recommend language that empowers the Board to regulate capacity procurement whether or not it is classified as competitive. This avoids trying the Board's hands with regard to future regulation in the event that market conditions change.

[74] As discussed in our Initial Comments and in prior Board proceedings, the Board could also recommend that the legislature establish a State Power Authority.

[75] *See Initial Joint Comments of PSEG and Exelon* at 14–15 (May 20, 2020); Initial Comments of NRG at 23; Initial Comments of EPSA at 2, 8–10; *Comments of Environmental Defense Fund* (May 20, 2020) ("Initial Comments of EDF") at 2–4.

[76] *See, e.g.*, Initial Comments of NRG at 23; Initial Comments of EPSA at 2, 8–10; Initial Comments of EDF at 2–4.

As the MOPR episode vividly shows, interests who stand to lose from decarbonization will not hesitate to weaponize regional transmission organization ("RTO") rules for use against states. Those efforts may succeed or fail, depending on the sympathies of RTO leadership and FERC commissioners. This risk is precisely why New Jersey must take steps now so that it will be able to quickly and efficiently leave PJM's capacity market when the need arises.

In this context, we respectfully submit that the BPU should not see use of the FRR option as a one-time choice to be considered now or never. Rather, the BPU should establish and maintain the authority and capabilities needed to exit RPM. Continued participation in the capacity market should be an ongoing active decision, not a passive outcome. This is critical both to help ensure New Jersey's interests are considered at PJM and FERC, and to offer policy makers an option other than "helpless victim" should market rules change in a direction opposed to New Jersey's policy goals.

Reform of RPM through the PJM stakeholder process will not happen without continued pressure from states on PJM to change. Several years of protests, requests for rehearing, and Organization of PJM States, Inc. letters to the PJM Board regarding the MOPR did not persuade the PJM Board or PJM staff to alter their course in seeking the imposition of the MOPR on state policy resources. While New Jersey should continue to seek change at PJM, taking concrete steps toward implementation of FRR both protects New Jersey's interests and demonstrates to PJM and stakeholders that failure to reform a capacity market design that disrespects states will have significant consequences.[77]

[77] The groundwork laid by the Board to implement the FRR may be useful even if the FRR does not need to be used due to timely and comprehensive relief by a court or FERC. In the long-term, a more sustainable resource adequacy construct would return authority over resource adequacy to the states, while leaving PJM's capacity market as a market for residual or backstop needs. Implementation of such a residual market design would also require state-level mechanisms to supervise the procurement of capacity. In designing an FRR construct, the Board should be mindful of how such a mechanism may be adapted in the future to procurement of capacity for less than 100% of utilities' requirements.

A. The BPU should pursue necessary reforms to PJM's resource adequacy approach

The discontents with RPM, and capacity markets in general go far beyond the MOPR. Ratepayers and consumer advocates cite chronic overprocurement.[78] The American Public Power Association ("Public Power") argues it brings huge costs without demonstrated benefit.[79] Renewable energy developers find they are a barrier to clean energy.[80] Academics worry that they are a poor match to the reliability needs of a low-carbon power system.[81]

Taking the critiques of RPM as a whole, we argue that RPM has, sadly, evolved into little more than a complex subsidy mechanism for traditional generation. Since RPM was created, we have seen dozens of rule changes that favor generation owners, including eliminating mechanisms to limit over procurement, attempts to suppress market liquidity, total devaluation of energy efficiency, elimination of entire classes of DR, ever more rigid product definitions, creation of barriers to competition from external resources, punitive penalty structures for intermittent resources, inflated demand curves, demonstrably false Cost of New Entry, gutting of market power protections, and arbitrary devaluation of energy storage.[82] At this point, RPM

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[78] *See* Wilson Energy Economics, *Over-Procurement of Generating Capacity in PJM: Causes and Consequences* (Feb. 2020), https://www.sierraclub.org/sites/www.sierraclub.org/files/blog/Wilson%20Overprocurement%20of%20Capacity%20in%20PJM.PDF.

[79] *See, e.g.*, Raymond L. Gifford and Matthew S. Larson, *Mandatory Capacity "Markets" and the Need for Reform* (Mar. 2020), https://www.publicpower.org/system/files/documents/Mandatory-Capacity-Markets-and-the-Need-for-Reform.pdf.

[80] *See* Michael Goggin et al., *Customer Focused and Clean: Power Markets for the Future* (Nov. 2018), https://windsolaralliance.org/wp-content/uploads/2018/11/WSA_Market_Reform_report_online.pdf.

[81] *See, e.g.*, Sonia Aggarwal, et al., *Wholesale Electricity Market Design for Rapid Decarbonization* (June 2019), https://energyinnovation.org/publication/wholesale-electricity-market-design-for-rapid-decarbonization/.

[82] *See, e.g.*, FERC Docket No. ER15-623-000, PJM, *Reforms to the Reliability Pricing Market ("RPM") and Related Rules in the PJM Open Access Transmission Tariff ("Tariff") and Reliability Assurance Agreement Among Load Serving Entities ("RAA")* at 75 (Elimination of the Short-term Resource Procurement Target, a mechanism that served to manage overprocurement risk), 34 (eliminating seasonal demand response), 53 (for practical purposes, largely eliminating RPM offer caps) (Dec. 12, 2014); PJM, *Order Rejecting Tariff Revisions and Terminating Section 206 Proceeding*, 163 FERC ¶ 61,101 (May 8, 2018) (rejecting PJM's third attempt to reduce capacity market liquidity); PJM Manual at Section 2.4.5 (documenting 2015 rule changes that eliminated energy efficiency's ability to displace traditional generation in RPM auctions); PJM, *Order Accepting Tariff Revisions*, 147 FERC ¶ 61,060 (Apr. 22, 2014) (limiting external capacity participation in RPM auctions); PJM, *Order on Tariff Revisions*,

serves to funnel vast sums of money from ratepayers to generation owners, but it is increasingly unclear how RPM is grounded in genuine reliability concerns or supports energy policymakers.

Since January 2020, PJM has shown a commendable willingness to change and publicly committed to being more receptive to the needs of all its stakeholders.[83] New Jersey should take PJM at their word, deliver a clearly articulated vision for the future of resource adequacy, and insist that PJM act upon it. This is the right time to avoid the trap of focusing on incremental changes to RPM, and instead engage with big picture issues, including:

- Should the region have a mandatory capacity market?
- How is reliability assured in a low-carbon grid?
- What authority should state utility regulators have over the level of reliability provided to their customers?
- How can the tradeoffs between wholesale reliability, distribution system reliability, and non-traditional approaches such as resilience and microgrids be managed?
- What options should be provided for competitive LSEs or even large individual customers to opt-out of any centralized procurement?
- Ensuring planners properly consider the reliability value of resources that do not participate in markets.

161 FERC ¶ 61,197 (Nov. 17, 2017) (imposing further requirements on external resources); Alan Southworth, *Is Capacity Market Participation Still Viable for Intermittent Resources Under Capacity Performance?* (May 11 2017), https://www.genscape.com/blog/capacity-market-participation-still-viable-intermittent-resources-under-capacity-performance; 84 Fed. Reg. ¶ 57,725 (2019) (instituting Section 206 investigation into whether PJM rules for capacity storage are just and reasonable).

[83] *See, e.g.*, Jasmin Melvin, *PJM CEO sees room for markets, state policies as it looks to grid of the future*, S&P Global Market Intelligence (Apr. 30, 2020), https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/pjm-ceo-sees-room-for-markets-state-policies-as-it-looks-to-grid-of-the-future-58364980.

RPM reforms should also include improvements to the FRR itself. Comments in this proceeding to date reveal that many of the FRR rules create a number of unnecessary difficulties. A better functioning FRR construct would give New Jersey more options to manage the problems associated with continued participation in RPM. Areas of possible improvement are:

- Investigate methods for state commissions or other ratemaking authorities to leverage PJM's impressive market power mitigation abilities to run competitive FRR procurements.
- Allow for more flexible entry and exit, especially around removing the arbitrary requirement that utilities stay in FRR for at least five years.
- Allow for states to use FRR to meet a portion of their loads rather than requiring an unnecessary all-or-nothing decision.

VI. CONCLUSION

For the reasons mentioned herein, PIOs urge the BPU to move forward without delay on preparing for the implementation of FRR in New Jersey.

Respectfully submitted,

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