STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

Investigation of Resource Adequacy Alternatives	**)**	**Docket No. EO20030203**

REPLY COMMENTS OF NRG ENERGY, INC.

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REPLY COMMENTS OF NRG ENERGY, INC.

NRG Energy, Inc. ("NRG") submits these reply comments in the above-captioned proceeding in support of reforms that deliver a clean energy future to the State of New Jersey. NRG's reply comments focus on two topics: the FRR proposals in this docket, and the relatively sparse criticisms FRR proponents raise for viable alternatives, which should be the focus of the New Jersey Board of Public Utilities' ("NJBPU") ongoing inquiry.

I. Reply Comments

A. Few Parties Filing Comments in the Docket Support FRR.

In the past few months, FRR sometimes has been painted as the inevitable or only state response to policymakers' concerns about the supposed incompatibility of the FERC-regulated wholesale market and state public policies. Numerous articles in the trade press have suggested a growing momentum for FRR on the part of stakeholders.[1] But at this critical juncture—the moment in time when the Board has called all stakeholders to make their views known in one of PJM's most important jurisdictions—support for FRR is vanishingly thin. The *only* parties who support an FRR solution are:

- monopolies PSEG-Exelon and their affiliates,[2]
- a select few power-generation developers who depend upon the perquisites of their relationship with these monopolies,[3] and
- two environmental groups that advocate a vision of FRR that is closer to resembling a highly competitive retail market[4] than the re-monopolization of the New Jersey power sector that the PSEG-Exelon proposal entails.

[1] *E.g.*, "Enviros: States may need to leave PJM market to advance clean energy goals," Jasmin Melvin, *S&P Global* (Jan. 9, 2020). "New Jersey looks to exit PJM capacity market, worried MOPR will impede 100% carbon-free goals," Robert Walton, *Utility Dive* (March 31, 2020).
[2] Atlantic City Electric, an Exelon subsidiary, supports the FRR. Jersey Central Power & Light, a FirstEnergy company, expresses potential support for FRR. Meanwhile, Con Edison's Rockland Electric Co. opposes it.
[3] Comments of Orsted and Comments of EDP Renewables.
[4] Joint Comments of Sierra Club/ Natural Resources Defense Council ("Sierra Club/NRDC").

By contrast, the groups arrayed in opposition to FRR are numerous and diverse. Consumer advocates, developers of renewables and innovative technologies, third-party suppliers, conventional generators, even utilities that are not PSEG-Exelon affiliates: All of them oppose FRR. Many others express skeptical questions that, when one considers the complexity of the problems they pose for which the PSEG-Exelon proposal has no real answers, must be read as oppositional.

Parties **Supporting** FRR[5]	Parties **Opposing/Skeptical** of FRR
1. Atlantic City Electric 2. EDP Renewables 3. Jersey Central Power and Light[6] ("JCP&L) 4. Natural Resources Defense Council- Sierra Club 5. Orsted 6. PSEG-Exelon	1. AARP 2. Advanced Energy Management Alliance 3. AEE-AWEA-MAREA-SEIA 4. Atlantic Shores Offshore Wind 5. Calpine Corporation 6. Calpine Retail Holdings 7. Cogentrix Energy 8. Direct Energy 9. Electric Power Supply Association 10. Enel NJ 11. Environmental Defense Fund 12. Independent Market Monitor 13. Institute for Policy Integrity 14. LS Power Development 15. Natural Gas Supply Association 16. New Jersey Conservation Association/New Jersey Sustainable Business Council 17. NJLEUC 18. NRG Energy, Inc. 19. PJM Providers Group 20. Rate Counsel 21. Retail Energy Supply Association 22. Vistra 23. Vitol

Most parties now realize that FRR, advertised as a *lower-cost* solution by nuclear

[5] The chart above categorizes the positions of parties' comments into two groups based on each party's discussion of FRR in its comments. Those commenters that did not take a position on FRR are not included in this chart.
[6] We generously designate this utility as supporting FRR, though JCP&L hedges by stating merely that it is "possible" to have an FRR that "properly aligns all parties' interests." JCP&L at 1.

generators who simultaneously complain that the capacity market is not *higher-priced*, does not resolve the issues at hand. Specifically, the concept that PSEG-Exelon proposes is predicated expressly on the use of those companies' perch as utility-distribution monopolies, acting as FRR Entities, to self-deal to their affiliated generators. As the Rate Counsel observes, "there appears to be no feasible route to a New Jersey FRR that does not implicate significant market power issues."[7] But it goes beyond that, because the PSEG-Exelon proposal is effectively a reintegration of the vertically integrated monopoly—without, as AARP observes, any of the consumer protections that traditionally attended that model.[8]

Importantly, the proponents of an FRR universally fail to acknowledge the real-world experience in regions where FRR has been utilized, which has resulted in significantly higher costs than what the PJM competitive market has produced. These facts cannot be ignored on the basis of mere representations of trust. Consumer affordability is more important than ever as New Jersey faces the current economic fallout from the Covid-19 pandemic.

It is time to stop pretending that FRR is a solution for New Jersey's low-carbon future. Numerous other proposals have emerged in this proceeding that take more direct aim at decarbonization, do so in a technology-neutral, competitive way, and work in concert with the regional marketplace.

B. The PSEG-Exelon Proposal Has a Variety of Flaws.

1. A capacity-based plan like FRR is not a cogent pathway toward decarbonization.

This debate suffers at is inception from a basic confusion. The production of *energy* causes carbon emissions. *Capacity*, the potential to reliably produce energy on demand, does not

[7] Rate Counsel at 2.
[8] AARP at 2.

produce carbon emissions by itself. It consequently makes little sense to adopt a policy like FRR, which is a way a utility might fulfill its *capacity* obligations, and retrofit it to be a decarbonization policy. Decarbonization policies should be focused on obtaining an ever larger supply cleaner *energy* to supply the system in an economically efficient manner.

Two prominent policy methods exist to reduce carbon emissions in the electric-power sector. One method produces fewer carbon emissions by taxing emissions or capping them, in effect raising the cost of those plants to produce energy and making other, cleaner plants relatively more viable. Another way to produce fewer carbon emissions is a Clean Electricity Standard ("CES") or like policy. Here, the goal is to crowd out fossil-fuel-based energy production by requiring instead a certain amount of megawatt-hours of production from clean energy resources; this happens when a state mandates the purchase Renewable Energy Credits ("REC") or Zero Emissions Credits ("ZEC"), where conventionally one REC or ZEC equals one megawatt-hour of production from an eligible facility.

Note how in either carbon price or a CES, the goal is to directly affect *the production of energy*—in a carbon price, less energy from fossil fuels, or in a CES, more energy from clean energy resources. This focus is sensible because, again, emissions are generally produced only when energy is generated—not merely when it *could* be generated.

FRR's subsidy regime for capacity is at best an attempted triple bank shot for environmental outcomes. This is made plain by the pricing methodology PSEG-Exelon propose in their FRR concept. Their scheme would entitle "clean" capacity to a right of first refusal to fulfill the FRR Entities' capacity obligations, at a premium above the price that would result in a competitively neutral capacity auction. PSEG-Exelon propose that consumers within the FRR zone would pay only the PJM market capacity price—ironically, the very price PSEG-Exelon

suggest will be unjustly driven up by MOPR. The additional premium for the FRR's "clean" capacity would then be socialized to all New Jerseyans "as payment for the resources' environmental attributes."[9] But neither the FRR nor supplemental payments guarantee a certain amount of megawatt-hours of clean energy production. Nor are these payments tied to those resources' performance in reducing carbon emissions on the grid. These payments have a merely aspirational link to environmental outcomes by not aiming at carbon emissions firstly and not even being aimed at energy production secondarily—again, a triple bank shot at best. The Board should not institute this phony payment for "environmental attributes."

Some may contend that the capacity and emissions are correlated. That does not answer why a state would not more directly aim at emissions or the energy that produces them. Moreover, to the degree that correlation exists at all, it will further erode in the future. A highly or fully decarbonized world that is suffused with mainly renewable sources of *energy* nevertheless likely will require certain resources that provide *capacity* but produce little energy. A study by the consulting firm E3 found that in a deeply decarbonized California, there would be many days or even months where no natural-gas-fired *energy* was generated—even though overall natural-gas *capacity* would hold relatively steady.[10] New Jersey should not set up a policy now to enact its forward-looking and visionary Energy Master Plan that is not aligned to the likely realities of a decarbonized future. It should, instead, choose one of the options that takes direct aim at carbon emissions.

[9] PSEG-Exelon at 4.

[10] Ming, Olson, De Moor, Jiang, and Schlag, "Long-Run Resource Adequacy under Deep Decarbonization Pathways for California," Energy & Environmental Economics (E3), June 2019, at 33-35. https://www.ethree.com/wp-content/uploads/2019/06/E3_Long_Run_Resource_Adequacy_CA_Deep-Decarbonization_Final.pdf.

2. A capacity-based plan like FRR is not a cogent pathway toward decarbonization.

At present, the New Jersey retail market is competitively structured to provide "electric generation service" which is defined as "the provision of retail energy and capacity."[11] Third-party suppliers provide this service, and non-shopping customers may take this service instead under the Basic Generation Service provided by their local electric distribution company.[12] PSEG-Exelon aver that in order to execute their FRR scheme that "certain conforming changes" would need to be made to the Electric Discount and Energy Competition Act ("EDECA"), the foundational statute permitting this retail competition. This "conforming change" would amend the product for which EDECA establishes competition to read "the provision of retail energy ~~and capacity~~."[13]

This is not the modest revision that the euphemism "conforming change" suggests. The only way PSEG-Exelon's proposal works is if it destroys the opportunity of third-party suppliers to bypass the capacity procured through the PSEG-Exelon scheme with competitive offers of capacity available elsewhere. PSEG-Exelon presumably would contend that limiting the competitive market is necessary to force otherwise unwilling customers to pay for the "environmental attributes" of the capacity. The non-cogent nature of this linkage is addressed above. But even if one grants that capacity and environmental attributes should be acquired in tandem, that is still not a reason to deny third-party suppliers an opportunity to find other sources of this supply of *both* capacity and environmental attributes at lower cost. Simply put, the path to New Jersey's environmental goals should involve more competition, not less competition.

[11] N.J.S.A. 48:3-51.
[12] *Id.*
[13] PSEG-Exelon at 16.

This erasure of competition is buried in the PSEG-Exelon proposal—though it really is its essence. The companies contend not to worry because, despite re-monopsonizing the capacity/environmental attributes market, there will be at least a handful of sellers of capacity/environmental attributes and that the state will be able to ordain a price cap.[14] Yet, in a design consciously premised on meeting the maximum amount of the state's capacity need from a pool of resources smaller than the state's capacity needs, the price cap is destined also to be the price floor, as there is no other mechanism to constrain the exercise of market power within the PSEG-Exelon proposal. That would lead to a recurring regulatory nightmare where rather than competition between sellers, the focus would always be on what the "appropriate" level of the price cap is. New Jersey should avoid that fate by firmly rejecting PSEG-Exelon's proposal.

Interestingly, a rival proposal submitted in this proceeding appears fundamentally at odds with the PSEG-Exelon FRR proposal in this regard. Sierra Club and NRDC support an FRR, but argue that if New Jersey were to undertake FRR, it should allow competition between *buyers* of capacity in the state in order to mitigate market power and ensure the best price for capacity/environmental attributes.[15] This is in stark contrast to the PSEG-Exelon proposal that is premised on the socialization of costs of whatever the FRR Entity (which is to say, themselves) procures. NRG opposes both forms of FRR—as should the Board—because there are superior carbon-reduction policies available *through* the regional market, rather than around it. However, Sierra Club-NRDC at least recognize that market forces on the retail side must be brought to bear—as both New Jersey law and the PJM tariff related to FRR provide for—in order to protect against abuses of market power through the establishment of nonbypassable rates charged to captive ratepayers.

[14] PSEG-Exelon at 14.
[15] Sierra Club/NRDC at 24-25.

In the quest for decarbonization, harnessing the benefits of broad regional competition to secure the desired quantity of clean resources is the key to maintaining consumer affordability while achieving aggressive clean energy goals. Either proposal for FRR would do the opposite, attempting to achieve carbon goals in an indirect and inefficient way without any guarantee of verified emissions reductions, much less guaranteed success in deep decarbonization.

3. Consumers should not be locked into nonbypassable long-term contracts.

Throughout the country, we are witnessing the consequences of tying consumers to long-term supply arrangements which, if they prove to be uneconomic, consumers nevertheless pay for. Indeed, it is this regulatory phenomenon more than any other that has *prevented* decarbonization from more swiftly occurring in parts of the country that did not restructure their vertically integrated monopolies.[16] And of course it was a previous generation of such lock-ups that was a key reason that policymakers restructured electricity markets in the first place. PSEG-Exelon's proposal stands expressly for this risk–shift. Worse, the long-term contracts it proposes would be *even more risky* for consumers than old-fashioned utility regulation ever was.

The massive energy transition that will have to occur over the next three decades to decarbonize the economy involves one point of certainty: the need to move to fewer and ultimately no atmospheric release of emissions from electricity generation. But there is substantial disagreement as to how we will get there. Some forecast a largely decentralized future, others a vast and interconnected grid; some project an entirely renewable portfolio, while others project significant gas capacity run at a low capacity factor on renewable natural gas, even

[16] The think tank Energy Innovation's research suggests that long-term contracts and rate-base-style supply arrangements are present in the vast majority of coal resources that remain online despite being uneconomic. Michael O'Boyle, "Utilities Running Uneconomic Coal Plants Cost Consumers $3.5 Billion from 2015-2017," *Forbes* (Dec. 3, 2019). https://www.forbes.com/sites/energyinnovation/2019/12/03/utilities-running-uneconomic-coal-plants-cost-consumers-35-billion-from-2015-2017/#790d34e342d1.

as others speak of a renaissance for nuclear or hydroelectric technologies. Given the momentous nature of the transition and the uncertainty around what precise technologies (and owners) will most efficiently move society there, "long-term contracts" may sound like a pleasing and sure bet. But in effect long-term contracts with particular technologies and particular owners are a big bet on a particular mix of resources. The risk of that bet, once the contract is inked, is shifted to consumers, even though they are in no position to manage that risk.

PSEG-Exelon are specifically suggesting a contract for differences, where resource owners would offer a long-term lock-up of their capacity/environmental attributes in the FRR procurement and then have that price adjusted up or down in subsequent years depending on year-ahead projected energy revenues.[17] This arrangement would leave consumers picking up the tab if and when energy revenues fall lower—which in a highly decarbonized world, suffused with zero-marginal-cost resources that suppress energy-market clearing prices, they likely will. Perversely, this paradigm of long-term contracting, but with a price for "environmental attributes" that fluctuates, *grows more expensive with time*. Additionally, technology advances likely will drive the future cost of new clean energy down, as we have seen with wind, solar, and storage. But the consumers that are locked into the FRR long-term contracts will not realize any savings, even as PSEG-Exelon reap the benefits of locking in their higher costs over the long-term. That is bizarre, and as NRG proposed in its initial comments, an appropriate market design for clean energy can avoid this.[18]

Finally, PSEG-Exelon offhandedly propose: "To eliminate any concern regarding the balance-sheet impact of the EDC selected to be the FRR entity that could result from carrying long-term capacity and attribute contracts, legislation should allow the EDC to securitize its cost

[17] PSEG-Exelon at 8.
[18] NRG at 14-24.

recovery."[19] This is a remarkable statement. PSEG-Exelon are saying it is too risky for an EDC to bear the risk of these long-term contracts, so it will be necessary to create a special legislative vehicle to ensure consumers unavoidably bear the risk. Securitization is a method by which special-issue bonds guaranteed by ratepayers, even in the face of the bankruptcy of the commercial parties to the clean-energy supply agreement, are issued to support these investments. Typically, securitization as a regulatory treatment has been reserved for long-term monopoly investments whose economics have turned upside-down; thus, in order to provide an offramp toward more economic investments or a policy of liberalization, consumers through securitization have been made to swallow utilities' medicine and bail out those firms' stranded costs.[20] If New Jersey were to adopt PSEG-Exelon's proposal here, it might mark the first time where securitization was used *from the start* of an investment's life. This is quite an admission about the likely fortunes of the scheme these monopolies propose.

C. The Board Noticed Various Other Decarbonization Pathways that PSEG-Exelon and Other FRR Proponents Largely Ignore.

The Board's notice asked thoughtful questions about CES design and carbon pricing.[21] These topics have received unfortunately little attention from FRR proponents. NRG's initial comments largely focus on the design of CES and an engine, the Forward Clean Energy Market, to achieve it.[22] We also argued that retail market reform—something solely within the Board's discretion—is a fruitful avenue for the Board to pursue if its goal is more clean-energy investment. The American Council on Renewable Energy supports this pathway to an "enhanced

[19] PSEG-Exelon at 10.
[20] Regulatory Assistance Project, "Securitization: In Search of the Proverbial Free Lunch," (2016). https://www.raponline.org/wp-content/uploads/2016/05/rap-issuesletter-securitization.pdf
[21] Notice, Topics 2(c) and 4.
[22] NRG at 14-24. The Advanced Energy Companies also provided comment on FCEM, among other ideas. Advanced Energy Companies at 35-36.

retail electric market" as well,[23] and the Advanced Energy Companies also observe that the ability to procure long-term resources through a retail market structure should be considered by the Board.[24] Notwithstanding that it is housed within an FRR proposal, even Sierra Club-NRDC promote the wider use of retail competition as an avenue toward achieving New Jersey's clean energy goals.

PSEG-Exelon critically refer to a CES as an "alternative approach [that] would still trigger FERC's new bidding requirements under the expanded MOPR."[25] In our initial comments, we offered a framework of cooperative federalism, which could commence were New Jersey to take action to issue a request for proposals to the market operator to facilitate a robust, transparent, and competitive trade in clean energy.[26] PJM has been notably solicitous of states in recent months. NRG believes if called upon to do so, PJM would design and ultimately propose to FERC a market for clean energy where state-induced demand could be cleared in a competitive manner. New Jersey is rightfully concerned about whether the competitive wholesale markets and its clean energy objectives are compatible over the long term, but as the Environmental Defense Fund contends, it would be rash to adopt FRR rather than pursuing a regional, competitive approach.[27] The time is now for New Jersey to take a leadership role in shaping a new regional, clean energy market.

As well, many parties promote carbon pricing to accomplish a shift toward less-carbon-intensive resources. PSEG-Exelon contend "leakage" makes this solution nonviable. They observe: "Leakage occurs, for example, when a carbon-emitting resource in New Jersey reduces

[23] ACORE at 1-2.
[24] Advanced Energy Companies at 31-32.
[25] PSEG-Exelon at 5.
[26] NRG at 22-24.
[27] Environmental Defense Fund at 3.

output, but then a resource in another state with the same (or worse) carbon emissions profile increases output to replace the reduction in New Jersey generation."[28] That same criticism is even more true when applied to the utilities' FRR proposal. Because their proposal is unconnected to energy production, as noted above, it would do nothing to control fossil-based energy production outside of New Jersey—including that which is imported to serve the state. Carbon pricing has a greater chance at controlling leakage because by being energy-production-related, it at least is open to design modifications that include a border adjustment whereby imports to serve New Jersey customers could be assessed an actual or shadow carbon price adder, affecting dispatch elsewhere.[29]

CES likewise controls for this by being open to regional aggregation of demand and supply.[30] Additionally, we note that the Energy Master Plan suggests imputed transmission limitations within a CES to ensure that resources that are not deliverable to the state cannot supply the market clean energy credits in excess of those constraints.[31] It is not unreasonable to entertain some limit so that resources whose underlying energy would not be deliverable to New Jersey are not qualified to supply clean energy credits to New Jersey customers.

II. Conclusion

FRR is an early leader to be the most overhyped policy "solution" of this decade. After so much PR has been galvanized toward it, it is shocking how little there is to commend to it when the details of PSEG-Exelon's particular scheme are made plain. Now is the time for New Jersey

[28] PSEG-Exelon at 5.
[29] PJM's Senior Carbon Pricing Task Force has conducted numerous analyses on border adjustments in this regard, which the Board may draw from.
[30] NRG at 18-20.
[31] EMP, p. 104.

to seize the opportunity and focus on more viable policy approaches to support its worthy clean-energy ambitions.

Respectfully Submitted,

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