

The PJM Board of Managers
c/o Mark Takahashi, Chairman
PJM Interconnection, L.L.C.
2750 Monroe Boulevard
Audubon, PA 19043

September 1, 2022

Dear Chairman Takahashi and Board Members,

Every four years, PJM has an opportunity to revisit the parameters of the demand curve for the Reliability Pricing Model. This Quadrennial Review is critical to ensuring that PJM's capacity market procures an appropriate amount of capacity and sends accurate price signals for resource entry and exit. We write to encourage you to adopt a package for the Quadrennial Review filing that will ensure grid reliability while reducing harm to consumers and the environment from over-procurement of capacity. The packages put forward by PJM staff and the Independent Market Monitor (IMM) make important steps toward right-sizing the capacity market.

The PJM staff and IMM packages call for using a Combined-Cycle (CC) gas plant as the market's reference resource and a forward-looking Energy & Ancillary Services (E&AS) Offset. These choices align with market realities, send more accurate price signals, better match markets with state policies, and better protect consumers. The PJM and IMM packages also shift the capacity demand curve to procure lower quantities, but the IMM's proposal goes further. Although no package received super-majority approval from the Markets & Reliability Committee, the PJM staff package received the greatest support, showing broad recognition of the need to strike a better balance on procurement levels and price.

We share the Board's concern with over-procuring capacity, which harms consumers, front-line communities, and the environment. Historically, PJM's consistent over-procurement has needlessly cost consumers billions of dollars.¹ Although the recent auction reduced procurement and overall prices, it nonetheless resulted in substantial, costly over-procurement. Moreover, over-procurement often functions as a subsidy for fossil-fuel fired power plants that are commonly situated in disadvantaged communities, causing harm through higher energy bills and pollution.² Further, by driving more investment in fossil-fuel plants than necessary for reliability, over-procuring capacity exacerbates climate change and undermines state climate policies. As Chairman Glick put it, "PJM's capacity market is designed to procure too many resources at too high a price, with obvious harm for customers."³

PJM has already taken steps to begin correcting harmful over-procurement, such as improvements to load forecasts and, in the last Quadrennial Review, eliminating a 1% shift in its demand curve. But more needs to be done, as the latest auction's over-procurement proves.⁴

The Brattle Group recommends shifting the reference resource to a CC gas plant, thus aligning the capacity market with actual development while lowering overall costs and procurement. Combustion turbine gas plants (CT) are considerably costlier on a Net CONE basis and are not

actually being built in PJM, while CCs are more efficient and are built far more commonly in this area. Because “CTs continue not to be built” in the PJM region and are rarely run, Brattle found that it is harder to accurately estimate the Net CONE of a CT compared to a CC. Retaining CTs as a reference resource would not only fail to represent the reality of new entry in PJM, but would also increase the risk of a significant error in the determination of Net CONE.⁵

As PJM staff and Brattle also stress—and as PJM previously implemented⁶—a forward-looking E&AS offset will yield lower and more accurate capacity prices and reduce over-procurement. A forward-looking methodology allows the capacity market to reflect existing market trends, but a backward-looking methodology inaccurately locks in “distortions from anomalous conditions” in prior years.⁷ A forward-looking E&AS offset will also allow the capacity market to reflect future reforms and avoiding overcharging consumers for capacity, but a backward-looking offset can lock in “anomalous market conditions” and send “incorrect price signals.”⁸ A backward-looking E&AS offset would artificially inflate capacity prices by ignoring actual market trends.

Both the PJM and IMM proposed demand curves would reduce harmful over-procurement, and both fall well within the “‘workable range’ of curves” that Brattle explains would “offer sufficient system reliability.”⁹ Importantly, the IMM’s proposed demand curve offers a more significant opportunity to mitigate harmful over-procurement without sacrificing reliability.

Overall, the PJM and IMM packages represent reasonable methods to improve the capacity market by reducing harmful over-procurement while still ensuring that the market sends accurate price signals to maintain grid reliability. In contrast, other packages, which would retain CTs as the reference resource and/or feature an inaccurate, backward-looking E&AS offset, would needlessly perpetuate over-procurement and harm consumers and the environment.

For these reasons, we respectfully recommend that the Board adopt either the PJM staff or the IMM proposals regarding the reference resource and E&AS Offset. We prefer the IMM’s proposed demand curve, which would better reduce over-procurement, but we recognize that PJM staff’s proposal is also a reasonable step in the right direction.

Sincerely,

Nick Lawton
Earthjustice

Casey Roberts
Sierra Club

Tom Rutigliano
Natural Resources Defense Council

John Moore
Sustainable FERC Project

Nicholas Guidi
Southern Environmental Law Center

Dave Kolata
Illinois Citizens Utility Board

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Robert Glover, Esq.
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Maryland Office of People's Counsel

Frederick Heinle
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¹ See, e.g., James F. Wilson, *Over-Procurement of Generating Capacity in PJM: Causes and Consequences*, at 12-14 (February 2020), available at <https://www.sierraclub.org/sites/www.sierraclub.org/files/blog/Wilson%20Overprocurement%20of%20Capacity%20in%20PJM.PDF>

² See, e.g., NAACP, *Coal Blooded: Putting Profits Before People*, at 23–30 (discussing environmental justice impacts from U.S. coal plants), available at <https://naacp.org/resources/coal-blooded-putting-profits-people>

³ *PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,040, 61,397 (Glick, dissenting at ¶ 2) (2020).

⁴ The most recent auction procured a 20.3% reserve margin for the entire RTO, roughly 5.5 percentage points higher than the target reserve margin. While this shows progress from prior auctions, much of the reduced cost came from lower capacity prices due to the clearing of cheaper sources of capacity.

⁵ The Brattle Group, *PJM CONE 2026/2027 Report*, at 16-18 (noting that “CTs continue not to be built” and that “their RTO Net CONE is about 20% higher than the CC”); *id.* at 16 (“If Net CONE is mis-estimated, the VRR curve will procure more or less capacity than desired.”); *id.* at 18 (noting that “CC Net CONE can be estimated relatively accurately” and explaining why Net CONE is more difficult to estimate for CTs).

⁶ PJM implemented a forward-looking offset at FERC’s direction, but the Commission later determined it lacked the authority to require PJM to change its offset because it was reversing its prior determination under Section 206 regarding PJM’s Reserve Pricing proposal. However, FERC’s rejection of the broader Reserve Pricing reform was not a judgment on the forward-looking offset itself; instead, FERC specifically noted that it was “not determining that a forward-looking E&AS Offset is unjust and unreasonable.” *PJM Interconnection, L.L.C.*, 177 FERC ¶ 61,209 at P 25 (2021).

⁷ The Brattle Group, *PJM CONE 2026/2027 Report*, at vii; see also *id.* at 51 (“Not only are past prices reflective of outdated fundamentals regarding demand, supply, fuel prices, and transmission; worse, they may include anomalous weather conditions that substantially distort the calculation and make it unduly volatile.”). For example, a backward-looking approach would ignore much higher natural gas prices that have resulted from changes in international energy markets.

⁸ *PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,153 at P 319–320 (2020) (noting that “a forward-looking offset . . . will better reflect changing market conditions and rules” and “will allow changes to energy and ancillary services revenues stemming from energy market design modifications to be more readily incorporated into capacity market parameters and prices”); *id.* at P. 312–313 (noting that a backward-looking E&AS offset “is easily distorted by anomalous market conditions in one year that are not representative of what market participants can expect in future delivery years” and that such “incorrect price signals could result in over-procurement of capacity with higher prices

passed through to load”); *see also id.* at P. 308–24 (finding a PJM proposal for a backward-looking E&AS offset to be unjust and unreasonable and directing PJM to establish a forward-looking offset).

⁹ *See* The Brattle Group, *Fifth Review of PJM’s Variable Resource Requirement Curve For Planning Years Beginning 2026/2027*, at iv–v, available at <https://www.pjm.com/-/media/committees-groups/committees/mic/2022/20220422-special/brattle-pjm-fifth-vrr-curve-study-2026-27---final>.