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Memorandum

Subject: E-Cubed Policy Associates, LLC RBP Package

From: Paul M. Sotkiewicz, Ph.D.

To: PJM Members Committee and PJM Board of Managers

CC: All Other Interested Stakeholders

Date: June 23, 2026, presented June 30, 2026

INTRODUCTION

E-Cubed Policy Associates, LLC (“E-Cubed”) appreciates the opportunity to provide this memorandum regarding its proposal for the so-called “Reliability Backstop Procurement” (“C&M”) proposal in the current Critical Issue Fast Path - Reliability Backstop Procurement / Connect & Manage process (“CIFP”).

E-Cubed appreciates the work PJM staff has devoted to the RBP proposal. However, PJM’s proposal has significant flaws that are likely to prevent RBP from attracting the desired new entry and from providing the market information needed to support bilateral contracting, which Members view as the preferred outcome.

E-Cubed does not object to the bilateral contracting component of PJM’s RBP proposal, because such contracting can occur before or after the RBP auction that PJM intends to begin in mid-September. However, the RBP auction, as currently structured, would discourage bilateral arrangements before the auction.

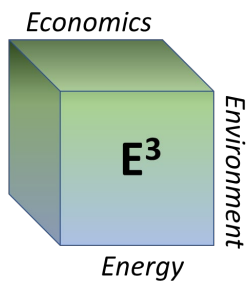
As discussed below, tailoring the RBP auction to established best practices would reveal information that supports bilateral contracting before and after the auction while also attracting resources through the auction itself.

E-CUBED PROPOSAL DIFFERENCES FROM PJM

While E-Cubed largely adopts the bilateral contracting portion of the PJM RBP proposal, the key differences are with respect to the RBP auction structure itself.

Require an active demand-side of the market by requiring large loads or PJM LSE members acting as their agent to bid their willingness to pay without any cap as part of the RBP auction.

Efficient auction structures require active demand-side participation. Market makers such as the Intercontinental Exchange (“ICE”) include demand-side bids for



commodities such as electricity and gas, as well as supply-side offers to sell. The RBP auction should operate the same way.

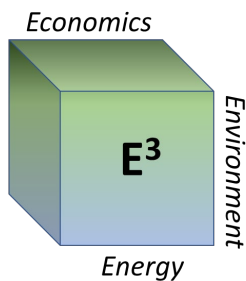
Large Loads not yet in service at the start of the 2026/2027 Delivery Year should be required to submit bids to procure RBP capacity and may state any willingness to pay based on the value they assign to generation capacity. Large Loads may be exempt from this requirement if they can demonstrate that they have contracted for capacity that will be in service after June 1, 2028, and before June 1, 2032.

Having information on willingness to pay as part of the auction reveals much about the state of the market and the willingness of large loads to pay for new capacity to ensure their reliable operations.

Allow offers to supply to be provided without any cap as part of the RBP auction.

PJM's current Stage 4 proposal to cap offers at \$555/MW-day is simply untenable for multiple reasons as it is unlikely to attract the needed supply as it fails to account for the actual costs of new capacity as well as the inherent uncertainties in ELCC capacity evaluation over time, uncertain energy and ancillary service net revenues ("EAS"), and uncertainty regarding transmission upgrade costs.

- 1) The VRR cap is based on an understated estimate of the cost of a CT (and the same is true for the Gross CONE of a CC) and cannot account for the actual quoted costs of CC and CT cited by PJM in its Investment Paper which shows combined cycle capital costs of \$2200/kW. Further, GridLab has recently published a report on new generator costs that are well above those used for the \$555/MW-day offer cap. It is attached to this memo for the PJM Board's reference.
- 2) PJM's proposed cap is well below the UCAP costs for solar, wind, and storage that are most likely to be immediately available given the majority of GIAs executed from Transition Cycle 1 ("TC 1") and in process in Transition Cycle 2 ("TC 2") are wind, solar, and battery energy storage resources with known transmission costs. Yet these resources also face ELCC risk that is beyond their control and PJM's proposed cap does not account for that risk.
- 3) The proposed PJM cap is based upon the 20-year Net CONE and not 15 years maximum available in the awarded contract. It is reasonable to expect that suppliers offering into the RBP auction will offer based on recovering their full costs over the 15-year horizon.
- 4) The proposed PJM cap is based upon an EAS offset that is but for a single year for which there are known forward energy market quotes. Over the course of 15 years, EAS revenues can change in ways that cannot be anticipated due to rapid



changes in technology, generation topology, and changing macroeconomic conditions among other variables.

- 5) For those suppliers who are in the Cycle 1 Interconnection Queue transmission upgrade costs are unknown and will not have any visibility until AFTER the proposed closure of the RBP auction window that happens in mid-November. Decision Point 1 in which some estimates from Cycle 1 for transmission upgrade costs commence at the end of November and close in late December.

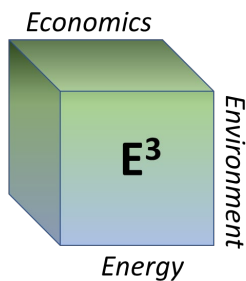
Include CIR Uprates in Eligible Supply

PJM Proposes to not permit CIR Uprates to be included as new supply for the purposes of the RBP auction. This is a mistake as while these MW may already exist as “energy only” without CIRs but are not counted toward meeting the resource adequacy targets in PJM. This may be the easiest “new” capacity to get into RPM as they are not constrained by supply chain or permitting issues. Yet PJM is rejecting these CIR uprates. Further, absent CIRs PJM cannot count on the extra MW in service to be deliverable when needed.

Eliminate the Gating Criteria as it is not well-defined, serves as a barrier to entry, and is not consistent with the way projects are developed and brought to commercial operation.

PJM’s proposed gating criteria is well intentioned, but misplaced.

- 1) First, there is a lack of well-defined rules on what constitutes a financing plan and permitting plan. Thus, going into the RBP auction, potential suppliers will be in the dark regarding what is or is not acceptable.
- 2) Second, project development does not start with financing parties already arranged, nor does a project developer have any control on how the siting and permitting processes will play out as they can be long, drawn out, and unpredictable.
- 3) Asking for gas pipeline commitments ahead of receiving a RBP auction award is putting the cart before the horse. Only after an award is given will such commitments commence.
- 4) PJM’s Stage 4 credit proposal for supply resources provides sufficient incentive to deliver on RBP commitments. For example, based on anonymous conversations over bilateral pricing for existing resources prior to December 2024, if a resource offered at \$600/MW-day and the clearing price was \$700/MW-day, the RBP supply resource would need to post three years of RBP penalties as credit. To simply get into the auction an offering supplier would need to post \$131,400/MW offered, or a total of \$131,400,000 for a 1000 MW UCAP



resource. At a \$700/MW-day clearing price, the amount of credit that would need to be posted would be \$153,300,000. With this kind of credit at risk, a developer has every incentive to deliver.

- 5) Finally, much of the gating criteria proposed by PJM that are outside of the interconnection process are not required of any bilateral arrangements nor are they required of projects going through the PJM interconnection queue. It gives the appearance of undue discrimination to force such requirements for the RBP auction in light of how other projects are treated.

Market Clearing Based on Uniform Clearing Prices not Pay-as-Bid.

Uniform clearing prices provide a strong incentive to reveal the "true" costs and "true" willingness to pay. In contrast, pay-as bid is known to lead to higher cost and inefficient outcomes and provides incentives to "guess" the highest offered price that clears on the part of the supply side.

Market clearing based on a uniform clearing prices with submitted demand bids from large loads and uncapped offers from supply resources provides true price discovery on the costs to build and willingness to pay and can facilitate future bilateral contracting regardless of how much capacity clears the RBP.

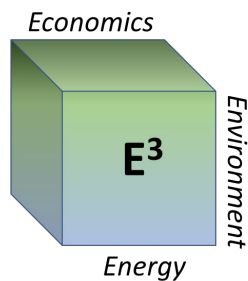
PJM's stance in earlier Stage meetings that "pay-as-bid" was chosen to mimic bilateral market outcomes is misguided. It is uniform clearing prices that help provide the best information for parties to enter bilateral contracts and hedging arrangements. This is seen and practiced daily on ICE where price discovery allows parties to engage bilaterally for commodities in the short term. The same principle applies in the RBP auction context.

The uniform clearing price is the highest levelized cost offer needed to clear the market (where supply equals demand).

Allow for Committed RBP Resources to Replace its Commitment.

PJM's Stage 4 proposal would not allow such replacement. However, like RPM Committed Resources that are permitted to replace their commitments through a bilateral transaction or Incremental Auctions ("IA"), RBP committed resources should be permitted to replace their capacity commitments for up to three years if they fail to reach commercial operation for any reason.

However, replacement can only be done after the 2nd IA prior to the Delivery Year in which the RBP committed resource has a commitment. The circumstances under which replacement capacity would be available would be either as yet uncommitted capacity in



RPM or Planned Resources that have not year cleared the BRA or the 1st IA or 2nd IA for the Delivery Year.

Such a mechanism still provides a strong incentive for an RBP committed resource to take every action possible to reach commercial operation, yet also provides it the ability to minimize its RBP penalties while helping preserve resource adequacy.

Credit and Counterparty Issues

While E-Cubed largely adopts PJM's credit requirements, there is one small tweak E-Cubed offers. Given the proposal for an active demand-side, large loads that are PJM members or their LSE agents acting on their behalf, must post sufficient credit to ensure that in the case a large load does not reach commercial operation for any reason, the broader PJM membership is less likely to face a default for failure to pay.

Thus, while PJM Settlement, Inc. serves as the counterparty for RBP auction transactions, the LSE agent or large load itself must post sufficient collateral with PJM that shows it "seriousness" regarding its ability to pay for new capacity procured on its behalf. If the LSE agents must post significant collateral, then the LSE agent has a strong incentive to ensure it receives sufficient collateral from the large load to prevent it from incurring the costs of default first before PJM Members face default risk on the whole.