

**MARYLAND OFFICE OF PEOPLE’S COUNSEL
RESPONSE TO PJM INTERCONNECTION,
LLC’S POWERING RELIABILITY THROUGH MARKET DESIGN PAPER**

August 31, 2026

On August 4, 2026, PJM Interconnection, LLC published a call for papers seeking additional feedback from PJM members and states regarding its *Powering Reliability Through Market Design* (“PRTMD”) paper and a prospective process to develop responsive market design rules.¹ The Maryland Office of People’s Counsel (“OPC”) is an independent state agency that represents the interests of Maryland residential and noncommercial utility customers. OPC participates in PJM’s stakeholder process as a member of the End-Use Customer sector.

On January 16, 2026, the PJM Board of Managers (“PJM Board”) directed PJM Staff to “analyze how the energy, reserve and capacity markets can evolve in a coordinated manner to provide appropriate incentives for both investment and performance” in support of resource adequacy.² Upon completion of this analysis, the Board also directed PJM to engage stakeholders on these topics, with the objectives of advancing “necessary changes to the energy and reserve markets that are already underway” and ensuring that “such changes are aligned with anticipated reforms to support resource adequacy.”³

In response, PJM issued its PRTMD paper on May 6, 2026 and presented it at the May 20 Markets & Reliability Committee meeting.⁴ Subsequently, PJM initiated a PRTMD Workshop

¹ PJM, *Powering Reliability Through Market Design Workshops: Request for Papers* (Aug. 4, 2026), <https://www.pjm.com/-/media/DotCom/committees-groups/workshops/prtmw/postings/2026/20260804-call-for-papers.pdf>

² PJM Board, *Board Decisional Letter on Critical Issue Fast Path – Large Load Additions* (Jan. 16, 2026), <https://www.pjm.com/-/media/DotCom/about-pjm/who-we-are/public-disclosures/2026/20260116-pjm-board-letter-re-results-of-the-cifp-process-large-load-additions.pdf>, at 7.

³ Id.

⁴ PJM, *Powering Reliability Through Market Design: Addressing Rising Demand and Constrained Supply, and Stimulating Investment to Support Durable Reliability* (May 6, 2026), <https://www.pjm.com/->

process and held three meetings, on June 12, July 15, and July 29, during which stakeholders reviewed PJM’s assessment and provided feedback on related topics. The PRTMD paper identifies significant changes affecting the region, including rapid growth in forecasted electricity demand from large loads, longer development timelines for new generation, and increasing uncertainty surrounding the revenues needed to support new generator investment. PJM did not recommend a single market design path but instead presented several potential approaches and invited further engagement from stakeholders.

This paper provides Maryland OPC’s current assessment of the challenges facing resource adequacy in PJM and its evaluation of the PRTMD paper. It also provides initial responses to the seven specific questions PJM requested feedback on in the request for papers.

EXECUTIVE SUMMARY

The resource adequacy challenges facing PJM are driven principally by unprecedented forecast growth from large loads. Unlike conventional load growth, individual large load additions can exceed 1 gigawatt (“GW”) in size, and may be delayed, reduced, relocated, or canceled even after substantially affecting PJM capacity and transmission planning. PJM’s response to the resource adequacy challenges caused by large load additions should address not only how to attract sufficient supply, but also who bears the costs if that forecast demand does not materialize as expected.

Financial and reliability risks associated with uncertain demand growth should be assigned to the large loads creating that incremental need. Large loads seeking firm service should provide credible financial or operational commitments corresponding to the capacity and

reliability needs they create. Likewise, greater long-term revenue certainty for new generation should be supported by correspondingly durable demand commitments. PJM cannot strengthen the credibility of its investment signal without also strengthening the credibility of the projected demand underlying that signal.

Accordingly, Maryland OPC supports a targeted and coordinated approach that builds upon the initiatives PJM is already pursuing rather than significantly overhauling the existing resource adequacy framework. We do not recommend adopting Path A, Path B, or Path C in its entirety. Under Path A, longer-term commitments may have a role when supported by credible demand commitments, preferably through voluntary arrangements that place the corresponding obligation on the customers creating the need. Under Path B, new large loads seeking firm service should support the capacity necessary to provide that service or accept priority curtailment if they connect before adequate capacity is available. Under Path C, PJM should continue improving energy and ancillary services (“E&AS”) incentives for flexibility, reserves, commitment, and performance without prematurely shifting away from the regional capacity market construct. We also recommend that PJM consider additional approaches, including “Commit-to-be-Counted” requirements and a “Large Load Reliability Service,” which would more directly link resource adequacy treatment and firm service to credible commitments from new large loads. PJM should evaluate these and other targeted reforms already underway before pursuing a broader restructuring of PJM’s capacity market design, referred to as the Reliability Pricing Model (“RPM”). This approach can preserve regional reliability and competitive investment while protecting existing customers from risks created by uncertain new demand.

BACKGROUND AND ASSESSMENT

A. PJM has presented its diagnosis and proposed paths forward.

The PRTMD paper identifies significant changes in the conditions that have historically surrounded PJM's RPM. PJM specifically identified three simultaneous structural forces affecting its system today:

1. Unprecedented surge in demand driven primarily by the rapid expansion of data centers;
2. Accelerated retirement of dispatchable generation due to policy and economic pressures; and
3. Significant friction in the supply chain and permitting processes that has elongated the time required to bring new resources online.⁵

PJM is concerned that the assumptions under which RPM functioned for nearly two decades no longer hold in the face of these structural forces. In contrast to current conditions, the past two decades were a time of slow load growth, approximately three-year generation development timelines, and merchant investment supported by annual market revenues.⁶ PJM argues that changed market conditions have created a growing mismatch between RPM's three-year forward procurement horizon and the apparently longer period now required to finance, permit, and construct new resources.⁷ As development timelines have lengthened, PJM further observes that developers increasingly require greater certainty regarding future revenues, often through long-term offtake agreements, than annual capacity-market revenues alone may provide.⁸

PJM also describes what it characterizes as a "Credibility Trap" affecting the market's ability to attract investment.⁹ In PJM's account, scarcity prices are intended to signal the need for additional capacity and induce entry of new generation, but corresponding price increases can prompt government intervention. PJM argues that such intervention creates uncertainty regarding

⁵ Id at 9.

⁶ Id at 11, 15.

⁷ Id at 4-5, 45-46.

⁸ Id at 5, 31-32.

⁹ Id at 26-27.

whether future market revenues will remain sufficiently durable to support investment. This, in turn, weakens investor interest in developing capacity and prolongs scarcity pricing.

Against this backdrop, PJM identifies three potential paths for longer-term reform. Path A would preserve the existing concept of shared regional reliability while increasing reliance on long-term capacity commitments or hedging to provide greater revenue certainty to suppliers and protect load from short-term price volatility.¹⁰ Path B would differentiate reliability by allowing customers that do not support adequate capacity to receive a lower level of service during scarcity conditions.¹¹ Path C would shift a greater portion of resource adequacy revenue recovery from the capacity market toward the E&AS markets, coupled with increased reliance on long-term energy contracting.¹² PJM does not recommend a single path and recognizes that components of the three approaches are not necessarily mutually exclusive.

B. Large load growth is central to the current resource adequacy problem.

PJM correctly identifies challenges faced by its market: rapidly growing demand from large load, reductions in supply due to retirements, delays in the development of new supply, and investment uncertainty. These three factors are creating stress on both reliability and affordability. The identified factors should not, however, be treated as co-equal causes of present resource adequacy challenges. The unprecedented scale, uncertainty, and velocity of forecasted large load growth is the principal new circumstance distinguishing current conditions from prior periods of market tightness.

PJM's load forecasts anticipate substantial increases in peak demand in a matter of years, with large loads accounting for the overwhelming share of projected growth while growth from

¹⁰ Id at 29-36.

¹¹ Id at 37-39.

¹² Id at 39-44.

other customer classes remains limited.¹³ While other factors affect the current imbalance, the magnitude and immediacy of the projected shortfall of generation as compared to demand corresponds with the extent to which forecasted load growth materializes. Large load growth therefore transforms otherwise familiar market and development constraints into a potential resource adequacy crisis.

The distinction between forecasts of large load growth and the other factors is important because large load additions also create an unprecedented kind of demand uncertainty.

Traditional sources of load forecast error, such as weather and economic growth, are diverse and probabilistic by nature. Large load additions are discrete, very large increments associated with identifiable commercial actors. The treatment of their prospective interconnection therefore determines the quality of the capacity signals for which PJM plans around and procures through RPM. Exogenous demand uncertainty makes load forecasting, verification, and accountability central, rather than peripheral, design questions for resource adequacy. Large load additions should be viewed as more than a proximate contributor to current conditions. The other conditions PJM identifies—resource retirements, longer development timelines, supply-chain and permitting constraints, and investor concern regarding revenue durability—would not present the same acute resource adequacy problem absent the unprecedented scale and speed of large load additions.

C. Reform should preserve the benefits of RPM and the PJM pool while addressing large load growth.

Capacity markets can and do provide value when functioning effectively. RPM has historically provided a transparent, regional mechanism for procuring capacity. Competitive

¹³ Maryland OPC, *Powering Reliability Through Market Design – Initial Considerations and Recommendations*, presentation to PRTMD Workshop (Jul. 15, 2026), at 7.

entry shifts generation investment risk away from captive retail customers. Regional pooling allows participating systems to meet a common reliability standard with less aggregate capacity than would be required if each utility planned independently for its own peak load and contingencies. The broader PJM pool has also provided reliability and cost benefits by allowing geographically diverse load and supply resources to respond jointly to system contingencies.

Those benefits should be preserved. However, realizing those benefits depends on accurately identifying the capacity the region actually needs and allocating the resulting costs and risks appropriately. Capacity markets falter when they rely on faulty information (i.e., “garbage in, garbage out”) and stray from basic regulatory principles, including beneficiary-pays cost allocation, protection of captive customers, and assignment of risk to the parties best able to manage it. Those principles are particularly important where large load additions create substantial new planning and procurement obligations. The appropriate objective is therefore not to abandon the RPM, but to preserve the benefits of the PJM pool while assigning incremental costs and risks to the entities that cause and can manage them.

D. Market credibility requires credible commitments from demand and, in particular, large load additions.

RPM’s current treatment of prospective large loads is not incentive-compatible. A large load can cause PJM to increase its forecasted reliability requirement—and thereby increase capacity procurement, transmission planning, and the market signal for new investment—without making a corresponding commitment to take service or bear the costs created if its forecasted demand does not materialize.

This creates an asymmetric allocation of risk. Existing customers bear higher capacity and transmission costs as the system plans for substantial new demand. Suppliers receive an investment signal based on that forecasted demand. The new large loads underlying the forecast,

however, remain free to delay, relocate, reduce, or abandon the project. The large load therefore retains the flexibility associated with an uncertain project while existing customers and suppliers bear the consequences of acting on its forecasted demand. This asymmetry also undermines the investment signal PJM seeks to strengthen: suppliers cannot know whether a scarcity signal reflects durable demand capable of supporting a long-lived investment or demand that may disappear after investment decisions have been made.

The same concern that PJM identifies with respect to the durability of supply-side revenues therefore applies to the durability of the demand underlying those revenues. The resulting “credibility gap” is not solely political as suggested by the “credibility trap” that PJM postulates. It is also a market and regulatory problem. A market cannot produce efficient investment signals if the demand creating those signals is not itself credible, and regulators cannot reasonably be expected to accept outcomes that do not ensure cost causers are held responsible. All of these concerns point to the same design need: durable, verifiable commitments. In the case of demand, these commitments must exist *before* prospective demand creates corresponding resource adequacy obligations. Reforms should align the incentives of new large loads with the costs and reliability consequences their entry creates, including requiring them to bring or fund capacity, reduce demand, or accept priority curtailment where adequate capacity is unavailable.

E. Other PJM resource adequacy efforts should build on reforms already underway before undertaking a broad redesign.

Previous proceedings and parallel PJM initiatives should be taken into consideration as PJM determines the path forward. PJM has already undertaken or initiated a number of reforms addressing the same resource adequacy concerns raised in PRTMD. These initiatives are

significant because they may materially affect the need for, scope of, and sequencing of any broader structural changes.

1. Recent Large Load and Resource Adequacy Reforms via CIFP proceedings

The 2025 Critical Issue Fast Path (“CIFP”) on Large Load Additions and the 2026 CIFP addressing Reliability Backstop Procurement (“RBP”) and Connect & Manage produced several reforms directly responsive to the rapid growth of large loads.¹⁴ These include the RBP, Interim Resource Adequacy Service (“IRAS”), Large Load Registry, and Bring Your Own New Capacity (“BYONC”) requirements tied to the inclusion of large loads in RPM. The tariff revisions implementing these programs and requirements are currently pending before the Federal Energy Regulatory Commission (“FERC”).¹⁵

Each of these measures addresses different aspects of the same problem: the substantial level of forecast large load additions. That is, RBP provides a mechanism to procure additional capacity where the market has cleared short of the reliability requirement due to large load additions. BYONC requirements require large loads to support their incremental capacity needs more directly. IRAS creates a framework under which qualifying new large loads without sufficient capacity may be subject to curtailment rather than freeriding on existing shared reliability. The Large Load Registry is intended to provide visibility into the identity, location, ramp schedule, and capacity arrangements of large loads. Collectively, these efforts are intended to address many resource adequacy issues.

2. Existing Capacity and E&AS Market Workstreams

¹⁴ See PJM, Critical Issue Fast Path – Large Load Additions, <https://www.pjm.com/committees-and-groups/cifp-lla>, and PJM, Critical Issue Fast Path - Reliability Backstop Procurement / Connect & Manage, <https://www.pjm.com/committees-and-groups/cifp-rbp>, for links to each processes issue charge, the PJM Board’s decisional letters, and files associated with Manual changes.

¹⁵ See: PJM, Reliability Backstop Procurement to Address Resource Adequacy and Large Loads, Docket No. ER26-3380-000 (filed July 31, 2026); PJM, Proposal to Establish Interim Resource Adequacy Service & a Large Load Registry, Docket No. ER26-3515-000 (filed Aug. 13, 2026).

PJM is separately pursuing several reforms to the design and inputs of RPM. The Quadrennial Review addresses the administrative inputs that shape the RPM demand curve and price formation, including Cost of New Entry (“CONE”), Net CONE, the reference resource, and the Variable Resource Requirement (“VRR”) curve.¹⁶ Following the typical Quadrennial Review schedule, these topics will be addressed again in the next several years. The issues raised in this proceeding overlap directly with PRTMD’s discussion of ways to develop and send effective investment signals.

PJM is also, as a response to the previous Quadrennial Review and related capacity-market workstreams: (a) considering a seasonal or sub-annual capacity construct; (b) reevaluating the Base Residual Auction (“BRA”) forward period; and (c) revising capacity accreditation treatment.¹⁷ Additionally, in parallel, the Reserve Certainty Senior Task Force (“RCSTF”) is considering E&AS reforms intended to value flexibility, commitment, reserves, and uncertainty more efficiently.¹⁸ PJM itself identifies these efforts as supporting reforms that can proceed under more than one PRTMD path. However, changes in these areas will materially affect the amount and timing of capacity procured, how different resource capabilities are valued, the volatility of market outcomes, and the ability of new entry to respond to forward market signals, calling into question the necessity and benefits of certain proposed PRTMD paths.

3. Existing capacity interconnection efforts

¹⁶ Newell, S., et al., The Brattle Group, Sixth Review of PJM’s Variable Resource Requirement Curve (Apr. 11, 2025); Newell, S., et al., The Brattle Group & Sargent & Lundy, Brattle 2025 CONE Report for PJM (Apr. 11, 2025).

¹⁷ See PJM, Sub-Annual Capacity Market Senior Task Force, <https://www.pjm.com/committees-and-groups/task-forces/sacmstf>; PJM, Effective Load Carrying Capability Senior Task Force, <https://www.pjm.com/committees-and-groups/task-forces/elccstf>.

¹⁸ See PJM, Reserve Certainty Senior Task Force, <https://www.pjm.com/committees-and-groups/task-forces/rcstf>.

PJM has already adopted a series of measures intended to accelerate the entry of new supply. Its broader interconnection reforms shifted the queue toward a “first-ready, first-served” cluster-study process.¹⁹ More recently, FERC approved the Reliability Resource Initiative (“RRI”) and expanded use of Surplus Interconnection Service (“SIS”),²⁰ and PJM has proposed an Expedited Interconnection Track (“EIT”).²¹ RRI was designed to accelerate the study of a limited number of “shovel-ready” projects, while SIS may permit new resources to make use of existing interconnection capability that is not fully utilized. EIT would provide an alternative expedited path for certain large capacity projects capable of reaching commercial operation on an accelerated schedule. These reforms are important because one of the central premises of PRTMD is that new generation cannot currently enter the market quickly enough to respond to changing market conditions. The success or failure of RRI, SIS, EIT, and the underlying queue reforms will therefore bear directly on the magnitude and duration of the supply development problem that PJM seeks to address through market design.

4. Other processes

Other ongoing processes may also materially affect the conditions underlying PRTMD. PJM’s Load Analysis Subcommittee and related forecasting work, for example, will continue to refine the treatment of large load additions and determine the demand against which capacity and transmission are planned. Regional transmission planning and large load interconnection reforms will affect whether new demand can be served and what network investments are required. These

¹⁹ See PJM, 181 FERC ¶ 61,162, (2022) (Transition to clustered, “first-ready, first-served” cycle process).

²⁰ See PJM, 190 FERC ¶ 61,084 (2025) (Reliability Resource Initiative); PJM, 190 FERC ¶ 61,083 (2025) (Surplus Interconnection Service).

²¹ See PJM, 195 FERC ¶ 61,197, (2026) (Expedited Interconnection Track), Docket Nos. ER26-1563-000, ER26-1563-001.

processes implicate many of the same questions concerning speed to power, cost causation, reliability priority, and the allocation of risk that PRTMD raises.

Altogether, ongoing initiatives demonstrate that PJM is already pursuing substantial changes on the demand side, supply side, and within its existing markets. PJM should first evaluate whether the reforms already underway can improve the credibility of projected demand, facilitate needed supply additions, better allocate incremental costs and risks, and increase the reliability value obtained from existing resources and flexible demand. A broader restructuring of RPM should be considered only where PJM identifies remaining problems that these more targeted reforms cannot reasonably address. Further, PRTMD efforts should also avoid unnecessarily superseding measures that have only recently been approved or remain under development. The credibility of previously endorsed and filed market reforms is itself relevant to market durability; repeatedly replacing rules before their impacts can be evaluated may create additional uncertainty rather than resolve it.

RESOURCE ADEQUACY CONSTRUCT EVALUATION FRAMEWORK

The assessment of potential resource adequacy reforms should begin with the objectives PJM is seeking to achieve, rather than with a preferred market mechanism. Different resource adequacy constructs can produce very different outcomes depending on how their underlying design choices are made. A capacity market, capacity demonstration requirement, operating reserve demand curve, shortage-pricing framework, or other constructs can all over- or under-procure relative to actual need if the underlying assumptions used to establish the reliability requirement are inaccurate. Likewise, no construct can fully eliminate uncertainty. The relevant question is how that uncertainty—and the financial risk associated with it—is allocated.

Maryland OPC believes a useful organizing framework is the five-part resource adequacy evaluation approach developed by Consumer Advocates of PJM States (“CAPS”) during PJM’s 2021 Quadrennial Review.²² The full CAPS study identifies a broader set of detailed questions and design considerations within each category. They ask, in summary:

1. Reliability Requirement – What need is PJM procuring, and how credible is the forecasted need?
2. Reliability Valuation – How much should load pay for the reliability standard being procured?
3. Resource Performance – What must resources deliver?
4. Competition – Can all capable resources compete?
5. Cost Allocation – Who causes the need, who receives the benefit, and who bears the financial and stranded-cost risk?

This framework was developed to emphasize that the performance of a resource adequacy construct depends less on the label attached to the construct than on the design choices made within it. The largest drivers of reliability and cost are often the underlying expectations of load and planning reliability standards, together with assumptions concerning resource performance, CONE, Net CONE, and competition.

Each of the five evaluation categories remains important to PJM’s current review. Two, however, are particularly important given the nature of the present resource adequacy challenge: the Reliability Requirement and Cost Allocation. The first determines how much capacity PJM anticipates it needs to procure. The second determines who bears the cost and risk associated by that need. Where projected resource adequacy shortfalls are driven primarily by uncertain load growth, these two questions are closely linked.

A. Reliability requirement

²² See Parent, C., Hoyt, M., & Clark, C., Exeter Associates, Inc., Resource Adequacy Constructs in Organized Wholesale Markets (Apr. 2021), prepared for CAPS. <https://web.archive.org/web/20241015053815/https://www.pjm.com/-/media/committees-groups/user-groups/pieoug/2021/20210505/20210505-resource-adequacy-constructs-in-organized-wholesale-markets-report.ashx>

Every resource adequacy construct begins with an expectation of future need, generally based on forecasted load and a series of planning assumptions. Those assumptions can materially affect the amount of capacity PJM determines is necessary to satisfy its reliability standard. Over-forecasting can result in unnecessary procurement, higher customer costs, and potential generator investments proving unnecessary.

These concerns are particularly important for PJM because projected load growth is heavily concentrated among large loads. Maryland OPC's analysis of PJM's 2026 Load Forecast shows that large loads account for the overwhelming share of projected peak-load growth over the next decade.²³ As a result, the apparent resource adequacy shortfall is highly dependent on the credibility of the large load assumptions incorporated into the forecast.

Maryland OPC has been raising these concerns with PJM since July 2024.²⁴ In its October 14, 2025 comments to the PJM Board, OPC warned that the exceptionally large volume of proposed large load adjustments could materially increase future capacity procurement, transmission investment, and stranded-cost risk for customers.²⁵ OPC also expressed concern that the standards and supporting documentation used to include large loads in PJM's load forecast were not uniform across transmission owners and did not provide sufficient information regarding the contractual, financial, and development commitments supporting individual projects.²⁶

²³ Maryland OPC, Powering Reliability Through Market Design – Initial Considerations and Recommendations, presentation to PRTMD Workshop (Jul. 15, 2026), at 7.

²⁴ Maryland OPC, Letter to PJM Board regarding Robustness and Consistency of the PJM Long-Term Load Forecasts (July 18, 2024); Maryland OPC, Letter to PJM Board regarding Large Load Adjustments for the 2026 Load Forecast (October 14, 2025); Maryland OPC, Comments regarding PJM Load Forecast Preparation Guidance (Mar. 11, 2026); Maryland OPC, Questions for PJM Subject Matter Experts regarding the “PJM Load Forecast Accuracy Report” (June 3, 2026).

²⁵ Maryland OPC, Letter to PJM Board regarding Large Load Adjustments for the 2026 Load Forecast (October 14, 2025) at 1-3.

²⁶ Id. at 12-13.

We therefore recommended that PJM adopt uniform and transparent standards for incorporating large load adjustments into its forecasts and require greater evidence of project commitments, including contractual, financial, and development milestones. OPC also supported probabilistic forecast bands and empirical discounting so that resource adequacy procurement gives greater weight to high-confidence demand while longer-term planning can account for less certain growth scenarios.²⁷

These concerns remain directly relevant to the market design questions presented in the PRTMD paper. The quality of PJM's investment signal depends in part on the quality of the demand signal underlying it. If large loads can enter the planning forecast before making sufficient credible commitments, the capacity market may respond to demand that later proves overstated. A more incentive-compatible approach would require increasingly firm commitments as a large load moves from a planning assumption toward inclusion in resource adequacy procurement.

B. Cost allocation

Cost allocation is not simply a question of who pays after a resource adequacy need has been identified. It also affects the incentives that shape demand-side behavior in the first place. Costs should generally follow the parties that cause them to be incurred and receive the associated benefits. When that relationship is weakened, customers can make decisions that shift costs to others without bearing the full consequences of those decisions.

The link between cost causation and cost allocation is especially important for new large loads. If an uncommitted large load can increase PJM's reliability requirement without bearing the financial risk associated with that incremental requirement, the load has limited incentive to

²⁷ Id. at 13-14.

reveal the true likelihood or timing of its demand. Likewise, if a large load can receive the same curtailment priority as existing firm customers without supporting the capacity needed to provide that service, it can freeride on reliability funded by others.

Assigning the associated costs and risks to the large loads creating the incremental need can improve both market efficiency and the quality of PJM's planning parameters. A large load faced with the choice of funding or bringing new capacity, reducing its demand, accepting non-firm curtailable service, or otherwise supporting its reliability requirement has an incentive to reveal the value it places on firm service. In that sense, cost causation is itself a resource adequacy tool: better alignment between cost responsibility and cost causation can produce better information and more efficient demand-side decisions.

The market efficiencies gained by proper assignment of costs and risks highlight an important tradeoff among resource adequacy constructs. Long-term contracting or capacity demonstration can provide greater revenue certainty to suppliers but can also transfer more stranded-cost risk to customers. Market-based constructs can place investment risk with suppliers but may provide less revenue certainty. The appropriate design depends on how well the resulting arrangement assigns risk to parties that create it and are best positioned to manage it.

For PJM's current circumstances, the objective should be a resource adequacy framework that maintains reliability at reasonable cost, preserves competition and regional pooling, provides credible incentives for needed investment, and assigns the financial consequences of uncertain large load growth to the entities creating that uncertainty. That requires addressing both sides of the resource adequacy equation: PJM should ensure that the demand used to establish the reliability requirement is sufficiently credible before it creates procurement obligations and that the resulting supply-side costs and risks follow the parties whose decisions create them. Whether

these objectives require additional fundamental changes to RPM—or more targeted reforms to the existing construct—should be determined only after PJM addresses readily apparent problems.

PROPOSED AREAS OF FOCUS

As discussed above, PJM’s PRTMD paper identifies three potential paths for addressing the region’s evolving resource adequacy challenges: Path A, “Stabilized Markets;” Path B, “Differential Reliability;” and Path C, “Energy Market Transition.”²⁸ The following comments provide Maryland OPC’s feedback with respect to each path in consideration of the diagnosis and objectives provided above.

A. Considerations for Path A: forward commitments should follow demand commitments.

Path A, as presented in the PRTMD paper, responds to PJM’s concern that annual capacity market revenues may no longer provide sufficient certainty to support new generation investment. Longer-term commitments may have a role where states, load-serving entities, or customers determine that they are appropriate to support investment in resources needed to serve identified demand. Financial commitments that provide greater revenue certainty for suppliers, however, necessarily create a corresponding financial obligation for load. Path A therefore raises a fundamental risk-allocation question: who bears the cost if the demand supporting that commitment does not materialize?

The answer should not be captive customers merely because PJM has forecast future demand. Broad forward procurement based on uncertain demand can convert forecast error into long-lived stranded costs. This concern becomes more significant where the contemplated supply

²⁸ PJM PRTMD, p. 7.

commitment extends for many years. Longer-lived supply-side obligations should therefore be supported by comparable firm demand-side commitments.

Accordingly, any mechanism that makes long-term commitments on behalf of new demand should follow, rather than precede, verified and financially accountable commitments from that demand. Where an identifiable new large load creates the need for additional capacity, the load should provide sufficient contractual commitment, financial security, or other assurance to support the resulting obligation. The more durable PJM makes the commitment to suppliers, the stronger the corresponding commitment from the demand causing that procurement should be.

PJM's proposed RBP design includes a voluntary pathway for bilateral arrangements to reduce the need for centralized procurement. Voluntary bilateral arrangements should be the preferred means of implementing any Path A-style long-term contracts. Bilateral arrangements can and do provide generators with the durable revenues needed for financing while placing the corresponding obligation on the customer that values the additional supply. Centralized procurement may remain appropriate for genuinely shared regional needs, but it should not become a mechanism for transferring the development risk associated with identifiable, uncertain new demand to existing customers.

Reforms in line with Path A should therefore be evaluated according to a straightforward principle: forward supply commitments should follow credible forward demand commitments, and the parties creating the incremental need should bear the corresponding stranded-cost risk.

B. Considerations for Path B: new large loads should bear the reliability consequences of unsupported growth.

Path B asks a different question: if new demand enters faster than sufficient supply can be developed, who should bear the resulting reliability consequence? Maryland OPC does not

believe the answer should be residential and other ordinary customers that historically received firm service under PJM's shared regional reliability construct. New large loads should not be permitted to enter an already constrained system and thereby reduce the reliability provided to existing customers. Instead, equivalent firm service for incremental large loads should depend on adequate capacity support. A new large load that brings or funds sufficient capacity should be entitled to participate in the shared firm-reliability construct on the same basis as other firm load. A load that elects to connect before sufficient capacity is available should accept the corresponding risk of priority curtailment during capacity-short conditions.

PJM's proposed IRAS framework moves in this direction by linking unsupported incremental large load to a different curtailment priority rather than automatically procuring capacity on its behalf. Reforms linked to Path B should build on that basic principle rather than establish differential reliability as a general feature of service for existing load. In other words, Path B should preserve shared firm reliability for legacy load while requiring new entrants to support the reliability level they seek.

C. Considerations for Path C: improve energy and ancillary services incentives.

PJM states in the PRTMD paper that reforms to the E&AS markets are necessary under any of the three paths because these markets must better value flexibility, reserve capability, commitment, and performance during stressed system conditions.²⁹ Maryland OPC agrees with the objective of improving those incentives. The principal value of Path C, however, does not depend on substantially shifting resource adequacy revenue recovery from RPM into increasingly volatile real-time markets. E&AS reforms can instead complement the capacity

²⁹ PJM PRTMD, p. 47.

construct by more accurately rewarding resources and loads for what they actually contribute when the system is stressed.

Capacity and E&AS markets perform related but different functions. A transparent forward capacity construct can identify and compensate the availability of resources needed to satisfy a planning reliability requirement, while E&AS prices can provide stronger incentives for resources to be flexible, responsive, and available when system conditions actually require them. Improving the latter does not require abandoning the former. Instead, reforms aligned with Path C provide an opportunity to make demand more responsive to system conditions. Large loads capable of shifting consumption, using storage or on-site resources, or otherwise reducing demand should receive transparent market incentives reflecting the reliability value of that flexibility. The same principle should apply to generation, storage, and demand response; compensation should increasingly reward actual flexibility and performance rather than resource labels.

RESPONSES TO QUESTIONS POSED BY PJM

PJM requested stakeholder feedback on seven specific questions to assist the states, PJM, and the PJM Board in determining the appropriate scope and process for developing market design rules. Maryland OPC provides the following responses, organized according to the questions presented by PJM.

- 1. The path(s) (either as described in the PJM paper or alternative paths) that your organization believes PJM should pursue and why.*

Maryland OPC does not recommend adopting Path A, Path B, or Path C in its entirety. Instead, PJM should pursue a targeted combination of the three paths, in concert with ongoing initiatives, while preserving the existing regional resource adequacy framework.

Selected Path A mechanisms may be appropriate where the underlying demand is credible and financially accountable. Path B principles are particularly relevant to new large loads that seek firm service before sufficient capacity is available. Path C reforms should continue where they improve E&AS market incentives and appropriately value flexibility and performance.

The common principle across the three paths should be that financial and reliability commitments on the supply side are matched by corresponding responsibility on the demand side. In the near term, PJM should prioritize reforms addressing large load qualifications, cost responsibility, and reliability treatment before undertaking a broader redesign of RPM. For additional comments, please see the above discussion.

In addition to selectively drawing from PJM's three paths, Maryland OPC believes the stakeholder process should consider two additional approaches that more directly address the demand-side incentive problem identified throughout these comments. The "Commit-to-be-Counted" path would require a prospective large load to satisfy objective commitment gates before its demand is included in the capacity-market requirement and firm transmission planning. The purpose is to make the load forecast incentive-compatible by requiring an entity seeking firm service to demonstrate its commitment through binding actions, rather than through an informational forecast request alone. Appropriate gates could include, for example, subscription to RBP, a qualifying BYONC arrangement, or another commitment that demonstrates responsibility for the resource adequacy need created by the load. This approach would improve the credibility of the quantity PJM procures against and reduce both over-procurement risk and uncertainty in the investment signal.

A potentially complementary "Large Load Reliability Service" path would require new large loads to select and support the level of reliability they receive before being added to the

shared firm-reliability pool. A customer seeking firm-backed service would bring or pay for sufficient capacity and assume associated locational deliverability and transmission responsibilities. A customer choosing non-firm or flexible service could connect sooner but would be excluded from firm resource-adequacy and transmission-planning assumptions and curtailed first when supply is insufficient. A transitional service option could provide temporary status, subject to collateral and milestones, while the customer obtains capacity backing or firm rights.

2. *Additional or supplemental path(s) that you recommend States explore to support long-term market durability and/or customer cost stability.*

States have an important role because many of the financial commitments necessary to serve individual large load customers are implemented through retail tariffs, utility service agreements, and state-regulated procurement practices.

We recommend that states continue evaluating large load tariffs and service requirements that assign the costs and risks associated with new capacity and infrastructure to the customers creating those needs. Potential approaches include requiring large loads seeking firm service to demonstrate qualifying BYONC arrangements, enter enforceable long-term capacity or power purchase agreements, provide appropriate financial security, or accept interruptible or flexible service where sufficient capacity is not yet available. Having supportive frameworks at a PJM level would facilitate such state efforts so long as they do not foreclose certain pathways (e.g., by obligating long-term procurement.)

3. *Any specific areas of the market design that your organization believes should be included in the scope of the upcoming stakeholder process, including why focusing on those areas will help stabilize PJM's wholesale markets and support more durable resource adequacy in the region.*

Maryland OPC recommends that the stakeholder process focus first on issues affecting the credibility of PJM resource adequacy requirement and the allocation of the resulting costs and risk. The highest priority should be large load qualification and load forecasting. PJM should establish transparent and verifiable standards governing when large loads are incorporated into resource adequacy procurement and should ensure that forecasts are updated as project circumstances change.

The process should also address cost allocation and the relationship between firm service and capacity support for new large loads, including the interaction among IRAS, BYONC, bilateral arrangements, and RBP obligations. Other appropriate topics include auction timing, seasonal or sub-annual capacity design, Effective Load Carrying Capability (“ELCC”) and resource adequacy risk modeling, demand response and large-load flexibility, and targeted E&AS reforms. These issues should be evaluated together because changes in one area can materially affect the need for reform elsewhere.

4. Areas that should remain out of scope in these stakeholder discussions and why it is appropriate to narrow the scope of work accordingly.

Maryland OPC does not support a near-term, broad-scale redesign of PJM’s market architecture. A near-term transition to an energy-only construct, therefore, should remain outside the scope of any forthcoming processes. We support targeted E&AS reform, but the current record does not demonstrate that eliminating or substantially diminishing the capacity market would produce a more reliable or affordable outcome.

Broad differential reliability for existing residential and commercial customers should also remain outside the scope. Differential service should instead be considered as a targeted mechanism for incremental large loads whose entry creates a new resource adequacy need. Additionally, technology-specific procurement should not be considered within any PRTMD

processes. Reliability products should be defined according to the services and performance needed by the system, allowing capable resources to compete where practicable. Finally, PJM should avoid duplicating work already underway in other stakeholder processes unless the PRTMD process must resolve a broader policy question necessary for that work to proceed.

5. The process that your organization would recommend be used to structure the stakeholder engagement.

Maryland OPC recommends a transparent process in which states and consumer representatives have a meaningful role throughout the development and evaluation of potential reforms. PJM should provide supporting analyses sufficiently in advance of stakeholder meetings to permit independent review and should clearly identify the assumptions driving modeled reliability, cost, and market outcomes. The process should begin with establishing clear objectives and problems being addressed before stakeholders are asked to select from specific market mechanisms. PJM should also coordinate the PRTMD process with existing workstreams so that reforms are complementary rather than duplicative or inconsistent. Where proposals materially affect the allocation of long-term financial risk, PJM should provide sufficient time for state regulators and consumer advocates to evaluate the implications for retail customers and state procurement requirements.

6. Any thoughts you have on issue prioritization and timing considerations for addressing these issues.

Maryland OPC supports reforms that improve the credibility and accountability of load assumptions before the creation of new long-term financial obligations. Before PJM significantly expands long-term procurement or hedging requirements, it should establish greater confidence regarding the demand those commitments are intended to serve.

Near-term work should prioritize large load qualifications, load forecasting, cost responsibility, IRAS and related differentiated service mechanisms, and pathways for large loads to bring or contract for sufficient capacity. PJM should simultaneously continue supply-side reforms intended to accelerate competitive entry and retain resources that can economically contribute to reliability, as well as ongoing demand flexibility reforms.

Longer-term changes to the overall capacity market structure should follow evaluation of these initiatives. PJM should avoid creating additional market uncertainty by undertaking a broader redesign before stakeholders can assess whether the RBP, IRAS, BYONC interconnection reforms, RCSTF, and related efforts materially improve the resource adequacy outlook.

7. Any education or analysis that you would request from PJM to support the upcoming stakeholder engagement.

Maryland OPC requests that PJM provide additional detailed analysis sufficient to evaluate the reliability benefits, costs, and customer risks associated with all potential PRTMD paths. In particular, PJM should explain how each path would allocate the incremental costs and reliability risks associated with new large load additions and how load forecasting, resource adequacy, transmission planning, and cost allocation reforms would be coordinated.

PJM should also evaluate the financial cost and risk implications of long-term commitments. That analysis should identify who would bear stranded-cost risk if PJM or another entity enters into a long-term capacity commitment associated with a large load that is

subsequently delayed, reduced, relocated, or canceled. Relatedly, PJM should explain how any expanded long-term procurement or hedging requirements would interact with state default-service procurement rules and existing retail regulatory structures.

Finally, Maryland OPC requests additional scenario analysis showing how projected resource adequacy outcomes change under alternative assumptions for large load growth, resource retirements, interconnection timing, demand response, and other supply additions. This analysis would help stakeholders distinguish between resource adequacy concerns that require structural market changes and those that may be addressed through the targeted reforms already underway.