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TO: CIFP-LLA FROM: PJM IMM.

**SUBJECT:** Executive Summary

The current tight/short conditions in the PJM Capacity Market are almost entirely the result of large data center load additions, both actual historical and forecast.<sup>1</sup> <sup>2</sup> The current supply of capacity in PJM is not adequate to meet the demand from large data center loads and will not be adequate in the foreseeable future. There is a market solution to the issues created by the addition of unprecedented amounts of large data center loads that does not require a massive wealth transfer. That solution is to require large data center loads to bring their own new generation. It is essential to have a pragmatic market solution that allows data centers to come to market as quickly as feasible and that is consistent with and sustains efficient and competitive PJM markets rather than to create the conditions for a return to cost of service regulation.

It should not be assumed that PJM is required to allow the interconnection of large loads that cannot be served reliably. The result of such a path would be an unreliable system that imposes costs on all the other PJM customers. That assumption is the premise on which the other CIFP-LLA options are based. If PJM does not believe that PJM has the authority to implement the requirement that new large loads will not be interconnected if the loads cannot be served reliably, PJM should file with FERC to ask for clarification. The requirement is consistent with, and required by, the definition of just and reasonable rates.

The solution is not to create reliability issues and wealth transfer issues by clearing the capacity market at the maximum price and at a quantity less than the reliability requirement. Status quo, co-location, cost of service, and demand side options all ignore the real issue and exacerbate reliability issues and customer cost issues. The options that accept the premise that PJM must interconnect new large data center loads that cannot be served reliably means by definition that reliability will be degraded. PJM will be in the position of allocating blackouts rather than ensuring reliability.

PJM should not permit the interconnection of large new data center loads if they cannot be served reliably. That means that the supply of capacity must be adequate to meet the total load

See, "Analysis of the 2025/2026 RPM Base Residual Auction - Part G Revised," <a href="https://www.monitoringanalytics.com/reports/Reports/2025/IMM\_Analysis\_of\_the\_2025">https://www.monitoringanalytics.com/reports/Reports/2025/IMM\_Analysis\_of\_the\_2025</a> 2026 RPM Base Residual Auction Part G 20250603 Revised.pdf (June 3, 2025).

See "Analysis of the 2026/2027 RPM Base Residual Auction - Part A," ("Part A") (October 1, 2025) <a href="https://www.monitoringanalytics.com/reports/Reports/2025/IMM">https://www.monitoringanalytics.com/reports/Reports/2025/IMM</a> Analysis of the 20262027 RP M Base Residual Auction Part A 20251001.pdf>.

including the large new data center loads consistent with the defined reliability requirement. In order to implement this approach, PJM should establish an interconnection queue for large new data center loads. Requested interconnections would be studied for both transmission system reliability and for capacity reliability. Loads would not be permitted to interconnect unless there is adequate capacity to serve them reliably. If large new data center loads want an expedited interconnection process, loads should be required to bring their own new generation.

The market solution is to require new large data center loads to bring their own new generation with locational and temporal characteristics matched to their load profile. The generation must be able to serve the actual hourly load of the data centers without transmission constraints. The generation must be deliverable to the system and deliverable to the new load. The generation must match the energy requirements of the data centers for all hours of the year. The new generation should not be an existing capacity resource. The added capacity would equal the load plus the required reserve margin. In the absence of that requirement, some or all of the costs of serving the new large data center loads would be imposed on other customers. The additional new generation would be UCAP MW defined by ELCC. ELCC ratings are revised every year. The data center load should be responsible for covering any shortfall in UCAP capacity resulting from lower ELCC ratings.

PJM would establish an expedited interconnection process for the new generation and for the new load. Both would be added to the system at the same time in order to minimize the impacts on other customers. The large new data center loads and their new generation would be studied and interconnected as quickly as possible. This requires cooperation and coordination among PJM, transmission owners, EDCs and state regulatory authorities.

While improving the load forecasting process is an important goal, simply improving the load forecasting process does not eliminate the issues created by the interconnection of large new data center loads without matching generation. Even if the load forecast were perfect, the impact on reliability issues would remain. The load forecasting process will remain significantly uncertain regardless of any improvements. The uncertainty in the current load forecasting process that results from the uncertainty about large new data center load additions would be eliminated by the bring your own new generation option. If the data centers do bring their own generation but the data centers do not materialize, the system is better off and there is no harm from the incorrect forecast. The bring your own new generation option requires a financial and physical commitment to the reliability of the grid that eliminates the current concerns about the forecasting process.

One of the many issues that have not been addressed to date and would not be addressed by other options is whether Part V (RMR) obligations would be incurred in order to serve large new data center loads. This includes Part V RMR obligations and Section 202(c) obligations. Such obligations would not be incurred under the bring your own new generation option. Such

obligations would be incurred under the other options. The RMR cost is another significant subsidy that other load could be required to pay to support large data center load additions.

All of the currently identified options require PJM to plan the transmission system to meet large data center loads consistent with the RTEP and require all customers to pay an allocated share of the transmission upgrades required to serve large data center load additions.

The bring your own new generation option will also reduce the impact on the energy market costs of all other PJM customers that would result from proposals that do not include new generation.

Demand side options, including DR and PRD, are not equivalent to new generation. If there were to be a demand side option, the new large data centers would have to agree to be interrupted whenever capacity is needed to serve the other loads that paid for capacity, at a reasonable energy price and not limit interruptions to emergencies or to the limited run hours of backup generation. Those non-limited interruptions could be frequent given that current forecasts for additional new large data center load are approximately 30,000 MW.<sup>3</sup> Demand side resources are not subject to market power mitigation and thus large new data center loads if defined as demand resources could exercise market power in the capacity and energy markets.

The \$1,849 per MWh PRD strike price cap is well above typical energy market clearing prices. This enables economic withholding of the PRD MW and means that the PRD are only illusory demand resources. Any demand side solution must be premised on performance based compensation tied to actual, verifiable load reductions coupled with a strike price cap and availability that meaningfully affects real time demand. While demand resources dispatched during a PAI continue to be subject to Non-Performance Assessment charges, demand resources dispatched outside of a PAI are not subject to any event specific penalties. CSPs may elect to use performance data from a Load Management event that was not subject to a Non-Performance Assessment (a non-PAI LM event) as performance data for a PJM zonal test event. The ability for test performance to be a substitute for event performance, coupled with the absence of nonperformance penalties, weakens the incentive to perform during non-PAI events. In their current and proposed forms, demand side solutions offer no viable substitution for generation capacity resources.

<sup>&</sup>lt;sup>3</sup> See PJM. 2025 PJM Long-Term Load Forecast Report <a href="https://www.pjm.com/-/media/DotCom/library/reports-notices/load-forecast/2025-load-report.pdf">https://www.pjm.com/-/media/DotCom/library/reports-notices/load-forecast/2025-load-report.pdf</a> (January 24, 2025).

<sup>&</sup>lt;sup>4</sup> "PJM Manual 18: PJM Capacity Market," § 8.6, Rev. 61 (July 23, 2025).

<sup>&</sup>lt;sup>5</sup> "PJM Manual 18: PJM Capacity Market," § 8.7, Rev. 61 (July 23, 2025).

The Market Monitor recommends that new data center load be required to bring their own new generation. If that recommendation were adopted, the reliability and market price impacts of data center load growth on other customers would be limited, although the existing impact of the already embedded data center load would remain. In addition, the impact of the uncertain forecast of data center load on other customers would be limited or eliminated, and the slower underlying dynamic of organic load growth and incentives would play out.<sup>6</sup> Under this option, data centers would enter into bilateral contracts with developers to build generation with locational and temporal characteristics reasonably matched to their load profile. The capacity would be offered into and clear in the PJM Capacity Market. The load would be included in total PJM load. The generation would be subject to the market seller offer caps (MSOC) for existing generation. Both the data center load and the associated generation would have an expedited queue option that would permit both the load and the generation to be added without delays.

It has been asserted that requiring large new data center loads to bring their own new generation would be discriminatory. The relevant standard for prohibited discrimination is unduly discriminatory.<sup>7</sup> It is not unduly discriminatory to identify the class of large data centers and impose requirements on that class that match the impact of that class on all other customers. It would be unduly discriminatory to all other customers, from the smallest residential customer to the largest industrial customer, to allow large data centers to add massive amounts of load to the system that cannot be served reliably with resulting price impacts and reliability impacts on those other customers. Preventing undue discrimination requires that data center loads bring their own new generation.

It is not an overstatement to assert that the ongoing addition of large data center loads will put PJM competitive markets at risk unless there is a solution that requires large data center loads to pay for the costs that they would otherwise impose on other customers. This does not mean just the costs of a substation or a large financial commitment to purchase power. Bringing the new generation needed to meet the data center load is a long term investment required for reliable service that signals that data centers are in the markets for the long haul and committed to the competitive market design. The other options put PJM competitive markets at risk.

<sup>&</sup>lt;sup>6</sup> See "Pre Technical Conference Comments of the Independent Market Monitor for PJM," Meeting the Challenge of Resource Adequacy in Regional Transmission Organization and Independent System Operator Regions, Docket No. AD25-7.

See Federal Power Act § 205, 16 U.S.C. § 824d(b) ("No public utility shall, with respect to any transmission or sale subject to the jurisdiction of the Commission, (1) make or grant any undue preference or advantage to any person or subject any person to any undue prejudice or disadvantage, or (2) maintain any unreasonable difference in rates, charges, service, facilities, or in any other respect, either as between localities or as between classes of service.").