Executive Summary: PJM Large Load Additions CIFP Stage 4 Package

Introduction: Integration of Large Load Additions

The expected unprecedented growth in electric demand over the next decade is a concern for PJM because of the potential shortfall in generation supply. This concern was confirmed in the most recent Reliability Pricing Model (RPM) Auction for the 2025/2026 Delivery Year where the results reflect tighter system conditions. The pace at which large loads, which are predominately data centers, are requesting to come online adds to the resource adequacy and other reliability challenges.

PJM recognizes the national importance of the integration of these large loads and is committed to accommodating them as efficiently and reliably as possible. Therefore, PJM is offering incremental solutions in an effort to accommodate these large load additions while managing these challenges.

Solution Framework

The goal is to reliably integrate these large loads as PJM Network Load while ensuring resource adequacy. This will ensure that the loads are integrated into the grid and that the grid is robust enough over time to serve these resources given their importance to the national economy and the needs of the public.

In particular, the key components of the solution options include the following:

Enhanced Load Forecasting

Demand-side Products

Interconnection of New Supply

CIFP Phase II Recommendations

Additional Post CIFP initiative

Solution Options

1. Enhanced Load Forecasting

The following changes are proposed to the PJM Load forecast process. These changes are in addition to existing enhancements already being implemented in the PJM Load Analysis Subcommittee further identified below.

Implementation: PJM's 2027 Load Forecast

State Review: Added step for state commission opportunity to review and provide feedback on large load adjustments prior to finalizing and issuing the PJM Load Forecast. The State Review would be in concert with the Large Load Addition submission. Though informal and within the discretion of each state, EDC/LSE would be required to indicate the date the EDC/LSE shared the Large Load Additions with the RERRA and provide any feedback received.

Duplicative requests: As part of the Large Load Adjustment annual submissions, submitters shall inquire with their subject customers, and indicate to PJM accordingly, whether any load interconnection requests they've received (that do not have either an Electric Service Obligation (ESO) or Construction Commitment (CC)) are duplicative with other such requests made to interconnect large load either within or outside of the PJM region such that only a subset of such requests are expected to achieve actual commercial operation. If so, the submitters are required to provide the number of sites and amount of MWs that are duplicative that are included in their submission. If the submitter does not provide the number of sites and amount of MWs, or further sufficient justification and explanation, then all such requests will be removed from the forecast. This will be added to the annual submission template.

Additional Review: Additional industry specific review of the PJM Load forecast (i.e., cross check with national level forecast and equipment projections) which may include a 3rd party review. This 3rd party review may weigh both the national level trends as well as the inter PJM trends that would help inform PJM's load forecast.

Transparency*:* To be included in the PJM load forecast, EDC/LSE/TO must ensure customer NDAs include ability to share all information with PJM related to large loads and such information must be shared.

Additional Load Forecast enhancements that are already in place or in progress.

- Large load coming online during a delivery year covered by an RPM auction for that forecast cycle with Construction Commitment (CC) or Electric Service Obligation (ESO) contract of the load within the electric service provider's territory will be considered for inclusion in the PJM forecast.
- Large load coming online beyond above but less than 8 years without construction commitments will be considered for inclusion in the PJM forecast if they have cleared demonstrable project milestones to be considered certain and may be de-rated to reflect its greater uncertainty.

- Requestors should provide a ramp rate with supporting documentation. Absent an EDC/LSE provided ramp rate, PJM will initially use a default 3-year ramp rate subject to further adjustment based on a comparison of this default value with actual ramp rates of new large loads.
- Utilization factor: PJM uses default historical factor (typically 70%) unless EDC/LSE provides supporting data.
- Financial Commitment: Document and quantify the customer's financial responsibility. This may align with the Rates and Agreement provided or be reflected in the capital project plan of the requested EDC/LSE.

2. Demand-side Products

Price Response Demand (PRD):

Implementation: 28/29 Base Residual Auction

- Remove the requirements for a dynamic retail rate and replace it with an energy market bid price.
- PRD is required to respond if dispatched (same as DR) prior to bid price. This aligns DR and PRD as far as dispatch order. PRD will remain eligible to set LMP at its bid price to the extent it is required to balance supply and demand.
- If there is a PAI, PRD is subject to penalty if dispatched by PJM (Same as DR)
- Energy bid price cap same as DR (30 min)

PJM is not proposing additional Demand Response product changes. Due to timing, stakeholder proposals that include a limited duration type of product cannot be implemented until the 29/30 Base Residual Auction.

3. Interconnection of New Supply

Expedited Interconnection Process (EIT):

Implementation: Mid-year 2026

Description:
New Expedited Interconnection Track for sponsored generation with a contractual commitment to new large load and/or standalone generation. This proposal would be standalone outside of the PJM Cycle Process and operate in parallel. Expedited timing allows shovel ready resources to execute GIAs sooner and allow an earlier path towards construction and network upgrade certainly.

Availability:
Generation with a contractual agreement to new large load: Available to new generation or uprates to existing generation supported by evidence of state commitment to expedite consideration of permitting and siting as evidenced by a letter from a governor's office or state siting authority and a financial commitment with a load that has an executed electric service agreement to interconnect with the Transmission Owner.

The new generation or uprate to existing generation must have an accredited capacity value equal to or greater than the new large load that it is contracted with.

Generation without a contractual agreement to new large load: Available to new generation or uprates to existing generation supported by evidence of state commitment to expedite consideration of permitting and sitting as evidenced by a letter from a governor's office or state siting authority. Requires additional financial commitments in the form of higher readiness deposits.

Timeframe:

10 months from application

Generation Eligibility:

- Capacity resource status must be requested with the application along with Capacity Interconnection Rights relevant to the fuel type being interconnected.
- Commercial Operations must be achieved within three years of the application submission. Output to the grid may still be limited based on completion of any network upgrades required.
- Point of Interconnection (POI) –must be interconnecting to the transmission system in the relevant state supporting the project.
- MW Requirements –Requests must be for large scale generation greater than 250 MW (UCAP)
- Resource Fuel Type: all fuel types eligible, including storage.

Generation Application:

- Can be submitted to PJM at any time. There are no defined EIT application windows.
- Are prioritized serially, in order as each application is received by PJM.
- Large nonrefundable study deposit (> $500,000) and readiness deposit.
    - $10k/MW for generation paired with load.
    - $20k/MW for generation Not paired with load.
- Applications are capped annually at 10 projects.
- Must provide 3 full years of site control for 100% of generating site & interconnection facilities at time of application.

Generation Post-Application, Costs, and Agreement Requirements:

- There are absolutely no site control changes or other project changes allowed such as Fuel Type, MW size, equipment type, etc. Changes post-GIA execution will follow the existing Necessary Study process.
- Cost Allocation: EIT resources are responsible for 100% of all identified required network upgrades. No cost sharing with other EIT projects or Cycle projects.
  Cost Estimates: For mitigations will be planning estimate level only.
- GIAs issued to interconnection requests in the Cycle Process
  Commercial Operation no more than 3 years from the date of EIT application. Milestone dates are eligible for extensions according to existing procedures.

Transparency:

Implementation: Mid-year 2026

- Enhance transparency and partnership opportunities of tentatively planned resources that have not provided a Notice of Intent (NOI). These are incremental or new resources not yet considered in the Reliability Requirement determination but further along in the queue process.

- Provide step-by-step guidelines to facilitate most efficient path for interconnection.

Load Interconnection:

PJM will continue to work with transmission owners, states and loads to assist with timely interconnection. Adjustments can be made to accommodate direction from FERC on load interconnection.

4. Recommendation to the Board to Invoke CIFP Phase II

PJM is recommending that the Board invoke CIFP Phase II to narrowly address:

Further incentivizing load flexibility when PJM is capacity deficient:

The reliability and security of the bulk electric power system is of the utmost importance. PJM believes it is important to incentivize new large loads to bring new supply to match their demand or participate voluntarily as PJM demand response resources. In order to solidify such incentives, it will be important, among other things, to ensure that loads are prioritized appropriately when load shedding is required in order to maintain supply and demand balance in real time operations. PJM therefore proposes that this work proceed expeditiously and in concert with follow-on work to enhance the current manual load shedding allocation methodology.

RPM Reliability backstop mechanism:

PJM will engage with stakeholders on a review of the Reliability Backstop mechanism. The effective date for any changes resulting from this review will be as soon as practical.

5. Additional Post CIFP initiative: Resource Adequacy enhancements

PJM commits to further engagement with stakeholders on additional, longer-term Resource Adequacy enhancements and potential impacts on the RPM Auction that require more time to ensure proper discussion and evaluation of options. Implementation is not feasible before the 28/29 RPM Auction.