



2026/2027 RPM Base Residual Auction Planning Period Parameters

PJM Interconnection

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Introduction

The planning parameters for the 2026/2027 RPM Base Residual Auction (BRA) that is to be conducted in December of 2024 were posted on the PJM RPM website on August 26, 2024. This document describes the posted parameters and provides a comparison to the 2025/2026 BRA planning parameters.

PJM RTO Region Reliability Requirement

The PJM RTO forecast peak load, the PJM RTO Region Reliability Requirement and the parameters used to derive the requirement for the 2026/2027 BRA are shown and compared to the 2025/2026 BRA parameters in **Table 1**.

The forecast peak load for the PJM RTO for the 2026/2027 Delivery Year is 157,197 MW which increased by 3,314 MW, or 2.2% compared to the forecast peak load of 153,883 MW for the 2025/2026 BRA. The forecast PJM system peak load is reported in Table B-10 of the 2024 PJM Load Forecast Report.¹ The PJM RTO Reliability Requirement for the 2026/2027 Delivery Year is 147,246 MW which increased by 2,796 MW, or 1.9% compared to the 2025/2026 BRA value prior to any adjustment for FRR obligations.² This increase is driven by the increase in the forecasted system peak load as the Forecast Pool Requirement remained relatively constant, at 0.9367 in 2026/2027 from 0.9387 in 2025/2026.

The Installed Reserve Margin (IRM) and Forecast Pool Requirement (FPR) represent the level of capacity reserves needed to satisfy the PJM reliability criterion of a Loss of Load Expectation not exceeding one occurrence in ten years. The IRM and FPR represent the same level of required reserves but are expressed in different terms of capacity value. The IRM expresses the required reserve level in terms of installed capacity MW (ICAP) as a percent of the forecast peak load, whereas the FPR expresses the required reserve level in terms of unforced capacity MW (UCAP) as a percent of the forecast peak load. Beginning with the 2025/2026 BRA, the FPR is equal to $(1 + \text{IRM})$ times (Reference Resource Accredited UCAP Factor). The PJM RTO Reliability Requirement expressed in terms of unforced capacity is used as the basis of the target reserve level to be procured in each RPM BRA and is equal to the forecast RTO peak load, multiplied by the FPR.

¹ The 2024 RPM Forecast is located at <https://pjm.com/-/media/library/reports-notice/load-forecast/2024-load-report.ashx>

² The total UCAP Obligation of all Fixed Resource Requirement (FRR) Entities is subtracted from the PJM RTO Reliability Requirement, and any applicable LDA Reliability Requirement, when determining the target reserve levels to be procured in each RPM BRA.

Table 1. Reserve Requirement Parameters for 2025/2026 and 2026/2027 BRAs

Reserve Requirement Parameters	2025/2026 BRA	2026/2027 BRA	Change in Value	Change in Percent
Installed Reserve Margin (IRM)	17.80%	18.60%	0.80%	4.5%
Pool Wide 5-Year Average EFORd	N/A	N/A	N/A	N/A
Pool Wide Accredited UCAP Factor	79.69%	78.98%	N/A	N/A
Forecast Pool Requirement (FPR)	0.9387	0.9367	-0.002	-0.2%
Forecast Peak Load (MW)	153,883	157,197	3,314	2.2%
PJM RTO Reliability Requirement (UCAP MW)	144,450	147,246	2,796	1.9%
FRR Obligation (UCAP MW)*	10,886	N/A	N/A	N/A
PJM RTO Reliability Requirement adjusted for FRR (UCAP MW)	133,564	N/A	N/A	N/A

* - FRR Obligations for DY 2026/2027 have not yet been determined

Locational Deliverability Areas

Prior to each BRA, the Capacity Emergency Transfer Objective (CETO) and Capacity Emergency Transfer Limit (CETL) are calculated for each of twenty-seven potential Locational Deliverability Areas (LDAs) that are defined in Schedule 10.1 of the PJM Reliability Assurance Agreement.³ Pursuant to Section 5.10 of Attachment DD of the PJM Open Access Transmission Tariff (OATT), for any Delivery Year, a separate Variable Resource Requirement (VRR) Curve is established for each LDA for which (1) the CETL is less than 1.15 times its CETO; (2) the LDA had a Locational Price Adder in any one or more of the three immediately preceding BRAs; and (3) the MAAC, EMAAC and SWMAAC LDAs are modeled in a BRA regardless of the outcome of the CETL/CETO test or prior BRA results. An LDA not otherwise qualifying under the above three tests may also be modeled if PJM finds that such LDA is determined to be likely to have a Locational Price Adder based on historic offer price levels or if such LDA is required to achieve an acceptable level of reliability consistent with the Reliability Principles and Standards.

³ CETO and CETL values were calculated for each of the twenty-seven potential LDAs defined in Schedule 10.1 of the PJM RAA and these values are shown on the detailed planning parameters spreadsheet posted on the PJM RPM website.

Based on an application of the above criteria, a separate VRR Curve will be established for the 2026/2027 BRA for each of the LDAs listed in **Table 2**. The list includes the same LDAs that were modeled with a separate VRR Curve in the 2025/2026 BRA, with the addition of the JCPL LDA. Of the LDAs listed on **Table 2**, the MAAC, EMAAC, BGE, DEOK, DOM and DPL-SOUTH LDAs have cleared with a Locational Price Adder in one or more of the past three BRAs. While none of the other listed LDAs had a Locational Price Adder in any of the last three BRAs or had a CETL to CETO ratio less than 1.15, they will be modeled in order to maintain an acceptable level of reliability consistent with the Reliability Principles and Standards. Establishing a separate VRR Curve for an LDA does not predestine the LDA to clear the BRA with a Locational Price Adder; an LDA will only clear at a higher clearing price if reliability constraints are reached when attempting to import capacity into the LDA in the auction clearing process.

A Reliability Requirement and a separate Variable Resource Requirement (VRR) Curve are established for each LDA that is modeled in the BRA and the LDA CETL acts as a maximum limit on the quantity of capacity that can be imported into the LDA. **Table 2** shows the Reliability Requirement and the CETL for each LDA being modeled in the 2026/2027 BRA. For comparison purposes, the LDA Reliability Requirement and CETL values used in the 2025/2026 BRA are also shown in **Table 2**.

Changes in LDA reliability requirement are primarily driven by changes in the forecast peak load of the LDA and the availability of capacity resources located in the LDA to meet the reliability requirement. The reliability requirement of an LDA will decrease for a decrease in the forecast peak load of the LDA and an increase in the availability rate of capacity resources located in the LDA. The reliability requirement of an LDA will increase for an increase in the forecast peak load of the LDA and a decrease in the availability rate of capacity resources located in the LDA.

Year-over-year changes in the CETL of an LDA are primarily driven by the addition or removal of transmission facilities, the magnitude and location of generation deactivations and additions, and changes in the load profile within the LDA. The variance of delivery year over delivery year LDA CETL values is typical for the 2026/2027 BRA except for DOM. The increase in the DOM LDA is attributed to implementation of baseline transmission upgrades.

Of those LDAs that had a Locational Price Adder in one or more of the last three BRAs, the DOM LDA CETL had the largest increase as compared to 2025/2026 and the EMAAC LDA CETL had the largest decrease as compared to 2025/2026. The DOM LDA CETL is 1,446 MW higher for the 2026/2027 BRA, a 28% increase from the 2025/2026 BRA CETL. The EMAAC LDA CETL is 1,072 MW lower for the 2026/2027 BRA, a 12% decrease from the 2025/2026 BRA CETL.

Table 2. LDA Reliability Requirements and Capacity Import Limits for 2025/2026 and 2026/2027 BRAs

LDA	2025/2026 BRA		2026/2027 BRA		Delta			
	Reliability Requirement (UCAP MW)	CETL (MW)	Reliability Requirement (UCAP MW)	CETL (MW)	Reliability Requirement (UCAP MW)	CETL (MW)	Reliability Requirement (Percent)	CETL (Percent)
MAAC	53,342.3	3,222.0	53,166.7	3,023.0	-175.6	-199.0	0%	-6%
EMAAC	30,953.4	8,717.0	30,999.7	7,645.0	46.3	-1,072.0	0%	-12%
SWMAAC	13,508.8	8,467.0	13,457.6	7,286.0	-51.2	-1,181.0	0%	-14%
PS	10,664.0	8,501.0	10,718.0	8,839.0	54.0	338.0	1%	4%
PS NORTH	5,415.8	4,282.0	5,390.0	4,126.0	-25.8	-156.0	0%	-4%
DPL SOUTH	2,750.4	2,030.0	2,645.2	1,846.0	-105.2	-184.0	-4%	-9%
PEPCO	6,557.3	6,572.0	6,474.8	6,096.0	-82.5	-476.0	-1%	-7%
ATSI	12,186.0	10,846.0	11,963.9	9,209.0	-222.1	-1,637.0	-2%	-15%
ATSI-Cleveland	5,064.0	4,713.0	5,066.9	4,955.0	2.9	242.0	0%	5%
COMED	20,819.6	5,254.0	21,094.9	6,012.0	275.3	758.0	1%	14%
BGE	6,940.7	6,031.0	6,952.8	5,720.0	12.1	-311.0	0%	-5%
PL	8,765.4	4,681.0	8,663.7	4,356.0	-101.7	-325.0	-1%	-7%
DAYTON	3,521.8	3,931.0	3,475.4	4,568.0	-46.4	637.0	-1%	16%
DEOK	5,596.1	5,387.0	5,636.8	5,524.0	40.7	137.0	1%	3%
DOM	25,746.2	5,164.0	26,664.8	6,610.0	918.6	1,446.0	4%	28%
JCPL	N/A	N/A	6,376.8	4,098.0	N/A	N/A	N/A	N/A

Variable Resource Requirement Curves

A Variable Resource Requirement (VRR) curve is established for the RTO and for each LDA modeled in the BRA. The VRR curve is a downward-sloping demand curve used in the clearing of the BRA that defines the price for a given level of capacity resource commitment relative to the applicable reliability requirement. The VRR curves for the PJM Region and each LDA are based on a target level of capacity and either the Gross or Net Cost of New Entry (Net CONE) as appropriate. When available, and as discussed in the Price Responsive Demand (PRD) section of this report, the VRR curve of the RTO and each affected LDA will be shifted leftward along the horizontal axis to reflect any PRD that has elected to participate in the 2026/2027 Delivery Year BRA.

For the 2026/2027 BRA, note that the reference resource changed from a CT unit to a CC unit. A CC resource has a substantially higher Gross CONE value as compared to a CT resource.

Target Level of Capacity

In the development of the VRR curve, the target level of capacity to be procured for the PJM RTO Region is the PJM RTO Region Reliability Requirement, and the target level of capacity for each LDA is the LDA Reliability Requirement.

Cost of New Entry (CONE)

The Gross CONE or Net CONE (in UCAP terms) is used in the development of the RTO VRR Curve and the VRR Curve for each modeled LDA depending on whether the Gross CONE value is greater than 1.75 times the calculated Net CONE value. **Table 3** shows the Net CONE values, and the components used to determine the Net CONE, for the PJM RTO and each LDA to be modeled in the 2026/2027 BRA. For comparison purposes, the CONE values used in the 2025/2026 BRA are also shown in **Table 3**.

The Net CONE for the RTO and each LDA is equal to the gross CONE applicable to the RTO and each LDA minus the applicable net energy and ancillary services (“EAS”) revenue offset. The Net CONE again decreased for the RTO and for all of the modeled LDAs, in many cases to \$0. The Net CONE of the RTO decreased by 100.0% and the decrease in LDA Net CONE values ranged from 10.2% for the PS and PS-NORTH LDAs to 100.0% for the SWMAAC, PEPCO, BGE, DAYTON, DEOK and DOM LDAs. The decrease in Net CONE across all LDAs is primarily due to the significant escalation in EAS values from DY 2025/2026. Although the Gross CONE values increased in all LDAs, the calculated Forward Net EAS values increased at higher rates in all LDAs. The Net EAS values for the 2025/2026 used historic LMP data from calendar years 2020 through 2022 while the 2026/2027 Delivery Year is calculated using forward prices.

Table 3. Net CONE for PJM RTO and LDAs for 2025/2026 and 2026/2027 BRAs

Location	2025/2026 BRA				2026/2027 BRA				Change in Net CONE	
	Gross CONE ICAP Terms (\$/MW-Year)	E&AS Offset ICAP Terms (\$/MW-Year)	Net CONE ICAP Terms (\$/MW-Year)	Net CONE UCAP Terms (\$/MW-Day)	Gross CONE ICAP Terms (\$/MW-Year)	E&AS Offset ICAP Terms (\$/MW-Year)	Net CONE ICAP Terms (\$/MW-Year)	Net CONE UCAP Terms (\$/MW-Day)	Net CONE UCAP Terms (\$/MW-Day)	Net CONE UCAP Terms (%)
RTO	\$130,223	\$64,245	\$65,978	\$228.81	\$198,103	\$198,861	(\$758)	\$0.00	-\$228.81	-100.0%
MAAC	\$126,433	\$59,171	\$67,263	\$250.98	\$199,700	\$166,300	\$33,400	\$145.69	-\$105.29	-42.0%
EMAAC	\$133,120	\$43,478	\$89,641	\$310.88	\$198,200	\$132,668	\$65,532	\$230.18	-\$80.70	-26.0%
SWMAAC	\$134,473	\$95,671	\$38,803	\$134.57	\$193,100	\$228,542	(\$35,442)	\$0.00	-\$134.57	-100.0%
PS, PS NORTH	\$133,120	\$37,684	\$95,435	\$330.97	\$198,200	\$113,609	\$84,591	\$297.12	-\$33.85	-10.2%
DPL SOUTH	\$133,120	\$62,277	\$70,842	\$245.68	\$198,200	\$164,823	\$33,377	\$117.24	-\$128.44	-52.3%
PEPCO	\$134,473	\$69,941	\$64,532	\$223.80	\$193,100	\$194,959	(\$1,859)	\$0.00	-\$223.80	-100.0%
ATSI, Cleveland	\$128,102	\$59,826	\$68,276	\$236.78	\$197,800	\$193,609	\$4,191	\$14.72	-\$222.06	-93.8%
COMED	\$128,986	\$41,505	\$87,481	\$300.32	\$201,714	\$137,869	\$63,845	\$210.51	-\$89.81	-29.9%
BGE	\$134,473	\$121,401	\$13,073	\$45.34	\$193,100	\$262,124	(\$69,024)	\$0.00	-\$45.34	-100.0%
PL	\$126,433	\$51,402	\$75,031	\$260.21	\$199,700	\$157,033	\$42,667	\$149.86	-\$110.35	-42.4%
DAYTON	\$128,102	\$72,917	\$55,185	\$191.38	\$197,800	\$212,324	(\$14,524)	\$0.00	-\$191.38	-100.0%
DEOK	\$128,102	\$68,920	\$59,182	\$205.25	\$197,800	\$201,808	(\$4,008)	\$0.00	-\$205.25	-100.0%
DOM	\$128,102	\$84,076	\$44,027	\$152.69	\$197,800	\$235,729	(\$37,929)	\$0.00	-\$152.69	-100.0%
JCPL	N/A	N/A	N/A	N/A	\$198,200	\$122,698	\$75,502	\$265.20	N/A	N/A

Price Responsive Demand (PRD)

Price Responsive Demand is provided by a PJM Member that represents retail customers having the ability to automatically reduce consumption in response to changing wholesale prices. In the PJM Capacity Market, a PRD Provider may voluntarily make a firm commitment of the quantity of PRD that will reduce its consumption in response to real time energy price during a Delivery Year.

In order to commit PRD for a Delivery Year, a PRD Provider must submit a PRD Plan by August 12th preceding the BRA for such Delivery Year that demonstrates to PJM's satisfaction that the nominated amount of PRD will be available by the start of the Delivery Year and that the Plan satisfies all requirements as described in section 3A of PJM Manual 18: PJM Capacity Market.⁴ A PRD Provider that is committing PRD in a BRA must also submit a PRD election in the Capacity Exchange system which indicates the Nominal PRD Value in MWs that the PRD Provider is willing to commit at different reservation prices (\$/MW-day). The VRR curve of the RTO and each affected LDA is shifted leftward along the horizontal axis by the UCAP MW quantity of elected PRD where the leftward shift occurs only for the portion of the VRR Curve at or above the PRD Reservation price. Once committed in a BRA, a PRD commitment cannot be replaced; the commitment can only be satisfied through the registration of price response load in the DR Hub system prior to or during the Delivery Year.

Summary

- The reference resource was changed from a gas combustion turbine (CT) to a gas combined cycle unit (CC). Net CONE values are significantly down from prior years and in many cases \$0. This results in the use of Gross CONE to establish the VRR curve. The Gross CONE of a CC is significantly higher than that of a CT.
- The forecast peak load for the PJM RTO for the 2026/2027 Delivery Year is 157,197 MW which is 3,314 MW, or 2.2%, above the forecast peak load of 153,883 MW for the 2025/2026 BRA.
- The PJM RTO Reliability Requirement for the 2026/2027 Delivery Year is 147,246 MW which is 2,796 MW, or 1.9%, above the 2025/2026 BRA value prior to adjustment for FRR obligations.
- The MAAC, EMAAC, SWMAAC, PS, PSNORTH, PEPCO, DPL-SOUTH, ATSI, ATSI-CLEVELAND, COMED, BGE, PPL, DAYTON, DEOK, DOM and JCPL LDAs will be modeled in the 2026/2027 BRA. These are the same LDAs that were modeled in the 2025/2026 BRA with the addition of JCPL for 2026/2027.

⁴ PRD Providers must submit a PRD Plan by January 15th preceding the BRA for such Delivery Year during normally scheduled BRA auctions.