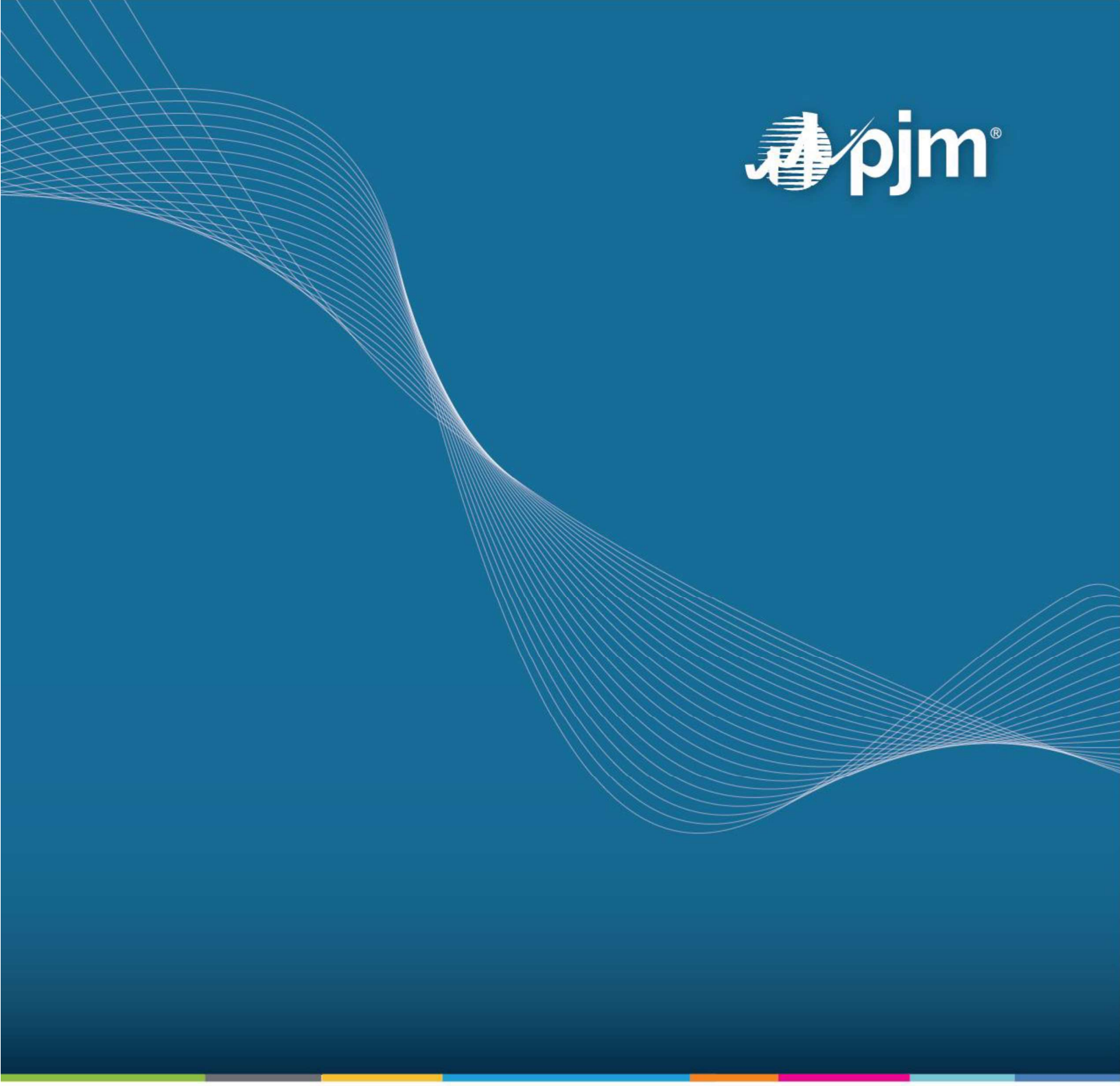

2026/2027 RPM Base Residual Auction Planning Period Parameters

May 9, 2025

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Introduction

The updated planning parameters for the 2026/2027 RPM Base Residual Auction (BRA) that is to be conducted in July of 2025 were posted on the PJM RPM website on April 28th, 2025. Please note that the updated planning parameters includes VRR curve data established by a price cap and price floor as approved by FERC in docket ER25-1357. 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 159,329 MW (with adjustments for load served outside PJM) which increased by 5,446 MW, or 3.5% 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 2025 PJM Load Forecast Tables[1]. The PJM RTO Reliability Requirement for the 2026/2027 Delivery Year is 146,105 MW which increased by 1,655 MW, or 1.1% compared to the 2025/2026 BRA value prior to any adjustment for FRR obligations[2]. After adjustment for FRR obligations, the RTO Reliability Requirement was calculated to be 134,520 MW, a 0.7% increase from the 2025/2026 Delivery Year.

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 + 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 2025 RPM Forecast is located at https://www.pjm.com/-/media/DotCom/planning/res-adeq/load-forecast/2025-load-report-tables.xlsx

[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%	19.10%	1.30%	7.3%
Reference Resource AUCAP Factor	79.00%	78.00%	-1.00%	-1.3%
Pool Wide Accredited UCAP Factor	79.69%	76.99%	-2.70%	-3.4%
Forecast Pool Requirement (FPR)	0.9387	0.917	-0.0217	-2.3%
Forecast Peak Load (MW)	153,883	159,329	5,446	3.5%
PJM RTO Reliability Requirement (UCAP MW)	**144,450**	**146,105**	**1,655**	**1.1%**
FRR Obligation (UCAP MW)*	10,886	11,585	699	6.4%
PJM RTO Reliability Requirement adjusted for FRR (UCAP MW)*	133,564	134,520	956	0.7%

* - FRR Obligations for DY 2026/2027 were updated 7/25

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.

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. The JCPL LDA was modeled for 2026/2027 as its CETL to CETO ratio fell below 115%. Of the LDAs listed on **Table 2**, the MAAC, EMAAC, DPL-SOUTH, BGE, DEOK and DOM 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.

[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.

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 changes in the availability rate of capacity resources located in the LDA. 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 generation additions, and changes in the load distribution profile within the LDA. LDA CETL values for the 2026/2027 BRA vary significantly in some cases from those of the 2025/2026 BRA in both the upward and downward direction but, in general, the magnitude of the changes for most regions lies within the year-to-year changes historically experienced with some exceptions. First, the significant decrease in the SWMAAC LDA CETL is attributed to voltage constraints due to a significant load increase in the DOM LDA. Second, the decrease in the PPL LDA is a result of increased load in the LDA and shifts in regional transmission flows due to load growth in other areas. The 16% decrease in the MAAC CETL is due to increased load in the DOM LDA, as well as a delay in completion to a key upgrade. Lastly, the large increase in the DOM LDA is a result of new baseline upgrades in that LDA.

Of those LDAs that had a Locational Price Adder in one or more of the last three BRAs, the DOM LDA CETL had the only increase as compared to 2025/2026 and the MAAC LDA CETL had the largest decrease as compared to 2025/2026. The DOM LDA CETL is 2,210 MW higher for the 2026/2027 BRA, a 43% increase from the 2025/2026 BRA CETL. The MAAC LDA CETL is 507 MW lower for the 2026/2027 BRA, a 16% decrease from the 2025/2026 BRA CETL.

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

	2025/2026 BRA		2026/2027 BRA		Delta			
LDA	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	52,587.1	2,715.0	-755.2	-507.0	-1%	-16%
EMAAC	30,953.4	8,717.0	30,428.6	8,083.0	-524.8	-634.0	-2%	-7%
SWMAAC	13,508.8	8,467.0	13,338.7	6,999.0	-170.1	-1,468.0	-1%	-17%
PS	10,664.0	8,501.0	10,797.6	8,889.0	133.6	388.0	1%	5%
PS NORTH	5,415.8	4,282.0	5,390.4	4,425.0	-25.4	143.0	0%	3%
DPL SOUTH	2,750.4	2,030.0	2,634.1	1,948.0	-116.3	-82.0	-4%	-4%
PEPCO	6,557.3	6,572.0	6,457.9	5,870.0	-99.4	-702.0	-2%	-11%
ATSI	12,186.0	10,846.0	11,923.5	10,406.0	-262.5	-440.0	-2%	-4%
ATSI-Cleveland	5,064.0	4,713.0	5,329.6	5,199.0	265.6	486.0	5%	10%
COMED	20,819.6	5,254.0	20,669.5	6,110.0	-150.1	856.0	-1%	16%
BGE	6,940.7	6,031.0	6,995.6	6,000.0	54.9	-31.0	1%	-1%
PL	8,765.4	4,681.0	9,521.8	3,205.0	756.4	-1,476.0	9%	-32%
DAYTON	3,521.8	3,931.0	3,521.3	4,157.0	-0.5	226.0	0%	6%
DEOK	5,596.1	5,387.0	5,514.7	5,280.0	-81.4	-107.0	-1%	-2%
DOM	25746.2	5,164.0	25,660.7	7,374.0	-85.5	2,210.0	0%	43%
JCPL	N/A	N/A	6,184.5	4,263.0	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. Under normal procedures as established by the PJM Tariff, the VRR curves for the PJM Region and each LDA are based on a target level of capacity and the Net Cost of New Entry (Net CONE). For the 2026/2027 and 2027/2028 BRAs, as approved by FERC in Docket ER25-1357, a price cap and price floor have been established to the normal VRR Curve. For the RTO and each LDA, the cap has been set at $329.17/MW-day (UCAP) and the floor has been set at $177.24/MW-day (UCAP). 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.

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.

Net Cost of New Entry (CONE)

Under normal BRA procedures, the Net CONE (in UCAP terms) is used in the development of the RTO VRR Curve and the VRR Curve for each modeled LDA. 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**. As previously noted, a cap and floor will be applied the VRR Curve.

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 decreased for the RTO and for five of the modeled LDAs. The Net CONE of the RTO decreased by 7.3% and the decrease in LDA Net CONE values ranged from 4.1% for the DOM LDA to 15.0% for the DAYTON LDA. Increases to Net CONE occurred in eight modeled LDAs, ranging from 3.9% in EMAAC to 78.6% in BGE. The large percentage increase in BGE can be primarily attributed to the increase in Gross CONE for CONE Area 2 and from the relatively low Net CONE value for BGE in the 2025/2026 Delivery Year. The Net EAS values for the 2025/2026 BRA used historic LMP data from calendar years 2021 through 2023 while the values for the 2026/2027 Delivery Year are calculated using a forward method shaped on historic LMP data from calendar years 2022 through 2024.

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

	2025/2026 BRA				2026/2027 BRA				Change in Net CONE	
Location	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	$143,980	$83,584	$60,396	$212.14	-$16.67	-7.3%
MAAC	$131,542	$59,171	$67,263	$250.98	$140,920	$63,028	$77,891	$267.33	$16.35	6.5%
EMAAC	$133,120	$43,478	$89,641	$310.88	$136,000	$44,041	$91,959	$323.00	$12.12	3.9%
SWMAAC	$134,473	$95,671	$38,803	$134.57	$142,000	$93,310	$48,690	$171.02	$36.45	27.1%
PS, PS NORTH	$133,120	$37,684	$95,435	$330.97	$136,000	$30,863	$105,137	$369.29	$38.32	11.6%
DPL SOUTH	$133,120	$62,277	$70,842	$245.68	$136,000	$74,458	$61,542	$216.17	-$29.51	-12.0%
PEPCO	$134,473	$69,941	$64,532	$223.80	$142,000	$67,672	$74,328	$261.07	$37.27	16.7%
ATSI, Cleveland	$128,102	$59,826	$68,276	$236.78	$147,600	$89,511	$58,089	$204.03	-$32.75	-13.8%
COMED	$128,986	$41,505	$87,481	$300.32	$150,800	$50,515	$100,285	$352.25	$51.93	17.3%
BGE	$134,473	$121,401	$13,073	$45.34	$142,000	$118,949	$23,051	$80.97	$35.63	78.6%
PL	$126,433	$51,402	$75,031	$260.21	$143,500	$53,210	$90,290	$317.14	$56.93	21.9%
DAYTON	$128,102	$72,917	$55,185	$191.38	$147,600	$101,270	$46,330	$162.73	-$28.65	-15.0%
DEOK	$128,102	$68,920	$59,182	$205.25	$147,600	$92,307	$55,293	$194.21	-$11.04	-5.4%
DOM	$128,102	$84,076	$44,027	$152.69	$147,600	$105,911	$41,689	$146.43	-$6.26	-4.1%
JCPL	N/A	N/A	N/A	N/A	$136,000	$33,118	$102,882	$361.37	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 forecast peak load for the PJM RTO for the 2026/2027 Delivery Year is 159,329 MW which is 5,446 MW, or 3.5%, 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 146,105 MW which is 1,655 MW, or 1.1%, higher than 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.
- As approved by FERC in Docket ER25-1325, a price cap of $329.17/MW-day (UCAP) and price floor of $177.24/MW-day (UCAP) have been established for the 2026/2027 and 2027/2028 BRAs.

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