

2027/2028 Base Residual Auction Report

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Introduction

This document provides information for PJM stakeholders regarding the results of the 2027/2028 Reliability Pricing Model (RPM) Base Residual Auction (BRA).

In each BRA, PJM seeks to procure a target capacity reserve level for the RTO in a least-cost manner while recognizing the following reliability-based constraints on the location and type of capacity that can be committed:

- Internal PJM locational constraints are established by setting up Locational Deliverability Areas (LDAs) with each LDA having a separate target capacity reserve level and a maximum limit on the amount of capacity that it can import from resources located outside of the LDA.
- Summer and winter seasonal sell offers must be matched to clear in order to meet the required annual commitment.

The clearing solution may be required to commit capacity resources out-of-merit order but still in a least-cost manner to ensure that all of these constraints are respected. In those cases where one or more of the constraints results in out-of-merit commitment in the auction solution, resource clearing prices will be reflective of the price of resources selected out-of-merit order to meet the necessary requirements.

An LDA was modeled in the BRA and had a separate VRR Curve if: (1) the LDA has a CETO/CETL margin that is less than 115%; or (2) the LDA had a Locational Price Adder in any of the three immediately preceding BRAs; or (3) the LDA is EMAAC, SWMAAC and MAAC. An LDA not otherwise qualifying under the above three tests may also be modeled if PJM finds that the 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.

As a result of the above criteria, MAAC, EMAAC, SWMAAC, PSEG, PS-NORTH, DPL-SOUTH, PEPCO, ATSI, ATSI-Cleveland, COMED, BGE, PL, DAY, DOM, DEOK and JCPL were modeled as LDAs in the 2027/2028 RPM Base Residual Auction. A Locational Price Adder represents the difference in Resource Clearing Prices for the Capacity Performance product between a resource in a constrained LDA and the immediate higher-level LDA.



Locational Deliverability Area Definition

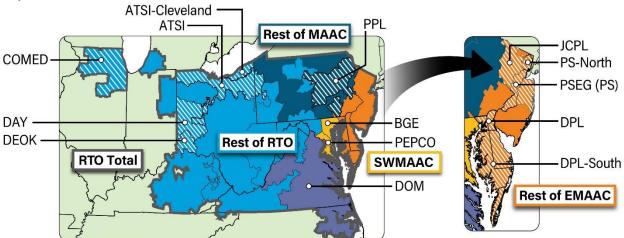
Locational Deliverability Areas (LDAs) defined as "(rest of)" do not include figures from modeled child LDAs contained within the parent LDA. For example, the PS (rest of) LDA does not include PS-NORTH within its totals.

- EMAAC total includes DPL-SOUTH, PS-NORTH, PS (rest of), JCPL, EMAAC (rest of).
- **SWMAAC** total includes PEPCO, BGE, SWMAAC (rest of).
- MAAC total includes EMAAC total, SWMAAC total, PPL, MAAC (rest of).

RTO total includes MAAC total, ATSI (rest of), ATSI-Cleveland, COMED, DAY, DEOK, DOM, RTO (rest of).

See Map 1.

Map 1. PJM LDAs





Executive Summary

The 2027/2028 Reliability Pricing Model (RPM) Base Residual Auction (BRA) cleared 134,478.1 MW of Unforced Capacity (UCAP) in the RTO from annual, summer-period and winter-period matched resources. 809.6 MW of UCAP did not clear because the offer prices were above the temporary price cap of \$333.44 \$/MW-day UCAP. A price cap below that, which is established for the VRR Curve, can reduce the amount of investment and therefore supply in the PJM region. Fixed Resource Requirement (FRR) committed 11,299 MW UCAP, which resulted in total procured capacity in the RTO of 145,777.1 MW UCAP or 6,623.2 MW UCAP below the RTO Reliability Requirement¹.

RPM cleared 14.8% Installed Reserve Margin (IRM) or 5.2 percentage points below the 20% IRM. The IRM is the reserve margin determined to be necessary to maintain a one-day-in-10-year Loss of Load Expectation (LOLE). Per OATT Attachment DD, Section 16, a shortfall of greater than one percentage point triggers an investigation into the cause of the shortage. Further, if a shortfall of greater than one percentage point continues for two additional BRAs, this will trigger a Reliability Backstop Auction. If a Reliability Backstop Auction is warranted, the Tariff requires that PJM make a filing with FERC prior to its execution.

PJM will also review if the amount of Base Load Generation Resources committed in the BRA is less than the forecasted minimum hourly load and investigate accordingly. If the amount of Base Load Generation Resources committed is less than the forecast minimum hourly load in three consecutive BRAs, then this will also trigger a Reliability Backstop Auction. To date, this condition has never occurred. PJM will publish the results of this comparison in a separate file on PJM.com after the auction results have been posted.

Supply offered into the RPM capacity market increased 955.8 MW (UCAP) from 135,191.8 MW in the 2026/2027 BRA to 136,147.6 MW in the 2027/2028 BRA. The total amount of new generation and generation uprates was 774 MW UCAP. The number of constrained LDAs remained at zero in the 2027/2028 BRA since the total amount cleared was less than the RTO Reliability Requirement. The total amount of capacity in RPM that cleared increased by 370.6 MW from 134,376.1 MW in the 2026/2027 BRA to 134,746.7 MW in the 2027/2028 BRA.

The RTO as a whole failed the Market Structure Test (i.e., the Three-Pivotal Supplier Test), resulting in the application of market power mitigation to all Existing Generation Capacity Resources. Mitigation was applied to a supplier's existing generation resources, resulting in utilizing the lesser of the supplier's approved Market Seller Offer Cap for such resource or the supplier's submitted offer price for such resource in the RPM Auction clearing.

Table 1 summarizes the prices (\$/MW-day UCAP) from the previous BRA and this BRA. For the 2027/2028 BRA, all prices cleared at the cap (\$333.44). In the 2026/2027 BRA, the RTO cleared at the price cap of \$329.17.

The sum of the product of total cleared supply by LDA and the associated clearing price in the 2027/2028 BRA was \$16.4 billion, which increased 1.9% from the \$16.1 billion value in the 2026/2027 BRA. Since the RPM cleared 6,623.2 MW UCAP less than the IRM, the product of cleared supply and the associated clearing price is estimated to be \$0.8 billion less than it would have been if the RPM cleared enough capacity to meet the IRM. Note that the \$16.4 billion value does not equate to a total cost to load because load that is hedged through self-supply or bilateral contracts is not exposed to the clearing prices in the auction.

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¹ 106.5 MW Price Responsive Demand (PRD) is included in the installed reserve margin calculation by subtracting the amount of PRD from the Reliability Requirement.



Table 1. Comparison of BRA Clearing Prices by Delivery Year by LDA

		BRA Resource Clearing Prices (\$/MW-day)*
Capacity Type	BRA	Rest of RTO
Capacity	2027/28***	\$333.44
Performance	2026/27**	\$329.17

The following is a list of significant planning parameter and market rules changes that impacted the auction results:

- Key planning parameters changes [please see the <u>Planning Parameters Report</u> (PDF) for additional details], which include:
 - RTO Reliability Requirement increase from 146,105 MW to 152,400 MW (UCAP)
 - 5,249.9 MW increase in forecasted load, largely due to additional Large Loads
 - IRM increased from 19.1% to 20.0%
 - FPR increased from 0.917 to 0.926
- Implemented a cap of \$256.75 \$/MW-ICAP (\$333.44 \$/MW-UCAP) and a floor of \$138.25 \$/MW-ICAP (\$179.55 \$/MW-UCAP) to the VRR Curve.² This cap and floor were in effect for the 2026/2027 and 2027/2028 BRAs. All offers below the floor were cleared, and all offers above the cap were not cleared.
- PJM submitted \$0 offers for specific Reliability Must-Run units and will allocate the revenue as a credit to the associated load.
- Required Demand Response (DR) availability increased to all hours in the year, and the calculation of the winter
 peak load was updated to a coincident value. This was a major driver to an increase of the ELCC value for DR from
 69% in the 2026/2027 BRA to 92% in the 2027/2028 BRA.
- The Chanceford-Doubs 500 kV backbone transmission line was delayed, which significantly impacted MAAC, SWMAAC and DOM CETLs.

Note: This BRA was conducted under a compressed auction schedule where the auction occurred ~18 months prior to the start of the delivery year. A typical BRA is held more than three years before the start of the delivery year. The prior BRA was conducted under the same compressed auction schedule.

² Approximate cap/floor price of \$325/\$175 \$/MW-UCAP filed in ER25-1357 was based on preliminary Reference Resource AUCAP Factor. Actual Reference Resource AUCAP Factor resulted in stated \$/MW-UCAP values.



Detailed Report

Table 2 contains a summary of the RTO clearing prices, cleared Unforced Capacity (UCAP) and estimated procured installed reserve margins for the 2017/2018 through 2027/2028 RPM BRAs. The estimated reserve margin presented in **Table 2** represents the percentage of installed capacity (ICAP) cleared in the RPM and committed by FRR entities in excess of the RTO load (including load served under the FRR alternative). The estimated reserve margin used a pool-wide EFORd prior to 2025/2026 Delivery Year and an accredited UCAP factor in subsequent delivery years to convert from cleared UCAP to estimate cleared ICAP, which may result in a difference from the actual reserve margin. The reserve margin procured for the entire RTO, which includes FRR and RPM load, is 14.8%, or 5.2 percentage points lower (or 8,526.4 MW ICAP lower) than the target reserve margin of 20.0% included in the Reliability Requirement to meet one loss-of-load day in 10 years criteria (or 0.1 loss-of-load days per year).

 Table 2.
 RPM Base Residual Auction Resource Clearing Price Results in the RTO

	Auction Results									
Delivery Year	Resource Clearing Price	Cleared UCAP (MW)	RPM Reserve Margin ¹	Total Reserve Margin ^{1,2,6}	Cleared MW Times Clearing Price (\$ billion)					
2017/18	\$120.00	167,003.7	20.1%	19.7%	\$7.5					
2018/19	\$164.77	166,836.9	20.2%	19.8%	\$10.9					
2019/20	\$100.00	167,305.9	22.9%	22.4%	\$7.0					
2020/21 ³	\$76.53	165,109.2	23.9%	23.3%	\$7.0					
2021/22	\$140.00	163,627.3	22.0%	21.5%	\$9.3					
2022/23	\$50.00	144,477.3	21.1%	19.9%	\$3.9					
2023/24	\$34.13	144,870.6	21.6%	20.3%	\$2.2					
2024/25	\$28.92	147,478.9	21.7%	20.4%	\$2.2					
2025/26 ⁴	\$269.92	135,684.0	18.6%	18.5%	\$14.7					
2026/27 ⁵	\$329.17	134,205.3	18.9%	18.9%	\$16.1					
2027/28	\$333.44	134,478.1	14.4%	14.8%	\$16.4					

¹Reserve Margins converted to ICAP using Pool-Wide AUCAP Factor or EFORd prior to 2025/26 DY, PRD removed from Reliability Requirement in calculation of RPM Reserve Margin; ² Total Reserve Margin includes FRR+RPM (Total ICAP/Total Peak-1); ³ Beginning 2020/2021 Cleared UCAP (MW) includes Annual and matched Seasonal Capacity Performance sell offers; ⁴ DOM zone included in RPM; ⁵ EE removed from Market; ⁶ Total Reserve margin does not include FRR commitments to meet the threshold to allow sales into RPM.

Figure 1 represents the trend in BRA capacity price by delivery year for RTO, EMAAC, SWMAAC and MAAC. For 2027/2028, all four LDAs cleared at \$333.44. This clearing price was an increase from \$329.17 in the RTO in the 2026/2027 BRA. The number of constrained LDAs remained at zero.



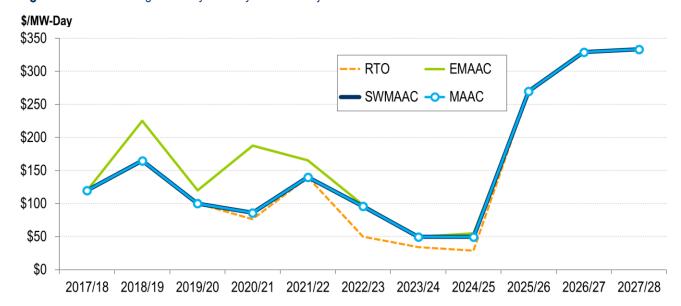


Figure 1. BRA Clearing Prices by Delivery Year for Major LDAs

Table 3 provides the total offered and cleared megawatts and associated prices by LDA. This table provides an indication of how much supply did not clear for each LDA.

Since there were no constrained LDAs in the 2027/2028 BRA, Capacity Transfer Rights (CTRs) have no value for the 2027/2028 Delivery Year. CTRs are allocated by load ratio share to all Load Serving Entities (LSEs) in a constrained LDA that has a higher clearing price than the unconstrained region. CTRs serve as a credit back to the LSEs in the constrained LDA for use of the transmission system to import less expensive capacity into that constrained LDA and are valued at the difference in the clearing prices of the constrained and unconstrained regions.

For 2027/2028, 809.6 MW UCAP³ of annual generation did not clear. These megawatts did not clear either because the offer was subject to a MOPR price or was approved for a Market Seller Offer Cap price that exceeded the temporary overall auction price cap. Any remaining amount that did not clear was winter-only where there were no matching summer-only resources that did not clear.

Table 3. Offered and Cleared MW and Associated Prices by LDA

	MW (U	ICAP)	System	Locational	RCP for Capacity Performance
LDA	Offered MW*	Cleared MW**	Marginal Price	Price Adder***	Resources
ATSI	7,609.6	7,603.6	\$333.44	\$0.00	\$333.44
ATSI-CLEVELAND	1,651.6	1,651.6	\$333.44	\$0.00	\$333.44
COMED	20,423.9	19,549.4	\$333.44	\$0.00	\$333.44
DAY	928.9	928.9	\$333.44	\$0.00	\$333.44
DEOK	2,418.6	2,414.5	\$333.44	\$0.00	\$333.44
DOM	20,018.3	19,896.1	\$333.44	\$0.00	\$333.44
MAAC	51,977.0	51,665.7	\$333.44	\$0.00	\$333.44
PPL	8,646.0	8,568.2	\$333.44	\$0.00	\$333.44
EMAAC	23,879.9	23,863.2	\$333.44	\$0.00	\$333.44

³ The MW UCAP volume cannot be reported on a more granular level because of confidentiality issues.

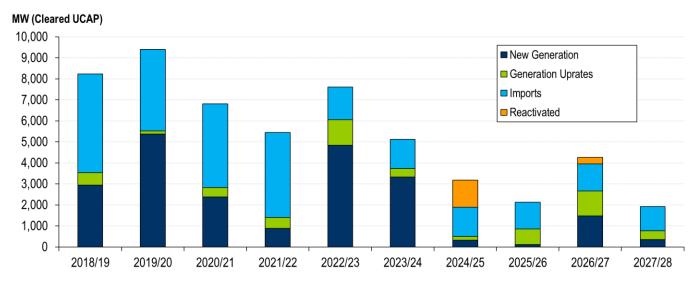


	MW (UCAP)		System	Locational	RCP for Capacity Performance
LDA	Offered MW*	Cleared MW**	Marginal Price	Price Adder***	Resources
DPL-SOUTH	959.6	959.6	\$333.44	\$0.00	\$333.44
PSEG	4,157.5	4,157.0	\$333.44	\$0.00	\$333.44
PS-NORTH	2,379.7	2,379.7	\$333.44	\$0.00	\$333.44
JCPL	2,496.6	2,496.6	\$333.44	\$0.00	\$333.44
SWMAAC	6,629.3	6,482.6	\$333.44	\$0.00	\$333.44
BGE	2,217.7	2,216.8	\$333.44	\$0.00	\$333.44
PEPCO	2,294.7	2,148.9	\$333.44	\$0.00	\$333.44
RTO	136,147.6	134,478.1	\$333.44	\$0.00	\$333.44

^{*} Offered MW values include Annual, Summer-Period, and Winter-Period Capacity Performance sell offers.

As seen in **Figure 2**, the 2027/2028 BRA procured 350.7 MW UCAP of capacity from new generation and 423.6 MW UCAP from uprates to existing or planned generation. The quantity of capacity procured from external Generation Capacity Resources in the 2027/2028 BRA declined from the 2026/2027 BRA at 1,281.7 MW to 1,005.9 MW. The total quantity of new, uprated, reactivated and imported generation decreased from 4,268.6 MW in 2026/2027 to 1,919.1 MW in 2027/2028. Certain external generation capacity that cleared in the 2027/2028 BRA are Prior Capacity Import Limit (CIL) Exception External Resources⁴ that qualify for an exception for the 2027/2028 Delivery Year to satisfy the enhanced pseudo-tie requirements established by FERC Order ER17-1138.

Figure 2. Cleared Megawatts (UCAP) by New Generation/Uprates/Imports by Delivery Year



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^{**} Cleared MW values include Annual and matched Seasonal Capacity Performance sell offers within the LDA.

^{***} Locational Price Adder is with respect to the immediate parent LDA.

⁴ A Prior CIL Exception Resource is an external Generation Capacity Resource for which (1) a Capacity Market Seller had, prior to May 9, 2017, cleared a Sell Offer in an RPM Auction under the exception provided to the definition of CIL as set forth in Article 1 of the Reliability Assurance Agreement or (2) an FRR Entity committed, prior to May 9, 2017, in an FRR Capacity Plan under the exception provided to the definition of CIL.



Table 4 contains a summary of the RTO resources for each cleared BRA from 2017/2018 through the 2027/2028 delivery years in terms of ICAP. The summary includes all resources located in the RTO (including FRR Capacity Plans).

A total of 200,993.8 MW of ICAP was eligible to be offered into the 2027/2028 Base Residual Auction or used in an FRR Capacity Plan. The total amount of supply in the PJM service area increased from 196,649.5 MW ICAP to 200,993.8 MW ICAP, or an increase in the total amount of supply by 4,344.3 MW ICAP.

A total of 179,458.1 MW (ICAP) of Generation Capacity Resources and Demand Response Resources were offered into the Base Residual Auction. This is an increase of 1,056.8 MW offered when compared to the 2026/2027 BRA. The total Demand Response offered into the auction declined slightly from 8,020.1 MW ICAP to 7,937.6 MW ICAP.

A total of 21,535.7 MW (ICAP) of Generation Capacity Resources were not offered. Certain Generation Capacity Resources received a must-offer exception. PRD committed in the auction is also included in the total 21,535.7 MW value above, but is not considered unoffered.

1,003.8 MW ICAP (809 MW UCAP) were not offered but were required to offer and are included in the 21,535.7 MW ICAP described above. These values reflect units with a must-offer requirement that did not offer and planned generation resources that submitted an NOI but then did not offer. All megawatts that were unoffered but required to offer are considered "unoffered" and may not be used as capacity for the delivery year. This means they may not be used to participate in an incremental auction or bilateral transaction or be included in an FRR plan. Any Seller with unoffered megawatts is subject to further review by PJM and the IMM. Such review may result in a referral to the FERC Office of Investigation for a comprehensive investigation to ensure the Seller did not withhold in order to exercise market power.

459.4 MW ICAP (105.1 MW UCAP) were not allowed to participate because: i) they were subject to both MOPR and MSOC⁵ where the MOPR price was greater than the MSOC price and the resource did not request and receive a unit-specific price or ii) they were subject to MOPR, did not have a default MOPR price and did not request and receive a unit-specific price.

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⁵ MSOC includes Market Seller Offer Cap outlined in OATT 6.4, and Planned Generation offer price cap included in OATT 6.5.



 Table 4.
 Total RTO Resources (RPM + FRR) Offered vs. Unoffered by Resource Type Used To Meet the Reliability Requirement

	Delivery Year (All values in ICAP)										
Auction Supply	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26*	2026/27	2027/28**
Internal PJM Gen Capacity	190,333.2	191,322.3	195,203.0	197,804.7	198,726.6	193,412.2	189,704.7	191,133.4	186,134.2	187,022.1	191,580.6
Internal PJM DR+PRD Capacity	10,855.2	10,772.8	10,859.2	8,245.5	10,694.8	9,501.2	9,517.2	9,626.1	8,233.7	8,135.1	8,052.6
Imports Offered	6,300.9	5,724.6	4,821.4	5,440.5	4,725.0	1,649.1	1,601.2	1,617.1	1,485.2	1,492.3	1,360.6
Eligible RPM Capacity	207,489.3	207,819.7	210,883.6	211,490.7	214,146.4	204,562.5	200,823.1	202,376.6	195,853.1	196,649.5	200,993.8
Exports/ Delistings FRR Commitments	1,223.2 15,776.1	1,313.4 15,793.0	1,318.2 15,385.3	1,319.8 13,931.6	1,319.8 13,657.4	1,525.3 33,297.1	1,518.9 33,500.7	1,522.7 34,584.2	1,525.3 13,184.5	1,426.3 14,837.5	1,427.0 14,372.2
Excused/Unoffered	4,305.3	2,348.4	1,454.5	8,384.4	9,433.8	2,190.0	9,949.6	12,207.4	9,819.0	1,984.4	5,736.5
Total Eligible RPM Capacity: Excused	21,304.6	21,304.6	19,454.8	18,158.0	24,411.0	37,012.4	44,969.2	48,314.3	24,528.8	18,248.2	21,535.7
Remaining Eligible RPM Capacity	186,184.7	186,515.1	191,428.8	193,332.7	189,735.4	167,550.1	155,853.9	154,062.3	171,324.3	178,401.3	179,458.1
Generation Offered DR Offered	175,329.5 10,855.2	177,592.1 10,772.8	181,866.4 10,859.2	178,807.1 9,047.8	178,823.5 10,911.9	157,872.2 9,677.9	146,571.7 9,282.2	144,741.2 9,321.1	163,314.6 8,009.7	170,381.2 8,020.1	171,520.5 7,937.6
Total Eligible RPM Capacity: Offered *includes DOM zone load provi	186,184.7	188,364.9	192,725.6	187,854.9	189,735.4	167,550.1	155,853.9	154,062.3	171,324.3	178,401.3	179,458.1

^{*}includes DOM zone load previously under the FRR Alternative.

Internal PJM Gen Capacity includes ICAP MW effective as of June 1 of the DY

ICAP values only include Annual Resources

^{**}includes DEOK zone load previously under the FRR Alternative.



Table 5 shows the Generation, DR and EE Resources offered and cleared in the RTO translated into UCAP megawatt amounts. Until the 2025/2026 Delivery Year, participants' sell offers for thermal resource EFORd values were used to convert a resource's ICAP values into UCAP values. Effective for 2025/2026, the appropriate Accredited UCAP Factor is used to convert ICAP values into UCAP values. Prior to the 2025/2026 Delivery Year, DR sell offers and EE sell offers were converted into UCAP using the appropriate Forecast Pool Requirement (FPR). Beginning in 2025/2026, DR sell offers are converted into UCAP using the appropriate DR Accredited UCAP Factor, while EE sell offers continued to be calculated by multiplying the EE nominated value by the Forecast Pool Requirement. Beginning in 2026/2027, EE Resources are not eligible to participate as a capacity resource in PJM.

Total offered Generation and DR (UCAP) used to meet the Reliability Requirement increased from 135,191.8 MW to 136,147.6 MW. Please note that UCAP for delivery years prior to 2025/2026 were not calculated using the marginal ELCC methodology, and changes going forward from 2025/2026 are in part responsible for the subsequent decreases in offered and cleared UCAP.

Table 5. Capacity Resource Offered and Cleared by Type by Delivery Year (UCAP)

			Delivery Year									
	Auction Results (UCAP)	2017/18	2018/19	2019/20	2020/21*	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27**	2027/28**
	Generation	166,204.8	166,909.6	172,071.2	171,262.3	171,663.2	152,128.6	141,026.7	138,799.3	129,607.5	129,661.2	128,849.0
red	DR	11,293.7	11,675.5	11,818.0	9,846.7	11,886.8	10,513.0	10,116.7	10,146.4	6,084.8	5,530.6	7,298.6
Offe	Total GEN/DR Offered	177,498.5	178,585.1	183,889.2	181,109.0	183,550.0	162,641.6	151,143.4	148,945.7	135,692.3	135,191.8	136,147.6
	EE	1,340.0	1,306.1	1,650.3	2,242.5	2,954.8	5,056.8	5,471.1	8,417.0	1,459.8	0.0	0.0
	Generation	154,690.0	154,506.0	155,442.8	155,976.5	150,385.0	131,541.6	131,777.4	132,423.1	128,607.5	128,845.5	127,448.1
red	DR	10,974.8	11,084.4	10,348.0	7,820.4	11,125.8	8,811.9	8,096.2	7,992.7	6,064.7	5,530.6	7,298.6
Clea	Total GEN/DR Cleared	165,664.8	165,590.4	165,790.8	163,796.9	161,510.8	140,353.5	139,873.6	140,415.8	134,672.2	134,376.1	134,746.7
	EE	1,338.9	1,246.5	1,515.1	1,710.2	2,832.0	4,810.6	5,471.1	7,668.7	1,459.8	0.0	0.0
	Uncleared GEN/DR	11,833.7	12,994.7	18,098.4	17,312.1	22,039.2	22,288.1	11,269.8	8,529.9	1,020.1	815.7	1,400.9
	Note: RTO numbers include all L	DAs. UCAP car	lculated using E	LCC values fo	r Generation F	Resources. DR	and EE UCAP	values include a	ppropriate DR	AUCAP Facto	r and FPR.	

Note: RTO numbers include all LDAs. UCAP calculated using ELCC values for Generation Resources. DR and EE UCAP values include appropriate DR AUCAP Factor and FPR.
*Starting 2020/2021: Generation, DR, and EE offered and cleared values include sum of Annual, Summer-Period, and Winter-Period Capacity Performance sell offers. **EE Eliminated



The 2025/2026, 2026/2027 and 2027/2028 numbers in **Table 6** and **Table 7** were significantly impacted by the marginal ELCC accreditation changes [see <u>ELCC class rating</u> (PDF)], so it is difficult to simply compare delivery year over delivery year results for 2024/2025 and earlier to 2025/2026 and future delivery years. **Table 6** shows the offered and cleared megawatts by resource type for RPM plus FRR commitments over the last four delivery years. Intermittent and Capacity Storage Resources (solar, wind, water, battery/hybrid) offered increased marginally by 282 MW UCAP, while coal megawatts offered decreased by 582 MW UCAP, primarily due to a planned deactivation. Natural gas offered declined modestly by 577 MW UCAP primarily from a decline in accredited UCAP factors. Demand Response offers increased sharply by 1,847 MW UCAP due to a significant increase in the accredited UCAP factor.

Table 6. Offered and Cleared MWs by Type for RPM and Committed FRR for Previous BRAs

Offered and Cleared UCAP

				5/26		6/27		7/28	2027/20	2026/27
	202	4/25	(Reflect	s ELCC	(Reflect	ts ELCC	(Reflect	ts ELCC		- 2026/27
			Accred	Accreditation) Accreditation) A		Accred	Accreditation)		Change	
Type	Offered	Cleared	Offered	Cleared	Offered	Cleared	Offered	Cleared	Offered	Cleared
Coal	35,114	31,532	30,081	30,081	30,948	30,948	30,366	29,766	(582)	(1,182)
Distillate Oil (No.2)	2,776	2,674	2,408	2,408	2,608	2,608	2,421	2,421	(187)	(187)
Gas	85,469	83,258	66,354	66,354	63,377	63,377	62,800	62,634	(577)	(743)
Nuclear	31,835	31,629	30,549	30,549	30,562	30,562	30,552	30,552	(10)	(10)
Oil	2,493	2,220	578	578	1,155	1,155	1,167	1,167	12	12
Solar	4,234	4,232	1,337	1,337	1,584	1,567	1,481	1,465	(103)	(103)
Water	6,137	6,137	5,365	5,361	5,597	5,597	6,002	6,002	405	405
Wind	1,396	1,396	2,618	1,676	4,507	3,717	4,144	3,526	(363)	(191)
Battery/Hybrid	36	36	14	14	35	35	205	205	171	171
Other	1,153	1,153	911	911	899	899	1,005	1,005	106	106
Demand Response	10,334	8,180	6,363	6,342	5,795	5,795	7,641	7,641	1,847	1,847
Aggregate Resource	503	503	327	273	58	49	-	-	(58)	(49)
Total (without EE)	181,481	172,951	146,905	145,883	147,125	146,309	147,786	146,385	661	76
Energy Efficiency	8,417	7,669	1,460	1,460	-	-	-	-	NA	NA

The table shows the UCAP MW quantities that offered and cleared in the BRA of each DY plus the UCAP MW committed to FRR Capacity Plans. Notes: Offered and Cleared MW quantities include sum of Annual, Summer-Period, and Winter-Period Capacity Performance sell offers. Other consists of: Kerosene, Other Gas, Other Liquid, Other Solid, Wood.



Capacity Import Participation

Table 7 shows the quantity of capacity imports cleared in the 2027/2028 BRA at 1,005.9 MW (UCAP). The majority of the imports remain sourced from resources located in regions north and west of the PJM RTO. Certain external generation capacity that has cleared are Prior CIL Exception External Resources that qualify for an exception for the 2027/2028 Delivery Year to satisfy the enhanced pseudo-tie requirements established by FERC Order ER17-1138.

Table 7. Capacity Imports (UCAP) Offered and Cleared by Region

		External Source Zones						
	NORTH	WEST 1	WEST 2	SOUTH 1	SOUTH 2	Total		
Offered MW (UCAP)*	213.6	0.0	561.9	230.4	138.9	1,144.8		
Cleared MW (UCAP)*	213.6	0.0	561.9	230.4	0.0	1,005.9		
Resource Clearing Price (\$/MW-day)	\$333.44	\$333.44	\$333.44	\$333.44	\$333.44			

^{*}Offered and Cleared MW quantities include resources that received CIL Exception and those associated with pre-OATT grandfathered transmission. Attachment G of Manual 14B provides a mapping of outside Balancing Authorities to the External Source Zones.

Resource Type by Season Participation

Table 8 provides a breakdown of the offered and cleared megawatts by season by resource type. There were 268.6 MW of Summer Capability and 859.9 MW of Winter Capability offered in the auction. All 268.6 MW of Summer Resources were matched with Winter Resources to meet the annual Capacity Performance capability requirement.

Table 8. Offered and Cleared (UCAP) by Resource Type by Season

Capacity Performance

	Offe	ered MW (UCA	NP)	Cleared MW (UCAP)						
Resource Type	Annual	Summer	Winter	Annual	Summer	Winter				
GEN	127,989.1	-	859.9	127,179.5	-	268.6				
DR	7,030.0	268.6	-	7,030.0	268.6	-				
PRD	106.5	-	-	106.5	-	-				
Grand Total	135,125.6	268.6	859.9	134,316.0	268.6	268.6				



Figure 3 displays the trend in offered and cleared DR and Price Responsive Demand (PRD) and cleared EE prior to 2026/2027 by delivery year. DR offered and cleared amounts increased for 2027/2028 to nearly 7,800 MW, reversing a downward trend observed since 2021/2022. The amount of PRD remains small and remained constant in the 2027/2028 Delivery Year.

Figure 3. DR and PRD Offered and Cleared and EE Cleared MW(UCAP) by Delivery Year

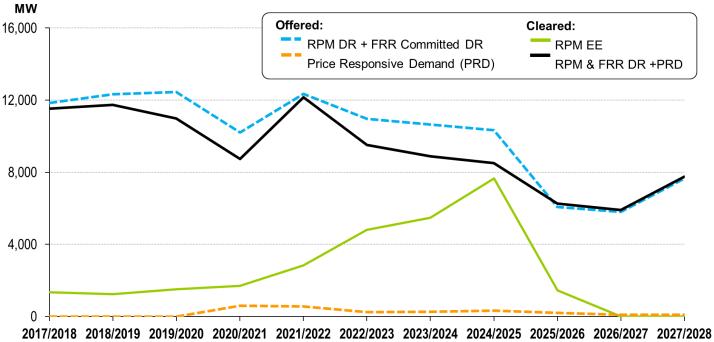




Table 9 provides a breakdown of offered and cleared DR by LDA. COMED cleared the most DR (1,515.9 MW), followed by AEP (1,105.6 MW) and DOM (768.3 MW).

Table 9. DR Offered and Cleared by LDA

LDA	Zone	Offered MW (UCAP)*	Cleared MW (UCAP)*	% Cleared
EMAAC	AECO	47.0	47.0	100.0%
EMAAC/DPL-S	DPL	159.4	159.4	100.0%
JCPL	JCPL	89.3	89.3	100.0%
EMAAC	PECO	266.6	266.6	100.0%
PSEG/PS-N	PSEG	234.3	234.3	100.0%
EMAAC	RECO	3.2	3.2	100.0%
EMAAC Sub Tota	I	799.8	799.8	100.0%
PEPCO	PEPCO	285.9	285.9	100.0%
BGE	BGE	169.6	169.6	100.0%
MAAC	METED	133.0	133.0	100.0%
MAAC	PENELEC	171.5	171.5	100.0%
PPL	PPL	421.8	421.8	100.0%
MAAC** Sub Tota	ıl	1,981.6	1,981.6	100.0%
RTO	AEP	1,105.6	1,105.6	100.0%
RTO	APS	553.1	553.1	100.0%
ATSI/ATSI-C	ATSI	672.3	672.3	100.0%
COMED	COMED	1,515.9	1,515.9	100.0%
DAY	DAY	172.1	172.1	100.0%
DEOK	DEOK	200.6	200.6	100.0%
DOM	DOM	768.3	768.3	100.0%
RTO	DUQ	122.1	122.1	100.0%
RTO	EKPC	207.0	207.0	100.0%
Grand Total		7,298.6	7,298.6	100.0%

^{*} MW values include sum of Annual and Summer-Period Capacity Performance DR

^{**} MAAC sub-total includes all MAAC Zones



Price Responsive Demand Participation

A certain amount of PRD was elected and committed⁶ in the 2027/2028 BRA. PRD is provided by a PJM Member that represents retail customers having the ability to predictably reduce consumption in response to energy 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. A PRD Provider that is committing PRD in a BRA must also submit a PRD election in the Capacity Exchange system that indicates the Nominal PRD Value in megawatts 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 megawatt quantity of elected PRD where the leftward shift occurs only for the portion of the VRR Curve at or above the PRD Reservation price. The planning parameters include a breakdown of elected PRD in ICAP, which can be converted to UCAP by taking ICAP * FPR. The VRR Curve of the RTO and each affected LDA is shifted leftward along the horizontal axis by the UCAP megawatt value of these quantities at 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.

⁶ This specific value is not being disclosed in accordance with PJM Data Confidentiality Rules



Appendix

BRA Clearing Simulation Without Cap and Floor

Table 1 contains a summary of the estimated RTO clearing prices,⁷ cleared UCAP and estimated procured reserve margins for the 2027/2028 RPM BRA without the cap and floor applied. Cleared UCAP and estimated reserve margins are both higher as compared to the actual results with the cap and floor applied, and the estimated resource clearing prices increased substantially, which resulted in the product of the cleared megawatt times the associated prices to increase \$9.9 billion over actual results.

Table 1. RPM Auction Resource Clearing Prices Results in the RTO With No Cap or Floor Simulation

	Auction Simulation – Estimated Impact of No Cap or Floor								
Delivery Year	Resource Clearing Price	Cleared UCAP (MW)	RPM Reserve Margin	Total Reserve Margin (RPM+FRR)	Cleared MW Times Clearing Price (\$ billion)				
2027/28	\$529.80	135,270.7	15.1%	15.4%	\$26.3				

Table 2 summarizes the prices (\$/MW-day UCAP) from the previous simulated BRA with no cap and floor and the 27/28 simulated BRA with no cap and floor. For the 2027/2028 simulated BRA, all prices cleared at \$529.80 except the DOM LDA which cleared at \$542.83. In the 2026/2027 simulated BRA, all prices cleared at \$388.57.

Table 2. RPM Simulated Base Residual Auction Resource Clearing Price Results

		BRA Resource Clearing Prices (\$/MW-day)			
Capacity Type	BRA	Rest of RTO	DOM		
Capacity	2026/27	\$388.57	-		
Performance	2027/28	\$529.80	\$542.83		

Note: Clearing prices in bold indicate constrained LDA

Table 3 provides the total offered and cleared megawatts and associated prices by LDA when no cap or floor is applied. The cleared capacity is approximately 800 MW higher compared to the cap and floor case, and the system marginal price increased to \$529.80. In this simulation, the DOM LDA bound and cleared at a price of \$542.83.

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⁷ The PJM simulation included existing offers provided by Capacity Market Sellers. PJM does not know how offers may have changed if the temporary cap and floor was not implemented.



Table 3. Offered and Cleared MW and Associated Prices by LDA – No Cap or Floor Simulation

	MW (UCAP)		System	Locational	RCP for Capacity
LDA	Offered MW*	Cleared MW**	Marginal Price	Price Adder***	Performance Resources
ATSI	7,609.6	7,603.6	\$529.80	\$0.00	\$529.80
ATSI-CLEVELAND	1,651.6	1,651.6	\$529.80	\$0.00	\$529.80
COMED	20,423.9	20,211.0	\$529.80	\$0.00	\$529.80
DAY	928.9	928.9	\$529.80	\$0.00	\$529.80
DEOK	2,418.6	2,414.5	\$529.80	\$0.00	\$529.80
DOM	20,018.3	19,896.1	\$529.80	\$13.03	\$542.83
MAAC	51,976.7	51,687.4	\$529.80	\$0.00	\$529.80
PPL	8,646.0	8,595.8	\$529.80	\$0.00	\$529.80
EMAAC	23,879.9	23,863.2	\$529.80	\$0.00	\$529.80
DPL-SOUTH	959.6	959.6	\$529.80	\$0.00	\$529.80
PSEG	4,157.5	4,157.0	\$529.80	\$0.00	\$529.80
PS-NORTH	2,379.7	2,379.7	\$529.80	\$0.00	\$529.80
JCPL	2,496.6	2,496.6	\$529.80	\$0.00	\$529.80
SWMAAC	6,629.0	6,482.3	\$529.80	\$0.00	\$529.80
BGE	2,217.7	2,216.8	\$529.80	\$0.00	\$529.80
PEPCO	2,294.4	2,148.6	\$529.80	\$0.00	\$529.80
RTO	136,147.3	135,270.7	\$529.80	\$0.00	\$529.80

^{*} Offered MW values include Annual, Summer-Period, and Winter-Period Capacity Performance sell offers.

^{**} Cleared MW values include Annual and matched Seasonal Capacity Performance sell offers within the LDA.

^{***} Locational Price Adder is with respect to the immediate parent LDA