



# 2024/2025 RPM Third Incremental Auction Results

March 11, 2024

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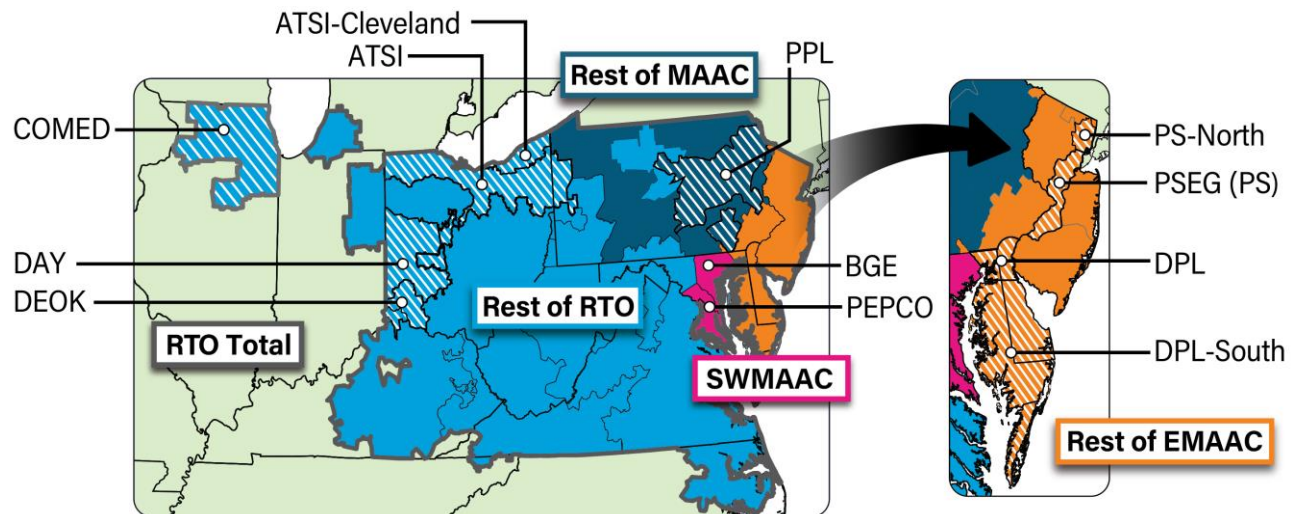
## Introduction

The 2024/2025 Third Incremental Auction opened on February 27, 2024, and the results were posted on March 11, 2024. This document provides a summary of the 2024/2025 Third Incremental Auction results. Incremental Auctions provide a mechanism for capacity suppliers to sell and purchase capacity and a means for PJM to adjust previously committed capacity levels due to Reliability Requirement increases or decreases.

## Locational Deliverability Area Definition

<p><b>Locational Deliverability Areas (LDAs) defined as (rest of)</b> 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.</p>	<ul style="list-style-type: none"> <li>• <b>EMAAC</b> total includes DPL-SOUTH, PS-NORTH, PS (rest of), EMAAC (rest of).</li> <li>• <b>SWMAAC</b> total includes PEPCO, BGE, SWMAAC (rest of).</li> <li>• <b>MAAC</b> total includes EMAAC total, SWMAAC total, PPL, MAAC (rest of).</li> </ul>	<p><b>RTO total</b> includes MAAC total, ATSI (rest of), ATSI-Cleveland, COMED, DAY, DEOK, RTO (rest of). See Error! Reference source not found..</p>
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**Map 1.** PJM LDAs



## Summary of the 2024/2025 RPM Third Incremental Auction Results

**Table 1** summarizes the clearing prices and cleared participant activity of the 2024/2025 Third Incremental Auction. The resource clearing price for Capacity Performance (CP) resources located in the rest of RTO is \$53.52/MW-day. Constrained LDAs in the 2024/2025 Third Incremental Auction were MAAC with a resource clearing price of \$75.50/MW-day, EMAAC with a resource clearing price of \$221.23/MW-day, and BGE with a resource clearing price of \$153.76/MW-day. These higher clearing prices in constrained LDAs in the eastern portion of the PJM region reflect tightening supply and demand conditions in those areas. Please see **Table 7** for a comparison of the Third Incremental Auction prices and the associated BRA prices.

Participant Sell Offers and Buy Bids are combined with the PJM Sell Offers and Buy Bids shown in **Table 6** to form the supply and demand curves. The solution algorithm clears all Buy Bids and Sell Offers in a least-cost manner while respecting the capacity import limits into each LDA. Total cleared summer-period Sell Offers must exactly equal total cleared winter-period Sell Offers across the entire RTO to ensure that seasonal CP Sell Offers clear to form annual CP commitments.

Across the entire RTO, total cleared participant Sell Offers (6,612.3 MW) were more than the total cleared participant Buy Bids (4,165.1 MW) by 2,447.2 MW. Every MW of offered capacity in the MAAC region cleared in the auction, and only about 250 MW of offered capacity in the remainder of PJM did not clear. PJM bought a total net capacity amount of 2,447.2 MW, comprised of 0 MW of cleared PJM Sell Offers and 2,447.2 MW of cleared PJM Buy Bids. The cleared PJM Buy Bids reflect an increase in the reliability requirement of the applicable LDA(s). The cleared megawatt quantity of EE Resources above the EE add-back margin remaining from all prior auctions must be offset by a PJM Buy Bid in order to avoid double counting of cleared EE Resource megawatts since EE measures are directly reflected in each peak load forecast.

**Table 1.** Summary of 2024/2025 Third Incremental Auction Results

Region	Clearing Price (\$/MW-Day)	Cleared Participant Sell Offers <sup>1</sup> (UCAP MW)	Cleared Participant Buy Bids (UCAP MW)	Net Cleared Participant Buy Bids (UCAP MW)
RTO (minus MAAC)	\$53.52	4,059.0	2,840.2	(1,218.8)
MAAC (minus EMAAC and BGE)	\$75.50	1,539.5	1,261.2	(278.3)
EMAAC	\$221.23	844.6	21.0	(823.6)
BGE	\$153.76	169.2	42.7	(126.5)
RTO Total	--	6,612.3	4,165.1	(2,447.2)

<sup>1</sup> Cleared Participant Sell Offers include Annual and matched Seasonal Capacity Performance cleared sell offers

## Participant Sell Offers and Buy Bids

RPM Incremental Auctions provide capacity suppliers with an opportunity to sell or purchase capacity for the Delivery Year through a PJM-administered auction process. Resource-specific Sell Offers are submitted into this auction by suppliers with available, uncommitted capacity. All Sell Offers into an Incremental Auction from Existing Generation Capacity Resources are subject to market power mitigation through the application of the Market Structure Test.

Any party that desires to purchase replacement capacity for the Delivery Year may do so by submitting a Buy Bid into the Incremental Auction. Participants submitting a Buy Bid must specify a megawatt quantity, price and LDA-specific location. All Buy Bids in Incremental Auctions for Delivery Year 2023/2024 and forward are of the annual CP product type. Cleared Buy Bids purchased in an Incremental Auction may be used as replacement capacity to cover a Delivery Year commitment provided the cleared Buy Bid has the same locational characteristics as the resource that it replaces.

**Table 2** shows the offered and cleared quantities for participant Sell Offers. A total of 6,887.9 MW of supply was offered into the Third Incremental Auction composed of uncleared capacity from prior 2024/2025 auctions and new capacity in the form of uprates or new resources that were not previously capacity resources in PJM.<sup>1</sup> Across the entire RTO, 6,638.4 MW of participant Sell Offers cleared, of which 6,586.2 MW were annual CP and 52.2 MW were matched seasonal CP (26.1 MW of summer resources matched with 26.1 MW of winter resources).

**Table 2.** Participant Sell Offers (Offered and Cleared Quantities)

LDA	Sell Offers (UCAP MW)*	Cleared Sell Offers (UCAP MW)*
DPL-SOUTH	33.2	33.2
PS-NORTH	62.5	62.5
PSEG (rest of)	51.1	51.1
EMAAC (rest of)	707.3	707.3
<b>EMAAC Total</b>	<b>854.1</b>	<b>854.1</b>
PEPCO	78.7	78.7
BGE	169.2	169.2
SWMAAC (rest of)	53.3	53.3
<b>SWMAAC Total</b>	<b>301.2</b>	<b>301.2</b>
PPL	591.1	591.1
MAAC (rest of)	821.5	821.5
<b>MAAC Total</b>	<b>2,567.9</b>	<b>2,567.9</b>
ATSI (rest of)	254.6	245.6
ATSI-Cleveland	0.0	0.0
COMED	2,481.1	2,399.9
DAY	7.2	7.2
DEOK	90.2	90.2
RTO (rest of)	1,486.9	1,327.6
<b>RTO Total</b>	<b>6,887.9</b>	<b>6,638.4</b>

\*Values include annual, summer and winter offered and cleared by LDA where the resource is modeled

There were 26.1 MW of seasonal capacity resources cleared in an aggregated manner to form a year-round commitment. 26.1 MW of summer CP resources comprising, 9.5 MW of EE Resources, and 16.6 MW of generation resources cleared along with 26.1 MW of winter CP resources comprising winter capability from wind resources. Total cleared summer-period Sell Offers must exactly equal total cleared winter-period Sell Offers across the entire RTO to ensure that seasonal CP Sell Offers clear to form annual CP commitments. **Table 3** shows a breakdown of the seasonal resources offered and cleared in the 2024/2025 Third Incremental Auction.

<sup>1</sup> The total offered supply quantity was determined using the annual Capacity Performance, summer Capacity Performance and winter Capacity Performance Sell Offers.

**Table 3.** Breakdown of Seasonal Capacity Performance Resources by Resource Type and Season That Offered and Cleared in the 2024/2025 Third Incremental Auction

Resource Type	Offered MW (UCAP)			Cleared MW (UCAP)		
	Annual	Summer	Winter	Annual	Summer	Winter
GEN	6,637.0	16.6	77.9	6,474.4	16.6	26.1
DR	107.6	0	0.0	72.5	0	0.0
EE	39.3	9.5	0.0	39.3	9.5	0.0
<b>Grand Total</b>	<b>6,783.9</b>	<b>26.1</b>	<b>77.9</b>	<b>6,586.2</b>	<b>26.1</b>	<b>26.1</b>

Participant demand in an Incremental Auction is composed of Buy Bids submitted by participants seeking replacement capacity for a previously committed capacity resource. The Buy Bids are specified in UCAP terms and, if cleared, are binding commitments to purchase capacity for the entire Delivery Year. Across the RTO, participants submitted a total of 14,056.2 MW Buy Bids, of which 4,165.1 MW cleared. The bid and cleared quantities of participants' Buy Bids are further illustrated by location in **Table 4**.

**Table 4.** Participant Buy Bids (Bid and Cleared Quantities)

LDA	Buy Bids (UCAP MW)	Cleared Buy Bids (UCAP MW)
DPL-SOUTH	180.3	0.0
PS-NORTH	44.7	0.0
PSEG (rest of)	128.4	0.0
EMAAC (rest of)	1,387.7	21.0
<b>EMAAC Total</b>	<b>1,741.1</b>	<b>21.0</b>
PEPCO	378.5	152.5
BGE	69.4	42.7
SWMAAC (rest of)	0.0	0.0
<b>SWMAAC Total</b>	<b>447.9</b>	<b>195.2</b>
PPL	1,924.2	368.0
MAAC (rest of)	1,856.1	740.7
<b>MAAC Total</b>	<b>5,969.3</b>	<b>1,324.9</b>
ATSI (rest of)	223.7	73.8
ATSI-Cleveland	166.9	1.1
COMED	3,961.1	1,567.8
DAY	37.2	0.0
DEOK	244.8	139.5
RTO (rest of)	3,453.2	1,058.0
<b>RTO Total</b>	<b>14,056.2</b>	<b>4,165.1</b>

## PJM Sell Offers and Buy Bids

[Sections 5.4](#) and [5.12](#) of Attachment DD of the [Tariff](#) (PDF) define the Incremental Auction requirements regarding the procurement or sale of capacity by PJM. Section 5.4 describes the triggering tests used by PJM prior to an Incremental Auction to determine the need for the procurement and/or sale of capacity by PJM in relation to updates



of the Reliability Requirement and capacity already procured. Section 5.12 describes the determination of the megawatt quantities and prices of Buy Bids and/or Sell Offers that PJM will submit when the various tests in Section 5.4 are triggered.

Prior to each Incremental Auction, PJM recalculates the Reliability Requirement based on an updated peak load forecast, updated Installed Reserve Margin and other updated planning information. For the RTO and each LDA, PJM sums the following component quantities to determine the total quantity that it will seek to procure or release in each Incremental Auction:

- The updated Reliability Requirement minus the Reliability Requirement utilized in the most recent prior auction conducted for that Delivery Year
  - Note that this quantity is negative if the updated Reliability Requirement is less than the Reliability Requirement utilized in the most recent prior auction. For a First or Second Incremental Auction, this difference is only considered if the change in Reliability Requirement is greater than the lesser of 500 MW or 1% of the prior auction's Reliability Requirement.
- Plus/minus the amount of committed capacity that PJM sought to procure/release that did not clear in previous Incremental Auctions for the same Delivery Year
- Minus any capacity PJM seeks to release in a parent LDA as a result of any Conditional Incremental Auction commitments for the same Delivery Year

If the result of such summation is a positive quantity, PJM will seek to procure such quantity by employing a PJM Buy Bid. The price of the PJM Buy Bid is based on the Updated VRR Curve Increment, which is the portion of the Updated VRR Curve located to the right of the point representing all capacity already procured for the Delivery Year. If the result of such summation is a negative quantity, PJM will seek to release such quantity by employing a PJM Sell Offer. The price of the PJM Sell Offer is based on the Updated VRR Curve Decrement, which is the portion of the Updated VRR Curve to the left of the point representing all capacity already procured for the Delivery Year.

PJM submitted the Sell Offers and Buy Bids shown in **Table 5** into the Third Incremental Auction for the 2024/2025 Delivery Year.<sup>2</sup> Note that a PJM Sell Offer is indicated by a negative PJM Buy Bid. PJM submitted a net Buy Bid for the Third Incremental Auction for the 2024/2025 Delivery Year totaling 3,324.7 MW across the RTO. All PJM Sell Offers and Buy Bids were for the annual CP product type. **Table 6** also defines the pricing points associated with the PJM Sell Offers and Buy Bids.

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<sup>2</sup> The determination of the PJM Buy Bid and Sell Offer quantities is detailed in the [2024/2025 Third Incremental Auction Planning Parameters](#) (XLS).

**Table 5.** PJM Buy Bids and Sell Offers for 2024/2025 Third Incremental Auction

LDA	PJM Buy Bid <sup>1</sup> (MW)	Price Points for PJM Buy Bids and PJM Sell Offers							
		Point 1		Point 2		Point 3		Point 4	
		x-axis (MW)	y-axis (\$/MW-Day)	x-axis (MW)	y-axis (\$/MW-Day)	x-axis (MW)	y-axis (\$/MW-Day)	x-axis (MW)	y-axis (\$/MW-Day)
RTO (Rest of)	1,186.4	0.0	\$136.25	1,186.4	\$97.77				
MAAC (Rest of)	19.8	0.0	\$181.74	19.8	\$180.41				
EMAAC (Rest of)	446.7	0.0	\$227.49	446.7	\$170.63				
SWMAAC (Rest of)	72.3	0.0	\$106.84	72.3	\$87.87				
PS (Rest of)	330.9	0.0	\$482.22	37.6	\$482.22	330.9	\$257.58		
PS NORTH	456.9	0.0	\$482.22	72.4	\$482.22	162.6	\$241.11	456.9	\$68.19
DPL SOUTH	99.2	0.0	\$228.19	6.0	\$213.26	99.2	\$91.32		
PEPCO	234.2	0.0	\$186.03	234.2	\$49.24				
ATSI (Rest of)	0.0								
ATSI-CLEVELAND	0.0								
COMED	180.3	0.0	\$57.94	180.3	\$23.93				
BGE	298.0	0.0	\$237.09	69.4	\$175.70	298.0	\$73.13		
PL	0.0								
DAYTON	0.0								
DEOK	0.0								
<b>TOTAL</b>	<b>3,324.7</b>								

<sup>1</sup> A PJM Sell Offer is indicated by a negative PJM Buy Bid.

The total net amount of capacity procured or released by PJM is a function of the clearing of the PJM Sell Offers, Buy Bids and Buy Bids for EE (i.e. add back). **Table 6** shows the offered and cleared quantities of PJM Sell Offers and Buy Bids for reliability, as well as PJM Buy Bids for EE, employed in the 2024/2025 Third Incremental Auction. Across the entire RTO region, PJM cleared Sell Offers totaled 0 MW while the PJM cleared Buy Bid quantity was 2,447.2 MW; therefore, PJM procured a total net capacity of 2,447.2 MW.

The total cleared PJM Buy Bid quantity of 2,447.2 MW includes 48.8 MW of PJM Buy Bids associated with an increase in the RTO reliability requirement that is set equal to the megawatt quantity of EE Resources that cleared in the auction. This is equivalent to the add-back to the Reliability Requirement PJM applies to match cleared EE Resources in the Base Residual Auction.

**Table 6.** Net Procurement of PJM Buy Bids/Sell Offers

LDA	PJM Bids/Offers (UCAP MW)		PJM Cleared Bids/Offers (UCAP MW)				Total Net Bids/Offers
	Buy Bids*	Sell Offers	Buy Bids*	Sell Offers	Net Bids/Offers for Reliability	Buy Bids for EE	
DPL-SOUTH	105.2	0.0	2.8	0.0	2.8	0.0	2.8
PS-NORTH	691.9	0.0	196.4	0.0	196.4	15.9	212.3
PSEG (rest of)	368.5	0.0	330.9	0.0	330.9	15.6	346.5
EMAAC (rest of)	446.7	0.0	258.9	0.0	258.9	3.1	262.0
<b>EMAAC Total</b>	<b>1,612.3</b>	<b>0.0</b>	<b>789.0</b>	<b>0.0</b>	<b>789.0</b>	<b>34.6</b>	<b>823.6</b>
PEPCO	234.2	0.0	189.2	0.0	189.2	0.0	189.2
BGE	367.4	0.0	118.3	0.0	118.3	8.2	126.5
SWMAAC (rest of)	72.3	0.0	72.3	0.0	72.3	0.0	72.3
<b>SWMAAC Total</b>	<b>673.9</b>	<b>0.0</b>	<b>379.8</b>	<b>0.0</b>	<b>379.8</b>	<b>8.2</b>	<b>388.0</b>
PPL	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAAC (rest of)	19.8	0.0	19.8	0.0	19.8	2.1	21.9
<b>MAAC Total</b>	<b>2,306.0</b>	<b>0.0</b>	<b>1,188.6</b>	<b>0.0</b>	<b>1,188.6</b>	<b>44.9</b>	<b>1,233.5</b>
ATSI (rest of)	0.0	0.0	0.0	0.0	0.0	0.3	0.3
ATSI-Cleveland	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COMED	180.3	0.0	23.4	0.0	23.4	0.0	23.4
DAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEOK	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RTO (rest of)	1,186.4	0.0	1,186.4	0.0	1,186.4	3.6	1,190.0
<b>RTO Total</b>	<b>3,672.7</b>	<b>0.0</b>	<b>2,398.4</b>	<b>0.0</b>	<b>2,398.4</b>	<b>48.8</b>	<b>2,447.2</b>

\* Does not include bids entered for EE buy back

## Mitigation in the 2024/2025 Third Incremental Auction

All parent companies failed the Three Pivotal Supplier (TPS) test in the 2024/2025 Third Incremental Auction. Offers submitted for resources that fail as pivotal suppliers will have those offers mitigated to their Market Seller Offer Cap (MSOC). Demand Resources and EE Resources are not subject to market power mitigation.

## APPENDIX: Comparison of auction results and final zonal net load prices

**Table 7.** Comparison of Base Residual Auction and Third Incremental Auction Prices

	BRA SMP	3IA SMP
RTO/System Marginal Price (SMP)	\$28.92	\$53.52
	Resource Clearing Price	
LDA	BRA	3IA
RTO	\$28.92	\$53.52
MAAC	\$49.49	\$75.50
EMAAC	\$54.95	\$221.23
SWMAAC	\$49.49	\$75.50
PS	\$54.95	\$221.23
PSNORTH	\$54.95	\$221.23
DPLSOUTH	\$90.64	\$221.23
PEPCO	\$49.49	\$75.50
ATSI	\$28.92	\$53.52
ATSI-CLEVELAND	\$28.92	\$53.52
COMED	\$28.92	\$53.52
BGE	\$73.00	\$153.76
PL	\$49.49	\$75.50
DAYTON	\$28.92	\$53.52
DEOK	\$96.24	\$53.52

**Table 8.** Preliminary and Final UCAP Obligations and Net Load Prices

Zone	Base Zonal UCAP Obligation	Preliminary Zonal Net Load Price	Final Zonal UCAP Obligation	Final Zonal Net Load Price
AE	2,918.7	\$54.50	2,907.0	\$58.23
AEP	13,441.3	\$28.99	13,914.3	\$29.40
APS	10,384.0	\$28.99	10,737.3	\$29.40
ATSI	14,616.7	\$28.99	14,819.4	\$29.40
BGE	7,556.5	\$59.83	7,716.5	\$61.53
COMED	24,122.2	\$28.99	23,299.1	\$29.40
DAYTON	3,831.2	\$28.99	3,875.6	\$29.40
DEOK	5,230.4	\$57.50	5,247.9	\$57.86
DLCO	3,258.1	\$28.99	3,239.7	\$29.40
DOM	3,805.6	\$28.99	4,469.5	\$29.40
DPL	4,607.4	\$66.07	4,584.4	\$69.42
EKPC	2,906.2	\$28.99	2,874.0	\$29.40
JCPL	6,794.9	\$54.50	7,042.3	\$58.23
METED	3,478.4	\$49.68	3,608.4	\$50.11
OVEC	85.2	\$28.99	74.2	\$29.40
PECO	9,892.5	\$54.50	10,023.5	\$58.23
PENLC	3,294.6	\$49.68	3,391.9	\$50.11
PEPCO	6,976.2	\$49.68	7,158.6	\$50.11
PL	8,552.9	\$49.68	8,685.1	\$50.11
PS	11,270.9	\$54.50	11,777.6	\$58.23
RECO	455.0	\$54.50	480.0	\$58.23