



## **2015/2016 RPM First Incremental Auction Results**

### **Introduction**

This document provides information for PJM stakeholders regarding the results of the 2015/2016 Reliability Pricing Model (RPM) First Incremental Auction. Incremental Auctions provide both a forum for capacity suppliers to purchase replacement capacity, and a means for PJM to adjust previously committed capacity levels due to Reliability Requirement increases or decreases combined with the appropriate share of the deferred Short-Term Resource Procurement Target.

The 2015/2016 First Incremental Auction opened on September 9, 2013 and the results were posted on September 20, 2013. This document begins with a high level summary of the Incremental Auction results followed by sections containing detailed descriptions of the configuration and results of the 2015/2016 First Incremental Auction.

### **Summary of 2015/2016 RPM First Incremental Auction Results**

Table 1 summarizes the clearing prices and cleared participant activity of the 2015/2016 First Incremental Auction. The First Incremental Auction cleared with unique prices in four regions of the RTO. Price separation occurred due to locational capacity import limits; however, no price separation occurred across the capacity product types. In the ATSI LDA, the resource clearing price for Limited, Extended Summer and Annual capacity was \$168.37/MW-Day for all three capacity product types. In the PSEG LDA, the resource clearing price for Limited, Extended Summer and Annual capacity was \$122.95/MW-Day for all three capacity product types. In the MAAC region outside of the PSEG LDA, which is comprised of the AECO, BGE, DPL, JCPL, Met-Ed, PECO, Penelec, PEPCO, PPL and RECO Zones, the resource clearing price for Limited, Extended Summer and Annual capacity was \$111.00/MW-Day for all three capacity product types. In the rest of the RTO, which is comprised of the AEP, APS, ComEd, Dayton, DEOK, DOM, EKPC and Duquesne Zones, the resource clearing price for Limited, Extended Summer and Annual capacity was \$43.00/MW-Day for all three capacity product types.

Across the entire RTO, total cleared participant buy bids (5,987.4 MW) exceeded total cleared participant sell offers (4,171.5 MW) by 1,815.9 MW; participants procured a total net capacity amount of 1,815.9 MW of replacement capacity meaning that PJM effectively released 1,815.9 MW of previously procured capacity. Across the entire RTO, PJM effectively released 1,373.9 MW of previously procured Limited DR capacity, 1,183.1 MW of previously procured Extended Summer DR capacity, and procured 741.1 MW of capacity from Annual Resources.

The cleared participant sell offer quantities reported in Table 1 do not include 26.4 MW of make-whole MWs associated with a capacity resource located in the ATSI LDA that partially cleared at a quantity below the minimum block specified in the resource's sell offer. As described in Section 5.14(b) of Attachment DD of the PJM Tariff, the capacity market seller will receive a make-whole payment equal to the resource clearing price times the difference between the specified minimum block MW quantity and the cleared



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MW quantity for the resource; and the cost of such payment shall be allocated and collected from all capacity market buyers in the LDA on a pro-rata basis based on the MWs purchased in the auction. Based on the ATSI LDA clearing price of \$168.37/MW-Day and make-whole quantity of 26.4 MW, the capacity resource will receive a make-whole payment of \$4,444.97/day which is allocated and collected from the 751 MW of cleared buy bids in ATSI resulting in an effective price for each cleared buy bid in ATSI in this auction of \$174.29/MW-Day.



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**Table 1 – Summary of 2015/2016 First Incremental Auction Results**

Region	Capacity Type	Clearing Price (\$/MW-Day)	Cleared Participant Sell Offers (UCAP MW)	Cleared Participant Buy Bids (UCAP MW)	Net Cleared Participant Buy Bids (UCAP MW)
<b>RTO (minus MAAC and ATSI) <sup>(1)</sup></b>	Limited	\$43.00	45.8	567.2	521.4
	Extended Summer	\$43.00	0.0	336.9	336.9
	Annual	\$43.00	1,477.8	1,634.9	157.1
	<b>TOTAL</b>	--	<b>1,523.6</b>	<b>2,539.0</b>	<b>1,015.4</b>
<b>MAAC (minus PSEG) <sup>(2)</sup></b>	Limited	\$111.00	32.2	389.3	357.1
	Extended Summer	\$111.00	10.4	406.0	395.6
	Annual	\$111.00	1,561.9	1,399.0	-162.9
	<b>TOTAL</b>	--	<b>1,604.5</b>	<b>2,194.3</b>	<b>589.8</b>
<b>PSEG</b>	Limited	\$122.95	0.9	118.8	117.9
	Extended Summer	\$122.95	0.0	153.9	153.9
	Annual	\$122.95	291.5	230.4	-61.1
	<b>TOTAL</b>	--	<b>292.4</b>	<b>503.1</b>	<b>210.7</b>
<b>ATSI <sup>(3)</sup></b>	Limited	\$168.37	0.0	377.5	377.5
	Extended Summer	\$168.37	0.0	296.7	296.7
	Annual	\$168.37	751.0	76.8	-674.2
	<b>TOTAL</b>	--	<b>751.0</b>	<b>751.0</b>	<b>0.0</b>
<b>TOTAL RTO</b>	Limited	--	78.9	1,452.8	1,373.9
	Extended Summer	--	10.4	1,193.5	1,183.1
	Annual	--	4,082.2	3,341.1	-741.1
	<b>TOTAL</b>	--	<b>4,171.5</b>	<b>5,987.4</b>	<b>1,815.9</b>

(1) Comprised of AEP, APS, ComEd, Dayton, DEOK, DOM, EKPC and Duquesne Zones

(2) Comprised of AECO, BGE, DPL, JCPL, Met-Ed, PECO, Penelec, PEPCO, PPL and RECO Zones

(3) Cleared sell offer quantity does not include 26.4 MW make-whole quantity. Make-whole payment results in effective price for cleared buy bids in ATSI of \$174.29/MW-Day.



## **2015/2016 RPM First Incremental Auction Results**

### **2015/2016 RPM First Incremental Auction Configuration**

#### **Participant Buy Bids and Sell Offers**

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. All Generation Capacity Resources and Energy Efficiency Resources are of the Annual Capacity type. Demand Resources offering into the Incremental Auction must specify the type of Capacity being offered. A Demand Resource with the potential to qualify as two or more of the capacity types may submit separate but coupled Sell Offers for each Demand Resource type for which it qualifies at different prices and the auction clearing algorithm will select the Sell Offer that yields the least-cost solution. For such coupled Demand Resource offers, the offer price of an Annual Demand Resource offer must be at least \$.01 per MW-day greater than the offer price of a coupled Extended Summer Demand Resource offer and the offer price of a Extended Summer Demand Resource offer must be at least \$.01 per MW-day greater than the offer price of a coupled Limited Demand Resource offer.

Any party that desires to purchase replacement capacity for the Delivery Year may do so by submitting a buy bid into the Incremental Auction. In addition to quantity, price and LDA-specific location, participants submitting a buy bid must also specify the desired capacity type (Annual, Extended Summer or Limited). 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 and same or better temporal characteristics than the resource that it replaces. Cleared buy bids of Annual capacity type may replace commitments of Annual Resources, Extended Summer DR and/or Limited DR. Cleared buy bids of Extended Summer capacity type may replace commitments on Extended Summer DR and/or Limited DR but may not replace commitments of Annual Resources. Cleared buy bids of Limited capacity type may replace commitments of Limited DR but may not replace commitments of Annual Resources or Extended Summer DR.

#### **PJM Buy Bids and Sell Offers**

Sections 5.4 and 5.12 of Attachment DD of the Tariff 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 MW quantities, capacity types and prices of buy bids and/or sell offers that PJM will submit when the various tests in section 5.4 are triggered.



## **2015/2016 RPM First Incremental Auction Results**

Prior to each Incremental Auction, PJM recalculates the Reliability Requirement, Minimum Annual Resource Requirement and Minimum Extended Summer Resource Requirement for the RTO and each LDA based on an updated peak load forecast, updated Installed Reserve Margin and an updated Capacity Emergency Transfer Objective (CETO). 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 1st or 2nd 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 the Short-Term Resource Procurement Target Applicable Share (STRPTAS). For a 1st or 2nd Incremental Auction, the STRPTAS is equal to 0.2 times the Short-Term Resource Procurement Target (STRPT) used in the Base Residual Auction (BRA). For a 3rd Incremental Auction, the STRPTAS is equal to 0.6 times the STRPT used in the BRA,
- 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 previously procured levels of Annual Resources and Extended Summer DR are short of the updated Minimum Annual and Extended Summer Resource Requirements then the PJM buy bid may be broken into multiple, smaller buy bids of the capacity types needed to make up any shortage. If no shortage exists then the PJM buy bid will be of the Limited capacity type.

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. The capacity type of a PJM sell offer is determined in a manner such that PJM will not release prior committed capacity from Annual Resources and Extended Summer DR below the updated Minimum Annual and Extended Summer Resource Requirements.



## 2015/2016 RPM First Incremental Auction Results

Based on an application of the Incremental Auction requirements of Sections 5.4 and 5.12 of Attachment DD of the Tariff and summarized above, PJM submitted the buy bids and sell offers, shown in Table 2, into the 1st Incremental Auction for the 2015/2016 Delivery Year<sup>1</sup>. Note that a PJM sell offer is indicated by a negative PJM buy bid in Table 2 and that PJM submitted sell offers for the 1st Incremental Auction for the 2015/2016 Delivery Year in each LDA with the exception of the DPL-SOUTH LDA. All PJM sell offers were of the Annual capacity type, with the exception of the ATSI LDA which had a sell offer of the Extended Summer capacity type. The PJM buy bid was for Limited capacity. Table 2 also defines the pricing points associated with the PJM buy bids and PJM sell offers.

**Table 2 – PJM Buy Bids and PJM Sell Offers for 2015/2016 First Incremental Auction**

Location	Change in Reliability Requirement (MW)	STRPT (MW)	Uncleared PJM Buy Bids from Prior IA (MW)	PJM Buy Bid		Price Points for PJM Buy Bids and PJM Sell Offers							
				(MW)*	Capacity Type	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)	-1,532.8	410.0	NA	-1122.8	Annual	0.0	\$0.00	1015.4	\$0.00	1015.4	\$62.21	1122.8	\$67.03
MAAC (Rest of)	-417.0	74.2	NA	-342.8	Annual	0.0	\$64.01	342.8	\$93.86	--	--	--	--
EMAAC (Rest of)	-412.0	109.9	NA	-302.1	Annual	0.0	\$0.00	10.2	\$0.00	10.2	\$61.63	302.1	\$115.18
SWMAAC (Rest of)	-166.0	39.6	NA	-126.4	Annual	0.0	\$96.16	126.4	\$141.65	--	--	--	--
PS (Rest of)	-202.0	30.0	NA	-172.0	Annual	0.0	\$0.00	73.9	\$0.00	73.9	\$61.63	172.0	\$117.17
PS NORTH	-73.0	27.7	NA	-45.3	Annual	0.0	\$94.78	45.3	\$145.17	--	--	--	--
DPL SOUTH	47.0	13.1	NA	60.1	Limited	0.0	\$288.70	60.1	\$151.27	--	--	--	--
PEPCO	-52.0	37.2	NA	-14.8	Annual	0.0	\$138.04	14.8	\$148.20	--	--	--	--
ATSI	-101.0	72.1	NA	-28.9	Ext. Summer	0.0	\$273.41	28.9	\$287.42	--	--	--	--
<b>TOTAL</b>	<b>-2,908.8</b>	<b>813.9</b>	<b>0.0</b>	<b>-2,095.0</b>									

\* A PJM Sell Offer is indicated by a negative PJM Buy Bid.

<sup>1</sup> The determination of the PJM buy bid sell offer quantities is detailed in the 2015/2016 1st IA Planning Parameters located at <http://pjm.com/~media/markets-ops/rpm/rpm-auction-info/2015-2016-1st-incremental-auction-planning-parameters.ashx>.



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### LDA Capacity Import Limits

Section 5.11A of Attachment DD of the Tariff describes the milestones that a Backbone Transmission Project must meet for it to be included and remain in the system model for a given Delivery Year. Based on an application of these milestone requirements, no changes have been made to the 2015/2016 system model prior to the 1st Incremental Auction; therefore the LDA Capacity Emergency Transfer Limit (CETL) values used for the 1st Incremental Auction are the same as those used in the Base Residual Auction.

Table 3 shows each LDA’s CETL limits for the Base Residual Auction and each LDA’s CETL as updated for each Incremental Auction for the 2015/2016 Delivery Year. The CETL remaining for use in the 1st IA for the 2015/2016 Delivery Year shown in the last row of Table 3 represents the LDA capacity import limits that were employed in the 1st IA for the 2015/2016 Delivery Year and are equal to the LDA CETL as updated for the 1st IA minus the total capacity import levels into the LDA.

**Table 3 – LDA Capacity Import Capability for 2015/2016 First Incremental Auction**

	LDA							
	MAAC	EMAAC	SWMAAC	PS	PS NORTH	DPL SOUTH	PEPCO	ATSI
Base Residual Auction (BRA) CETL	6,156.0	9,177.0	8,373.0	6,220.0	2,972.0	1,822.0	6,522.0	5,417.8
1st Incremental Auction (IA) CETL	6,156.0	9,177.0	8,373.0	6,220.0	2,972.0	1,822.0	6,522.0	5,417.8
Capacity Import Level (BRA Imports)	6,156.0	6,649.2	6,331.3	6,206.6	2,884.4	1,369.9	2,899.6	5,417.8
Capacity Import Limit for 1st Incremental Auction	0.0	2,527.8	2,041.7	13.4	87.6	452.1	3,622.4	0.0

### Incremental Auction Clearing

Participant supply offers and buy bids are combined with the PJM sell offers and buy bids shown in Table 2 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. Annual capacity buy bids may only clear against sell offers from Annual Resources; Extended Summer buy bids may only clear against sell offers from Annual Resources and/or Extended Summer DR; and Limited buy bids may clear against sell offers of any capacity type.



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### 2015/2016 RPM First Incremental Auction Results

#### Auction Clearing Prices

Table 4 summarizes the clearing prices of the 2015/2016 First Incremental Auction. The First Incremental Auction cleared with unique prices in four regions of the RTO. Price separation occurred due to locational capacity import limits; however, no price separation occurred across the capacity product types. In the ATSI LDA, the resource clearing price for Limited, Extended Summer and Annual capacity was \$168.37/MW-Day. In the PSEG LDA, the resource clearing price for Limited, Extended Summer and Annual capacity was \$122.95/MW-Day. In the MAAC region outside of the PSEG LDA, which is comprised of the AECO, BGE, DPL, JCPL, Met-Ed, PECO, Penelec, PEPCO, PPL and RECO Zones, the resource clearing price for Limited, Extended Summer and Annual capacity was \$111.00/MW-Day. In the rest of the RTO, which is comprised of the AEP, APS, ComEd, Dayton, DEOK, DOM, EKPC and Duquesne Zones, the resource clearing price for Limited, Extended Summer and Annual capacity was \$43.00/MW-Day.

**Table 4 –Auction Clearing Prices by LDA and Product Type**

Region	Clearing Price (\$/MW-Day)		
	Limited	Extended Summer	Annual
RTO (minus MAAC and ATSI) <sup>(1)</sup>	\$43.00	\$43.00	\$43.00
MAAC (minus PSEG) <sup>(2)</sup>	\$111.00	\$111.00	\$111.00
PSEG	\$122.95	\$122.95	\$122.95
ATSI <sup>(3)</sup>	\$168.37	\$168.37	\$168.37

(1) Comprised of AEP, APS, ComEd, Dayton, DEOK, DOM, EKPC and Duquesne Zones

(2) Comprised of AECO, BGE, DPL, JCPL, Met-Ed, PECO, Penelec, PEPCO, PPL and RECO Zones

(3) Make-whole payment results in effective price for cleared buy bids in ATSI of \$174.29/MW-Day.



## 2015/2016 RPM First Incremental Auction Results

### Participant Buy Bids and Sell Offers

Table 5 shows the offered and cleared quantities for participant sell offers. A total of 6,773.2 MW of supply was offered into the First Incremental Auction composed of uncleared capacity from prior 2015/2016 auctions and new capacity in the form of uprates or new resources that were not previously capacity resources in PJM. Across the entire RTO, 4,171.5 MW of participant sell offers cleared mostly in the form of Annual capacity.

**Table 5 – Participant Sell Offers (Offered and Cleared Quantities)**

LDA	Sell Offers (UCAP MW) <sup>(1)</sup>				Cleared Sell Offers (UCAP MW)			
	Limited	Extended Summer	Annual	Total	Limited	Extended Summer	Annual	Total
DPL-SOUTH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PS-NORTH	0.0	0.0	540.0	540.0	0.0	0.0	268.5	268.5
PSEG (rest of)	0.9	0.0	25.6	26.5	0.9	0.0	23.0	23.9
EMAAC (rest of)	9.6	10.4	136.1	156.1	9.6	10.4	72.8	92.8
<b>EMAAC Total</b>	<b>10.5</b>	<b>10.4</b>	<b>701.7</b>	<b>722.6</b>	<b>10.5</b>	<b>10.4</b>	<b>364.3</b>	<b>385.2</b>
PEPCO	0.0	0.0	1.7	1.7	0.0	0.0	1.7	1.7
SWMAAC (rest of)	0.0	0.0	1,364.7	1,364.7	0.0	0.0	654.8	654.8
<b>SWMAAC Total</b>	<b>0.0</b>	<b>0.0</b>	<b>1,366.4</b>	<b>1,366.4</b>	<b>0.0</b>	<b>0.0</b>	<b>656.5</b>	<b>656.5</b>
MAAC (rest of)	37.1	0.0	1,398.4	1,435.5	22.6	0.0	832.6	855.2
<b>MAAC Total</b>	<b>47.6</b>	<b>10.4</b>	<b>3,466.5</b>	<b>3,524.5</b>	<b>33.1</b>	<b>10.4</b>	<b>1,853.4</b>	<b>1,896.9</b>
ATSI <sup>(2)</sup>	15.6	0.0	1,060.5	1,076.1	0.0	0.0	751.0	751.0
RTO (rest of)	146.8	0.0	2,025.8	2,172.6	45.8	0.0	1,477.8	1,523.6
<b>RTO Total</b>	<b>210.0</b>	<b>10.4</b>	<b>6,552.8</b>	<b>6,773.2</b>	<b>78.9</b>	<b>10.4</b>	<b>4,082.2</b>	<b>4,171.5</b>

(1) Sell Offers include the MW amounts offered from all Product Types of coupled DR sell offers, only one of which is capable of clearing in the auction.

(2) Cleared sell offer quantity does not include 26.4 MW make-whole quantity.



## **2015/2016 RPM First Incremental Auction Results**

Participant demand in an Incremental Auction is composed of buy bids submitted by participants. The buy bids are specified in UCAP terms and, if cleared, are binding commitments to purchase capacity for the entire Delivery Year. Cleared Buy Bids purchased in an Incremental Auction may be used as replacement capacity to cover Delivery Year commitment and compliance shortfalls. Table 6 shows offered and cleared quantities of participant buy bids. There was a total of 21,304.7 MW of buy bids submitted by participants into the auction. Across the entire RTO, 5,987.4 MW of participant buy bids cleared comprised of 1,452.8 MW of Limited capacity buy bids, 1,193.5 MW of Extended Summer buy bids and 3,341.1 MW of Annual capacity buy bids.

The cleared participant sell offer quantities reported in Table 5 do not include 26.4 MW of make-whole MWs associated with a capacity resource located in the ATSI LDA that partially cleared at a quantity below the minimum block specified in the resource's sell offer. As described in Section 5.14(b) of Attachment DD of the PJM Tariff, the capacity market seller will receive a make-whole payment equal to the resource clearing price times the difference between the specified minimum block MW quantity and the cleared MW quantity for the resource; and the cost of such payment shall be allocated and collected from all capacity market buyers in the LDA on a pro-rata basis based on the MWs purchased in the auction. Based on the ATSI LDA clearing price of \$168.37/MW-Day and make-whole quantity of 26.4 MW, the capacity resource will receive a make-whole payment of \$4,444.97/day which is allocated and collected from the 751 MW of cleared buy bids in ATSI resulting in an effective price for each cleared buy bid in ATSI in this auction of \$174.29/MW-Day.



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Table 6 – Participant Buy Bids (Bid and Cleared Quantities)

LDA	Buy Bids (UCAP MW)				Cleared Buy Bids (UCAP MW)			
	Limited	Extended Summer	Annual	Total	Limited	Extended Summer	Annual	Total
DPL-SOUTH	28.6	1.6	20.0	50.2	19.8	1.6	0.0	21.4
PS-NORTH	90.7	27.6	25.0	143.3	66.5	22.8	0.0	89.3
PSEG (rest of)	89.1	148.6	540.4	778.1	52.3	131.1	230.4	413.8
EMAAC (rest of)	407.6	213.2	2,496.5	3,117.3	250.4	110.7	545.1	906.2
<b>EMAAC Total</b>	<b>616.0</b>	<b>391.0</b>	<b>3,081.9</b>	<b>4,088.9</b>	<b>389.0</b>	<b>266.2</b>	<b>775.5</b>	<b>1,430.7</b>
PEPCO	144.7	110.8	1,161.0	1,416.5	65.1	66.6	661.0	792.7
SWMAAC (rest of)	58.4	87.6	82.9	228.9	34.0	46.2	0.0	80.2
<b>SWMAAC Total</b>	<b>203.1</b>	<b>198.4</b>	<b>1,243.9</b>	<b>1,645.4</b>	<b>99.1</b>	<b>112.8</b>	<b>661.0</b>	<b>872.9</b>
MAAC (rest of)	237.7	290.3	498.6	1,026.6	20.0	180.9	192.9	393.8
<b>MAAC Total</b>	<b>1,056.8</b>	<b>879.7</b>	<b>4,824.4</b>	<b>6,760.9</b>	<b>508.1</b>	<b>559.9</b>	<b>1,629.4</b>	<b>2,697.4</b>
ATSI	479.0	304.5	361.8	1,145.3	377.5	296.7	76.8	751.0
RTO (rest of)	902.2	354.8	12,141.5	13,398.5	567.2	336.9	1,634.9	2,539.0
<b>RTO Total</b>	<b>2,438.0</b>	<b>1,539.0</b>	<b>17,327.7</b>	<b>21,304.7</b>	<b>1,452.8</b>	<b>1,193.5</b>	<b>3,341.1</b>	<b>5,987.4</b>



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Table 7 provides a further breakdown of the capacity offered and cleared into the 2015/2016 First Incremental Auction. A total of 6,773.2 MW of supply was offered into the First Incremental Auction composed of uncleared capacity from prior 2015/2016 auctions and new capacity in the form of uprates or new resources that were not previously capacity resources in PJM.

**Table 7 - 2015/2016 First Incremental Auction Supply Resource Mix**

Resource Type	Type	Total Sell Offers (MW UCAP)	Cleared Sell Offers (MW UCAP)
DEMAND	DEMAND	220.4	89.3
EE	EE	111.9	87.4
GEN	New Generation (including Uprates)	71.2	71.2
	Uncleared from Prior Auction	6,369.7	3,923.6
		<b>6,773.2</b>	<b>4,171.5</b>



## 2015/2016 RPM First Incremental Auction Results

### PJM Buy Bids and Sell Offers

The total net amount of capacity procured or released by PJM is a function of the clearing of the PJM sell offers and buy bids. Tables 8a and 8b show the offered and cleared quantities of PJM sell offers and PJM buy bids, respectively, employed in the 2015/2016 First Incremental Auction. For the 2015/2016 First Incremental Auction, across the entire RTO region, cleared PJM sell offers totaled 1,876.0 MW and cleared PJM buys bids totaled 60.1 MW therefore PJM released a total net capacity amount of 1,815.9 MW.

**Table 8a – PJM Sell Offers (Offered and Cleared Quantities)**

LDA	Sell Offers (UCAP MW)				Cleared Sell Offers (UCAP MW)			
	Limited	Extended Summer	Annual	Total	Limited	Extended Summer	Annual	Total
DPL-SOUTH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PS-NORTH	0.0	0.0	45.3	45.3	0.0	0.0	25.3	25.3
PSEG (rest of)	0.0	0.0	172.0	172.0	0.0	0.0	172.0	172.0
EMAAC (rest of)	0.0	0.0	302.1	302.1	0.0	0.0	279.3	279.3
<b>EMAAC Total</b>	<b>0.0</b>	<b>0.0</b>	<b>519.4</b>	<b>519.4</b>	<b>0.0</b>	<b>0.0</b>	<b>476.6</b>	<b>476.6</b>
PEPCO	0.0	0.0	14.8	14.8	0.0	0.0	0.0	0.0
SWMAAC (rest of)	0.0	0.0	126.4	126.4	0.0	0.0	41.2	41.2
<b>SWMAAC Total</b>	<b>0.0</b>	<b>0.0</b>	<b>141.2</b>	<b>141.2</b>	<b>0.0</b>	<b>0.0</b>	<b>41.2</b>	<b>41.2</b>
MAAC (rest of)	0.0	0.0	342.8	342.8	0.0	0.0	342.8	342.8
<b>MAAC Total</b>	<b>0.0</b>	<b>0.0</b>	<b>1,003.4</b>	<b>1,003.4</b>	<b>0.0</b>	<b>0.0</b>	<b>860.6</b>	<b>860.6</b>
ATSI	0.0	28.9	0.0	28.9	0.0	0.0	0.0	0.0
RTO (rest of)	0.0	0.0	1,122.8	1,122.8	0.0	0.0	1,015.4	1,015.4
<b>RTO Total</b>	<b>0.0</b>	<b>28.9</b>	<b>2,126.2</b>	<b>2,155.1</b>	<b>0.0</b>	<b>0.0</b>	<b>1,876.0</b>	<b>1,876.0</b>



**2015/2016 RPM First Incremental Auction Results**

**Table 8b – PJM Buy Bids (Bid and Cleared Quantities)**

LDA	Buy Bids (UCAP MW)				Cleared Buy Bids (UCAP MW)			
	Limited	Extended Summer	Annual	Total	Limited	Extended Summer	Annual	Total
DPL-SOUTH	60.1	0.0	0.0	60.1	60.1	0.0	0.0	60.1
PS-NORTH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PSEG (rest of)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EMAAC (rest of)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EMAAC Total</b>	<b>60.1</b>	<b>0.0</b>	<b>0.0</b>	<b>60.1</b>	<b>60.1</b>	<b>0.0</b>	<b>0.0</b>	<b>60.1</b>
PEPCO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SWMAAC (rest of)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>SWMAAC Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
MAAC (rest of)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>MAAC Total</b>	<b>60.1</b>	<b>0.0</b>	<b>0.0</b>	<b>60.1</b>	<b>60.1</b>	<b>0.0</b>	<b>0.0</b>	<b>60.1</b>
ATSI				0.0				0.0
RTO (rest of)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>RTO Total</b>	<b>60.1</b>	<b>0.0</b>	<b>0.0</b>	<b>60.1</b>	<b>60.1</b>	<b>0.0</b>	<b>0.0</b>	<b>60.1</b>



## 2015/2016 RPM First Incremental Auction Results

### LDA Capacity Import Margins

The LDA capacity import limit margins prior to and after the clearing of the First Incremental Auction for the 2015/2016 Delivery Year are shown in Table 9. The LDA capacity import limit margin represents the difference between the updated LDA capacity import limit and the capacity imported into the LDA.

**Table 9 – PJM Capacity Import Margins**

	LDA							
	MAAC	EMAAC	SWMAAC	PS	PS NORTH	DPL SOUTH	PEPCO	ATSI
Capacity Import Limit Margin prior to 1st Incremental Auction	0.0	2,527.8	2,041.7	13.4	87.6	452.1	3,622.4	0.0
Capacity Import Limit Margin after 1st Incremental Auction	0.0	1,898.8	1,866.5	0.0	292.1	370.6	2,831.4	0.0

### Mitigation in the 2015/2016 First Incremental Auction

All regions of the RTO, including the RTO as a whole, failed the Market Structure Test. As a result, mitigation was applied to all existing generation resources in the execution of the RPM auction clearing. Therefore in the event a generator’s price-based offer exceeded the calculated offer cap, cost-based offers were utilized in the RPM auction clearing. Demand Resources and Energy Efficiency Resources are not subject to market mitigation.