# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

	)	
Old Dominion Electric Cooperative and	)	Docket No. EL17-32-000
Direct Energy Business, LLC on behalf of	)	
itself and its affiliate, Direct Energy	)	
Business Marketing, LLC and American	)	
Municipal Power, Inc.	)	
	)	
V.	)	
	)	
PJM Interconnection, L.L.C.	)	
	)	D. J. W. FI 17 27 000
Advanced Energy Management Alliance	)	Docket No. EL17-36-000
	)	
V.	)	
	)	
PJM Interconnection, L.L.C.	)	
	)	

# ANSWER AND MOTION FOR LEAVE TO ANSWER OF THE INDEPENDENT MARKET MONITOR FOR PJM

Pursuant to Rules 212 and 213 of the Commission's Rules and Regulations,<sup>1</sup> Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor for PJM<sup>2</sup> ("Market Monitor"), submits this answer of PJM Interconnection, L.L.C. ("PJM") filed January 25, 2017 ("PJM"), to the complaints of Old Dominion Electric Cooperative, et al. and Advanced Energy Management Alliance, filed December 23, 2017 ("December 23<sup>rd</sup> Complaint") and January 5, 2017 ("January 5<sup>th</sup> Complaints")(collectively "Complaints").

<sup>&</sup>lt;sup>1</sup> 18 CFR §§ 385.212 & 385.213 (2015).

<sup>&</sup>lt;sup>2</sup> Capitalized terms used herein and not otherwise defined have the meaning used in the PJM Open Access Transmission Tariff ("OATT") or the PJM Operating Agreement ("OA").

#### I. ANSWER

The Market Monitor agrees with PJM (at 2) that the "Complaints represent a collateral attack on the Commission's 2015 and 2016 orders" and that the Complaints identify "no changed circumstances to justify their collateral attack." PJM further states (at 8): "Complainants' request to tolerate—not just for five years, but for six years or more—resources that do not have that fundamental, defining, performance obligation, is a sharp rebuke to the Commission's fundamental objective in the Capacity Performance Orders."

While no new evidence exists to support granting the Complaint, new evidence does exist that supports PJM's position on why the inclusion of base generation capacity resources, base demand side capacity resources and base energy efficiency capacity resources ("Base Capacity Product") should not be extended and why continued efforts to attenuate the Commission's objectives for RPM reform should be rejected.

The Market Monitor's Analysis of the 2019/2020 RPM Base Residual Auction ("BRA") included the results of a number of sensitivity analyses which showed the impact of various market design elements on the outcomes of the 2019/2020 BRA. One of the sensitivities (Scenario 13) showed the impact of including the Base Capacity Product.<sup>3</sup>

## The report concluded:

The inclusion of sell offers for Base Capacity Resources and Base Capacity DR/EE Resources had a significant impact on the auction results. Based on actual auction clearing prices and quantities and make whole MW, total RPM market revenues for the 2019/2020 RPM Base Residual Auction were \$6,999,893,108. If there had been no offers for Base Capacity Resources and Base Capacity DR/EE Resources in the 2019/2020 RPM Base Residual Auction and everything else had remained the same, total RPM market revenues for the 2019/2020 RPM Base Residual Auction would have been \$12,248,291,567, an increase of \$5,248,398,459, or 75.0

See Market Monitor, Analysis of the 2019/2020 RPM Base Residual Auction Revised, which can be accessed: <a href="http://www.monitoringanalytics.com/reports/Reports/2016/IMM Analysis of the">http://www.monitoringanalytics.com/reports/Reports/2016/IMM Analysis of the</a> 20192020 RPM BRA 20160831-Revised.pdf> (August 31, 2016).

percent, compared to the actual results. From another perspective, the inclusion of Base Capacity Resources and Base Capacity DR/EE Resources resulted in a 42.9 percent reduction in RPM revenues for the 2019/2020 RPM Base Residual Auction compared to what RPM revenues would have been without any Base Capacity Resources and Base Capacity DR/EE Resources. (Scenario 13.)

Table 1 from the report summarized the results of all the sensitivities.

Table 1 Scenario summary of RPM revenue: 2019/2020 RPM Base Residual Auction

			Scenario Impact		
Scenario	Scenario Description	RPM Revenue (\$ per Delivery Year)	RPM Revenue (\$ per Delivery Year)	Percent	
0	Actual Results	\$6,999,893,108	NA	NA	
1	Revised Shape of the VRR Curve	\$6,584,436,158	\$415,456,950	6.3%	
2	ComEd CETL at 2017/2108 Level	\$6,612,836,020	\$387,057,088	5.9%	
3	Forecast Peak Load Reduced by 2.6 Percent	\$8,101,386,204	(\$1,101,493,096)	(13.6%)	
4	Net Revenue Offset Calculation	\$6,956,448,094	\$43,445,014	0.6%	
5	Inclusion of DR/EE Offers	\$9,099,465,731	(\$2,099,572,623)	(23.1%)	
6	Inclusion of EE Offers and EE Add Back	\$6,905,618,435	\$94,274,673	1.4%	
7	EE Cleared MW Equal to EE Add Back MW	\$6,983,867,441	\$16,025,667	0.2%	
8	Inclusion of Base Capacity DR/EE Offers	\$8,206,198,971	(\$1,206,305,862)	(14.7%)	
9	Inclusion of CP DR/EE Offers	\$6,861,332,713	\$138,560,395	2.0%	
10	Inclusion of 75 Percent of Offers for External Generation	\$7,089,724,034	(\$89,830,926)	(1.3%)	
11	Inclusion of 50 Percent of Offers for External Generation	\$7,280,090,853	(\$280,197,745)	(3.8%)	
12	Inclusion of 25 Percent of Offers for External Generation	\$7,399,063,952	(\$399,170,844)	(5.4%)	
13	Inclusion of Base Capacity and Base Capacity DR/EE Offers	\$12,248,291,567	(\$5,248,398,459)	(42.9%)	
	Inclusion of Base Capacity and Base Capacity DR/EE Offers, and CP				
14	DR/EE Offers	\$13,595,336,649	(\$6,595,443,541)	(48.5%)	
45	Inclusion of Base Capacity and Base Capacity DR/EE Offers, CP	#44 F00 074 f01	(47, 400, 004, 612)	(50.40)	
15	DR/EE Offers, and 50 Percent of Offers for External Generation	\$14,599,974,126	(\$7,600,081,018)	(52.1%)	

Table 2 Scenario summary of cleared UCAP: 2019/2020 RPM Base Residual Auction

		Scenario Impact		
Scenario	Scenario Description	Cleared UCAP (MW)	Cleared UCAP (MW)	Percent
0	Actual Results	167,305.9	NA	NA
1	Revised Shape of the VRR Curve	164,937.1	2,368.8	1.4%
2	ComEd CETL at 2017/2108 Level	167,164.4	141.5	0.1%
3	Forecast Peak Load Reduced by 2.6 Percent	171,757.1	(4,451.2)	(2.6%)
4	Net Revenue Offset Calculation	167,314.9	(9.0)	0.0%
5	Inclusion of DR/EE Offers	164,225.7	3,080.2	1.9%
6	Inclusion of EE Offers and EE Add Back	165,415.0	1,890.9	1.1%
7	EE Cleared MW Equal to EE Add Back MW	166,902.3	403.6	0.2%
8	Inclusion of Base Capacity DR/EE Offers	165,666.6	1,639.3	1.0%
9	Inclusion of CP DR/EE Offers	166,346.2	959.7	0.6%
10	Inclusion of 75 Percent of Offers for External Generation	167,227.9	78.0	0.0%
11	Inclusion of 50 Percent of Offers for External Generation	167,055.4	250.5	0.1%
12	Inclusion of 25 Percent of Offers for External Generation	166,951.4	354.5	0.2%
13	Inclusion of Base Capacity and Base Capacity DR/EE Offers	164,129.2	3,176.7	1.9%
14	Inclusion of Base Capacity and Base Capacity DR/EE Offers, and CP DR/EE Offers	162,446.2	4,859.7	3.0%
15	Inclusion of Base Capacity and Base Capacity DR/EE Offers, CP DR/EE Offers, and 50 Percent of Offers for External Generation	161,511.0	5,794.9	3.6%

The report provided more detail on the locational results of including the Base Capacity Product in the auction.

Table 34 shows the results if there had been no offers for Base Capacity Resources and Base Capacity DR/EE Resources in the 2019/2020 RPM Base Residual Auction and everything else had remained the same.<sup>4</sup> All import limit binding constraints would have remained the same, except that the BGE import limit would not have been binding. The RTO clearing price for Capacity Performance Resources would have increased to \$163.13 per MW-day, and the clearing quantity would have decreased to 164,129.2 MW. The EMAAC clearing price for Capacity Performance Resources would have increased to \$353.28 per MW-day, and the clearing quantity would have decreased to 29,183.9 MW. The

The EE add back MW values for each LDA were adjusted to reflect the removal of Base Capacity EE offers for this scenario. As the product types of the EE Resources with accepted measurement and verification plans used in calculating the EE add back MW in the 2019/2020 RPM Base Residual Auction were not available, the EE add back MW values used for this scenario were calculated by multiplying the original EE add back values by the ratio of Capacity Performance EE offers to total EE offers for each LDA.

Pepco clearing price for Capacity Performance Resources would have increased to \$163.13 per MW-day, and the clearing quantity would have decreased to 6,129.0 MW. The ComEd clearing price for Capacity Performance Resources would have increased to \$212.00, and the clearing quantity would have decreased to 22,508.1 MW. The BGE clearing price for Capacity Performance Resources would have increased to \$163.13 per MW-day, and the clearing quantity would have increased to 2,975.8 MW.

Based on actual auction clearing prices and quantities and make whole MW, total RPM market revenues for the 2019/2020 RPM Base Residual Auction were \$6,999,893,108. If there had been no offers for Base Capacity Resources and Base Capacity DR/EE Resources in the 2019/2020 RPM Base Residual Auction and everything else had remained the same, total RPM market revenues for the 2019/2020 RPM Base Residual Auction would have been \$12,248,291,567, an increase of \$5,248,398,459, or 75.0 percent, compared to the actual results. From another perspective, the inclusion of Base Capacity Resources and Base Capacity DR/EE Resources resulted in a 42.9 percent reduction in RPM revenues for the 2019/2020 RPM Base Residual Auction compared to what RPM revenues would have been without any Base Capacity Resources and Base Capacity DR/EE Resources.

Table 34 from the analysis showed the locational results:

Table 34 Impact of Base Capacity Resources: 2019/2020 RPM Base Residual Auction (Scenario 13)

		Actual Auction Results		CP Resources Only	
LDA	Product Type	Clearing Prices (\$ per MW-day)	Cleared UCAP (MW)	Clearing Prices (\$ per MW-day)	Cleared UCAP (MW)
RTO	Base Capacity DR/EE	\$80.00	10,191.3		
	Base Capacity	\$80.00	16,807.3		
	Capacity Performance	\$100.00	140,307.3	\$163.13_	164,129.2
RTO Total		' <del>-</del>	167,305.9	_	164,129.2
EMAAC	Base Capacity DR/EE	\$99.77	1,629.5		
	Base Capacity	\$99.77	5,136.0		
	Capacity Performance	\$119.77	24,003.8	\$353.28	29,183.9
<b>EMAAC Total</b>		_	30,769.3	_	29,183.9
Pepco	Base Capacity DR/EE	\$0.01	474.5		
	Base Capacity	\$80.00	48.3		
	Capacity Performance	\$100.00	5,725.6	\$163.13	6,129.0
Pepco Total		_	6,248.4	_	6,129.0
ComEd	Base Capacity DR/EE	\$182.77	1,945.2		
	Base Capacity	\$182.77	1,216.3		
	Capacity Performance	\$202.77	19,809.9	\$212.00	22,508.1
ComEd Total			22,971.4		22,508.1
BGE	Base Capacity DR/EE	\$80.30	252.9		
	Base Capacity	\$80.30	346.5		
	Capacity Performance	\$100.30	2,140.1	\$163.13	2,975.8
BGE Total			2,739.5		2,975.8

The Market Monitor's analysis assumes that when the Base Capacity Product is removed that nothing else changes. It is possible that some additional Capacity Performance resources would be offered if the Base Capacity Product were eliminated. It is also possible that PJM's Seasonal Capacity approach would increase the supply of Capacity Performance resources if the Base Capacity Product were eliminated. Both would tend to reduce the impact of the elimination of the Base Capacity Product.

The Market Monitor's analysis demonstrates the significant price suppressive effects of the continued inclusion of the Base Capacity Product in the capacity market. PJM included the Base Capacity Product for two transition years in order to provide a smoother transition to full capacity performance and to permit market participants to prepare to be Capacity Performance resources. The two year transition period was approved by the Commission and was long enough. A one year transition would have been long enough. Base Capacity Product resources are an inferior product to Capacity Performance resources.

Base Capacity Product resources are not substitutes for Capacity Performance resources.

There is no reason to continue to permit Base Capacity Product resources to displace

Capacity Performance resources in the capacity market.

Price suppression means forcing the clearing price to be less than the efficient, competitive level. Price suppression in the capacity market has long term consequences for the entire PJM market. The capacity market does not exist in a vacuum. The only reason that there is a capacity market is to make the energy market work. Price suppression makes economic units appear uneconomic. Price suppression weakens incentives to enter the market compared to the efficient incentive level. Price suppression strengthens incentives to leave the market compared to the efficient incentive level.

When the market is not permitted to work, participants will seek out of market solutions. Financial difficulties for specific companies and specific units in PJM have resulted from price suppression in the capacity market. The recent requests for unit specific out of market subsidies in PJM are in significant part a result of price suppression in the capacity market.<sup>5</sup>

The PJM market design depends on a well functioning capacity market with appropriate performance incentives and appropriate product definitions. The capacity performance design includes those elements. The Base Capacity Product is not consistent with the capacity performance market rules and should be eliminated on schedule.

The Complaints should be rejected as a matter of law, and, if not rejected, denied.

#### II. MOTION FOR LEAVE TO ANSWER

The Commission's Rules of Practice and Procedure, 18 CFR § 385.213(a)(2), do not permit answers to answers or protests unless otherwise ordered by the decisional authority. The Commission has made exceptions, however, where an answer clarifies the issues or

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See, e.g., Amended complaint, Docket No. EL16-49-000 (January 9, 2017); Ohio Public Utilities Commission, Cases Nos. 14-1693, 14-1297 and 16-0395.

assists in creating a complete record.<sup>6</sup> In this answer, the Market Monitor provides the Commission with information useful to the Commission's decision-making process and which provides a more complete record. Accordingly, the Market Monitor respectfully requests that this answer be permitted.

#### III. CONCLUSION

The Market Monitor respectfully requests that the Commission afford due consideration to this answer as the Commission resolves the issues raised in this proceeding.

Respectfully submitted,

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Dated: February 13, 2017

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See, e.g., PJM Interconnection, L.L.C., 119 FERC ¶61,318 at P 36 (2007) (accepted answer to answer that "provided information that assisted ... decision-making process"); California Independent System Operator Corporation, 110 FERC ¶ 61,007 (2005) (answer to answer permitted to assist Commission in decision-making process); New Power Company v. PJM Interconnection, L.L.C., 98 FERC ¶ 61,208 (2002) (answer accepted to provide new factual and legal material to assist the Commission in decision-making process); N.Y. Independent System Operator, Inc., 121 FERC ¶61,112 at P 4 (2007) (answer to protest accepted because it provided information that assisted the Commission in its decision-making process).

## **CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Eagleville, Pennsylvania, this 13<sup>th</sup> day of February, 2017.

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