

December 12, 2012

**VIA E-MAIL**

Ms. Sauntia Warfield  
Office of the Secretariat  
Commodity Futures Trading Commission  
Three Lafayette Centre  
1155 21st Street, N.W.  
Washington, D.C. 20581

**Re: Rule 40.6(a) Certification. Notification Regarding Increasing Position Limits and Accountability Levels for PJM AEP Dayton Hub Electricity Futures and Options NYMEX Submission #12-431**

Dear Ms. Warfield:

The New York Mercantile Exchange, Inc. ("NYMEX" or the "Exchange") is notifying the Commodity Futures Trading Commission ("CFTC" or "Commission") that it is self-certifying amendments to position limits and accountability levels for several PJM AEP Dayton Hub electricity futures and option contracts, effective Thursday, December 27, 2012, for a trade date of Friday, December 28, 2012. The contracts affected are:

- PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures (Chapter 765, Code VM)
- PJM AEP Dayton Hub Peak Calendar-Month LMP Option (Chapter 382, Code OT)
- PJM AEP Dayton Hub Real-Time Peak Calendar-Day 2.5 MW Futures (Chapter 766, Code VD)
- PJM AEP Dayton Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (Chapter 896, Code Z9)
- PJM AEP Dayton Hub Peak 50 MW Calendar-Month LMP Option (Chapter 1181, Code PJD)
- PJM AEP Dayton Hub Peak 50 MW Calendar-Month LMP Option on Calendar Futures Strip (Chapter 1183, Code PJP)
- PJM AEP Dayton Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (Chapter 156, Code D7)
- PJM AEP Dayton Hub Day-Ahead Peak Calendar-Day 2.5 MW Futures (Chapter 953, Code PAP)
- PJM AEP Dayton Hub Off-Peak LMP Futures (Chapter 765A, Code VP)
- PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (Chapter 897, Code V3)
- PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Day 2.5 MW Futures (Chapter 955, Code AOR)
- PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (Chapter 157, Code R7)
- PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures (Chapter 954, Code PEO)

The Position Limit, Position Accountability and Reportable Level Table and Header Notes located in the Interpretations and Special Notices Section of Chapter 5 of the NYMEX Rulebook are being amended to reflect the changes in the position limits and accountability levels for the contracts listed above.

Exchange business staff responsible for the rule amendments and the Exchange legal department collectively reviewed the designated contract market core principles (“Core Principles”) as set forth in the Commodity Exchange Act (the “Act” or “CEA”). During the review, Exchange staff identified that the rule amendments may have some bearing on the following Core Principles:

- Contracts not Readily Subject to Manipulation: The contracts are not readily subject to manipulation due to the deep liquidity and robustness in the underlying physical markets.
- Position Limitations or Accountability: The amended spot-month speculative position limits for the contracts are set at less than the threshold of 25% of the deliverable supply in the respective underlying market.
- Availability of General Information: The Exchange will publish information on the contracts’ specifications on its website, together with daily trading volume, open interest, and price information.

Pursuant to Section 5c(c) of the Act and CFTC Regulation 40.6, the Exchange hereby certifies that the attached amendments comply with the Act, including regulations under the Act. There were no substantive opposing views to this proposal. A review of deliverable supply is attached.

The Exchange certifies that this submission has been concurrently posted on the Exchange’s website at <http://www.cmegroup.com/market-regulation/rule-filings.html>

Should you have any questions concerning the above, please contact the undersigned at (312) 930-8167 or [Sean.Downey@cmegroup.com](mailto:Sean.Downey@cmegroup.com).

Sincerely,

/s/Sean M. Downey  
Director and Assistant General Counsel

Attachments: Appendix A: Chapter 5 Table  
Appendix B: Analysis of Deliverable Supply

## Appendix A

NYMEX Rulebook Chapter 5 Position Limit Table  
(Bold/underlining indicates additions)

<u>Contract Name</u>	<u>Rule Chapter</u>	<u>Commodity Code</u>	<u>All Month Accountability Level</u>	<u>Any One Month Accountability Level</u>	<u>Expiration Month Limit</u>	<u>Reporting Level</u>	<u>Aggregate Into (1)</u>
			<u>Rule 560</u>	<u>Rule 560</u>	<u>Rule 559</u>	<u>Rule 561</u>	
<b><i>AEP-Dayton Hub</i></b>							
PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures	765	VM	<del>1,000</del> <u>2,000</u>	<del>750</del> <u>1,500</u>	<del>150</del> <u>1,100</u>	25	VM
PJM AEP Dayton Hub Peak Calendar-Month LMP Option	382	OT	<del>1,000</del> <u>2,000</u>	<del>750</del> <u>1,500</u>	<del>150</del> <u>1,100</u>	25	VM
PJM AEP Dayton Hub Real-Time Peak Calendar-Day 2.5 MW Futures	766	VD	<del>1,000</del> <u>2,000</u>	<del>750</del> <u>1,500</u>	<del>150</del> <u>1,100</u>	25	VM
PJM AEP Dayton Hub 5 MW Peak Calendar-Month Real-Time LMP Futures	896	Z9	<del>1,000</del> <u>2,000</u>	<del>750</del> <u>1,500</u>	<del>150</del> <u>1,100</u>	25	VM
PJM AEP Dayton Hub Peak 50 MW Calendar-Month LMP Option	1181	PJD	<del>1,000</del> <u>2,000</u>	<del>750</del> <u>1,500</u>	<del>150</del> <u>1,100</u>	25	VM
PJM AEP Dayton Hub Peak 50 MW Calendar-Month LMP Option on Calendar Futures Strip	1183	PJP	<del>1,000</del> <u>2,000</u>	<del>750</del> <u>1,500</u>	<del>150</del> <u>1,100</u>	25	VM
PJM AEP Dayton Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures	156	D7	<del>10,000</del> <u>30,000</u>	<del>7,500</del> <u>20,000</u>	<del>1,500</del> <u>12,000</u>	25	D7
PJM AEP Dayton Hub Day-Ahead Peak Calendar-Day 2.5 MW Futures	953	PAP	<del>10,000</del> <u>30,000</u>	<del>7,500</del> <u>20,000</u>	<del>1,500</del> <u>12,000</u>	25	D7
PJM AEP Dayton Hub Off-Peak LMP Futures	765A	VP	1,000	750	<del>150</del> <u>400</u>	25	VP
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures	897	V3	1,000	750	<del>150</del> <u>400</u>	25	VP

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PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Day 2.5 MW Futures	955	AOR	1,000	750	<del>150</del> <u>400</u>	25	VP
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures	157	R7	175,000	125,000	<del>25,000</del> <u>75,000</u>	25	R7
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	954	PEO	175,000	125,000	<del>25,000</del> <u>75,000</u>	25	R7

### ANALYSIS OF DELIVERABLE SUPPLY

The four contracts considered in this analysis are: PJM AEP Dayton Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures contract (Code D7), PJM AEP Dayton Hub Day-Ahead LMP Off-Peak Calendar-Month 5 MW Futures contract (Code R7), PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures contract (Code VM), and PJM AEP Dayton Hub Off-Peak LMP Futures contract (Code VP). These four contracts are highlighted as they are considered to be the “parent” contracts and their position limits and accountability levels are being raised. The position limits and accountability levels for the balance of the contracts are also being amended because they aggregate into one of the four parent contracts whose limits are increasing.

The term "Peak Days" shall mean a Monday through Friday, excluding North American Electric Reliability Corporation holidays. "Peak Hours" shall mean Hour Ending 0800 through 2300 Eastern Prevailing Time (EPT). "Off-Peak Days & Hours" shall mean the hours ending 0100 through 0700 and 2400 Eastern Standard Time (EST), Monday through Friday (except when Daylight Savings Time is in effect, in which case Off-Peak Hours means the hours ending 0100 through 0600 and 2300 through 2400 EST) as well as the hours ending 0100 through 2400 EST, Saturday and Sunday, including North American Electric Reliability Corporation holidays.

The two day-ahead contracts are based on 5 megawatts (MW) per hour. The contract size of the PJM AEP Dayton Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures contract is 80 megawatt hour (MWh), as the contract is designed to cover all 16 peak hours during the peak day. The contract size of the PJM AEP Dayton Hub Day-Ahead LMP Off-Peak Calendar-Month 5 MW Futures contract is 5 MWh, as it is designed to cover only one off-peak hour during the peak day. A market participant would need to buy or sell eight (8) PJM AEP Dayton Hub Day-Ahead LMP Off-Peak Calendar-Month 5 MW Futures contracts to cover all 8 off-peak hours in a given day.

The PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures contract is based on 2.5 MW per hour. The average number of peak hours in a month is approximately 341, thus yielding an average contract size of 853 MWh. The PJM AEP Dayton Hub Off-Peak LMP Futures contract is also based on 2.5 MW per hour. Since there are approximately 388 off-peak hours in a month, the average contract size of the off-peak real-time contract is 971 MWh.

#### Background on Electricity Markets

Electricity is priced in two separate and distinct short term markets: the day-ahead market and the real-time market. In the day-ahead market, prices for a particular hour of the next day are calculated by PJM based on forecasted load,

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generation supply offers, and demand bids. Market participants use the day-ahead market to schedule the majority of expected generation and load. In reality, forecasted load rarely equals actual load. This is because when the power is needed, consumer demand may be higher or lower than the level that was anticipated, a generator may be inoperable, transmission wires may be down, etc. The real-time PJM market provides a venue to buy and sell power to account for surpluses and shortfalls that arise during the operating day. In the real-time market, market participants buy and sell power during the operating day, which is the day in which the power is generated and transmitted. Throughout the real-time operating day, PJM calculates prices in five-minute consecutive increments that are incorporated into the hourly prices posted by PJM. Furthermore, the day-ahead and real-time markets are segmented into peak and off-peak markets. In this regard, load and generation are typically higher during peak hours as compared to off-peak hours.

PJM, like other regional transmission organizations (RTO), calculate power prices during a given hour, either in the next day or in the same day. Many PJM member generators and commercials participate in these markets. The day-ahead and real-time prices calculated by PJM are subject to the Federal oversight. Specifically, PJM and its independent market monitor are under the jurisdiction of the Federal Energy Regulatory Commission (FERC). The settlement prices of the futures contracts are computed by averaging hourly power prices over a month or a day. Thus, manipulating the final settlement price would likely be difficult and costly because it would involve affecting multiple hourly auctions. Moreover, such manipulative activity likely would come to the attention of PJM, the market monitor, and FERC.

### Historical Load

Table 1 below provides historical load data for the PJM AEP Dayton Hub, which reflects the amount of electricity that was produced and consumed in real time. The Exchange considered actual load information reported by the ISO/RTO as the basis of its analysis of deliverable supply. Because the day-ahead and real-time auctions price power for the same flow date, the real-time load is the appropriate measure of deliverable supply for both the day-ahead and real-time markets.

The average monthly load for the AEP Dayton Hub was calculated using real-time hourly load data published by PJM and aggregated by NRGSTREAM.<sup>1</sup> Specifically, peak hourly loads were used for monthly peak calculations, and off-

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<sup>1</sup> NRGSTREAM is an aggregator and distributor of public and private energy market information ([www.nrgstream.com](http://www.nrgstream.com)). In the case of electricity, NRGSTREAM gathers hourly load and pricing information and aggregates it on a daily basis for peak and off-peak hours.

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peak hourly loads were used for monthly off-peak calculations. Exchange staff used data from March 2011 to July 2012, as PJM only started publishing zonal real-time load in the middle of February 2011.

**Table 1. Historical Load (MWh) for the AEP Dayton Hub, as aggregated and published by NRGSTREAM**

Location/Time of Use	Data Dates	Average Monthly Load
AEP Peak	Mar-11 to July-12	5,613,005
Dayton Peak	Mar-11 to July-12	791,374
<b>PJM AEP Dayton Hub Peak</b>		<b>6,404,379</b>
AEP Off Peak	Mar-11 to July-12	2,227,322
Dayton Off Peak	Mar-11 to July-12	298,487
<b>PJM AEP Dayton Hub Off Peak</b>		<b>2,525,809</b>

In setting the spot-month speculative position limits for the four main parent contracts in the PJM AEP Dayton Hub, the limit levels should be established relative to size of the estimated monthly deliverable supply. Table 2 below shows the code associated with each futures contract, contract size, average monthly peak or off-peak load, contract-equivalent deliverable supply, proposed position limit, and percentage of the proposed position limit versus the estimated deliverable supply. As noted previously, real-time monthly loads for peak and off-peak hours are used as measures of deliverable supply as the day-ahead and real-time markets both price power that actually flows in the real-time day. Thus, the average monthly volume for a given day-ahead market during peak/off-peak hours is the same value as the real-time market during the same peak/off-peak hours.

**Table 2. Deliverable Supply Estimates and Proposed Position Limits' Share of Deliverable Supply**

Contract Code	Contract Size (MWh)	Average Monthly Volume (MWh)	Contract Equivalent Deliverable Supply	Proposed Position Limits	% of Position Limit/Deliverable Supply
D7	80	6,404,379	80,055	12,000	15%
R7	5	2,525,809	505,162	75,000	15%
VM	853	6,404,379	7,509	1,100	15%
VP	971	2,525,809	2,601	400	15%

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The remaining contracts specified in the submission aggregate into one of the four main futures contracts in Table 2. Specifically:

The following contracts aggregate into PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures (Chapter 765):

- PJM AEP Dayton Hub Peak Calendar-Month LMP Option (Chapter 382)
- PJM AEP Dayton Hub Real-Time Peak Calendar-Day 2.5 MW Futures (Chapter 766)
- PJM AEP Dayton Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (Chapter 896)
- PJM AEP Dayton Hub Peak 50 MW Calendar-Month LMP Option (Chapter 1181)
- PJM AEP Dayton Hub Peak 50 MW Calendar-Month LMP Option on Calendar Futures Strip (Chapter 1183)

The following contracts aggregate into PJM AEP Dayton Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (Chapter 156)

- PJM AEP Dayton Hub Day-Ahead Peak Calendar-Day 2.5 MW Futures (Chapter 953)

The following contracts aggregates into PJM AEP Dayton Hub Off-Peak LMP Futures (Chapter 765A)

- PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (Chapter 897)
- PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Day 2.5 MW Futures (Chapter 955)

The following contracts aggregate into PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (Chapter 157)

- PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures (Chapter 954).

The contracts that aggregate into another contract (referred to as the “parent”) take on the same position limits and accountability levels specified by the parent contract.