CME Group

Christopher Bowen Managing Director and Chief Regulatory Counsel Legal Department

August 9, 2013

VIA E-MAIL

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

Re: Regulation 40.6(a) Certification. Notification of Amendments to Twenty-Four (24) Electricity Futures and Option Contracts NYMEX Submission #13-330

Dear Ms. Jurgens:

The New York Mercantile Exchange, Inc. ("NYMEX" or "Exchange") is notifying the Commodity Futures Trading Commission ("CFTC" or "Commission") that it is self-certifying amendments to twenty-four (24) electricity futures and option contracts. The effective date for the amendments is Sunday, August 25, 2013, for the trade date Monday, August 26, 2013. The contracts affected are listed in the table below:

Current Contract Name	Code	Chapter
PJM Western Hub Real-Time Peak Calendar-Day 2.5 MW Futures	JD	637
PJM Northern Illinois Hub Real-Time Peak Calendar-Day 2.5 MW Futures	UD	763
PJM AEP Dayton Hub Real-Time Peak Calendar-Day 2.5 MW Futures	VD	766
PJM West Hub RT Same Day Option	J01-J31	1069
NYISO Zone G Day-Ahead Peak Calendar-Day 2.5 MW Futures	GN	617B
PJM Western Hub Real-Time Peak Calendar-Month 2.5 MW Futures	JM	635
PJM Electricity Option on Calendar Futures Strip	60	354
PJM Calendar-Month LMP Option	JO	380
PJM 50 MW Calendar-Month LMP Option	PML	312
PJM Western Hub 50 MW Peak Calendar-Month Real-Time LMP Futures	4S	178
PJM Western Hub Peak Calendar-Month Real-Time LMP Futures	L1	176
PJM Northern Illinois Hub Real-Time Peak Calendar-Month 2.5 MW Futures	UM	762
PJM Northern Illinois Hub Peak Calendar-Month LMP Option	OU	384
PJM Northern Illinois Hub Peak 50 MW Calendar-Month LMP Option on	PJH	1184
Calendar Futures Strip		
PJM Northern Illinois Hub Peak 50 MW Calendar-Month LMP Option	PJN	1182
PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures	B3	894
PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures	VM	765
PJM AEP Dayton Hub Peak Calendar-Month LMP 5 MW Option	OT	382
PJM AEP Dayton Hub Peak 50 MW Calendar-Month LMP Option	PJD	1181
PJM AEP Dayton Hub Peak 50 MW Calendar-Month LMP Option on Calendar	PJP	1183
Futures Strip		
PJM AEP Dayton Hub 5MW Peak Calendar-Month Real-Time LMP Futures	Z9	896
NYISO Zone G Peak LBMP Futures	KG	617
NYISO Zone G 5 MW Peak Calendar-Month Day-Ahead LBMP Option	9U	904A
NYISO Zone G Day-Ahead Peak Calendar-Month 5 MW Futures	T3	904

The size of the PJM Western Hub Real-Time Peak Calendar-Day 2.5 MW Futures (Commodity code JD), PJM Northern Illinois Hub Real-Time Peak Calendar-Day 2.5 MW Futures (Commodity code UD), PJM AEP Dayton Hub Real-Time Peak Calendar-Day 2.5 MW Futures (Commodity code VD), and NYISO Zone G Day-Ahead Peak Calendar-Day 2.5 MW Futures (Commodity code GN) contracts are increasing to 80 megawatt hours (MWh), based on a five (5) (megawatts) MW per hour flow rate. Contract names for these four (4) rule chapters are being updated to reflect the 5 MW per hour flow rate. There is currently no open interest in these four (4) contracts. As a result of the size change in these contracts, the Exchange fees will be amended as described in Appendix D, Pursuant to Commission Regulation 40.6(a), NYMEX is separately self-certifying amendments to block trading minimum thresholds for these four (4) contracts) in NYMEX/COMEX Submission No. 13-316. Block transactions are governed by Rule 526. The minimum block levels for these four (4) contracts are decreasing from the current level of ten (10) contracts to five (5) contracts.

In addition, the rules for the PJM West Hub RT Same Day Option (Commodity codes J01 - J31) are being amended to indicate 50 MW in the title and to reflect the correct title of the underlying futures contract and to add the term "megawatt hours" or "MWh" to the multiplier of 800.

Based on an analysis of deliverable supply, the position limits for the five contracts above, as well as for the remaining subject contracts, are being amended. Please refer to Appendix B for the deliverable supply analysis and Appendix C for the revised position limits, accountability levels, aggregation rules, and reportable levels.

NYMEX business staff responsible for the amendments to the twenty-four (24) electricity contracts and the NYMEX Legal Department collectively reviewed the designated contract market core principles ("Core Principles") as set forth in the Commodity Exchange Act ("CEA" or the "Act"). During the review, NYMEX staff identified that the amendments to the contracts may impact the following Core Principles as follows:

- <u>Contracts Not Readily Susceptible to Manipulation</u>: The spot-month speculative position limits for the contracts have been updated and are at or below 25 percent of the estimated deliverable supply for the appropriate underlying cash markets.
- <u>Position Limitations or Accountability</u>: The contracts have spot-month speculative position limits as well as all-months and any-one-month accountability levels. These position limits and accountability levels have been updated and are at or below 25 percent of deliverable supply for the appropriate underlying cash markets. (See Appendix C.)
- <u>Availability of General Information</u>: The Exchange will make publically available the details of the contracts' amendments by publishing a notice to the marketplace. Furthermore, the Exchange will update the NYMEX rulebook to reflect the amended terms and conditions of the contracts.

Pursuant to Section 5c(c) of the Act and CFTC Regulation 40.6(a), the Exchange hereby certifies that the amendments to the twenty-four (24) electricity contracts comply with the Act, including regulations under the Act. There were no substantive opposing views to this proposal.

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

Should you have any questions concerning the above, please contact the undersigned at (212) 299-2200 or <u>Christopher.Bowen@cmegroup.com</u>. Please reference NYMEX Submission No. 13-330 in any related correspondence.

Sincerely,

/s/Christopher Bowen Managing Director and Chief Regulatory Counsel

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Attachments: Appendix A – Product Chapter Amendments to Five (5) Electricity Futures and Option Contracts

Appendix B – Deliverable Supply Analysis in support of proposed modifications Appendix C – Position Limit, Position Accountability, and Reportable Level Table in Chapter 5 of the NYMEX Rulebook (attached under separate cover) Appendix D – Amended Exchange Fees

Appendix A

Amendments to Five Electricity Futures and Options Contracts (Additions <u>underlined</u>, deletions overstruck)

Chapter 637 PJM Western Hub Real-Time Peak Calendar-Day 2.5 <u>5</u> MW Futures

637.03. CONTRACT QUANTITY AND VALUE

One contract The contract quantity shall be 40 MWH (Mega-watt Hours) 80 Megawatt hours (MWh) based on a flow rate of 5 Megawatts (MW) per peak hour.

Each futures contract shall be valued as the contract quantity (40 MWH) multiplied by the settlement price.

Chapter 763 PJM Northern Illinois Hub Real-Time Peak Calendar-Day 2.5 <u>5</u> MW Futures

763.03. CONTRACT QUANTITY AND VALUE

The contract quantity shall be 40 MWH (Mega-watt Hours) 80 Megawatt hours (MWh) based on a flow rate of 5 Megawatts (MW) per peak hour.

Each futures contract based on the PJM Northern Illinois Hub Calendar Day Peak LMP Swap Futures contract shall be valued as the contract quantity (40 MWH) multiplied by the settlement price. Each futures contract shall be valued as the contract quantity multiplied by the settlement price.

Chapter 766 PJM AEP-Dayton Hub Real-Time Peak Calendar-Day 2.5 5 MW Futures

766.03. CONTRACY QUANTITY AND VALUE

The contract quantity shall be 40 MWH (Mega watt Hours) 80 Megawatt hours (MWh) based on a flow rate of 5 Megawatts (MW) per peak hour.

Each futures contract based on the PJM AEP-Dayton Hub Calendar-Day Peak LMP Swap Futures contract shall be valued as the contract quantity (40 MWH) multiplied by the settlement price. Each futures contract shall be valued as the contract quantity multiplied by the settlement price.

Chapter 1069 PJM West Hub Real-Time <u>50 MW</u> Same Day Option

1069.02 TRADING UNIT

A call option represents the differential between the final settlement price of the PJM Peak Calendar-Day LMP Swap Futures PJM Western Hub Real-Time Peak Calendar-Day 5 MW Futures contract less the strike price, or zero whichever is greater, multiplied by 800 Megawatt hours (MWh). A put Option represents the differential between the strike price and the final settlement price of the PJM Peak Calendar Day LMP Swap Futures PJM Western Hub Real-Time Peak Calendar-Day 5 MW Futures contract, or zero, whichever is greater, multiplied by 800 MWh.

1069.04 STRIKE PRICES

Trading shall be conducted for Option with strike prices in increments as set forth below.

(A) On the first business day of trading in an Option contract month, trading shall be at the following strike prices: (i) the previous day's settlement price for the PJM Peak Calendar-Day LMP Swap Futures contracts PJM Western Hub Real-Time Peak Calendar-Day 5 MW Futures contract in the corresponding contract day rounded off to the nearest fifty-cent increment strike price unless such settlement price is precisely midway between two fifty-cent increment strike prices in which case it shall be rounded off to the lower fifty-cent increment strike price and (ii) the twenty fifty-cent increment strike price and (ii) the twenty fifty-cent increment strike price described in (i) of this Rule 1069.04(A) and (iii) the twenty fifty-cent increment strike price described in (ii) of this Rule 1069.04(A) and (iv) an additional ten strike prices for both call and put options will be listed at one-dollar increment shell the strike prices for both put and call options will be listed at one-dollar increments below the lowest fifty-cent increment strike as described in (ii) of this Rule 1069.04(A).

(B) Thereafter, on any business day prior to the expiration of the option (i) new consecutive strike prices for both puts and calls will be added such that at all times there will be at least twenty fifty-cent increment strike prices above and below the at-the-money strike price available for trading in all options contract months and (ii) new one-dollar increment strike prices above the highest fifty-cent increment strike price, and (iii) new one-dollar strike prices above the highest fifty-cent increment strike price, and (iii) new one-dollar increment strike prices will be added such that at all times there shall be at least ten one-dollar increment strike prices below the lowest fifty-cent strike price.

(C) Notwithstanding the provisions of subsections (A) through (B) of this Rule, if the Exchange determines that trading in the Option contract will be facilitated thereby, the Exchange may, by resolution, change the increments between strike prices, the number of strike prices which shall be traded on the first day in any new option contract month, the number of new strike prices which will be introduced on each business day or the period preceding the expiration of a Option contract in which no new strike prices may be introduced.

Chapter 617B NYISO Zone G Day-Ahead Peak Calendar-Day 2.5 5 MW Futures

617B.03. CONTRACT QUANTITY AND VALUE

The contract quantity shall be 40 MWH (Megawatt Hours) 80 Megawatt hours (MWh) based on a flow rate of 5 Megawatts (MW) per peak hour.

Each contract shall be valued as the contract quantity (40 MWH) multiplied by the settlement price.

Appendix B Deliverable Supply Analysis

U.S. Independent System Operator (ISO) and Regional Transmission Organizations (RTOs)

PJM: PJM Interconnection LLC ("PJM") is an independent RTO that plays a vital role in the U.S. electric system by providing its members with opportunities for buying and selling power, arranging transmission service, and allowing the use of larger and more efficient generating units. PJM coordinates the movement of electricity in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia. In 1997, PJM began operating the nation's first regional, bid-based, hourly energy market. PJM enables participants to buy and sell power, schedule transactions, and reserve transmission service.

NEW YORK ISO: The New York Independent System Operator (NYISO) is an ISO that manages New York's electricity transmission grid – a 10,892-mile network of high-voltage lines that carry electricity throughout the state. NYISO also oversees wholesale electricity markets where more than \$75 billion has been transacted since 1999. In addition, NYISO facilitates and administers the markets for installed capacity, energy, ancillary services, and transmission congestion contracts. Furthermore, NYISO provides scheduling of firm and non-firm point-to-point transmission service and Network Integration Transmission Service.

Market Competitiveness

ISO/RTO markets are highly competitive and were established following Federal Energy Regulatory Commission (FERC) orders. FERC Order No. 888 identified barriers to competitive wholesale electricity markets and required that those barriers be removed. FERC Order No. 889 established open access to system information. FERC Order No. 2000 provided the framework for the formation of ISO/RTO markets. Under FERC authority, PJM and NYISO (as well as the Midcontinent ISO and ISO New England), operate and monitor their respective market to ensure the competitiveness and reliability of the electricity system.

ISOs/RTOs are also monitored by the North American Electric Reliability Corporation (NERC), a nonprofit organization made up of stakeholders responsible for developing reliability standards and ensuring compliance with those standards. NERC has various committees, sub-committees, task forces, and working groups that investigate and analyze system disruptions in order to prevent market manipulation.

Besides governmental and industrial organizations, each ISO/RTO is monitored by an independent market monitor. The market monitors regularly evaluate the competitiveness of the various markets, recommend improvement plans, and review the implementation of those plans. Market monitors also publish quarterly and annual market reports to raise public awareness of the state of their respective markets. Monitoring Analytics is the market monitor for PJM, and Potomac Economics is the market monitor for NYISO.

Day-ahead vs. Real-Time Market

ISOs/RTOs offer two basic energy markets for electricity participants: a real-time (or spot) market and a day-ahead market. The real-time and day-ahead markets are interrelated as the day-ahead market is a forward market for real-time delivery of power during the following day. In contrast, the real-time market prices electricity that flows the same day during a particular hour. Real-time generation and load may differ from forecasted generation and load expressed in the day-ahead market. Both the day-ahead and real-time markets adopt a competitive auction process developed by stakeholders from both the generation and load sides. Market-clearing prices or locational marginal prices (LMPs) are published publicly on a timely basis to ensure competitive pricing.

Hub vs. Zone

Within a given ISO/RTO, the term "zone" refers to a group of electrical nodes within a utility control area, such as AEP Ohio (AEP Zone) and Dayton Power & Light (Dayton Zone) in the PJM territory. In contrast, the term "hub" refers to a group of selected electrical nodes from one or more zones. For example PJM's AEP Dayton Hub ("PJM AD Hub") is a group of nodes selected from the AEP Zone and Dayton Zone. Both zonal and hub LMPs are designed by ISOs and RTOs and take into account a combination of historical and projected LMPs for individual nodes that reflect prescribed commercial criteria in a statistically consistent manner. For instance, a hub may reflect common LMP correlation criteria or comprise a set of nodes that consistently experience (or consistently do not experience) congestion. Each ISO/RTO hub has been subjected to a thorough stakeholder vetting process before being introduced.

Since the hubs are designed to reflect physical transactions at the zonal level in all of the related zones, to derive load information for the cash market activities for the hubs, Exchange staff used load data for the related zones or control areas to calculate the transaction volume. Below are the hub definitions with zonal information, as implied by the physical locations of the hubs' nodes.

PJM Western Hub: a group of 104 nodes located in southern Maryland, Washington D.C., and central and western Pennsylvania. The related zones include BGE, PEPCO, Penelec, PECO, and PPL.

PJM AEP Dayton Hub: a group of 1152 nodes located in AEP Ohio and Dayton Power and Light's control area. The related zones include AEP and Dayton.

PJM Northern Illinois Hub: a group of 225 nodes located in Commonwealth Edison's control area in Northern Illinois. The related zones include Com Ed.

ANALYSIS OF DELIVERABLE SUPPLY

The term "Peak Days" shall mean a Monday through Friday, excluding NERC holidays. "Peak Hours" shall mean Hour Ending 0800 through 2300 Eastern Prevailing Time (EPT).

Historical Load

Tables 1 and 2 below provide historical load data for PJM Western Hub, PJM AEP Dayton Hub, PJM Northern Illinois Hub, and NYISO Zone G. Load data in the two tables reflect the amount of electricity that was consumed in real time. An analysis of deliverable supply should consider actual load information reported by the ISO/RTO. 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.¹

Average monthly loads were calculated for PJM locations using real-time hourly load data published by PJM and aggregated by NRGSTREAM.² Specifically, peak hourly loads were used for monthly peak calculations.

Table 1. Historical Load (MWh) for PJM and ISO-NE Locations from NRGSTREAM

Location/Time of Use	Data Availability	Average Monthly Load

¹ Per NYMEX's recent meeting with DMO staff, the Exchange continues to review the suggested deliverable supply methodology and will adjust accordingly once a consensus is agreed upon within the industry.

² NRGSTREAM is an aggregator and distributer of public and private energy market information. (www.nrgstream.com).

BGE Peak	Mar-11 to July-12	1,402,873
PEPCO Peak	Mar-11 to July-12	766,543
Penelec Peak	Mar-11 to July-12	1,374,934
PECO Peak	Mar-11 to July-12	1,777,286
PPL Peak	Mar-11 to July-12	1,787,232
PJM Western Hub Peak		7,108,868
AEP Peak	Mar-11 to July-12	5,613,005
Dayton Peak	Mar-11 to July-12	791,374
PJM AEP Dayton Hub Peak		6,404,379
ComEd Peak	Mar-11 to July-12	4,350,772
PJM Northern Illinois Hub Peak		4,350,772

Average monthly loads for NYISO zones were calculated using annual load data published by the ISO in its "Gold Book."³ Specifically, the annual Zone G load represents the volume of electricity delivered and consumed in real time; monthly volumes were computed by dividing the annual zonal value by 12. Exchange staff obtained NYISO data on actual loads for the years 2002 to 2012.

Year	Zone G
	GWh
2002	9,970
2003	0,451
2004	10,696
2005	10,924
2006	10,417
2007	10,909

Table 2. Historical Loads for NYISO Zone G

³ See page 8 of NYISO's 2013 Load & Capacity Data at

http://www.nyiso.com/public/webdocs/markets operations/services/planning/Documents and Resources/Planni ng Data and Reference Docs/Data and Reference Docs/2013 GoldBook.pdf. The Gold Book is an authoritative source of load information that comes directly from the operator of the day-ahead and real-time auctions. The Gold Book primarily provides forecasts of load and capacity in NYISO's service area, but it does have historical load data by zone. While other ISOs also conduct forecasting and publish the results, they do not always provide historical load data. Even if historical data are published, it may be aggregated to a level that is not useful for computing deliverable supply estimates. PJM is affected by this shortcoming. Therefore, in the case of PJM-based contracts, load data were obtained from the next-best source, which is third-party suppliers of electricity information. While there are numerous firms that provide such data, NYMEX staff used information published by NRGSTREAM. NRGSTREAM accesses ISOs' real-time hourly load and price data on a paid basis.

2008	10,607
2009	10,189
2010	10,384
2011	10,066
2012	9,938

For the evaluation of the NYISO Zone G cash market, Exchange staff used the actual load data from 2012. The average annual electricity load, as shown in the Table 3 below, was multiplied by 1,000 to convert the value from gigawatt hours to megawatt hours. Then, the annual MWh load was divided by 12 to put the load on a monthly basis. Next, peak and off-peak loads were calculated by assuming a 50% split between the two loads.

Table 3. 2012 Monthly Volumes for NYISO Zone G

Zone	GWh	MWh	MWh/month	Peak/Off- Peak Split MWh/month
G	9,938	9,938,000	828,167	414,083

It is possible to consider forecasted zonal loads for 2013. NYISO, like other ISOs/RTOs, have a responsibility to provide electricity to consumers in a reliable manner. In order to fulfill this requirement, ISOs forecast demand and capacity into the future. ISOs/RTOs have a vested interest in producing accurate forecasts because the alternative of producing poor forecasts may lead to system failures, which is not desirable. NYISO forecasted 2013 zonal loads using 2012 values and assuming an average growth rate of 0.96%. This assumption is reasonable given a relatively stable population and the prospect for improvements in the economy. Because short-term forecasts are likely to be much more accurate than long-term forecasts, the 2013 forecasted load, which is only one year out, is probably very dependable. Given this information, Table 4 below provides the 2013 forecasted loads for NYISO Zone G. The differences between the 2012 and 2013 values are minimal.

Zone	GWh	MWh	MWh/month	Peak/Off- Peak Split MWh/month
G	10,054	10,054,000	837,833	418,917

Table 4. 2013 Forecasted Monthly Volumes for NYISO Zone G

Position Limits for the PJM and NYISO Futures Contracts

The subject contracts to be amended aggregate into other futures contracts. Thus, the subject contracts take on the position limits of the "parent" futures contracts. The contracts specified in the submission are denoted in the gray rows while the parent contracts are denoted in the green rows (see Table 5).

Table 5. Position Limits for PJM and NYISO contracts

Contract	Aggregate	Size of Parent	Average Monthly	Contract-	Current	New Limit	New Limit's
ooue		(Total	Volume	Deliverable	Limit		Deliverable
		MWh)		Supply			Supply (%)
JM	JM	850	7,108,868	8,363	1,000	2,090	25
JD	JM	850	7,108,868	8,363	1,000	2,090	25
60	JM	850	7,108,868	8,363	1,000	2,090	25
JO	JM	850	7,108,868	8,363	1,000	2,090	25
PML	JM	850	7,108,868	8,363	1,000	2,090	25
4S	JM	850	7,108,868	8,363	1,000	2,090	25
J01-J31	JM	850	7,108,868	8,363	1,000	2,090	25
L1	JM	850	7,108,868	8,363	1,000	2,090	25
UM	UM	850	4,350,772	5,119	750	1,275	25
UD	UM	850	4,350,772	5,119	750	1,275	25
OU	UM	850	4,350,772	5,119	750	1,275	25
PJH	UM	850	4,350,772	5,119	750	1,275	25
PJN	UM	850	4,350,772	5,119	750	1,275	25
B3	UM	850	4,350,772	5,119	750	1,275	25
VM	VM	850	6,404,379	7,535	1,100	1,880	25
VD	VM	850	6,404,379	7,535	1,100	1,880	25
OT	VM	850	6,404,379	7,535	1,100	1,880	25
PJD	VM	850	6,404,379	7,535	1,100	1,880	25
PJP	VM	850	6,404,379	7,535	1,100	1,880	25
Z9	VM	850	6,404,379	7,535	1,100	1,880	25
KG	KG	400	414,083	1,035	150	250	24
GN	KG	400	414,083	1,035	150	250	24
9U	KG	400	414,083	1,035	150	250	24
T3	KG	400	414,083	1,035	150	250	24

APPENDIX C

Position Limit, Position Accountability, and Reportable Level Table in Chapter 5 of the NYMEX Rulebook (attached under separate cover with additions <u>underlined</u> and deletions overstruck)

APPENDIX D

Amended Fee Schedule

(additions <u>underlined</u>, deletions overstruck)

Exchange Fees for JD, UD, VD, and GN						
Cross Cross Member Day Member Division Non-Member IIP						
Pit	Х	0.20 <u>0.35</u>	0.20 <u>0.37</u>	0.20 <u>0.40</u>		
Globex	Х	0.20 <u>0.35</u>	0.20 <u>0.37</u>	0.20 <u>0.40</u>	0.20 <u>0.37</u>	
ClearPort		0.20 <u>0.35</u>		0.20 <u>0.40</u>		

Other Processing Fees		
	Member	Non-Member
Cash Settlement	0.20 0.105	0.20 <u>0.12</u>
Futures from E/A	X	Х
	House Acct	Customer Acct
Options E/A Notice	Х	Х
Delivery Notice	Х	Х

Additional Fees and S	Surcharges	
EFS Surcharge	Х	
Block Surcharge	Х	
Facilitation Desk Fee	.02	

Contract Name	Rule Chapter	Commodity Code	Contract Size
PJM Western Hub Real-Time Peak Calendar-Month 2.5 MW Futures	635	JM	850
NYISO Zone G Peak LBMP Futures	617	KG	400
PJM Northern Illinois Hub Real-Time Peak Calendar-Month 2.5 MW Futures	762	UM	850
PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures	765	VM	850
PJM Electricity Option on Calendar Futures Strip	354	60	12
PJM Calendar-Month LMP Option	380	JO	850
PJM AEP Dayton Hub Peak Calendar-Month LMP 5 MW Option	382	ОТ	1,700
PJM Northern Illinois Hub Peak Calendar-Month LMP Option	384	OU	850
PJM AEP Dayton Hub Peak 50 MW Calendar-Month LMP Option	1181	PJD	17,000
PJM Northern Illinois Hub Peak 50 MW Calendar-Month LMP Option on Calendar Futures Strip	1184	PJH	240
PJM Northern Illinois Hub Peak 50 MW Calendar-Month LMP Option	1182	PJN	17,000
PJM AEP Dayton Hub Peak 50 MW Calendar-Month LMP Option on Calendar Futures Strip	1183	PJP	240
PJM 50 MW Calendar-Month LMP Option	312	PML	20
PJM Western Hub 50 MW Peak Calendar-Month Real-Time LMP Futures	178	4S	800
PJM West Hub RT Same Day Option	1069	J01-J31	800
NYISO Zone G Day-Ahead Peak Calendar-Day 2.5 <u>5</u> MW Futures	617B	GN	<u>80</u> -40
PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures	894	B3	80
PJM Western Hub Peak Calendar-Month Real-Time LMP Futures	176	L1	80
PJM AEP Dayton Hub 5 MW Peak Calendar-Month Real-Time LMP Futures	896	Z9	80
PJM Western Hub Real-Time Peak Calendar-Day 2.5 <u>5</u> MW Futures	637	JD	<u>80</u> -40
PJM Northern Illinois Hub Real-Time Peak Calendar-Day 2.5 5 MW Futures	763	UD	<u>80</u> -40
PJM AEP Dayton Hub Real-Time Peak Calendar-Day 2.5 <u>5</u> MW Futures	766	VD	<u>80</u> -40
NYISO Zone G 5 MW Peak Calendar-Month Day-Ahead LBMP Option	904A	9U	80
NYISO Zone G Day-Ahead Peak Calendar-Month 5 MW Futures	904	Т3	80

Contract Units	Туре	Settlement	Group	Diminishing Balance Contract	Reporting Level	Spot-Month position comprised of futures and deliveries	Spot-Month Aggregate Into Futures Equivalent Leg (1)
MWh	Futures	Financially Settled Futures	Power		25		JM
MWh	Futures	Financially Settled Futures	Power		25		KG
MWh	Futures	Financially Settled Futures	Power		25		UM
MWh	Futures	Financially Settled Futures	Power		25		VM
Underlying Futures	Eu.Option	Exercises into Financial Future	Power		25		JM
MWh	Am.Option	Exercises into Financial Future	Power		25		JM
MWh	Am.Option	Exercises into Financial Future	Power		25		VM
MWh	Am.Option	Exercises into Financial Future	Power		25		UM
MWh	Am.Option	Exercises into Financial Future	Power		25		VM
Underlying Futures	Eu.Option	Exercises into Financial Future	Power		25		UM
MWh	Am.Option	Exercises into Financial Future	Power		25		UM
Underlying Futures	Eu.Option	Exercises into Financial Future	Power		25		VM
Underlying Futures	Am.Option	Exercises into Financial Future	Power		25		JM
MWh	Futures	Financially Settled Futures	Power		25		JM
MWh	Eu.Option	Financially Settled Option	Power		25		JM
MWh	Futures	Financially Settled Futures	Power		25		KG
MWh	Futures	Financially Settled Futures	Power		25		UM
MWh	Futures	Financially Settled Futures	Power		25		JM
MWh	Futures	Financially Settled Futures	Power		25		VM
MWh	Futures	Financially Settled Futures	Power		25		JM
MWh	Futures	Financially Settled Futures	Power		25		UM
MWh	Futures	Financially Settled Futures	Power		25		VM
MWh	Am.Option	Exercises into Financial Future	Power		25		KG
MWh	Futures	Financially Settled Futures	Power		25		KG

Spot-Month Aggregate Into Futures Equivalent Leg (2)	Spot-Month Aggregate Into Ratio Leg (1)	Spot-Month Aggregate Into Ratio Leg (2)	Spot-Month Accountability Level	Initial Spot- Month Limit (In Net Futures Equivalents) Leg (1) / Leg (2)
				<u>2,090</u> 1000
				<u>250</u> 1 50
				<u>1,275</u> 750
				<u>1,880</u> 1,100
	1 60 : 1 JM			<u>2,090</u> 1000
	1 JO : 1 JM			<u>2,090</u> 1000
	1 OT : 2 VM			<u>2,090</u> 1000
	1 OU : 1 UM			<u>1,275</u> 750
	1 PJD : 20 VM			<u>1,880</u> 1,100
	1 PJH : 20 UM			<u>1,275</u> 750
	1 PJN : 20 UM			<u>1,275</u> 750
	1 PJP : 20 VM			<u>1,880</u> 1,100
	1 PML : 20 JM			<u>2,090</u> 1000
	1.0625 4S : 1 JM			<u>2,090</u> 1000
	1.0625 J01-J31 : 1 JM			<u>2,090</u> 1000
	<u>5</u> 10 GN : 1 KG			<u>250</u> 1 50
	10.625 B3 : 1 UM			<u>1,275</u> 750
	10.625 L1 : 1 JM			<u>2,090</u> 1000
	10.625 Z9 : 1 VM			<u>1,880</u> 1,100
	<u>10.625</u> 21.25 JD : 1 JM			<u>2,090</u> 1000
	<u>10.625</u>			<u>1,275</u> 750
	<u>10.625</u> 21.25 JD : 1 VM			<u>1,880</u> 1,100
	5 9U : 1 KG			<u>250</u> 1 50
	5 T3 : 1 KG			<u>250</u> 1 50

Initial Spot-Month Limit Effective Date

Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For JM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For JM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For VM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For UM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For VM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For UM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For UM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For VM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For JM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For JM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For JM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For KG: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For UM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For JM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For VM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month

For JM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For UM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For VM: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For KG: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For KG: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month For KG: Effective as of the opening of trading on the first business day when a contract month becomes the first nearby month

Spot-Month Limit (In Contract Units) Leg (1) / Leg (2)	Single Month Aggregate Into Futures Equivalent Leg (1)	Single Month Aggregate Into Futures Equivalent Leg (2)	Single Month Aggregate Into Ratio Leg (1)	Single Month Aggregate Into Ratio Leg (2)	Single Month Accountability Level Leg (1) / Leg (2)	Single Month Limit (In Net Futures Equivalents) Leg (1) / Leg (2)	All Month Aggregate Into Futures Equivalent Leg (1)
<u>1,776,500-850000</u>	JM				5,000		JM
<u>100,000 -60,000</u>	KG				1,500		KG
<u>1,083,750 637,500</u>	UM				4,000		UM
<u>1,598,000</u> 935000	VM				1,500		VM
<u>1,776,500-850000</u>	JM		1 60 : 1 JM		5,000		JM
<u>1,776,500-850000</u>	JM		1 JO : 1 JM		5,000		JM
<u>1,598,000</u> 935000	VM		1 OT : 2 VM		1,500		VM
<u>1,083,750 637,500</u>	UM		1 OU : 1 UM		4,000		UM
<u>1,598,000</u> 935000	VM		1 PJD : 20 VM		1,500		VM
<u>1,083,750 637,500</u>	UM		1 PJH : 20 UM		4,000		UM
<u>1,083,750 637,500</u>	UM		1 PJN : 20 UM		4,000		UM
<u>1,598,000</u> 935000	VM		1 PJP : 20 VM		1,500		VM
<u>1,776,500-850000</u>	JM		1 PML : 20 JM		5,000		JM
<u>1,776,500-850000</u>	JM		1.0625 4S : 1 JM		5,000		JM
<u>1,776,500-850000</u>	JM		1.0625 J01-J31 : 1 JM		5,000		JM
<u>100,000 -60,000</u>	KG		<u>5</u> 10 GN : 1 KG		1,500		KG
<u>1,083,750 637,500</u>	UM		10.625 B3 : 1 UM		4,000		UM
<u>1,776,500-850000</u>	JM		10.625 L1 : 1 JM		5,000		JM
<u>1,598,000</u> 935000	VM		10.625 Z9 : 1 VM		1,500		VM
<u>1,776,500-850000</u>	JM		<u>10.625</u> 21.25 JD : 1 JM		5,000		JM
<u>1,083,750-637,500</u>	UM		<u>10.625</u>		4,000		UM
<u>1,598,000</u> 935000	VM		<u>10.625</u> 21.25 JD : 1 VM		1,500		VM
<u>100,000 -60,000</u>	KG		5 9U : 1 KG		1,500		KG
<u>100,000 -60,000</u>	KG		5 T3 : 1 KG		1,500		KG

All Month Aggregate Into Futures Equivalent Leg (2)	All Month Aggregate Into Ratio Leg (1)	All Month Aggregate Into Ratio Leg (2)	All Month Accountability Level Leg (1) / Leg (2)	All Month Limit (In Net Futures Equivalents) Leg (1) / Leg (2)
			7,000	
			2,000	
			5,000	
			2,000	
	1 60 : 1 JM		7,000	
	1 JO : 1 JM		7,000	
	1 OT : 2 VM		2,000	
	1 OU : 1 UM		5,000	
	1 PJD : 20 VM		2,000	
	1 PJH : 20 UM		5,000	
	1 PJN : 20 UM		5,000	
	1 PJP : 20 VM		2,000	
	1 PML : 20 JM		7,000	
	1.0625 4S : 1 JM		7,000	
	1.0625 J01-J31 : 1 JM		7,000	
	<u>5</u> 10 GN : 1 KG		2,000	
	10.625 B3 : 1 UM		5,000	
	10.625 L1 : 1 JM		7,000	
	10.625 Z9 : 1 VM		2,000	
	<u>10.625</u> 21.25 JD : 1 JM		7,000	
	<u>10.625</u> 21.25 JD : 1 UM		5,000	
	<u>10.625</u> 21.25 JD : 1 VM		2,000	
	5 9U : 1 KG		2,000	
	5 T3 : 1 KG		2.000	