

**SUBMISSION COVER SHEET**

**IMPORTANT:** Check box if Confidential Treatment is requested

Registered Entity Identifier Code (optional): 14-457R (7 of 7)

Organization: New York Mercantile Exchange, Inc. ("NYMEX")

Filing as a:  DCM  SEF  DCO  SDR

Please note - only ONE choice allowed.

Filing Date (mm/dd/yy): 11/20/2014 Filing Description: Listing of Seven (7) Electricity Options

**SPECIFY FILING TYPE**

Please note only ONE choice allowed per Submission.

**Organization Rules and Rule Amendments**

- Certification § 40.6(a)
- Approval § 40.5(a)
- Notification § 40.6(d)
- Advance Notice of SIDCO Rule Change § 40.10(a)
- SIDCO Emergency Rule Change § 40.10(h)

Rule Numbers: \_\_\_\_\_

**New Product**

Please note only ONE product per Submission.

- Certification § 40.2(a)
- Certification Security Futures § 41.23(a)
- Certification Swap Class § 40.2(d)
- Approval § 40.3(a)
- Approval Security Futures § 41.23(b)
- Novel Derivative Product Notification § 40.12(a)
- Swap Submission § 39.5

Official Product Name: See filing.

**Product Terms and Conditions (product related Rules and Rule Amendments)**

- Certification § 40.6(a)
- Certification Made Available to Trade Determination § 40.6(a)
- Certification Security Futures § 41.24(a)
- Delisting (No Open Interest) § 40.6(a)
- Approval § 40.5(a)
- Approval Made Available to Trade Determination § 40.5(a)
- Approval Security Futures § 41.24(c)
- Approval Amendments to enumerated agricultural products § 40.4(a), § 40.5(a)
- "Non-Material Agricultural Rule Change" § 40.4(b)(5)
- Notification § 40.6(d)

Official Name(s) of Product(s) Affected:

Rule Numbers:

November 20, 2014

**VIA ELECTRONIC PORTAL**

Christopher J. Kirkpatrick  
Office of the Secretariat  
Commodity Futures Trading Commission  
Three Lafayette Centre  
1155 21st Street, N.W.  
Washington, DC 20581

**RE: CFTC Regulation 40.2(a) Certification. Notification Regarding the Initial Listing of Seven (7) Electricity Options for Trading on CME Globex and the Trading Floor and for Clearing through CME ClearPort.  
NYMEX Submission No. 14-457R (7 of 7)**

Dear Mr. Kirkpatrick:

New York Mercantile Exchange, Inc. (“NYMEX” or “Exchange”) is notifying the Commodity Futures Trading Commission (“CFTC” or “Commission”) that it is self-certifying the listing of seven (7) electricity option contracts (the “Contracts”) for trading on CME Globex and the trading floor as well as for submission for clearing through CME ClearPort effective on Sunday December 7, 2014 for the trade date Monday, December 8, 2014.

Please note that NYMEX Submission No. 14-457 is being revised to change the first listed contract month of the PJM Western Hub Real-Time Peak 5 MW Option on Calendar Futures Strip (Code 6OA, Chapter 1178) from January 2016 to January 2017. No other changes are being made to the original submission.

The Contract specifications are as follows:

Option Contract	Option Code	Option Rule Chapter	Underlying Futures Contract	Underlying Futures Code
PJM Western Hub Real-Time Peak Calendar-Month 5 MW Option	JOA	1177	PJM Western Hub Peak Calendar-Month Real-Time LMP Futures	L1
PJM Western Hub Real-Time Peak 5 MW Option on Calendar Futures Strip	6OA	1178	PJM Western Hub Peak Calendar-Month Real-Time LMP Futures	L1
MISO Indiana Hub (formerly Cinergy Hub) Real-Time Peak 5 MW Option on Calendar Futures Strip	OEA	1180	MISO Indiana Hub (formerly Cinergy Hub) 5 MW Peak Calendar-Month Real-Time Futures	H3
PJM Western Hub Real-Time Peak Calendar-Month 50 MW Option	PMA	1186	PJM Western Hub Peak Calendar-Month Real-Time LMP Futures	L1
PJM Northern Illinois Hub Real-Time Peak Calendar-Month 5 MW Option	OUA	1270	PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures	B3
MISO Indiana Hub (formerly Cinergy Hub) Real-Time Peak Calendar-	OYA	1271	MISO Indiana Hub (formerly Cinergy Hub) 5 MW Peak Calendar-Month Real-Time Futures	H3

Option Contract	Option Code	Option Rule Chapter	Underlying Futures Contract	Underlying Futures Code
Month 5 MW Option				
ISO New England Day-Ahead Peak Calendar-Month 5 MW Option	INE	1272	ISO New England Mass Hub 5 MW Peak Calendar-Month Day-Ahead LMP Futures	U6

**Listing Schedule:**

- **JOA:** CME Globex: 1 month  
CME ClearPort/Floor: 60 consecutive months  
The number of listed contract months will be determined on a rolling basis beginning with January 2015.
- **6OA:** CME Globex/CME ClearPort/Floor: Three one-year strips (January contracts). Add a new strip when the nearby December contract of the underlier expires.  
The number of listed contract months will be determined on a rolling basis beginning with January 2015.
- **OEA:** CME Globex: One one-year strip (January contract). Add a new strip when the nearby December contract of the underlier expires.  
CME ClearPort/Floor: Five one-year strip (January contracts). Add a new strip when the nearby December contract of the underlier expires.  
The number of listed contract months will be determined on a rolling basis beginning with January 2015.
- **PMA:** CME Globex: 18 consecutive months  
CME ClearPort/Floor: Current year plus the next five calendar years. A new calendar year will be added following the termination of trading in the December contract of the current year.  
The number of listed contract months will be determined on a rolling basis beginning with January 2015.
- **OUA and INE:** CME Globex: 1 month  
CME ClearPort/Floor: Current year plus the next four calendar years. A new calendar year will be added following the termination of trading in the December contract of the current year.
- **OYA:** CME Globex: 1 month  
CME ClearPort/Floor: Current year plus the next five calendar years. A new calendar year will be added following the termination of trading in the December contract of the current year.

**First Listed Contract Month:**

- **JOA:** June 2016
- ~~6OA and OEA:~~ January 2016
- ~~6OA and PMA:~~ January 2017
- **OUA, OYA, and INE:** January 2015

**Option Type:**

**60A and OEA:** European style option

**JOA, PMA, OUA, OYA, and INE:** American style option

**Contract Size:**

- **JOA, 60, OEA, OUA, OYA, and INE:** The unit of trading shall be 80 megawatt hours (MWh).
- **PMA:** The unit of trading shall be 800 MWh.

**Minimum Price Fluctuation:** The minimum fluctuation shall be \$0.01 per MWh.

**Value Per Tick:**

- **JOA, 60, OEA, OUA, OYA, and INE:** \$0.80
- **PMA:** \$8.00

**Strike Prices:** Increments of \$0.50 per MWh on CME ClearPort and the NYMEX trading floor venues. Dynamic strike price generation on CME Globex venues.

**Last Trading Day:**

- **JO, PMA, OUA, OYA, and INE:** The contract shall expire on the second to last business day of the calendar month immediately preceding the contract month.
- **60 and OEA:** The contract shall expire on the on the second to last Friday of the month prior to the first underlying futures contract. If the second to last Friday is an Exchange holiday, expiration will occur on the business day immediately preceding that day.

**Minimum Block Levels:**

- **JOA:** 85
- **60A:** 1
- **OEA:** 5
- **PMA:** 19
- **OUA and INE:** 95
- **OYA:** 76

**Trading Hours:**

- **Open Outcry:** Monday – Friday 9:00 a.m. – 2:30 p.m. (8:00 a.m. – 1:30 p.m. Central Time/CT).
- **CME Globex and CME ClearPort Trading Hours:** Sunday – Friday 6:00 p.m. – 5:15 p.m. (5:00 p.m. – 4:15 p.m. CT) with a 45-minute break each day beginning at 5:15 p.m. (4:15 p.m. CT).

**Trading and Clearing Fees:**

Exchange Fees for JOA				
	Member	Cross Division	Non-Member	IIP
Pit	0.35	0.37	0.40	
Globex	0.35	0.37	0.40	0.385
ClearPort	0.35		0.40	
Agency Cross	0.35		0.40	

Other Processing Fees		
	House Acct	Customer Acct
Options E/A Notice	0.12	0.12

Additional Fees and Surcharges	
Facilitation Desk Fee	0.02

**For new underlying future**

	Member	Non-Member
Futures from E/A	0.105	0.12

Exchange Fees for PMA				
	Member	Cross Division	Non-Member	IIP
Pit	3.50	3.70	4.00	
Globex	3.50	3.70	4.00	3.85
ClearPort	3.50		4.00	
Agency Cross	3.50		4.00	

Other Processing Fees		
	House Acct	Customer Acct
Options E/A Notice	0.40	0.85

Additional Fees and Surcharges	
Facilitation Desk Fee	0.20

**For new underlying future**

	Member	Non-Member
Futures from E/A	0.105	0.12

Exchange Fees for 6OA and OEA				
	Member	Cross Division	Non-Member	IIP
Pit	42.00	45.00	48.00	
Globex	42.00	45.00	48.00	46.20
ClearPort	42.00		48.00	
Agency Cross	42.00		48.00	

Other Processing Fees		
	House Acct	Customer Acct
Options E/A Notice	0.40	0.85

Additional Fees and Surcharges	
Facilitation Desk Fee	1.00

For new underlying futures

	Member	Non-Member
Futures from E/A	0.105	0.12

Exchange Fees for OUA, OYA, and INE				
	Member	Cross Division	Non-Member	IIP
Pit	0.35	0.37	0.40	
Globex	0.35	0.37	0.40	0.385
ClearPort	0.35		0.40	
Agency Cross	0.35		0.40	

Other Processing Fees		
	Member	Non-Member
Futures from E/A	0.105	0.12
	House Acct	Customer Acct
Options E/A Notice	0.12	0.12

Additional Fees and Surcharges	
Facilitation Desk Fee	0.02

For new underlying futures

	Member	Non-Member
Futures from E/A	0.105	0.12

Pursuant to Commission Regulation 40.6(a), NYMEX is separately self-certifying block trading on these Contracts in NYMEX/COMEX Submission No. 14-482.

The Exchange is also notifying the CFTC that it is self-certifying the insertion of the terms and conditions for the contracts into 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 in relation to the listing of the new contracts. The terms and conditions establish the all month/any one month accountability levels, diminishing balances, expiration month position limit, reportable level and aggregation allocation for the new contracts. In addition, the Exchange is self-certifying the insertion of the non-reviewable ranges (“NRR”) for the option contracts into Rule 588.H

The Exchange reviewed the designated contract market core principles (“Core Principles”) as set forth in the Commodity Exchange Act (“Act” or “CEA”). During the review, Exchange staff identified that the new products may have some bearing on the following Core Principles:

Prevention of Market Disruption: Trading in the Contracts will be subject to the NYMEX rules (“Rulebook”) Chapters 4 and 7, which include prohibitions on manipulation, price distortion and disruptions of the delivery or cash-settlement process. As with all products listed for trading on one of CME Group’s designated contract markets, activity in the new products will be subject to extensive monitoring and surveillance by CME Group’s Market Regulation Department.

Contracts not Readily Subject to Manipulation: The Contracts are not readily subject to manipulation due to oversight of the hourly electricity auctions by the regional transmission organization (RTO). Moreover, each RTO is regulated by the Federal Energy Regulatory Commission (FERC) and monitored by an independent market monitor.

Compliance with Rules: Trading in the Contracts will be subject to the rules in Rulebook Chapter 4, which includes prohibitions against fraudulent, noncompetitive, unfair and abusive practices. Additionally, trading in the seven (7) options will be subject to the full panoply of trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the Rulebook. As with all products listed for trading on one of CME Group’s designated contract markets, activity in the seven (7) options will be subject to extensive monitoring and surveillance by CME Group’s Market Regulation Department. The Market Regulation Department has the authority to exercise its investigatory and enforcement power where potential rule violations are identified.

Position Limitations or Accountability: The spot-month speculative position limit for each of the options is 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 option contracts’ specifications on its website, together with daily trading volume, open interest, and price information.

Daily Publication of Trading Information: Trading volume, open interest, and price information will be published daily on the Exchange’s website and via quote vendors.

Financial Integrity of Contracts: All contracts traded on the Exchange will be cleared by the Clearing House of the Chicago Mercantile Exchange, Inc., which is a registered derivatives clearing organization with the Commission and is subject to all Commission regulations related thereto.

Execution of Transactions: The Contracts are listed for trading on CME Globex and the trading floor as well as for submission for clearing through the CME ClearPort platform. The CME Globex platform provides a transparent, open, and efficient mechanism to electronically execute trades on screen. The CME ClearPort platform provides a competitive and open execution of transactions by brokers. In addition, the NYMEX trading floor is available as a venue to provide for competitive and open execution of transactions.

Trade Information: All required trade information is included in the audit trail and is sufficient for the Market Regulation Department to monitor for market abuse.

Protection of Market Participants: Rulebook Chapters 4 and 5 contain multiple prohibitions precluding intermediaries from disadvantaging their customers. These rules apply to trading on all of the Exchange’s competitive trading venues and will be applicable to transactions in the seven (7) options.

Disciplinary Procedures: Chapter 4 of the Rulebook contains provisions that allow the Exchange to discipline, suspend or expel members or market participants that violate the Rulebook. Trading in the seven (7) options will be subject to Chapter 4, and the Market Regulation Department has the authority to exercise its enforcement power in the event rule violations in these contracts are identified.

Dispute Resolution: Disputes with respect to trading in the Contracts will be subject to the arbitration provisions set forth in Chapter 6 of the Rulebook. Chapter 6 allows all nonmembers to submit a claim for financial losses resulting from transactions on the Exchange to arbitration. A member named as a respondent in a claim submitted by a nonmember is required to participate in the arbitration pursuant to Chapter 6. Additionally, the Exchange requires that members resolve all disputes concerning transactions on the Exchange via arbitration.

Pursuant to Section 5c(c) of the Act and CFTC Regulation 40.2(a), the Exchange hereby certifies that the listing of the Contracts comply with the Act, including regulations under the Act. There were no substantive opposing views to this proposal. A description of the underlying cash markets for the new products is attached (See Appendix C).

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 (212) 299-2200 or via e-mail at [Christopher.Bowen@cmegroup.com](mailto:Christopher.Bowen@cmegroup.com).

Sincerely,

/s/Christopher Bowen  
Managing Director and Chief Regulatory Counsel

Attachments:

Appendix A – Rulebook Chapters

Appendix B – Position Limit, Position Accountability and Reportable Level Table located in Chapter 5 of the NYMEX Rulebook (attached under separate cover)

Appendix C – Cash Market Overview and Analysis of Deliverable Supply

Appendix D – Rule 588.H - Globex Non-Reviewable Trading Ranges



## **APPENDIX A**

### **Chapter 1177**

#### **PJM Western Hub Real-Time Peak Calendar-Month 5 MW Option**

##### **1177100. SCOPE OF CHAPTER**

This chapter is limited in application to put and call options on PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) contract. In addition to the rules of this chapter, transactions in options on PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) shall be subject to the general rules of the Exchange insofar as applicable.

##### **1177101. OPTION CHARACTERISTICS**

The number of months open for trading at a given time shall be determined by the Exchange.

###### **1177101.A. Trading Schedule**

The hours of trading for this contract shall be determined by the Exchange.

###### **1177101.B. Trading Unit**

A call option traded on the Exchange represents an option to assume one (1) long position per peak day in the underlying PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) contract at the strike price. A put option traded on the Exchange represents an option to assume one (1) short position per peak day in the underlying PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) contract at the strike price.

###### **1177101.C. Price Increments**

Prices shall be quoted in dollars and cents per megawatt hour (MWh). The minimum price increment shall be \$0.01 per MWh. A cabinet trade may occur at the price of \$.0025 per MWh or \$1.00. The option contract shall not be subject to price fluctuation limitations.

###### **1177101.D. Position Limits, Exemptions, Position Accountability and Reportable Levels**

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

###### **1177101.E. Termination of Trading**

Trading shall cease on the second to last business day of the calendar month immediately preceding the contract month.

#### **1177101.F. Type Option**

The option is an American-style option which can be exercised on any business day prior to and until expiration day.

#### **1177102. EXERCISE PRICES**

Trading shall be conducted for options 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 Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) contract in the corresponding delivery month 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) fifty-cent increment strike prices which are twenty increments higher than the strike price described in subsection (A)(i) of this rule and (iii) fifty-cent increment strike prices which are twenty increments lower than the strike price described in subsection (A)(i) of this rule and (iv) one-dollar increment strike prices which are ten increments above the highest fifty-cent increment as described in subsection A(ii) of this rule and (v) one-dollar increment strike prices which are ten increments lower than the highest fifty-cent increment as described in subsection A(ii) of this rule.

(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 price 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 will be added such that at all times there shall be ten one-dollar increment strike prices above the highest fifty-cent strike price and (iii) new one-dollar increment strike prices will be added such that at all times there shall be up to ten one-dollar strike prices below the lowest fifty-cent strike price and each such strike price shall be above zero. The at-the-money strike price will be determined in accordance with the procedures set forth in subsection (A)(i) of this rule.

(C) Notwithstanding the provisions of subsections (A) and (B) of this rule, if the Exchange determines that trading in the option 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 an option contract in which no new strike prices may be introduced.

#### **1177103. DISCLAIMER**

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EVENT SHALL NYMEX, ITS AFFILIATES OR PJM HAVE ANY LIABILITY FOR ANY LOST PROFITS OR INDIRECT, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

## Chapter 1178

### PJM Western Hub Real-Time Peak 5 MW Option on Calendar Futures Strip

#### 1178100. SCOPE OF CHAPTER

This chapter is limited in application to put and call options on PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) contract. In addition to the rules of this chapter, transactions in options on the PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) contract shall be subject to the general rules of the Exchange insofar as applicable.

#### 1178101. OPTION CHARACTERISTICS

The number of months open for trading at a given time shall be determined by the Exchange.

##### 1178101.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

##### 1178101.B. Trading Unit

A call option traded on the Exchange represents an option to assume one (1) long position per peak day in the entire calendar strip of the underlying PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) contract at the strike price. A put option traded on the Exchange represents an option to assume one (1) short position per peak day in the entire calendar strip of the underlying PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) contract at the strike price.

##### 1178101.C. Price Increments

Prices shall be quoted in dollars and cents per megawatt hour (MWh). The minimum price increment shall be \$0.01 per MWh. A cabinet trade may occur at the price of \$.0025 per MWh or \$1.00. The option contract shall not be subject to price fluctuation limitations.

##### 1178101.D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

##### 1178101.E. Termination of Trading

The option contract shall expire on the second to last Friday of the month prior to the first underlying PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) contract. If the second to last Friday is an Exchange holiday, expiration will occur on the business day immediately preceding that day.

##### 1178101.F. Type Option

The option is a European-style option which can only be exercised into the underlying futures on the expiration day.

#### 1178102. EXERCISE PRICES

Trading shall be conducted for options 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 average settlement price for the strip of underlying PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) contracts 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) )

fifty-cent increment strike prices which are ten increments higher than the strike price described in subsection (A)(i) of this rule and (iii) fifty-cent increment strike prices which are ten increments lower than the strike price described in subsection (A)(i) of this rule.

(B) Thereafter, on any business day prior to the expiration of the option, new consecutive strike prices for both puts and calls will be added such that at all times there will be at least ten fifty-cent increment strike price above and below the at-the-money strike price available for trading in all options contract months. The at-the-money strike price will be determined in accordance with the procedures set forth in subsection (A)(i) of this rule.

(C) Notwithstanding the provisions of subsections (A) and (B) of this rule, if the Exchange determines that trading in the option 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 an option contract in which no new strike prices may be introduced.

**1178103.**

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## Chapter 1180

### MISO Indiana Hub (formerly Cinergy Hub) Real-Time Peak 5 MW Option on Calendar Futures Strip

#### 1180100. SCOPE OF CHAPTER

This chapter is limited in application to put and call options on MISO Indiana Hub (formerly Cinergy Hub) 5 MW Peak Calendar-Month Real-Time Futures (H3) contract. In addition to the rules of this chapter, transactions in options on the MISO Indiana Hub (formerly Cinergy Hub) 5 MW Peak Calendar-Month Real-Time Futures (H3) contract shall be subject to the general rules of the Exchange insofar as applicable.

#### 1180101. OPTION CHARACTERISTICS

The number of months open for trading at a given time shall be determined by the Exchange.

##### 1180101.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

##### 1180101.B. Trading Unit

A call option traded on the Exchange represents an option to assume one (1) long position per peak day in the entire calendar strip of the underlying MISO Indiana Hub (formerly Cinergy Hub) 5 MW Peak Calendar-Month Real-Time Futures (H3) contract at the strike price. A put option traded on the Exchange represents an option to assume one (1) short position per peak day in the entire calendar strip of the underlying MISO Indiana Hub (formerly Cinergy Hub) 5 MW Peak Calendar-Month Real-Time Futures (H3) contract at the strike price.

##### 1180101.C. Price Increments

Prices shall be quoted in dollars and cents per megawatt hour (MWh). The minimum price increment shall be \$0.01 per MWh. A cabinet trade may occur at the price of \$.0025 per MWh or \$1.00. The option contract shall not be subject to price fluctuation limitations.

##### 1180101.D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

##### 1180101.E. Termination of Trading

The option contract shall expire on the second to last Friday of the month prior to the first underlying MISO Indiana Hub (formerly Cinergy Hub) 5 MW Peak Calendar-Month Real-Time Futures (H3) contract. If the second to last Friday is an Exchange holiday, expiration will occur on the business day immediately preceding that day.

##### 1180101.F. Type Option

The option is a European-style option which can only be exercised into the underlying futures on the expiration day.

#### 1180102. EXERCISE PRICES

Trading shall be conducted for options 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 average settlement price for the strip of underlying MISO Indiana Hub (formerly Cinergy Hub) 5 MW Peak Calendar-Month Real-Time Futures (H3) contracts 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) ) fifty-cent increment strike prices which are ten increments higher than the strike price described in subsection (A)(i) of this rule and (iii) fifty-cent increment strike prices which are ten increments lower than the strike price described in subsection (A)(i) of this rule.

(B) Thereafter, on any business day prior to the expiration of the option, new consecutive strike prices for both puts and calls will be added such that at all times there will be at least ten fifty-cent increment strike price above and below the at-the-money strike price available for trading in all options contract months. The at-the-money strike price will be determined in accordance with the procedures set forth in subsection (A)(i) of this rule.

(C) Notwithstanding the provisions of subsections (A) and (B) of this rule, if the Exchange determines that trading in the option 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 an option contract in which no new strike prices may be introduced.

**Chapter 1186**  
**PJM Western Hub Real-Time Peak Calendar-Month 50 MW Option**

**1186100. SCOPE OF CHAPTER**

This chapter is limited in application to put and call options on PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) contract. In addition to the rules of this chapter, transactions in options on PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) shall be subject to the general rules of the Exchange insofar as applicable.

**1186101. OPTION CHARACTERISTICS**

The number of months open for trading at a given time shall be determined by the Exchange.

**1186101.A. Trading Schedule**

The hours of trading for this contract shall be determined by the Exchange.

**1186101.B. Trading Unit**

A call option traded on the Exchange represents an option to assume ten (10) long positions per peak day in the underlying PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) contract at the strike price. A put option traded on the Exchange represents an option to assume ten (10) short positions per peak day in the underlying PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) contract at the strike price.

**1186101.C. Price Increments**

Prices shall be quoted in dollars and cents per megawatt hour (MWh). The minimum price increment shall be \$0.01 per MWh. A cabinet trade may occur at the price of \$.0025 per MWh or \$1.00. The option contract shall not be subject to price fluctuation limitations.

**1186101.D. Position Limits, Exemptions, Position Accountability and Reportable Levels**

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

**1186101.E. Termination of Trading**

Trading shall cease on the second to last business day of the calendar month immediately preceding the contract month.

#### **1186101.F. Type Option**

The option is an American-style option which can be exercised on any business day prior to and until expiration day.

#### **1186102. EXERCISE PRICES**

Trading shall be conducted for options 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 Western Hub Peak Calendar-Month Real-Time LMP Futures (L1) contract in the corresponding delivery month 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) fifty-cent increment strike prices which are twenty increments higher than the strike price described in subsection (A)(i) of this rule and (iii) fifty-cent increment strike prices which are twenty increments lower than the strike price described in subsection (A)(i) of this rule.

(B) Thereafter, on any business day prior to the expiration of the option, 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 price above and below the at-the-money strike price available for trading in all options contract months. The at-the-money strike price will be determined in accordance with the procedures set forth in subsection (A)(i) of this rule.

(C) Notwithstanding the provisions of subsections (A) and (B) of this rule, if the Exchange determines that trading in the option 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 an option contract in which no new strike prices may be introduced.

#### **1186103. DISCLAIMER**

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## Chapter 1270

### PJM Northern Illinois Hub Real-Time Peak Calendar-Month 5 MW Option

#### 1270100. SCOPE OF CHAPTER

This chapter is limited in application to put and call options on PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (B3) contract. In addition to the rules of this chapter, transactions in options on PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (B3) shall be subject to the general rules of the Exchange insofar as applicable.

#### 1270101. OPTION CHARACTERISTICS

The number of months open for trading at a given time shall be determined by the Exchange.

##### 1270101.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

##### 1270101.B. Trading Unit

A call option traded on the Exchange represents an option to assume one (1) long position per peak day in the underlying PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (B3) contract at the strike price. A put option traded on the Exchange represents an option to assume one (1) short position per peak day in the underlying PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (B3) contract at the strike price.

##### 1270101.C. Price Increments

Prices shall be quoted in dollars and cents per megawatt hour (MWh). The minimum price increment shall be \$0.01 per MWh. A cabinet trade may occur at the price of \$.0025 per MWh or \$1.00. The option contract shall not be subject to price fluctuation limitations.

##### 1270101.D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

##### 1270101.E. Termination of Trading

Trading shall cease on the second to last business day of the calendar month immediately preceding the contract month.

#### **1270101.F. Type Option**

The option is an American-style option which can be exercised on any business day prior to and until expiration day.

#### **1270102.**

#### **EXERCISE PRICES**

Trading shall be conducted for options 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 Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (B3) contract in the corresponding delivery month 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) fifty-cent increment strike prices which are twenty increments higher than the strike price described in subsection (A)(i) of this rule and (iii) fifty-cent increment strike prices which are twenty increments lower than the strike price described in subsection (A)(i) of this rule and (iv) one-dollar increment strike prices which are ten increments above the highest fifty-cent increment as described in subsection A(ii) of this rule and (v) one-dollar increment strike prices which are ten increments lower than the highest fifty-cent increment as described in subsection A(ii) of this rule.

(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 price 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 will be added such that at all times there shall be ten one-dollar increment strike prices above the highest fifty-cent strike price and (iii) new one-dollar increment strike prices will be added such that at all times there shall be up to ten one-dollar strike prices below the lowest fifty-cent strike price and each such strike price shall be above zero. The at-the-money strike price will be determined in accordance with the procedures set forth in subsection (A)(i) of this rule.

(C) Notwithstanding the provisions of subsections (A) and (B) of this rule, if the Exchange determines that trading in the option 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 an option contract in which no new strike prices may be introduced.

## Chapter 1271

### MISO Indiana Hub (formerly Cinergy Hub) Real-Time Peak Calendar-Month 5 MW Option

#### 1271100. SCOPE OF CHAPTER

This chapter is limited in application to put and call options on MISO Indiana Hub (formerly Cinergy Hub) 5 MW Peak Calendar-Month Real-Time Futures (H3) contract. In addition to the rules of this chapter, transactions in options on MISO Indiana Hub (formerly Cinergy Hub) 5 MW Peak Calendar-Month Real-Time Futures (H3) shall be subject to the general rules of the Exchange insofar as applicable.

#### 1271101. OPTION CHARACTERISTICS

The number of months open for trading at a given time shall be determined by the Exchange.

##### 1271101.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

##### 1271101.B. Trading Unit

A call option traded on the Exchange represents an option to assume one (1) long position per peak day in the underlying MISO Indiana Hub (formerly Cinergy Hub) 5 MW Peak Calendar-Month Real-Time Futures (H3) contract at the strike price. A put option traded on the Exchange represents an option to assume one (1) short position per peak day in the underlying MISO Indiana Hub (formerly Cinergy Hub) 5 MW Peak Calendar-Month Real-Time Futures (H3) contract at the strike price.

##### 1271101.C. Price Increments

Prices shall be quoted in dollars and cents per megawatt hour (MWh). The minimum price increment shall be \$0.01 per MWh. A cabinet trade may occur at the price of \$.0025 per MWh or \$1.00. The option contract shall not be subject to price fluctuation limitations.

##### 1271101.D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

##### 1271101.E. Termination of Trading

Trading shall cease on the second to last business day of the calendar month immediately preceding the contract month.

##### 1271101.F. Type Option

The option is an American-style option which can be exercised on any business day prior to and until expiration day.

#### 1271102. EXERCISE PRICES

Trading shall be conducted for options 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 MISO Indiana Hub (formerly Cinergy Hub) 5 MW Peak Calendar-Month Real-Time Futures (H3) contract in the corresponding delivery month 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) fifty-cent increment strike prices which are twenty increments higher than the strike price described in subsection (A)(i) of this rule and (iii) fifty-cent increment strike

prices which are twenty increments lower than the strike price described in subsection (A)(i) of this rule and (iv) one-dollar increment strike prices which are ten increments above the highest fifty-cent increment as described in subsection A(ii) of this rule and (v) one-dollar increment strike prices which are ten increments lower than the highest fifty-cent increment as described in subsection A(ii) of this rule.

(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 price 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 will be added such that at all times there shall be ten one-dollar increment strike prices above the highest fifty-cent strike price and (iii) new one-dollar increment strike prices will be added such that at all times there shall be up to ten one-dollar strike prices below the lowest fifty-cent strike price and each such strike price shall be above zero. The at-the-money strike price will be determined in accordance with the procedures set forth in subsection (A)(i) of this rule.

(C) Notwithstanding the provisions of subsections (A) and (B) of this rule, if the Exchange determines that trading in the option 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 an option contract in which no new strike prices may be introduced.

**Chapter 1272**  
**ISO New England Day-Ahead Peak Calendar-Month 5 MW Option**

**1272100. SCOPE OF CHAPTER**

This chapter is limited in application to put and call options on ISO New England Mass Hub 5 MW Peak Calendar-Month Day-Ahead LMP Futures (U6) contract. In addition to the rules of this chapter, transactions in options on ISO New England Mass Hub 5 MW Peak Calendar-Month Day-Ahead LMP Futures (U6) shall be subject to the general rules of the Exchange insofar as applicable.

**1272101. OPTION CHARACTERISTICS**

The number of months open for trading at a given time shall be determined by the Exchange.

**1272101.A. Trading Schedule**

The hours of trading for this contract shall be determined by the Exchange.

**1272101.B. Trading Unit**

A call option traded on the Exchange represents an option to assume one (1) long position per peak day in the underlying ISO New England Mass Hub 5 MW Peak Calendar-Month Day-Ahead LMP Futures (U6) contract at the strike price. A put option traded on the Exchange represents an option to assume one (1) short position per peak day in the underlying ISO New England Mass Hub 5 MW Peak Calendar-Month Day-Ahead LMP Futures (U6) contract at the strike price.

**1272101.C. Price Increments**

Prices shall be quoted in dollars and cents per megawatt hour (MWh). The minimum price increment shall be \$0.01 per MWh. A cabinet trade may occur at the price of \$.0025 per MWh or \$1.00. The option contract shall not be subject to price fluctuation limitations.

**1272101.D. Position Limits, Exemptions, Position Accountability and Reportable Levels**

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

**1272101.E. Termination of Trading**

Trading shall cease on the second to last business day of the calendar month immediately preceding the contract month.

#### **1272101.F. Type Option**

The option is an American-style option which can be exercised on any business day prior to and until expiration day.

#### **1272102.**

#### **EXERCISE PRICES**

Trading shall be conducted for options 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 ISO New England Mass Hub 5 MW Peak Calendar-Month Day-Ahead LMP Futures (U6) contract in the corresponding delivery month 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) fifty-cent increment strike prices which are twenty increments higher than the strike price described in subsection (A)(i) of this rule and (iii) fifty-cent increment strike prices which are twenty increments lower than the strike price described in subsection (A)(i) of this rule and (iv) one-dollar increment strike prices which are ten increments above the highest fifty-cent increment as described in subsection A(ii) of this rule and (v) one-dollar increment strike prices which are ten increments lower than the highest fifty-cent increment as described in subsection A(ii) of this rule.

(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 price 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 will be added such that at all times there shall be ten one-dollar increment strike prices above the highest fifty-cent strike price and (iii) new one-dollar increment strike prices will be added such that at all times there shall be up to ten one-dollar strike prices below the lowest fifty-cent strike price and each such strike price shall be above zero. The at-the-money strike price will be determined in accordance with the procedures set forth in subsection (A)(i) of this rule.

(C) Notwithstanding the provisions of subsections (A) and (B) of this rule, if the Exchange determines that trading in the option 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 an option contract in which no new strike prices may be introduced.

**APPENDIX B**

**NYMEX Rulebook Chapter 5 Position Limit Table**

(Attached Under Separate Cover)

## APPENDIX C

### **Cash Market Overview and Analysis of Deliverable Supply**

#### **REGIONAL TRANSMISSION ORGANIZATIONS & INDEPENDENT SYSTEM OPERATORS**

**PJM:** PJM Interconnection LLC (“PJM”) is a regional transmission organization (RTO) that 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. Acting as a neutral, independent party, PJM operates a competitive wholesale electricity market and manages the high-voltage electricity grid to ensure reliability for more than 61 million people. PJM prices power at numerous utility zones as well as for hubs, including the Western Hub, Northern Illinois Hub, AEP Dayton Hub, and Eastern Hub.

**MIDCONTINENT ISO:** Midcontinent Independent System Operator (MISO) is a not-for-profit, member-based RTO that administers the wholesale electricity market in its service area. MISO provides its customers with valued service; reliable, cost-effective systems and operations; dependable and transparent prices; open access to markets; and planning for long-term efficiency. The MISO service area covers all or parts of 15 states – Montana, North Dakota, South Dakota, Minnesota, Wisconsin, Michigan, Iowa, Illinois, Indiana, Missouri, Kentucky, Arkansas, Mississippi, Louisiana, and Texas. MISO also provides reliability services for those states (or parts thereof), as well as the Canadian province of Manitoba. MISO's market area has a generation capacity of 176,454 megawatts (MW) and maintains 65,787 miles of transmission lines. MISO prices power for various hubs, including the Indiana, Illinois, Michigan, and Minnesota Hubs.

**ISO NEW ENGLAND:** ISO New England (ISO-NE) is an independent, not-for-profit corporation that is the RTO serving Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. This RTO is primarily responsible for providing centrally dispatched instructions for the generation and flow of electricity, developing and operating the New England wholesale electricity marketplace, and managing comprehensive bulk electric power system and wholesale markets' planning processes. ISO-NE has operated as an RTO since February 1, 2005, and it manages day-ahead and real-time energy markets, a forward capacity market, regulation market (e.g., frequency regulation), reserve markets, and annual and monthly auctions of financial transmission rights (FTRs). ISO-NE prices power at each state-level load zones, except for Massachusetts, which is divided into northeastern, southeastern, and western/central regions. The RTO also prices power at the Mass Hub (also referred to the Internal Hub).

#### **DAY-AHEAD VERSUS REAL-TIME MARKET**

RTOs and independent system operators (ISOs) offer two basic energy markets for physical market 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 pricing power that is delivered during a given hour on the following day. In contrast, the real-time market prices electricity that flows during a particular hour on the same day. Each hour has a separate auction in the day-ahead and real-time markets. Moreover, the day-ahead and real-time markets adopt a competitive auction process developed by the stakeholders from both the generation and load sides. Hourly market-clearing prices



or locational marginal prices (LMPs) are published for both the day-ahead and real-time markets to reflect dynamic and competitive pricing and are publicly available on a timely basis to ensure competitiveness and transparency.

### **OVERSIGHT AND SUSCEPTIBILITY TO MANIPULATION**

RTO markets (as well as ISO markets) are highly competitive and, except for ERCOT, were established following Federal Energy Regulatory Commission (FERC) orders.<sup>1</sup> 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 oversight, PJM, MISO, and ISO-NE operate and monitor their respective market to ensure the competitiveness and reliability of the electricity system. FERC oversees and investigates energy markets with respect to manipulation, and it enforces regulatory requirements through imposition of civil penalties and other means. The Office of Enforcement within FERC ensures compliance with FERC statutes, rules, and orders. In this regard, the enforcement office monitors energy markets and gathers relevant data to prohibit market manipulation, fraud, and violations of electric reliability standards. It also takes remedial measures when these cases happen and imposes penalty on the parties involved.

RTOs and ISOs also are monitored by the North American Electric Reliability Corporation (NERC), a non-profit organization made up of stakeholders responsible for developing reliability standards (both seasonal and long term) and ensuring compliance with those standards. NERC has various committees, sub-committees, task forces, and working groups investigating and analyzing system disruptions to prevent market manipulation. NERC is subject to oversight by FERC.

Besides governmental and industry organizations, each ISO/RTO is monitored by an independent market monitor. The market monitors regularly evaluate the competitiveness of their respective markets, recommend improvements plans, and review the implementation of those plans. Market monitors 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, while Potomac Economics the market monitor for MISO and ISO-NE.

### **DELIVERABLE SUPPLY CALCULATIONS**

Load data reflect the amount of electricity that is produced and consumed in real time. An analysis of deliverable supply should consider actual load information reported by an RTO/ISO. 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 methodology for determining the monthly deliverable supply for the PJM Western Hub contracts is based on the maximum one-hour load realized over three years in the utility zones associated with the Western Hub (i.e., BGE, PEPCO, PENELEC, PECO, and PPL). The deliverable supply of electricity in the Northern Illinois Hub is approximated by the ComEd utility zone. The deliverable supply of electricity at ISO New England's Internal Hub is calculated as the total load in the RTO's footprint. While the

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<sup>1</sup> Because ERCOT operates solely within the state of Texas, it is not subject to FERC jurisdiction; FERC regulates the transmission and wholesale sales of electricity in interstate commerce only. Instead, ERCOT is regulated by the Public Utility Commission of Texas (PUCT).

maximum one-hour loads indicate the largest actual volumes of electricity that the utility zones were able to handle individually, these values likely are lower than the theoretical maximum loads that the zones could deliver to end users. The approach also includes load points outside of the Western Hub/Northern Illinois Hub/Internal Hub in order to account for the fact that power may be delivered outside of the hubs yet is still priced at the respective hubs through numerous virtual transactions.

Load data used to determine the deliverable supply of power at the Western Hub, Northern Illinois Hub, and Mass Hub were obtained from NRGSTREAM, an aggregator and distributor of public and private energy market information. The load information covered the period October 9, 2011, to October 8, 2014. The maximum Western Hub load (39,562 MW) was calculated as the sum of the maximum hourly load in each of the BGE, PEPCO, PENELEC, PECO, and PPL utility zones (Table 1). The maximum Northern Illinois Hub load (30,586 MW) is the maximum hourly load from the ComEd zone. The maximum Mass Hub load (27,377 MW) is the maximum hourly load across all of the New England states (Maine, Massachusetts, Rhode Island, Connecticut, New Hampshire, and Vermont). A month is assumed to have 368 peak hours and 424 off-peak hours.

As shown in Table 2, the monthly deliverable supply for peak hours at PJM’s Western Hub is equal to 14,558,816 MWh (equivalent to 181,985 contracts based on a size of 80 MWh). While the maximum one-hour load occurred during peak hours, it is assumed that the peak load value can be applied to off-peak hours as the zones would be able to handle such loads at that time if they were demanded. Thus, the deliverable supply of power at the Western Hub during off-peak hours is 16,774,288 MWh (equivalent to 3,354,857 contracts based on size of 5 MWh). The monthly deliverable supply for peak hours at PJM’s Northern Illinois Hub is equal to 11,255,648 MWh (equivalent to 140,695 contracts based on a size of 80 MWh). The deliverable supply of power in PJM’s Northern Illinois Hub during off-peak hours is 12,968,464 MWh (equivalent to 2,593,692 contracts based on size of 5 MWh). The monthly deliverable supply for peak hours at ISO New England’s Mass Hub is equal to 10,074,736 MWh (equivalent to 125,934 contracts based on a size of 80 MWh). The deliverable supply of power in ISO New England’s Mass Hub during off-peak hours is 11,607,848 MWh (equivalent to 2,321,569 contracts based on size of 5 MWh).

Table 1. Maximum Hourly Load by Utility Zone

Utility Zone	Maximum Hourly Load
BGE	8,337
PEPCO	8,170
PENELEC	4,552
PECO	8,695
PPL	9,808
ComEd	30,586
<b>New England States (Combined)</b>	<b>27,377</b>

Table 2. Maximum Hourly and Monthly Loads for PJM Western Hub & ISO New England Mass Hub

Hub	Maximum Hourly Load (MW)	Maximum Monthly Load (MWh)
<b>PJM Western Hub (peak hours)</b>	39,562	14,558,816
<b>PJM Western Hub (off-peak hours)</b>	39,562	16,774,288
<b>PJM Northern Illinois Hub (peak hours)</b>	30,586	11,255,648
<b>PJM Northern Illinois Hub (off-peak hours)</b>	30,586	12,968,464
<b>ISO New England Internal Hub (peak hours)</b>	27,377	10,074,736
<b>ISO New England Internal Hub (off-peak hours)</b>	27,377	11,607,848

The methodology for determining the deliverable supply in the MISO Indiana Hub is different from that used for the PJM and ISO New England markets. MISO reports load by reliability region only and not by hub. Therefore, hub-level deliverable supply was determined using the system-wide maximum one-hour load over the three-year period December 19, 2010, and December 18, 2013, and the 2012 percentage of MISO total load attributable to the state of Indiana.<sup>2</sup> Because the load percentages for Indiana and other MISO states reflect the MISO footprint before the integration of Entergy Utilities in the southern United States, slightly older load data was used in order to best align the two datasets.<sup>3</sup>

The maximum one-hour load in the pre-Entergy MISO service area is 103,822 MW. According to MISO, the state of Indiana accounted for 16% of the total load. Therefore, the maximum one-hour load in the Indiana Hub is estimated to be 16,611 MW. As shown in Table 3, the monthly deliverable supply for peak hours is equal to 6,112,848 MWh (equivalent to 76,410 contracts based on a size of 80 MWh). The deliverable supply of power in the MISO Indiana Hub during off-peak hours is 7,043,064 MWh (equivalent to 1,408,612 contracts based on size of 5 MWh).<sup>4</sup>

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<sup>2</sup>

[https://www.misoenergy.org/Library/Repository/Study/MTEP/MTEP12/E3\\_MTEP12\\_Futures%20Retail%20Rate%20Impact.pdf](https://www.misoenergy.org/Library/Repository/Study/MTEP/MTEP12/E3_MTEP12_Futures%20Retail%20Rate%20Impact.pdf)

<sup>3</sup> The integration of Entergy Utilities into MISO was effective December 19, 2013.

<sup>4</sup> As in PJM, it was assumed that there are 368 peak hours and 424 off-peak hours in a given month in the MISO system.

Table 3. Maximum Hourly and Monthly Loads for MISO Indiana Hub

Hub	Maximum Hourly Load (MW)	Maximum Monthly Load (MWh)
MISO Indiana Hub (peak hours)	16,611	6,112,848
MISO Indiana Hub (off-peak hours)	16,611	7,043,064

**POSITION LIMITS**

The spot-month speculative position limits for the option contracts are set at no greater than 25% of monthly deliverable supply. A given option contract, as well as any related futures and options based the same underlying hub, aggregate into the parent contract for that particular hub. The position limits determined from this deliverable supply analysis affect the entire complex of contracts associated with each electricity hub. Spot-month speculative position limit levels for parent contracts vary due to the location and contract size. Table 4 below shows the position limit for a parent contract of different sizes in PJM Western Hub, PJM Northern Illinois, ISO New England Mass Hub, and MISO Indiana Hub. The position limits for all of the affected contracts, including the subject options, the parent contracts, and any related futures and options, are provided in NYMEX Chapter 5 Position Limit Table (See Appendix B, attached under separate cover).

Table 4. Parent Contract Position Limits

Location	Period	Contract Size (MW)	Monthly Deliverable Supply (MWh)	Position Limit (contracts)
<b>ISO New England</b>				
<i>Mass Hub</i>	Peak	850	10,074,736	2,960
	Off-Peak	975	11,607,848	2,975
	Peak	80	10,074,736	31,480
	Off-Peak	5	11,607,848	580,390
<b>MISO</b>				
<i>Indiana</i>	Peak	850	6,112,848	1,795
	Off-Peak	975	7,043,064	1,805
	Peak	80	6,112,848	19,100
	Off-Peak	5	7,043,064	352,150
<b>PJM</b>				
<i>Western Hub</i>	Peak	850	14,558,816	4,280
	Off-Peak	975	16,774,288	4,300
	Peak	80	14,558,816	45,495
	Off-Peak	5	16,774,288	838,710
<i>Northern Illinois</i>	Peak	850	11,255,648	3,310
	Off-Peak	975	12,968,464	3,325
	Peak	80	11,255,648	35,170
	Off-Peak	5	12,968,464	648,420

## APPENDIX D

### NYMEX Rule 588.H Globex Non-Reviewable Trading Range Table

Instrument	Bid/Ask Reasonability	Non-Reviewable Range (NRR)
PJM Western Hub Real-Time Peak Calendar-Month 5 MW Option	The greater of the delta times the underlying futures' non-reviewable range or 20% of the fair value premium up to the underlying futures' non-reviewable range with a minimum reasonability of \$1.00	20% of premium up to ¼ of the underlying futures non-reviewable range with a minimum of 1 tick.
PJM Western Hub Real-Time Peak 5 MW Option on Calendar Futures Strip	The greater of the delta times the underlying futures' non-reviewable range or 20% of the fair value premium up to the underlying futures' non-reviewable range with a minimum reasonability of \$1.00	20% of premium up to ¼ of the underlying futures non-reviewable range with a minimum of 1 tick.
MISO Indiana Hub (formerly Cinergy Hub) Real-Time Peak 5 MW Option on Calendar Futures Strip	The greater of the delta times the underlying futures' non-reviewable range or 20% of the fair value premium up to the underlying futures' non-reviewable range with a minimum reasonability of \$1.00	20% of premium up to ¼ of the underlying futures non-reviewable range with a minimum of 1 tick.
PJM Western Hub Real-Time Peak Calendar-Month 50 MW Option	The greater of the delta times the underlying futures' non-reviewable range or 20% of the fair value premium up to the underlying futures' non-reviewable range with a minimum reasonability of \$1.00	20% of premium up to ¼ of the underlying futures non-reviewable range with a minimum of 1 tick.
PJM Northern Illinois Hub Real-Time Peak Calendar-Month 5 MW Option	The greater of the delta times the underlying futures' non-reviewable range or 20% of the fair value premium up to the underlying futures' non-reviewable range with a minimum reasonability of \$1.00	20% of premium up to ¼ of the underlying futures non-reviewable range with a minimum of 1 tick.
MISO Indiana Hub (formerly Cinergy Hub) Real-Time Peak Calendar-Month 5 MW Option	The greater of the delta times the underlying futures' non-reviewable range or 20% of the fair value premium up to the underlying futures' non-reviewable range with a minimum reasonability of \$1.00	20% of premium up to ¼ of the underlying futures non-reviewable range with a minimum of 1 tick.
ISO New England Day-Ahead Peak Calendar-Month 5 MW Option	The greater of the delta times the underlying futures' non-reviewable range or 20% of the fair value premium up to the underlying futures' non-reviewable range with a minimum reasonability of \$1.00	20% of premium up to ¼ of the underlying futures non-reviewable range with a minimum of 1 tick.