

# SUBMISSION COVER SHEET

Registered Entity Identifier Code (optional) 13-148R Date: April 26, 2013

**IMPORTANT: CHECK BOX IF CONFIDENTIAL TREATMENT IS REQUESTED.**

## ORGANIZATION

New York Mercantile Exchange, Inc.

## FILING AS A:

DCM

SEF

DCO

SDR

ECM/SPDC

## TYPE OF FILING

### • Rules and Rule Amendments

- Certification under § 40.6 (a) or § 41.24 (a)
- "Non-Material Agricultural Rule Change" under § 40.4 (b)(5)
- Notification under § 40.6 (d)
- Request for Approval under § 40.4 (a) or § 40.5 (a)
- Advance Notice of SIDCO Rule Change under § 40.10 (a)

### • Products

- Certification under § 39.5(b), § 40.2 (a), or § 41.23 (a)
- Swap Class Certification under § 40.2 (d)
- Request for Approval under § 40.3 (a)
- Novel Derivative Product Notification under § 40.12 (a)

## RULE NUMBERS

Chapters 382, 616B, 618B, 637, 643, 680, 687, 688, 756B, 763, 766, 778, 778A, 780, 780A, 950, 951-959, 1049, 1050, 1076, 1077, 1181, and 1182; Position Limit, Position Accountability and Reportable Level Table.

## DESCRIPTION

This submission amends NYMEX Submission # 13-148 regarding amendments to twenty-eight (28) electricity futures and option contracts. The revision affects the effective date of the amendments. No other changes to the original submission are being made.

April 26, 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: Rule 40.6(a) Certification. Notification of Revised Effective Date for Amending Twenty-Eight (28) Electricity Futures and Option Contracts  
NYMEX Submission #13-148R**

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 amending the effective date of the previously-submitted, self-certified amendments to twenty-eight (28) electricity futures and option contracts. The original filing (NYMEX Submission #13-148) was submitted to the CFTC on April 26, 2013. The effective date for the amendments is being changed to permit additional time to incorporate the amendment into the Exchange’s trading systems. The new effective date will be Sunday, May 19, 2013, for trade date Monday, May 20, 2013. The balance of the original submission remains unchanged.

Previously, the Exchange self-certified amendments to twenty-eight (28) electricity futures and option contracts, effective Sunday, May 12, 2013 for trade date Monday, May 13, 2013. There is currently no open interest in these contracts. The changes are being made so as to align the contract terms and conditions with cash market trading practices. The twenty-eight (28) contracts to be amended are provided in the table below:

Contract	Chapter	Clearing Code
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Day 2.5 MW Futures	955	AOR
ISO New England Mass Hub Day-Ahead Peak Calendar-Day 2.5 MW Futures	756B	CE
Dow Jones Mid-Columbia Electricity Price Index Futures	643	DO
ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	959	IDO
MISO Minnesota Hub Off-Peak Calendar-Month LMP Futures	780A	LJ
MISO Minnesota Hub Peak Calendar-Month LMP Futures	780	LM
PJM Northern Illinois Hub Real-Time Off-Peak Calendar-Day 2.5 MW Futures	958	NOC

MISO Illinois Hub Off-Peak Calendar Month LMP Futures	778A	OJ
MISO Illinois Hub Peak Calendar-Month LMP Futures	778	OM
PJM AEP Dayton Hub Peak Calendar-Month LMP Option	382	OT
PJM AEP Dayton Hub Day-Ahead Peak Calendar-Day 2.5 MW Futures	953	PAP
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	954	PEO
PJM Northern Illinois Hub Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	957	PNO
PJM Northern Illinois Hub Day-Ahead Peak Calendar-Day 2.5 MW Futures	956	PNP
PJM Western Hub Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	951	PWO
PJM Western Hub Day-Ahead Peak Calendar-Day 2.5 MW Futures	950	PWP
PJM Western Hub Real-Time Off-Peak Calendar-Day 2.5 MW Futures	952	WOR
NYISO Zone A Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	680	ZAO
NYISO Zone G Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	687	ZGO
NYISO Zone J Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	688	ZJO
NYISO Zone A Day-Ahead Peak Calendar-Day 2.5 MW Futures	616B	AN
NYISO Zone J Day-Ahead Peak Calendar-Day 2.5 MW Futures	618B	JN
PJM Northern Illinois Hub Peak 50 MW Calendar-Month LMP Option	1182	PJN
PJM AEP Dayton Hub Peak 50 MW Calendar-Month LMP Option	1181	PJD
MISO Indiana Hub Day-Ahead Off-Peak Calendar-Day 5 MW Futures	1076	FAD
MISO Indiana Hub Real-Time Off-Peak Calendar-Day 5 MW Futures	1077	FTD
Alberta Power Pool Calendar Day Futures	1049	AOD
Alberta Power Pool Calendar Month Futures	1050	AOM

The sizes of most of the futures contracts, with the exception of those associated with the Alberta Power Pool Calendar Day Futures (Code AOD), Alberta Power Pool Calendar Month Futures (Code AOM), MISO Indiana Hub Day-Ahead Off-Peak Calendar-Day 5 MW Futures (Code FAD), and MISO Indiana Hub Real-Time Off-Peak Calendar-Day 5 MW Futures (Code FTD) contracts, are being adjusted to a flow rate of 5 megawatts (MW) per hour. In this regard, peak hour futures contracts will have a size of 80 MWh, and off-peak hour futures contracts will have a size of 5 MWh. With respect to the affected electricity option contracts, the underlying futures contracts are being changed to futures contracts based on a 5 MW per hour flow rate. The size of the Alberta Power Pool Calendar Day Futures and Alberta Power Pool Calendar Month Futures contracts is being reduced to 1 MWh. For the contracts that will have an amended size or underlying futures contract, the contract titles will be changed to reflect those adjustments.

Language associated with the observance of Daylight Savings Time is being removed from the MISO Indiana Hub Day-Ahead Off-Peak Calendar-Day 5 MW Futures and MISO Indiana Hub Real-Time Off-Peak Calendar-Day 5 MW Futures contracts.

In the product chapters for the two 50 MW option contracts noted above, the position limit language is being replaced with standard Exchange language that directs market participants to the Position Limit, Position Accountability and Reportable Level Table located in the Interpretations and Special Notices Section of Chapter 5 (Trading Qualifications and Practices) of the NYMEX Rulebook. Moreover, certain language regarding contract trading quantity is being removed from the product chapters for the Alberta-based power contracts. All product chapter amendments are provided in Appendix A. The new fees for the subject contracts are provided in Appendix B, and the new minimum block levels are shown in Appendix C.

The position limits associated with the Dow Jones Mid-Columbia Electricity Price Index Futures (Code DO), MISO Minnesota Hub Off-Peak Calendar-Month LMP Futures (Code LJ), MISO Minnesota Hub Peak Calendar-Month LMP Futures (Code LM), MISO Illinois Hub Off-Peak Calendar-Month LMP Futures (Code OJ), MISO Illinois Hub Peak Calendar-Month LMP Futures (Code OM), Alberta Power Pool Calendar Day Futures, and Alberta Power Pool Calendar Month Futures contracts are being amended based on an updated deliverable supply analysis (Appendix D). The position limits for the remaining contracts have been verified as being at or below 25 percent of estimated deliverable supply. The amendments to the terms and conditions contained in the Position Limit, Position Accountability and Reportable Level Table located in the Interpretations and Special Notices Section of Chapter 5 (Trading Qualifications and Practices) of the NYMEX Rulebook are provided in Appendix E.

NYMEX business staff responsible for the amendments to the twenty-eight (28) 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:

- Contracts Not Readily Subject to Manipulation: The subject contracts are being amended to reflect cash market trading practices. Moreover, the spot-month speculative position limits have been either updated or verified to at or below 25 percent of the estimated deliverable supply for the appropriate underlying cash markets.
- Position Limitations or Accountability: All of the subject 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 either been updated or verified to be at or below 25 percent of deliverable supply for the appropriate underlying cash markets. (See also Appendix D)
- Availability of General Information: 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 Rule 40.6(a), the Exchange hereby certifies that the amendments to the twenty-eight (28) 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 <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 [Christopher.Bowen@cmegroup.com](mailto:Christopher.Bowen@cmegroup.com). Please reference NYMEX Submission No. 13-148R in any related correspondence.

Sincerely,

/s/Christopher Bowen  
Managing Director and Chief Regulatory Counsel

Attachments: Appendix A – Amendments to Twenty-Eight (28) Electricity Futures and Option Contracts  
Appendix B – Fee Tables  
Appendix C – Minimum Block Levels  
Appendix D – Deliverable Supply Analysis  
Appendix E – Amendments to the Terms and Conditions in the Reportable Level Table located in the Interpretations and Special Notices Section of Chapter 5

**Chapter 955**  
**PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**955102.B. Trading Unit**

The contract quantity shall be ~~2.5~~ 5 Megawatt hours (MWh).

Each futures contract shall be valued as the contract quantity multiplied by the settlement price.

**Chapter 756B**  
**ISO New England Mass Hub Day-Ahead Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**756B.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.

**Chapter 643**  
**Dow Jones Mid-Columbia Electricity Price Index 5 MW Futures**

**643.05. CONTRACT QUANTITY AND VALUE**

~~The contract quantity is based on 2.5 megawatts per hour for each peak hour of the contract month. The daily total is 40 Megawatt Hours (MWh). One contract shall equal the daily total multiplied by the number of peak days in the contract month.~~

The contract quantity shall be 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 multiplied by the settlement price.

**Chapter 959**  
**ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**959102.B. Trading Unit**

The contract quantity shall be ~~2.5~~ 5 Megawatt hours (MWh).

Each futures contract shall be valued as the contract quantity multiplied by the settlement price.

**Chapter 780A**  
**MISO Minnesota Hub Off-Peak Calendar-Month LMP 5 MW Futures**

**780A.04. CONTRACT QUANTITY AND VALUE**

~~The contract quantity is based on 2.5 megawatts per hour for each peak hour of the contract month. The daily total is 40 Megawatt Hours (MWH). One contract shall equal the daily total multiplied by the number of peak days in the contract month.~~

The contract quantity shall be 5 Megawatt hours (MWh).

Each futures contract shall be valued as the contract quantity multiplied by the settlement price.

**Chapter 780**  
**MISO Minnesota Hub Peak Calendar-Month LMP 5 MW Futures**

**780.05. CONTRACT QUANTITY AND VALUE**

~~The contract quantity is based on 2.5 megawatts per hour for each peak hour of the contract month. The daily total is 40 Megawatt Hours (MWH). One contract shall equal the daily total multiplied by the number of peak days in the contract month.~~

The contract quantity shall be 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 multiplied by the settlement price.

**Chapter 958**  
**PJM Northern Illinois Hub Real-Time Off-Peak Calendar-Day 2.5 5 MW Futures**

**958102.B. Trading Unit**

The contract quantity shall be ~~2.5~~ 5 Megawatt hours (MWh).

Each futures contract shall be valued as the contract quantity multiplied by the settlement price.

**Chapter 778A**  
**MISO Illinois Hub Off-Peak Calendar-Month LMP 5 MW Futures**

**778A.05. CONTRACT QUANTITY AND VALUE**

~~The contract quantity is based on 2.5 megawatts per hour for each peak hour of the contract month. The daily total is 40 Megawatt Hours (MWH). One contract shall equal the daily total multiplied by the number of peak days in the contract month.~~

The contract quantity shall be 5 Megawatt hours (MWh).

Each futures contract shall be valued as the contract quantity multiplied by the settlement price.

**Chapter 778**  
**MISO Illinois Hub Peak Calendar-Month LMP 5 MW Futures**

**778.05. CONTRACT QUANTITY AND VALUE**

The contract quantity is based on 2.5 megawatts per hour for each peak hour of the contract month. The daily total is 40 Megawatt Hours (MWH). One contract shall equal the daily total multiplied by the number of peak days in the contract month.

The contract quantity shall be 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 multiplied by the settlement price.

**Chapter 382**  
**PJM AEP Dayton Hub Peak Calendar-Month LMP 5 MW Option**

**382.02 TYPE OPTION**

~~The put option represents an option to assume a short position in the underlying PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures (VM) contract traded on the Exchange at the strike price. The call option represents an option to assume a long position in the underlying PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures (VM) contract traded on the Exchange at the strike price.~~

A call option traded on the Exchange represents an option to assume, at the strike price, one (1) long contract per peak day of the underlying PJM AEP Dayton Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (Z9) contract. A put option traded on the Exchange represents an option to assume, at the strike price, one (1) short contract per peak day of the underlying PJM AEP Dayton Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (Z9) contract.

**382.04 HOURS OF TRADING**

The hours of trading in the option contract on the Exchange shall be the same as the hours of trading for the underlying ~~PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures (VM)~~ PJM AEP Dayton Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (Z9) contract. All such trading shall take place on the trading floor of the Exchange within the hours prescribed by the Exchange.

**382.05 STRIKE PRICES**

(A) Trading shall be conducted for options with strike prices in increments as set forth below.

(B) 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 ~~PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures (VM)~~ PJM AEP Dayton Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (Z9) contracts in the corresponding delivery month rounded off to the nearest fifty-cent strike price unless such settlement price is precisely midway between two strike prices in which case it shall be rounded off to the lower strike price and (ii) the twenty fifty-cent increment strike prices which are twenty increments higher than the strike price described in (i) of this Rule 382.05(B) and (iii) the twenty fifty cent increment strike prices which are twenty increments lower than the strike price described in (i) of this Rule 382.05(B) and (iv) an additional ten strike prices for both call and put options will be listed at one dollar increments above the highest fifty cent increment as described in (ii) of this Rule 382.05(B), beginning with the first available such strike that is evenly divisible by \$0.50 and (v) an additional ten strike prices for both call and put options will be listed at one dollar increments below the lowest fifty cent increment as described in (iii) of this Rule 382.05(B).



(C) 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 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 will be added such that at all times there shall be ten fifty cent strike prices above the highest fifty cent strike, (iii) new one dollar increment strike prices will be added such that at all times there shall be up to ten five-cent strike prices below the lowest fifty cent strike 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 (B) of this Rule 382.05.

(D) Notwithstanding the provisions of subsections (A) through (C) 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 the option in which no new strike prices may be introduced.

**Chapter 953**  
**PJM AEP Dayton Hub Day-Ahead Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**953102.B. Trading Unit**

The contract quantity shall be ~~40~~ Megawatt hours (MWh) and is based on ~~2.5~~ megawatts for peak daily hours.

The contract quantity shall be 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 multiplied by the settlement price.

**Chapter 954**  
**PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**954102.B. Trading Unit**

The contract quantity shall be ~~2.5~~ 5 Megawatt hours (MWh).

Each futures contract shall be valued as the contract quantity multiplied by the settlement price.

**Chapter 957**  
**PJM Northern Illinois Hub Day-Ahead Off-Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**957102.B. Trading Unit**

The contract quantity shall be ~~2.5~~ 5 Megawatt hours (MWh).

Each futures contract shall be valued as the contract quantity multiplied by the settlement price.

**Chapter 956**  
**PJM Northern Illinois Hub Day-Ahead Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**956102.B. Trading Unit**

The contract quantity shall be ~~40~~ Megawatt hours (MWh) and is based on ~~2.5~~ megawatts for peak daily hours.

The contract quantity shall be 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 multiplied by the settlement price.

**Chapter 951**  
**PJM Western Hub Day-Ahead Off-Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**951102.B. Trading Unit**

The contract quantity shall be ~~2.5~~ 5 Megawatt hours (MWh).

Each futures contract shall be valued as the contract quantity multiplied by the settlement price.

**Chapter 950**  
**PJM Western Hub Day-Ahead Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**950102.B. Trading Unit**

The contract quantity shall be ~~40~~ Megawatt hours (MWh) and is based on ~~2.5~~ megawatts for peak daily hours.

The contract quantity shall be 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 multiplied by the settlement price.

**Chapter 952**  
**PJM Western Hub Real-Time Off-Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**952102.B. Trading Unit**

The contract quantity shall be ~~2.5~~ 5 Megawatt hours (MWh).

Each futures contract shall be valued as the contract quantity multiplied by the settlement price.

**Chapter 680**  
**NYISO Zone A Day-Ahead Off-Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**680102.B. Trading Unit**

The contract quantity shall be ~~2.5~~ 5 Megawatt hours (MWh).

Each futures contract shall be valued as the contract quantity multiplied by the settlement price.

**Chapter 687**  
**NYISO Zone G Day-Ahead Off-Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**687102.B. Trading Unit**

The contract quantity shall be ~~2.5~~ 5 Megawatt hours (MWh).

Each futures contract shall be valued as the contract quantity multiplied by the settlement price.

**Chapter 688**  
**NYISO Zone J Day-Ahead Off-Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**688102.B. Trading Unit**

The contract quantity shall be ~~2.5~~ 5 Megawatt hours (MWh).

Each futures contract shall be valued as the contract quantity multiplied by the settlement price.

**Chapter 616B**  
**NYISO Zone A Day-Ahead Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**616B.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.

**Chapter 618B**  
**NYISO Zone J Day-Ahead Peak Calendar-Day ~~2.5~~ 5 MW Futures**

**618B.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.

**Chapter 1182**  
**PJM Northern Illinois Hub Peak 50 MW Calendar-Month LMP Option**

**1182100. SCOPE OF CHAPTER**

This chapter is limited in application to put and call options on the ~~PJM Northern Illinois Hub Real-Time Peak Calendar-Month 2.5 MW Futures (JM)~~ 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 the ~~PJM Northern Illinois Hub Real-Time Peak Calendar-Month 2.5 MW Futures (JM)~~ PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (B3) contract shall be subject to the general rules of the Exchange insofar as applicable.

**1182101.B. Trading Unit**

A call option traded on the Exchange represents an option to assume ~~twenty (20)~~ ten (10) long positions per peak day in the underlying ~~PJM Northern Illinois Hub Real-Time Peak Calendar-Month 2.5 MW~~

~~Futures (UM) 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 twenty (20) ten (10) short positions per peak day in the underlying PJM Northern Illinois Hub Real-Time Peak Calendar-Month 2.5 MW Futures (UM) PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (B3) contract at the strike price.~~

#### **1182101.D. Position Limits and Position Accountability**

~~For purposes of calculating compliance with position limits, each contract will be aggregated with positions held in PJM AEP Dayton Hub Real Time Peak Calendar Month 2.5 MW Futures (VM). Each position in the option contract shall be deemed equivalent to 20 of the quantity of the PJM AEP Dayton Hub Real Time Peak Calendar Month 2.5 MW Futures (VM) base contract into which each the option contract aggregates.~~

~~In accordance with Rule 559, no person shall own or control positions in excess of 150 (PJM AEP Dayton Hub Real Time Peak Calendar Month 2.5 MW Futures (VM) equivalent) contracts net long or net short in the spot month.~~

~~In accordance with Rule 560:~~

- ~~1. the all months accountability level shall be 750 (PJM AEP Dayton Hub Peak Calendar-Month LMP Swap futures equivalent) contracts net long or net short in all months combined;~~
- ~~2. the any one month accountability level shall be 1,000 (PJM AEP Dayton Hub Real Time Peak Calendar-Month 2.5 MW Futures (VM) equivalent) contracts net long or net short in any single contract month excluding the spot month.~~

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

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.

#### **1182102. EXERCISE PRICES**

(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 ~~PJM Northern Illinois Hub Real-Time Peak Calendar-Month 2.5 MW Futures (UM) PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (B3)~~ contracts 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) the strike price which is fifty-cent higher than the strike price described in subsection (A)(i) of this rule and (iii) the strike price which is fifty-cent 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, (i) new consecutive strike prices for both puts and calls will be added such that at all times there will be at least one 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 in which no new strike prices may be introduced.

**Chapter 1181**  
**PJM AEP Dayton Hub Peak 50 MW Calendar-Month LMP Option**

**1181100. SCOPE OF CHAPTER**

This chapter is limited in application to put and call options on ~~PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures (VM)~~ PJM AEP Dayton Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (Z9) contracts. In addition to the rules of this chapter, transactions in options on ~~PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures (VM)~~ PJM AEP Dayton Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (Z9) contracts shall be subject to the general rules of the Exchange insofar as applicable.

**1181101.B. Trading Unit**

A call option traded on the Exchange represents an option to assume ~~twenty (20)~~ ten (10) long positions per peak day in the underlying ~~PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures (VM)~~ PJM AEP Dayton Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (Z9) contract at the strike price. A put option traded on the Exchange represents an option to assume ~~twenty (20)~~ ten (10) short positions per peak day in the underlying ~~PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures (VM)~~ PJM AEP Dayton Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (Z9) contract at the strike price.

**1181101.D. Position Limits and Position Accountability**

~~For purposes of calculating compliance with position limits, each contract will be aggregated with positions held in PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures (VM). Each position in the option contract shall be deemed equivalent to 20 of the quantity of the PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures (VM) base contract into which each the option contract aggregates.~~

~~In accordance with Rule 559, no person shall own or control positions in excess of 150 (PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures (VM) equivalent) contracts net long or net short in the spot month.~~

~~In accordance with Rule 560:~~

~~1. the all-months accountability level shall be 750 (PJM AEP Dayton Hub Peak Calendar-Month LMP Swap futures equivalent) contracts net long or net short in all months combined;~~

~~2. the any one month accountability level shall be 1,000 (PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures (VM) equivalent) contracts net long or net short in any single contract month excluding the spot month.~~

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

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.

**1181102. EXERCISE PRICES**

(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 ~~PJM AEP Dayton Hub Real-Time Peak Calendar-Month~~

~~2.5 MW Futures (VM) the PJM AEP Dayton Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (Z9)~~ contracts 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) the strike price which is fifty-cent higher than the strike price described in subsection (A)(i) of this rule and (iii) the strike price which is fifty-cent 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, (i) new consecutive strike prices for both puts and calls will be added such that at all times there will be at least one 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 in which no new strike prices may be introduced.

## **Chapter 1076**

### **MISO Indiana Hub Day-Ahead Off-Peak Calendar-Day 5 MW Futures**

#### **1076.03 OFF-PEAK DAYS AND HOURS**

“Off-Peak Hours” shall mean the hours ending 0100 through 0700 and 2400 Eastern Standard Time (EST), Monday through Friday ~~(except when Daylight Savings Time is in effect, in which case Off-Peak Hours means the hours ending 0100 through 0600 and 2300 through 2400 EST)~~ and the hours ending 0100 through 2400 EST, Saturday and Sunday, including North American Electric Reliability Corporation holidays.

#### **1076.04 CONTRACT QUANTITY AND VALUE**

The contract quantity shall be 5 Megawatts Hours (MWh). ~~Transaction sizes for trading in any delivery day shall be restricted to whole number multiples of the number of off-peak hours in the contract day. The contract quantity is adjusted to reflect the transition in and out of Daylight Savings Time.~~ Each futures contract shall be valued at the contract quantity multiplied by the settlement price.

## **Chapter 1077**

### **MISO Indiana Hub Real-Time Off-Peak Calendar-Day 5 MW Futures**

#### **1077.03 OFF-PEAK DAYS AND HOURS**

“Off-Peak Hours” shall mean the hours ending 0100 through 0700 and 2400 Eastern Standard Time (EST), Monday through Friday ~~(except when Daylight Savings Time is in effect, in which case Off-Peak Hours means the hours ending 0100 through 0600 and 2300 through 2400 EST)~~ and the hours ending 0100 through 2400 EST, Saturday and Sunday, including North American Electric Reliability Corporation holidays.

#### **1077.04 CONTRACT QUANTITY AND VALUE**

The contract quantity shall be 5 Megawatts Hours (MWh). ~~Transaction sizes for trading in any delivery day shall be restricted to whole number multiples of the number of off-peak hours in the contract day. The contract quantity is adjusted to reflect the transition in and out of Daylight Savings Time.~~ Each futures contract shall be valued at the contract quantity multiplied by the settlement price.

**Chapter 1049**  
**Alberta Power Pool Calendar Day 1 MW Futures**

**1049.05 CONTRACT QUANTITY AND VALUE**

The contract quantity shall be 1 Megawatt hour (MWh). ~~5 Megawatts for all daily hours.~~ The contract quantity will be adjusted by the transition in and out of the Daylight Savings Time.

~~Transaction sizes for trading in any contract day shall be restricted to whole number multiples of the number of hours in the contract day.~~

Each futures contract shall be valued at the contract quantity multiplied by the settlement price.

**Chapter 1050**  
**Alberta Power Pool Calendar Month 1 MW Futures**

**1050.05 CONTRACT QUANTITY AND VALUE**

The contract quantity shall be 1 Megawatt hour (MWh). ~~5 Megawatts for daily hours.~~ The contract quantity will be adjusted by the transition in and out of the Daylight Savings Time.

~~Transaction sizes for trading in any delivery month shall be restricted to whole number multiples of the number of days in the contract month.~~

Each futures contract shall be valued at the contract quantity multiplied by the settlement price.

Appendix B

**Contract Fees  
Group A**

Contract (Original Name)	Chapter	Clearing Code
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Day 2.5 MW Futures	955	AOR
ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	959	IDO
MISO Minnesota Hub Off-Peak Calendar-Month LMP Futures	780A	LJ
PJM Northern Illinois Hub Real-Time Off-Peak Calendar-Day 2.5 MW Futures	958	NOC
MISO Illinois Hub Off-Peak Calendar Month LMP Futures	778A	OJ
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	954	PEO
PJM Northern Illinois Hub Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	957	PNO
PJM Western Hub Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	951	PWO
PJM Western Hub Real-Time Off-Peak Calendar-Day 2.5 MW Futures	952	WOR
NYISO Zone A Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	680	ZAO
NYISO Zone G Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	687	ZGO
NYISO Zone J Day-Ahead Off-Peak Calendar-Day 2.5 MW Futures	688	ZJO

Exchange Fees					
	Member Day	Member	Cross Division	Non-Member	IIP
Pit	X	.02	.025	.03	
Globex	X	.02	.025	.03	.025
ClearPort		.02		.03	

Other Processing Fees			
	Member	Non-Member	
Cash Settlement	.005	.009	<i>*only applies to financially settled contracts</i>
Futures from E/A	X	X	<i>*applies to futures contracts</i>
	House Acct	Customer Acct	
Options E/A Notice	X	X	<i>*applies to physical options</i>
Delivery Notice	X	X	<i>*applies to physical futures</i>

Additional Fees and Surcharges		
EFS Surcharge	X	<i>*\$2.50 fee typically only charged on our core physical contracts</i>
Block Surcharge	X	<i>*\$0.10 fee charged on block trades</i>
Facilitation Desk Fee	.0015	<i>*fee applies to CPC trades entered by ClearPort Market Ops</i>



## Contract Fees Group B

Contract (Original Name)	Chapter	Clearing Code
ISO New England Mass Hub Day-Ahead Peak Calendar-Day 2.5 MW Futures	756B	CE
Dow Jones Mid-Columbia Electricity Price Index Futures	643	DO
MISO Minnesota Hub Peak Calendar-Month LMP Futures	780	LM
MISO Illinois Hub Peak Calendar-Month LMP Futures	778	OM
PJM AEP Dayton Hub Day-Ahead Peak Calendar-Day 2.5 MW Futures	953	PAP
PJM Northern Illinois Hub Day-Ahead Peak Calendar-Day 2.5 MW Futures	956	PNP
PJM Western Hub Day-Ahead Peak Calendar-Day 2.5 MW Futures	950	PWP
NYISO Zone A Calendar-Day Peak LBMP Futures	616B	AN
NYISO Zone J Calendar-Day Peak LBMP Futures	618B	JN

Exchange Fees					
	Member Day	Member	Cross Division	Non-Member	IIP
<b>Pit</b>	X	.35	.37	.40	
<b>Globex</b>	X	.35	.37	.40	.37
<b>ClearPort</b>		.35		.40	

Other Processing Fees			
	Member	Non-Member	
<b>Cash Settlement</b>	.0875	.12	<i>*only applies to financially settled contracts</i>
<b>Futures from E/A</b>	X	X	<i>*applies to futures contracts</i>
	<b>House Acct</b>	<b>Customer Acct</b>	
<b>Options E/A Notice</b>	X	X	<i>*applies to physical options</i>
<b>Delivery Notice</b>	X	X	<i>*applies to physical futures</i>

Additional Fees and Surcharges		
<b>EFS Surcharge</b>	X	<i>*\$2.50 fee typically only charged on our core physical contracts</i>
<b>Block Surcharge</b>	X	<i>*\$0.10 fee charged on block trades</i>
<b>Facilitation Desk Fee</b>	.02	<i>*fee applies to CPC trades entered by ClearPort Market Ops</i>

## Contract Fees Group C

Contract (Original Name)	Chapter	Clearing Code
PJM AEP Dayton Hub Peak Calendar-Month LMP Options	382	OT
PJM Northern Illinois Hub Peak 50 MW Calendar-Month LMP Options	1182	PJM
PJM AEP Dayton Hub Peak 50 MW Calendar-Month LMP Options	1181	PJD

Exchange Fees					
	Member Day	Member	Cross Division	Non-Member	IIP
<b>Pit</b>	X	.35	.37	.40	
<b>Globex</b>	X	.35	.37	.40	.37
<b>ClearPort</b>		.35		.40	

Other Processing Fees			
	Member	Non-Member	
<b>Cash Settlement</b>	X	X	<i>*only applies to financially settled contracts</i>
<b>Futures from E/A</b>	X	X	<i>*applies to futures contracts</i>
	House Acct	Customer Acct	
<b>Options E/A Notice</b>	.04	.06	<i>*applies to physical options</i>
<b>Delivery Notice</b>	X	X	<i>*applies to physical futures</i>

Additional Fees and Surcharges		
<b>EFS Surcharge</b>	X	<i>*\$2.50 fee typically only charged on our core physical contracts</i>
<b>Block Surcharge</b>	X	<i>*\$0.10 fee charged on block trades</i>
<b>Facilitation Desk Fee</b>	.02	<i>*fee applies to CPC trades entered by ClearPort Market Ops</i>

**Contract Fees  
Group D**

Contract (Original Name)	Chapter	Clearing Code
Alberta Power Pool Calendar Day Futures	1049	AOD
Alberta Power Pool Calendar Month Futures	1050	AOM

Exchange Fees					
	Member Day	Member	Cross Division	Non-Member	IIP
<b>Pit</b>	X	.00528	.00564	.006	
<b>Globex</b>	X	.00528	.00564	.006	.00564
<b>ClearPort</b>		.00528		.006	

Other Processing Fees			
	Member	Non-Member	
<b>Cash Settlement</b>	.00132	.0018	<i>*only applies to financially settled contracts</i>
<b>Futures from E/A</b>	X	X	<i>*applies to futures contracts</i>
	House Acct	Customer Acct	
<b>Options E/A Notice</b>	X	X	<i>*applies to physical options</i>
<b>Delivery Notice</b>	X	X	<i>*applies to physical futures</i>

Additional Fees and Surcharges		
<b>EFS Surcharge</b>	X	<i>*\$2.50 fee typically only charged on our core physical contracts</i>
<b>Block Surcharge</b>	X	<i>*\$0.10 fee charged on block trades</i>
<b>Facilitation Desk Fee</b>	.0003	<i>*fee applies to CPC trades entered by ClearPort Market Ops</i>

## Minimum Block Levels

CME Code	Current Min Block	Proposed Min Block	Reason for Change
AOR	32	16	Changing contract size: 2.5MW to 5MW
IDO	32	16	Changing contract size: 2.5MW to 5MW
LJ	4	100	Changing contract size: 2.5MW to 5MW and changing VQU
NOC	32	16	Changing contract size: 2.5MW to 5MW
OJ	4	100	Changing contract size: 2.5MW to 5MW and changing VQU
PEO	32	16	Changing contract size: 2.5MW to 5MW
PNO	32	16	Changing contract size: 2.5MW to 5MW
PWO	32	16	Changing contract size: 2.5MW to 5MW
WOR	32	16	Changing contract size: 2.5MW to 5MW
ZAO	32	16	Changing contract size: 2.5MW to 5MW
ZGO	32	16	Changing contract size: 2.5MW to 5MW
ZJO	32	16	Changing contract size: 2.5MW to 5MW
CE	10	5	Changing contract size: 2.5MW to 5MW
DO	10	100	Changing contract size: 2.5MW to 5MW and changing VQU
LM	10	100	Changing contract size: 2.5MW to 5MW and changing VQU
OM	10	100	Changing contract size: 2.5MW to 5MW and changing VQU
PAP	10	5	Changing contract size: 2.5MW to 5MW
PNP	10	5	Changing contract size: 2.5MW to 5MW
PWP	10	5	Changing contract size: 2.5MW to 5MW
AN	10	5	Changing contract size: 2.5MW to 5MW
JN	10	5	Changing contract size: 2.5MW to 5MW
OT	10	95	Changing contract size: 2.5MW to 5MW and changing VQU
PJN	2	19	Changing VQU
PJD	2	19	Changing VQU
AOD	5	24	Changing size from 5MW to 1MW
AOM	100	100	Changing size from 5MW to 1MW

### Mid-Columbia Electricity Hub

The Mid-Columbia (Mid-C) electricity hub is unlike other hubs that serve as underlying cash markets for other NYMEX power contracts. In this regard, the Mid-C is not a hub defined by an independent system operator (ISO) or regional transmission operator (RTO), such as PJM or the Electric Reliability Council of Texas (ERCOT). The Mid-C refers to 118 miles of the Columbia River in central Washington State where five hydroelectric projects are located. These projects are owned and operated by Chelan County Public Utility District (PUD), Grant County PUD, and Douglas County PUD.<sup>1</sup> Chelan County PUD operates the Rocky Reach and Rock Island Hydro projects. Grant County PUD controls the Wanapum and Priest Rapids Hydro projects, and Douglas County PUD operates the Wells Dam.<sup>2</sup>

Because the source of electricity at the Mid-C is hydro-based, the best way to estimate deliverable supply is to quantify generation at each hydro project and then sum those values together. Below is a table listing each hydro project's generator nameplate capacity.

*Table 1. Hydro Capacity at Mid-C*

Hydro Project	Generator Nameplate Capacity (MW)	Estimated Maximum Annual Output (MWh)
Rocky Reach <sup>3</sup>	1,300	11,388,000
Rock Island <sup>4</sup>	624	5,466,240
Wanapun <sup>5</sup>	1,038	9,092,880
Priest Rapids <sup>5</sup>	955	8,365,800
Wells <sup>6</sup>	774	6,780,240
Total	4,661	40,830,360

Hydro generators do not typically operate at full capacity all day long, so assuming the maximum output likely would lead to an exaggerated estimate of deliverable supply. It is reported that Rocky Reach Dam has a net average annual generation of 5.8 million megawatt hours (MWh).<sup>7</sup> In addition, according to a Kittitas County (Washington State) document, the

<sup>1</sup> <http://www.chelanpud.org/mid-c-services.html>

<sup>2</sup> <http://www.wpuda.org/publications/connections/hydro/River%20Riders.pdf>

<sup>3</sup> <http://www.chelanpud.org/rocky-reach-hydro-project.html>

<sup>4</sup> <http://www.chelanpud.org/rock-island-hydro-project.html>

<sup>5</sup> <http://www.grantpud.org/component/content/article/10-your-pud/96-power-generation>

<sup>6</sup> [http://relicensing.douglaspud.org/background/wells\\_project.htm](http://relicensing.douglaspud.org/background/wells_project.htm)

<sup>7</sup> [http://www.newsdata.com/rr/project\\_rocky\\_reach.html](http://www.newsdata.com/rr/project_rocky_reach.html)

Wanapum Dam generates over four million megawatt hours (MWh) per year.<sup>8</sup> Electricity output values appear to be approximately half of the maximum annual generation for the respective dams. Thus, it is reasonable to assume that the annual actual generation at Mid-C is 20,415,180 MWh, or 1,701,265 MWh per month.

### **Alberta Power Pool**

In 2011, Alberta's competitive wholesale electricity market was valued at approximately \$8 billion in annual energy transactions and about 164 participants. The Alberta Electric System Operator (AESO) is a not-for-profit entity that operates much like a U.S.-based independent system operator. AESO is responsible for the safe, reliable, and economic planning and operation of the Alberta Interconnected Electric System (AIES). The provincial operator provides open and non-discriminatory access to Alberta's interconnected power grid for generation and distribution companies and large industrial consumers of electricity. In doing so, AESO contracts with transmission facility owners to acquire transmission services and with other parties to provide fair and timely access to the system. AESO also develops and administers transmission tariffs, procures ancillary services to ensure system reliability, and manages settlement of the hourly wholesale market and transmission system services. AESO is committed to a fair, open, and efficient market for the exchange of electric energy in Alberta. To this end, AESO operates the Alberta Power Pool, an auction where market participants submit bids and offers for electricity during a specific hour in the same day. (The Alberta Power Pool only offers a real-time market; no day-ahead market exists). The price paid for electricity during a specific hour is the market-clearing price.

The Alberta Power Pool contracts are flat contracts, which means that there is no distinction between peak and off-peak periods. Thus, the monthly contract covers all 24 hours in every day of the month. The daily contract covers all 24 hours in the specified day.

Estimates of deliverable supply should account for the actual load. NRGSTREAM offers hourly power demand on an actual basis. The table below shows the monthly Alberta power demand over the past three years.

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<sup>8</sup> [http://www.co.kittitas.wa.us/cds/smp/reports/CH6\\_ColumbiaRiver\\_June2012\\_DRAFT.pdf](http://www.co.kittitas.wa.us/cds/smp/reports/CH6_ColumbiaRiver_June2012_DRAFT.pdf)

*Table 2. Alberta Power Pool Monthly Electricity Demand*

<b>Month/Year</b>	<b>Total Alberta Power Demand (Actual)</b>
Apr-10	5,593,728
May-10	5,735,662
Jun-10	5,673,223
Jul-10	5,970,460
Aug-10	5,984,228
Sep-10	5,660,034
Oct-10	5,999,913
Nov-10	6,230,922
Dec-10	6,709,664
Jan-11	6,651,662
Feb-11	5,975,968
Mar-11	6,478,046
Apr-11	5,827,571
May-11	5,658,985
Jun-11	5,668,763
Jul-11	6,157,296
Aug-11	6,215,112
Sep-11	5,900,439
Oct-11	6,102,222
Nov-11	6,316,339
Dec-11	6,640,718
Jan-12	6,767,286
Feb-12	6,219,032
Mar-12	6,412,157
Apr-12	5,981,767
May-12	5,946,949
Jun-12	5,734,741
Jul-12	6,374,732
Aug-12	6,341,447
Sep-12	5,862,371
Oct-12	6,356,989
Nov-12	6,535,852
Dec-12	7,033,158
Jan-13	6,988,969
Feb-13	6,159,864
Mar-13	6,705,447
<b>3-Year Avg</b>	<b>6,182,548</b>

## **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.

**ISO NEW ENGLAND:** ISO New England (ISO-NE), an independent, not-for-profit corporation, 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, forward capacity market (FCM), regulation market (e.g., frequency regulation), reserve markets, and annual and monthly auctions of financial transmission rights (FTRs).

**MIDWEST ISO:** Midwest ISO (MISO) is a not-for-profit, member-based organization 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 11 states - Montana, North Dakota, South Dakota, Minnesota, Iowa, Missouri, Illinois, Wisconsin, Michigan, Indiana, and Kentucky. MISO also provides reliability services for those states, as well as parts of Arkansas, Louisiana, Mississippi, Texas, and the Canadian province of Manitoba. MISO has a generation capacity in its market area of 132,296 MW and maintains 49,670 miles of transmission lines.

### **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, MISO, NYISO, and ISO-



NE operate and monitor their respective market to ensure the competitiveness and reliability of the electricity system.

The ISO/RTOs are also monitored by the North American Electric Reliability Corporation (NERC), a non-profit organization made up of stakeholders responsible for developing reliability standards and ensuring compliance with those standards. The NERC has various committees, sub-committees, task forces, and working groups investigating and analyzing system disruptions 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 market, recommend improvements plan, and review the implementation of those plans. Market monitors publish quarterly and annual market reports to raise public awareness of the state of the respective markets.

### **Day-ahead vs. Real-Time Market**

The four ISO/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 the 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 the real-time markets adopt a competitive auction process developed by the 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 competitiveness and transparency. In addition, market transactions are settled hourly to reflect dynamic and competitive pricing.

### **Hub vs. Zone**

Within each 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 (RTOs) taking 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.<sup>9</sup>

**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.

**ISO-NE Mass Hub:** a group of 32 nodes located in central Massachusetts, also known as Internal Hub. Mass Hub is the only hub within ISO-NE. The related zones include all zones of the ISO-NE control area.

### **ANALYSIS OF DELIVERABLE SUPPLY**

There are two basic types of daily and monthly futures contracts based on U.S. ISOs proposed under this submission: peak and off-peak. For each, the underlying unit is 5 megawatts per hour (MW/h). The contract size of the peak contracts is 80 MWh, as the contracts are designed to cover the 16 peak hours during the peak day. Monthly peak contracts must be traded in multiples of the number of peak days in the month. The contracts size of the off-peak contracts is 5 MWh, as the contracts are designed to cover off-peak hours during the day. Daily (monthly) off-peak contracts must be traded in multiples of the number of off-peak hours in the day (month).

The term "Peak Days" shall mean a Monday through Friday, excluding North American Electric Reliability Corporation (NERC) holidays. "Peak Hours" shall mean Hour Ending 0800 through 2300 Eastern Prevailing Time (EPT), except MISO, which is Eastern Standard Time (EST). "Off-Peak Days & Hours" shall mean the hours ending 0100 through 0700 and 2400 (EST for MISO; EPT for all other ISOs), Monday through Friday as well as all day Saturday, Sunday, and NERC holidays.

### **Historical Load**

Tables 3 and 4 below provide historical load data for PJM Western Hub, PJM AEP Dayton Hub, PJM Northern Illinois Hub, ISO New England Mass Hub, NYISO Zone A, NYISO Zone G, and NYISO Zone J. Load data in the two tables reflect the amount of electricity that was produced and 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.

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<sup>9</sup> Please note hub definitions may change from time to time when the ISO/RTO updates the definitions.

Average monthly loads were calculated for the PJM and ISO-NE locations using real-time hourly load data published by PJM and ISO-NE and aggregated by NRGSTREAM.<sup>10</sup> Specifically, peak hourly loads were used for monthly peak calculations, and off-peak hourly loads were used for monthly off-peak calculations. For ISO-NE, Exchange staff used data from January 2009 to July 2012. For PJM, Exchange staff used data from February 2011, as NRGSTREAM only started web-scraping zonal load in mid-February 2011.

*Table 3. Historical Load (MWh) for PJM and ISO-NE Locations from NRGSTREAM*

<b>Location/Time of Use</b>	<b>Data Availability</b>	<b>Average Monthly Load</b>
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
<b>PJM Western Hub Peak</b>		<b>7,108,868</b>
BGE Off Peak	Mar-11 to July-12	533,677
PEPCO Off Peak	Mar-11 to July-12	287,430
Penelec Off Peak	Mar-11 to July-12	480,367
PECO Off Peak	Mar-11 to July-12	661,120
PPL Off Peak	Mar-11 to July-12	660,342
<b>PJM Western Hub Off Peak</b>		<b>2,622,935</b>
AEP Peak	Mar-11 to July-12	5,613,005
Dayton Peak	Mar-11 to July-12	791,374
<b>PJM AEP Dayton Hub Peak</b>		<b>6,404,379</b>
AEP Off Peak	Mar-11 to July-12	2,227,322
Dayton Off Peak	Mar-11 to July-12	298,487
<b>PJM AEP Dayton Hub Off Peak</b>		<b>2,525,809</b>
ComEd Peak	Mar-11 to July-12	4,350,772
<b>PJM Northern Illinois Hub Peak</b>		<b>4,350,772</b>
ComEd Off Peak	Mar-11 to July-12	4,116,983

<sup>10</sup> NRGSTREAM is an aggregator and distributor of public and private energy market information. (www.nrgstream.com).

<b>PJM Northern Illinois Hub Off Peak</b>		<b>4,116,983</b>
<b>ISO New England Mass Hub Peak</b>	Jan-09 to July-12	<b>5,655,266</b>
<b>ISO New England Mass Hub Off Peak</b>	Jan-09 to July-12	<b>1,904,563</b>

Average monthly loads for NYISO zones were calculated using annual load data published by the ISO itself in its “Gold Book.”<sup>11</sup> Specifically, the annual zonal loads represent the volume of electricity delivered and consumed in real time in the respective zone; monthly volumes by zone were computed by dividing the annual zonal values by 12. Exchange staff used NYISO data on actual loads for the years 2002 to 2011 and the forecasted load data for 2012.

*Table 4. Historical Loads for NYISO Zones*

<b>Year</b>	<b>A</b>	<b>G</b>	<b>J</b>
	<b>GWh</b>		
2002	16,355	9,970	51,356
2003	15,942	0,451	50,829
2004	16,102	10,696	52,073
2005	16,498	10,924	54,007
2006	15,998	10,417	53,096
2007	16,258	10,909	54,750
2008	15,835	10,607	54,835
2009	15,149	10,189	53,100
2010	15,903	10,384	55,114
2011	16,017	10,066	54,060
2012 Forecast	15,902	10,105	53,663

<sup>11</sup> See pages 14 and 20 of NYISO’s 2012 Load & Capacity Data at [http://www.nyiso.com/public/webdocs/services/planning/planning\\_data\\_reference\\_documents/2012\\_GoldBook.pdf](http://www.nyiso.com/public/webdocs/services/planning/planning_data_reference_documents/2012_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 and ISO-NE are affected by this shortcoming. Therefore, in the cases of the PJM- and ISO-NE-based contracts, load data were obtained from the next-best source, which are 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.

For the evaluation of cash markets in the NYISO zones, Exchange staff used actual load data from 2011 for each zone. The average annual electricity load for each zone, as shown in the Table 5 below, was multiplied by 1,000 to convert each value from gigawatt hours to megawatt hours. Then, the annual MWh loads were divided by 12 to put the loads on a monthly basis. Next, peak and off-peak loads were calculated by assuming a 50% split between peak and off-peak loads.

*Table 5. 2011 Monthly Volumes for NYISO Locations*

<b>Zone</b>	<b>GWh</b>	<b>MWh</b>	<b>MWh/month</b>	<b>Peak/Off-Peak Split MWh/month</b>
A	16,017	16,017,000	1,334,750	667,375
G	10,066	10,066,000	838,833	419,417
J	54,060	54,060,000	4,505,000	2,252,500

It is possible to consider forecasted zonal loads for 2012. 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 2012 loads by zone using 2011 values assumed an average growth rate of 0.6%. 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 2012 forecasted loads, which are only one year out, are probably very dependable. Given this information, Table 6 below provides the 2012 forecasted loads for the various NYISO zones. The differences between the 2011 and 2012 values are minimal.

*Table 6. 2012 Monthly Volumes for NYISO Locations*

<b>Zone</b>	<b>GWh</b>	<b>MWh</b>	<b>MWh/month</b>	<b>Peak/Off-Peak Split MWh/month</b>
A	15,902	15,902,000	1,325,167	662,583
G	10,105	10,105,000	842,083	421,042
J	53,663	53,663,000	4,471,917	2,235,958

MISO operates several trading hubs: Illinois, Indiana, Michigan, and Minnesota. To estimate the deliverable supply of electricity at each hub, it would be ideal to have access to actual, hub-specific load data. However, the ISO does not publish load data at that level. The most granular load data is available at the regional level: East, West, or Central. Therefore, one must estimate deliverable supply using MISO's region-wide data and each state's share of the total load. Three years of monthly peak and off-peak loads for the entire MISO service area are reported below in Table 7. The load data were obtained from NRGSTREAM.

*Table 7. MISO System-wide Load*

<b>Month/Year</b>	<b>MISO Total Actual Peak Load (MWh) HE 8:00-23:00 M-F</b>	<b>MISO Total Actual Off-Peak Load (MWh) HE 24:00-7:00 M-F, 1:00-24:00 Sat/Sun</b>
Apr-10	22,582,168	19,090,397
May-10	22,295,404	23,695,462
Jun-10	27,987,874	23,557,652
Jul-10	29,637,558	28,508,475
Aug-10	31,068,413	27,304,084
Sep-10	24,494,317	21,545,455
Oct-10	22,302,563	22,081,767
Nov-10	23,037,445	22,050,413
Dec-10	28,551,945	25,269,184
Jan-11	26,636,621	27,779,155
Feb-11	24,435,275	22,826,992
Mar-11	26,162,109	22,894,566
Apr-11	22,451,301	21,428,071
May-11	23,336,477	22,977,036
Jun-11	24,761,465	20,431,053
Jul-11	26,523,747	28,317,385
Aug-11	27,938,625	22,463,366
Sep-11	21,468,891	19,913,209
Oct-11	20,515,548	20,412,158
Nov-11	20,893,785	19,811,694
Dec-11	22,123,247	21,412,438
Jan-12	21,371,271	22,327,643
Feb-12	20,684,659	19,204,079
Mar-12	20,255,512	18,834,881
Apr-12	18,608,396	17,692,308
May-12	21,183,365	19,783,742
Jun-12	23,294,321	21,353,603
Jul-12	27,154,353	26,263,498
Aug-12	25,947,082	20,674,768
Sep-12	18,688,705	20,760,799

Oct-12	21,180,419	17,867,505
Nov-12	19,977,195	19,159,254
Dec-12	19,852,393	22,428,894
Jan-13	22,882,824	21,785,184
Feb-13	20,420,398	19,521,272
Mar-13	20,548,334	21,311,262
<b>3-Year Avg</b>	<b>23,368,167</b>	<b>22,020,520</b>

In order to estimate the peak and off-peak loads for each MISO hub, NYMEX staff relied on load shares by state that were reported by MISO (Table 8).<sup>12</sup>

*Table 8. States' Shares of MISO Load*

State	Load Share (%)
Illinois	10.4
Indiana	15.5
Minnesota	13.8

Based on the percentages above, NYMEX staff calculated the monthly peak and off-peak loads for the Illinois Hub (Table 9), Minnesota Hub (Table 10), and Indiana Hub (Table 11).

*Table 9. Estimated Monthly Load for Illinois Hub*

Month/Year	MISO Illinois Actual Peak Load (MWh) HE 8:00-23:00 M-F	MISO Illinois Actual Off-Peak Load (MWh) HE 24:00-7:00 M-F, 1:00-24:00 Sat/Sun
Apr-10	2,348,545	1,985,401
May-10	2,318,722	2,464,328
Jun-10	2,910,739	2,449,996
Jul-10	3,082,306	2,964,881
Aug-10	3,231,115	2,839,625
Sep-10	2,547,409	2,240,727
Oct-10	2,319,467	2,296,504
Nov-10	2,395,894	2,293,243
Dec-10	2,969,402	2,627,995
Jan-11	2,770,209	2,889,032

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Feb-11	2,541,269	2,374,007
Mar-11	2,720,859	2,381,035
Apr-11	2,334,935	2,228,519
May-11	2,426,994	2,389,612
Jun-11	2,575,192	2,124,830
Jul-11	2,758,470	2,945,008
Aug-11	2,905,617	2,336,190
Sep-11	2,232,765	2,070,974
Oct-11	2,133,617	2,122,864
Nov-11	2,172,954	2,060,416
Dec-11	2,300,818	2,226,894
Jan-12	2,222,612	2,322,075
Feb-12	2,151,205	1,997,224
Mar-12	2,106,573	1,958,828
Apr-12	1,935,273	1,840,000
May-12	2,203,070	2,057,509
Jun-12	2,422,609	2,220,775
Jul-12	2,824,053	2,731,404
Aug-12	2,698,497	2,150,176
Sep-12	1,943,625	2,159,123
Oct-12	2,202,764	1,858,221
Nov-12	2,077,628	1,992,562
Dec-12	2,064,649	2,332,605
Jan-13	2,379,814	2,265,659
Feb-13	2,123,721	2,030,212
Mar-13	2,137,027	2,216,371
<b>3-Year Avg</b>	<b>2,430,289</b>	<b>2,290,134</b>

*Table 10. Estimated Monthly Load for Minnesota Hub*

<b>Month/Year</b>	<b>MISO Minnesota Actual Peak Load (MWh) HE 8:00-23:00 M-F</b>	<b>MISO Minnesota Actual Off-Peak Load (MWh) HE 24:00-7:00 M-F, 1:00-24:00 Sat/Sun</b>
Apr-10	3,116,339	2,634,475
May-10	3,076,766	3,269,974
Jun-10	3,862,327	3,250,956
Jul-10	4,089,983	3,934,170
Aug-10	4,287,441	3,767,964
Sep-10	3,380,216	2,973,273
Oct-10	3,077,754	3,047,284



Nov-10	3,179,167	3,042,957
Dec-10	3,940,168	3,487,147
Jan-11	3,675,854	3,833,523
Feb-11	3,372,068	3,150,125
Mar-11	3,610,371	3,159,450
Apr-11	3,098,280	2,957,074
May-11	3,220,434	3,170,831
Jun-11	3,417,082	2,819,485
Jul-11	3,660,277	3,907,799
Aug-11	3,855,530	3,099,945
Sep-11	2,962,707	2,748,023
Oct-11	2,831,146	2,816,878
Nov-11	2,883,342	2,734,014
Dec-11	3,053,008	2,954,916
Jan-12	2,949,235	3,081,215
Feb-12	2,854,483	2,650,163
Mar-12	2,795,261	2,599,214
Apr-12	2,567,959	2,441,539
May-12	2,923,304	2,730,156
Jun-12	3,214,616	2,946,797
Jul-12	3,747,301	3,624,363
Aug-12	3,580,697	2,853,118
Sep-12	2,579,041	2,864,990
Oct-12	2,922,898	2,465,716
Nov-12	2,756,853	2,643,977
Dec-12	2,739,630	3,095,187
Jan-13	3,157,830	3,006,355
Feb-13	2,818,015	2,693,936
Mar-13	2,835,670	2,940,954
<b>3-Year Avg</b>	<b>3,224,807</b>	<b>3,038,832</b>

*Table 11. Estimated Monthly Load for Indiana Hub*

<b>Month/Year</b>	<b>MISO Indiana Actual Peak Load (MWh) HE 8:00-23:00 M- F</b>	<b>MISO Indiana Actual Off-Peak Load (MWh) HE 24:00-7:00 M- F, 1:00-24:00 Sat/Sun</b>
Apr-10	3,500,236	2,959,012
May-10	3,455,788	3,672,797
Jun-10	4,338,120	3,651,436
Jul-10	4,593,821	4,418,814

Aug-10	4,815,604	4,232,133
Sep-10	3,796,619	3,339,546
Oct-10	3,456,897	3,422,674
Nov-10	3,570,804	3,417,814
Dec-10	4,425,551	3,916,724
Jan-11	4,128,676	4,305,769
Feb-11	3,787,468	3,538,184
Mar-11	4,055,127	3,548,658
Apr-11	3,479,952	3,321,351
May-11	3,617,154	3,561,441
Jun-11	3,838,027	3,166,813
Jul-11	4,111,181	4,389,195
Aug-11	4,330,487	3,481,822
Sep-11	3,327,678	3,086,547
Oct-11	3,179,910	3,163,884
Nov-11	3,238,537	3,070,813
Dec-11	3,429,103	3,318,928
Jan-12	3,312,547	3,460,785
Feb-12	3,206,122	2,976,632
Mar-12	3,139,604	2,919,407
Apr-12	2,884,301	2,742,308
May-12	3,283,422	3,066,480
Jun-12	3,610,620	3,309,808
Jul-12	4,208,925	4,070,842
Aug-12	4,021,798	3,204,589
Sep-12	2,896,749	3,217,924
Oct-12	3,282,965	2,769,463
Nov-12	3,096,465	2,969,684
Dec-12	3,077,121	3,476,479
Jan-13	3,546,838	3,376,704
Feb-13	3,165,162	3,025,797
Mar-13	3,184,992	3,303,246
<b>3-Year Avg</b>	<b>3,622,066</b>	<b>3,413,181</b>

### **Position Limit for the Dow Jones Mid-C Futures Contract**

The Dow Jones Mid-Columbia Electricity Price Index futures contract aggregates into itself. Thus, the position limit is determined for the contract in question and not another parent contract. The contract terms and conditions of the Mid-C futures contract state that Monday through Saturday are peak days. Therefore, it is assumed that a given calendar month has 26 peak days. With 26 peak days, the monthly deliverable supply is 1,474,430 MWh. Moreover, there are 16 peak hours each day, which reduces the monthly deliverable supply to 982,953 MWh. On a contract-equivalent basis (given a contract size of 80 MWh), the deliverable supply is 12,287 contracts. The spot-month speculative position limit for contract DO, which should be no greater than 25% of the deliverable supply, is recommended to be 2,500 contracts (20% of deliverable supply).

### **Position Limits for the Alberta Power Pool Daily and Monthly Futures Contracts**

The Alberta Power Pool daily and monthly futures contracts aggregate into themselves. Thus, the position limits should be determined for the contracts in question and not other parent contracts. The average monthly power demand in the Alberta Power Pool is 6,182,548 MWh, which is equivalent to 6,182,548 contracts (based on a contract size of 1 MWh). The position limit for the AOM contract, which should be no greater than 25% of the deliverable supply, should be set at 1,000,000 contracts (16% of deliverable supply). The daily demand is expected to be 206,084 MWh, assuming a 30 calendar days in the month. The daily deliverable supply is equivalent to 206,084 contracts (based on a contract size of 1 MWh). The position limit for the AOD contract, which is set at 25% of deliverable supply should be 35,000 contracts for the daily Alberta Power Pool futures contract (equivalent to 17% of deliverable supply).

### **Position Limits for the MISO Futures Contracts**

The MISO Illinois Hub and Minnesota futures contracts aggregate into themselves. Thus, the position limits should be determined for the contracts in question and not other parent contracts. For the Illinois Hub, the average monthly peak-hour load is 2,430,289 MWh, which is equivalent to 30,378 contracts (based on a contract size of 80 MWh). The spot-month limit for the OM contract, which should be no greater than 25% of deliverable supply, is recommended to be 7,000 contracts (23% of deliverable supply) for the MISO Illinois Hub Peak Calendar-Month LMP futures contract. The average monthly off-peak hour load is 2,290,134 MWh, which is equivalent to 458,026 contracts (based on a contract size of 5 MWh). The spot-month limit for the OJ contract, which is 25% of deliverable supply, should be set at 90,000 contracts (20% of deliverable supply) for the MISO Illinois Hub Off-Peak Calendar-Month LMP futures contract. For the Minnesota Hub, the average monthly peak-hour load is 3,224,807 MWh, which is equivalent to 40,310 contracts (based on a contract size of 80 MWh). The spot-month limit should be set at 10,000 contracts (25% of deliverable supply) for the LM contract. The average monthly off-peak hour load is 3,038,832 MWh, which is equivalent to 607,766 contracts (based on a contract size of 5 MWh). The spot-month limit should be set at 150,000 contracts (25% of deliverable supply) for the LJ contract.

The two off-peak daily Indiana Hub futures contracts aggregate into 5 MW monthly futures contracts. For the Indiana Hub, the average monthly off-peak hour load is 3,413,181 MWh, or 682,636 contracts. The spot-month limit should be no greater than 25% of deliverable supply.

Contract Code	Aggregates Into	Current Spot-Month Limit	Limit's Share of Deliverable Supply (%)
FDM	FDM	60,000	9
FAD (MISO Indiana Hub Day-Ahead Off-Peak Calendar-Day 5 MW Futures)	FDM	60,000	9
FTM	FTM	40,000	6
FTD (MISO Indiana Hub Real-Time Off-Peak Calendar-Day 5 MW Futures)	FTM	40,000	6

**Position Limits for the PJM, ISO-NE, and NYISO Futures Contracts**

The contracts to be amended aggregate into other futures contracts. Thus, the subject contracts take on the position limits of the subject futures contracts

Contract Code	Aggregate Into	Size of Parent (Total MWh)	Average Monthly Volume	Contract-Equivalent Deliverable Supply	Current Position Limit	Limit's Share of Deliverable Supply (%)
AOR	VP	971	2,525,809	2,601	400	15
CE	NI	850	5,655,266	6,653	200	3
IDO	KI	971	1,904,563	1,961	200	10
NOC	UO	971	4,116,983	4,240	500	12
OT	VM	850	6,404,379	7,534	1,100	15
PAP	D7	80	6,404,379	80,055	12,000	15
PEO	R7	5	2,525,809	505,162	75,000	15
PNO	L3	5	4,116,983	823,397	100,000	12
PNP	N3	80	4,350,772	54,385	5,000	9
PWO	E4	5	2,622,935	524,587	120,000	23
PWP	J4	80	7,108,868	88,861	7,000	8
WOR	JP	971	2,622,935	2,701	600	22
ZAO	KB	971	667,375	687	150	22
ZGO	KH	971	419,417	432	100	23
ZJO	KK	971	2,252,500	2,320	200	9
AN	KA	400	667,375	1,668	400	24
JN	KJ	400	2,252,500	5,631	400	7
PJN	UM	850	4,350,772	5,118	750	15
PJD	VM	850	6,404,379	7,534	1,100	15

## **Appendix E**

### **NYMEX Rulebook Chapter 5 Position Limit Table**

The position limits, accountability levels, reporting levels, and aggregation rules for the twenty-eight (28) electricity contracts are being amended in the NYMEX Rulebook Chapter 5 Position Limit Table, effective May 12, 2013, for the trade date May 13, 2013.

(Bold/underlining indicates additions; strikethrough indicates deletion)

**See Attached Excel File**