Christopher Bowen
Managing Director and Chief Regulatory Counsel
Legal Department

March 28, 2014

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: CFTC Regulation 40.2(a) Certification. Notification of New Product Listing of Crude Oil Weekly Option and Natural Gas Weekly Option Contracts.
NYMEX Submission No. 14-088

Dear Ms. Jurgens:

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 Crude Oil Weekly Option and Natural Gas Weekly Option contracts (collectively the "Contracts") for trading on the NYMEX trading floor and CME Globex effective on Sunday, April 13, 2014, for trade date Monday, April 14, 2014.

Pursuant to Commission Regulation 40.6(a), NYMEX is separately self-certifying block trading on these Contracts with a minimum threshold of 10 contracts in the Contracts in NYMEX Submission No. 14-105.

While the Exchange will list options for the four (4) nearest Friday expirations, for the initial listings only, the closest to expiry Friday will not be listed since it is an Exchange holiday. Thereafter, the Exchange will list the nearest four (4) Friday expirations.

The contract specifications are as follows:

Rule Chapter Number and Contract Title	Chapter 1011 Crude Oil Weekly Option
Commodity Code	LO1, LO2, LO3, LO4,LO5
Contract Size	1,000 barrels
First Listing	April 25, May 2, May 9, May 16
Listing Period	The nearest four Fridays
Termination of Trading	Options expire on Friday. If the Friday of the listing is a scheduled Exchange holiday, the option shall terminate on the first Business Day immediately preceding the Friday. However, if the first Business Day immediately preceding the Friday is the expiration of a Crude Oil monthly option, the weekly option shall not be listed for trading.
Minimum Price Fluctuation	$0.01 per barrel
Value per Tick	$10.00

1 North End Avenue New York, NY 10282 T 212 299 2200 F 212 299 2299 christopher.bowen@cmegroup.com cmegroup.com

Block Trade Minimum Threshold	10 contracts

Trading and Clearing Hours:

Open Outcry: Monday – Friday 9:00 a.m. – 2:30 p.m. (8:00 a.m. – 1:30 p.m. Chicago Time/CT).
CME Globex**:** 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).

Rule Chapter Number and Contract Title	Chapter 1012 Natural Gas Weekly Option
Commodity Code	ON1, ON2, ON3, ON4,ON5
Contract Size	10,000 MMBtu
First Listing	April 25, May 2, May 9, May 16
Listing Period	The nearest four Fridays
Termination of Trading	Options expire on Friday. If the Friday of the listing is a scheduled Exchange holiday, the option shall terminate on the first Business Day immediately preceding the Friday. However, if the first Business Day immediately preceding the Friday is the expiration of a Natural Gas monthly option, the weekly option shall not be listed for trading.
Minimum Price Fluctuation	$0.001per MMBtu
Value per Tick	$10.00
Block Trade Minimum Threshold	10 contracts

Trading and Clearing Hours:

Open Outcry: Monday – Friday 9:00 a.m. – 2:30 p.m. (8:00 a.m. – 1:30 p.m. Chicago Time/CT).
CME Globex**:** 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).

Fee Schedule:

Crude Oil Weekly Option and Natural Gas Weekly Option

Exchange Fees					
	Member Day	**Member**	**Cross Division**	**Non-Member**	**IIP**
Pit	$0.45	$0.70	$0.95	$1.45	
Globex	$0.45	$0.70	$0.95	$1.45	$0.95

1 North End Avenue New York, NY 10282 T 212 299 2200 F 212 299 2299 christopher.bowen@cmegroup.com cmegroup.com

Other Processing Fees			
	Member	Non-Member	
	House Acct	Customer Acct	
Options E/A Notice	$0.40	$0.85	**applies to physical options*

The Exchange is also notifying the CFTC that it is self-certifying the insertion of the terms and conditions for the Crude Oil Option and Natural Gas Weekly Option 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 Contracts. The terms and conditions establish the all month/any one month accountability levels, expiration month position limit, reportable level and aggregation allocation for the Contracts. (See Appendix B, attached under separate cover).

Exchange business staff responsible for the new products and the Exchange Legal Department collectively reviewed the designated contract market core principles ("Core Principles") as set forth in the Commodity Exchange Act ("CEA" or "Act"). 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 these 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: These Contracts are not readily subject to manipulation due to the deep liquidity and robustness in the respective underlying NYMEX Crude Oil futures and NYMEX Natural Gas futures markets which provide diverse participation and sufficient spot transactions.

- Compliance with Rules: Trading in these Contracts will be subject to the rules in Rulebook Chapter 4 which includes prohibitions against fraudulent, noncompetitive, unfair and abusive practices. Additionally, trading in these contracts will also be subject to the full panoply of trade practice rules, the majority of which are contained in Chapter 5 of the Rulebook. As with all products listed for trading on one of CME Group's designated contract markets, activity in these new products 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 limits for the Crude Oil Weekly Option and Natural Gas Weekly Option contracts are set to aggregate into the Crude Oil Futures and Natural Gas Futures contracts, respectively.

- Availability of General Information: The Exchange will publish information on the Contracts' specification 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.

1 North End Avenue New York, NY 10282 T 212 299 2200 F 212 299 2299 christopher.bowen@cmegroup.com cmegroup.com

- Execution of Transactions: The Contracts will be listed for trading on CME Globex and the NYMEX trading floor. The CME Globex platform provides a transparent, open, and efficient mechanism to electronically execute trades on screen. In addition, the NYMEX trading floor continues to be available as a trading venue and 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 these products.
- 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 these contracts 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 products are identified.
- Dispute Resolution: Disputes with respect to trading in these 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 Contracts comply with the Act, including regulations under the Act. There were no substantive opposing views to the listing of the Contracts.

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.

Sincerely,

/s/Christopher Bowen
Managing Director and Chief Regulatory Counsel

Attachments:	Appendix A:	Rule Chapters
	Appendix B:	Position Limit, Position Accountability, and Reportable Level Table in Chapter 5 of the NYMEX Rulebook (attached under separate cover)
	Appendix C:	Rule 588.H – Non-reviewable Range Table
	Appendix D:	Cash Market Overview and Analysis of Deliverable Supply

1 North End Avenue New York, NY 10282 T 212 299 2200 F 212 299 2299 christopher.bowen@cmegroup.com cmegroup.com

APPENDIX A

Chapter 1011
Crude Oil Weekly Option

1011100. SCOPE OF CHAPTER

This chapter is limited in application to weekly put and call options on the Light Sweet Crude Oil Futures contract. In addition to the rules of this chapter, transactions in the Crude Oil Weekly Option contract shall be subject to the general rules of the Exchange insofar as applicable.

1011101. OPTION CHARACTERISTICS

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

1011101.A. Trading Schedule

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

1011101.B. Trading Unit

A Crude Oil weekly call option traded on the Exchange represents an option to assume a long position in the nearest to expiry Light Sweet Crude Oil Futures contract. If expiration occurs after the Light Sweet Crude Oil Monthly option contract and on or before the first nearby Light Sweet Crude Oil Futures expiration, the contract will be exercisable into second closest to expiry Light Sweet Crude Oil Futures contract.

A Crude Oil Weekly put option traded on the Exchange represents an option to assume a short position in the nearest to expiry Light Sweet Crude Oil Futures contract. If expiration occurs after the Light Sweet Crude Oil Monthly option contract and on or before the first nearby Light Sweet Crude Oil Futures expiration, the contract will be exercisable into second closest to expiry Light Sweet Crude Oil Futures contract.

1011101.C. Price Increments

Prices shall be quoted in dollars and cents per barrel and prices shall be in multiples of $0.01 per barrel. The minimum price increment will be $0.01. A cabinet trade may occur at a price of $0.001 per barrel, or $1.00 per contract.

1011101.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

.

1011101.E. Termination of Trading

Options will expire at the close of trading on a Friday schedule. If such Friday falls on the expiration of a Crude Oil monthly option, the weekly option shall not be listed.

For the first (1st) weekly option of the month, if the first Friday of the listing is a scheduled Exchange holiday, the Crude Oil Weekly Option shall terminate on the first Business Day immediately preceding the Friday.

For the second (2nd) weekly option of the month, if the second Friday of the listing is a scheduled Exchange holiday, the Crude Oil Weekly Option shall terminate on the first Business Day immediately preceding the Friday.

For the third (3rd) weekly option of the listing, if the third Friday of the listing is a scheduled Exchange holiday, the Crude Oil Weekly Option shall terminate on the first Business Day immediately preceding the Friday

For the fourth (4th) weekly option of the listing, if the fourth Friday of the listing is a scheduled Exchange holiday, the Crude Oil Weekly Option shall terminate on the first Business Day immediately preceding the Friday

1011101.F. Type Option

The option is an American-style option which can be exercised on any Business Day prior to and until expiration day. Notwithstanding Rule 300, Crude Oil Weekly Option contracts will be exercised automatically as of the settlement price of the underlying futures contract, with no contrary instructions. All options at least one minimum price increment in-the-money will be exercised and all options with zero intrinsic value will be abandoned.

1011102. EXERCISE PRICES

(A) On the first Business Day of trading in a Crude Oil Weekly Option contract, trading shall be at the following strike prices: (i) the previous day's settlement for the underlying Light Sweet Crude Oil Futures contract rounded off to the nearest fifty-cent increment strike price, unless such settlement price is precisely midway between two fifty-cent strike prices, in which case it shall be rounded off to the lower fifty-cent increment strike price and (ii) the twenty fifty cent increment strike prices which are twenty increments higher than the strike price described in (i) of this Rule and (iii) the twenty fifty-cent increment strike prices which are twenty increments lower than the strike price described in (i) of this Rule and (iv) an additional ten strike prices for both call and put options will be listed at $2.50 increments above the highest fifty-cent increments as described in (ii) of this Rule beginning with the first available such strike that is evenly divisible by $2.50 and (v) an additional ten strike prices for both put and call options will be listed at $2.50 increments below the lowest fifty-cent increment as described in (iii) of this Rule, beginning with the first available such strike that is evenly divisible by $2.50.

(B) Thereafter, on any Business Day prior to the expiration of the Crude Oil Weekly 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 ($0.50) increment and ten two dollar and fifty cent ($2.50) strike prices strike prices above and below the at-the-money strike price available for trading in all Crude Oil Weekly Options. 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 Crude Oil Weekly 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 weekly option, the number of new strike prices which will be introduced on each Business Day or the period preceding the expiration of a Crude Oil Weekly Option in which no new strike prices may be introduced.

Chapter 1012
Natural Gas Weekly Option

1012100. SCOPE OF CHAPTER

This chapter is limited in application to weekly put and call options on the Henry Hub Natural Gas Futures contract. In addition to the Rules of this chapter, transactions in the Natural Gas Weekly Option contract shall be subject to the general Rules of the Exchange insofar as applicable.

1012101. OPTION CHARACTERISTICS

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

1012101.A. Trading Schedule

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

1012101.B. Trading Unit

A Natural Gas Weekly call option traded on the Exchange represents an option to assume a long position in the nearest to expiry Henry Hub Natural Gas Futures contract. If expiration occurs after the Natural Gas Monthly option contract and on or before the first nearby Henry Hub Natural Gas Futures expiration, the contract will be exercisable into second closest to expiry Henry Hub Natural Gas Futures contract.

A Natural Gas Weekly put option traded on the Exchange represents an option to assume a short position in the nearest to expiry Henry Hub Natural Gas Futures contract. If expiration occurs after the Natural Gas Monthly option contract and on or before the first nearby Natural Gas Futures expiration, the contract will be exercisable into second closest to expiry Henry Hub Natural Gas Futures contract.

1012101.C. Price Increments

Prices shall be quoted in dollars and tenths of a cent per MMBtu and prices shall be in multiples of $0.001 per MMBtu. The minimum price increment will be $0.001. A cabinet trade may occur at a price of $0.0001 per MMBtu, or $1.00 per contract.

1012101.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.

1012101.E. Termination of Trading

Options will expire at the close of trading on a Friday schedule. If such Friday falls on the expiration of a Natural Gas monthly option, the weekly option shall not be listed.

For the first (1st) weekly option of the month, if the first Friday of the listing is a scheduled Exchange holiday, the Natural Gas Weekly Option shall terminate on the first Business Day immediately preceding the Friday.

For the second (2nd) weekly option of the month, if the second Friday of the listing is a scheduled Exchange holiday, the Natural Gas Weekly Option shall terminate on the first Business Day immediately preceding the Friday.

For the third (3rd) weekly option of the listing, if the third Friday of the listing is a scheduled Exchange holiday, the Natural Gas Weekly Option shall terminate on the first Business Day immediately preceding the Friday.

For the fourth (4th) weekly option of the listing, if the fourth Friday of the listing is a scheduled Exchange holiday, the Natural Gas Weekly Option shall terminate on the first Business Day immediately preceding the Friday.

1012101. F. Type Option

The option is an American-style option which can be exercised on any Business Day prior to and until expiration day. Notwithstanding Rule 300.08, Natural Gas Weekly Option contracts will be exercised automatically as of the settlement price of the underlying futures contract, with no contrary instructions. All options at least one minimum price increment in-the-money will be exercised and all options with zero intrinsic value will be abandoned.

1012102. EXERCISE PRICES

(A) On the first Business Day of trading in a Natural Gas Weekly Option contract, trading shall be at the following strike prices: (i) the previous day's settlement for the underlying Henry Hub Natural Gas futures contract rounded off to the nearest five-cent increment strike price, unless such settlement price is precisely midway between two five-cent strike prices, in which case it shall be rounded off to the lower five-cent increment strike price and (ii) the twenty fifty cent increment strike prices which are twenty five-cent increments higher than the strike price described in (i) of this Rule and (iii) the twenty five-cent increment strike prices which are twenty increments lower than the strike price described in (i) of this Rule and (iv) an additional ten strike prices for both call and put options will be listed at $.250 increments above the highest five-cent increments as described in (ii) of this Rule beginning with the first available such strike that is evenly divisible by $.25 and (v) an additional ten strike prices for both put and call options will be listed at $.25 increments below the lowest five-cent increment as described in (iii) of this Rule, beginning with the first available such strike that is evenly divisible by $.25.

(B) Thereafter, on any Business Day prior to the expiration of the Natural Gas Weekly 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 five-cent increment strike prices and ten $.25 increment strike prices 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 Natural Gas Weekly 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 a Natural Gas Weekly Option in which no new strike prices may be introduced.

APPENDIX B

NYMEX Rulebook Chapter 5 Position Limit Table

(Attached under separate cover)

APPENDIX C

Rule 588.H Globex Non-Reviewable Ranges

Instrument	Bid/Ask Reasonability	Non-Reviewable Range (NRR)
Crude Oil Weekly Options	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 $0.10	20% of premium up to ¼ of the underlying futures non-reviewable range with a minimum of 1 tick.
Natural Gas Weekly Options	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 $0.05	20% of premium up to ¼ of the underlying futures non-reviewable range with a minimum of 1 tick.

APPENDIX D

Cash Market Overview and Analysis of Deliverable Supply

Crude Oil Weekly Option

New York Mercantile Exchange, Inc. ("NYMEX" or "Exchange") is intending to launch a Crude Oil Weekly Option, contract for trading on CME Globex and the NYMEX trading floor.

Contract	Commodity Code	Rule Chapter
Crude Oil Weekly Option	LO1-LO5	1011

I. Methodology and Data Sources: Key Components of Estimated Deliverable Supply

In estimating deliverable supply for the WTI contract and relying on Commission long-standing precedent, the key component of estimated deliverable supply is the portion of typical production and supply stocks that could reasonably be considered to be reliably available for delivery. Accordingly, there are three components NYMEX considered in updating the existing deliverable supply estimates of the Domestic Light Sweet Common Stream Crude Oil for the Cushing, Oklahoma delivery location:

(1) Crude Oil Production;

(2) Crude Oil Flows to the delivery area; and

(3) Crude Oil Storage in the delivery area.

A. Crude Oil Production

For production, NYMEX used information collected by the U.S. Department of Energy ("DOE") Energy Information Administration ("EIA"), which is a definitive source for this information. Other information is, in part, available from other sources as well, particularly at the state level from either energy or tax revenue authorities. We have chosen to rely on the EIA data alone because it constitutes a single source, employing common standards, across each state. The EIA data are highly regarded but they do not provide sufficient breakdown on the quality characteristics of the oil production to determine the subset of total production that would qualify as Domestic Light Sweet under the terms of the futures contract.

B. Crude Oil Flows to the Cushing Delivery Area

To determine the flows of Domestic Light Sweet crude oil into the delivery area, NYMEX consulted with industry executives and professionals from pipeline and storage terminal operators in Cushing as well as other major industry participants. It is noteworthy that the estimates provided here are materially less than the production that can readily access the delivery mechanism and which *could* be delivered due to the fact that the sources we used were specifically knowledgeable about *actual* Cushing deliveries. Thus, the information provided is not what *could be* delivered — the standard which is in accordance with Commission's policy and precedent — but what actually *is* delivered. The Exchange believes that the Cushing delivery mechanism for light sweet crude oil and corresponding commercial secondary market constitutes such a sophisticated and highly-developed commercial market mechanism that, at any time, the actual flows to and stocks in the delivery area represent precisely the deliverable supply sufficient to support the mechanism. In other words, even though at any time there is additional production that *could* be delivered to the delivery mechanism, we are only including what *actually* flows in our estimate of deliverable supply.[1]

C. Crude Oil Storage in the Cushing Delivery Area

Storage data are provided on a weekly basis by EIA. Details are provided for the U.S., Petroleum Administration for Defense Districts ("PADDs") and Cushing. There are five PADDs and, in some cases, they correspond to broad regions. PADD 2 broadly includes the Midwest; PADD 3 broadly includes U.S. Gulf Coast states and New Mexico; PADD 4 contains the Rocky Mountain States excluding New Mexico. Cushing is the only single location where crude oil official inventory numbers are collected and publicly disseminated on a regular basis anywhere in the world. The actual geographic market that is consistently most applicable to the NYMEX crude oil futures contract would, therefore, include much of PADD 2, not just Cushing.

[1] We recognize that not including all production that could reasonably and readily access the delivery point represents a departure from the Commission's stated methodology; but, since the Cushing secondary market is so sophisticated and highly-developed that it regularly supports physical delivery quantities that are more than 10 times greater than the quantity of physical throughput , such departure seems to introduce no material impairment in determining a reasonable deliverable supply that supports the physical delivery needs of the physical market. We are not suggesting that such departure be regularly applied in estimating deliverable supply for commodity markets; in fact, we can think of no other market where we would recommend doing so.

Nonetheless, NYMEX includes only inventories reported at Cushing, so these underestimate relevant storage. As with production, EIA does not provide details on the quality characteristics of stored crude oil, but the industry experts with whom NYMEX consulted consistently estimated that 60% to 70% of the oil stored at Cushing qualified as Domestic Light Sweet Common Stream, (with a notable leaning towards 70%).

II. The Cushing Physical Delivery Mechanism: Scope of Deliverable Oil

The Cushing physical delivery mechanism is comprised of a network of nearly two dozen pipelines and 10 storage terminals, several with major pipeline manifolds. Two of the storage facilities — Enterprise and Enbridge — and their pipeline manifolds are the core of the Cushing physical delivery mechanism.[2] Physical volumes delivered against the WTI Contract within the Enterprise and Enbridge systems are at par value. Any deliveries made on futures contracts elsewhere in Cushing require the Seller to compensate the Buyer for the lower of the transportation netbacks from these facilities to where the delivery occurs. Detailed information about the inflowing and outflowing pipelines is contained below in Table 2.

Terminating obligations in the WTI Contract are fulfilled by delivering any of six "Domestic Production Streams of crude oil: West Texas Intermediate ("WTI"); Low Sweet Mix ("Scurry Snyder"); New Mexican Sweet; North Texas Sweet; Oklahoma Sweet; and South Texas Sweet. Additionally, a seventh stream, defined as "The Domestic Common Stream" transported by Enterprise Products' (formerly Teppco Pipeline), is also deliverable. Market participants commonly refer to the combination of all of the deliverable streams, including the Domestic Common Stream, as "WTI." Furthermore, the flow of each of these sweet crude streams is also commonly referred to as "Domestic Common Stream" within the complex that comprises the Cushing delivery mechanism, as well as in the WTI physical market which calls for delivery in the Cushing delivery mechanism.

[2] Three of the major sources for the cash-market information we provide in this analysis come from Plains All America, Enterprise and Enbridge. Enterprise oversees the vast majority of deliveries in the Cushing Delivery Market and, as indicated, Enterprise and Enbridge are the core delivery mechanism operators. Plains and Enbridge account for about 60% of the storage available at Cushing.

III. Physical Market Trading Structure and Term Contracts

A. Physical Market Trading Structure

Typically, there is a chronology of sales and purchases of crude oil in the onshore U.S. market that starts with a sale from producer and finishes with a purchase by an end-user to consume the crude oil. First-sales are from producers to aggregators or other middleman-type firms with delivery at the property where it is produced. The first-sale buyer transports oil downstream from the point of sale. Usually the first-sale buyer resells the oil to someone other than the end-user but sometimes sells directly to the end-user.

Final sales are sales to end-users who when they consume the oil remove it from the supply chain. End-users, however, also resell oil. Such end-user re-sales sometimes occur during the same commercial cycle in which they purchased it; other times, they occur during a later commercial cycle after the oil has been stored for a period of time. Like end-users, other buyers of oil also can either resell it immediately or store it first for some period of time and then resell it later. Thus, it is a common commercial practice that the first-sale and multiple subsequent re-sales occur in the same delivery cycle.

As discussed above, the Cushing delivery market is essentially a major reseller market where buyers either: resell the oil to someone else; store the oil and resell it later; store the oil and then consume it later; or transport it to consume it. The Cushing market is essentially downstream of first-sales. Most of the sales in the Cushing market are for resale and not for either storage or final-sale; in fact, the physical market in "WTI," in which the standard form of delivery is within the pipeline system at Cushing, is estimated to be 10-20 times the multiple of "WTI" oil that flows to Cushing. As such, it is clear that most sales are for resale because they constitute the selling, over-and-over (thus, *re*-selling), of the base physical oil that flows to Cushing. *Argus Media* documents about 5-8 times the flow in "WTI" sales but does not capture all of the sales.[3]

[3] The commercial market for physical delivery of light sweet crude oil in Cushing is a *secondary* (or *spot*) market mechanism. The number of physical deliveries in this market each month is 240 million barrels and higher (240,000 futures contracts equivalent and higher).

B. Term Contracts

The Exchange has spoken with and interviewed a number of market participants regarding common commercial practices with respect to the use of term contracts in the U.S. onshore crude oil market.[4] The responses we received were consistent and they can be summarized as follows:

- Almost all first-sales of production are sold term; as discussed in the previous section, typically for delivery on the property where it is produced (or nearest gathering pipeline or holding tank), and typically to middleman-firms or aggregators. These middleman-firms typically resell the crude oil to other middleman-firms (or participants performing that function) or to end-users. Typically, the first-sales contracts are "evergreen" contracts that can be discontinued by either party with notice. NYMEX is including evergreen contracts in the "term contracts" category.
- There are no restrictions applied to the resale of crude oil bought first-sale on a term basis from producers. In fact, that would clearly not be applicable because sales are typically to aggregators or others acting in a middleman-firm role with the expressed responsibility of reselling the oil.
- The Cushing market is downstream of first-sales; in other words, Cushing is downstream of any term sales from producers. Thus, even if barrels were sold term by the producer, in the Cushing market those barrels are re-sold and re-delivered by either the purchaser from the producer or a subsequent purchaser from that original purchaser. The Cushing market mechanism, which consists of trading and physical delivery of light sweet crude oil, is a commercial secondary (or *spot*) market which is extremely liquid, comprised of broad participation and results in a substantial quantity of physical delivery of crude oil.
- Terms sales do not result in reducing the deliverable supply for Cushing. Market participants all agreed that crude oil purchased on a term sale is available for resale, including in the Cushing

[4] These include: Plains All America, a major Midcontinent aggregator and marketer and operator of pipeline and storage terminals including in Cushing; Enterprise, a Midcontinent aggregator and marketer and operator of pipeline and storage terminals, including in Cushing; JSK Consulting, the principal of which is a seasoned Midcontinent oil market participant and professional with 40 years of experience in trading, operating transportation and storage in Cushing, and refining; a major international oil aggregator, marketer and refiner who is heavily active in the Cushing market and has requested anonymity; and an Energy Market Participant Group of several dozen market participants organized through Hunton & Williams LLP to discuss and comment on Regulatory issues.

market, and that all market participants downstream of first-sales participate in the market for resale.

- Our sources expressly advised us that any production sold long-term was available for re-sale and this is especially the case in the Cushing market.

C. Data for Crude Oil Production

In the five-year of 2008-2012, the average production of crude oil available to the U.S. Midcontinent[5] was approximately 75.5 million barrels per month. Based on discussions with industry participants, our estimate of the portion of that average production which would qualify as Domestic Light Sweet Common Stream is 50% and higher— i.e., 37.8 million barrels and higher. The 37.8 million barrels converts into 37,800 contracts equivalent of the WTI Contract.

Table 1A in the Appendix provides monthly production data available to the U.S. Midcontinent from January 2008 through 2013. It shows that production has been steadily growing in recent years and this trend is expected to continue. Overall, US domestic crude oil production increased by 790,000 barrels per day between 2011 and 2012 alone, the largest increase in annual output since the beginning of U.S. commercial crude oil production in 1859. The EIA expects U.S. crude oil production to continue rising on increasing drilling in tight rock formations located in North Dakota and Texas[6]. EIA estimates that total U.S. oil production will increase from 6.89 million b/d in November 2012 to 8.15 million b/d in December 2014.

In addition to growing production over the past five years onshore in the U.S., production has also increased in Canada over the past decade. Canadian oil is not currently deliverable under the Domestic Light Sweet Crude Oil futures contract and we have not included any of it in any of our deliverable supply estimates. However, Canadian oil flows to the U.S. Midcontinent, including Cushing, and this flow is anticipated to increase over the foreseeable future. It is entirely foreseeable that, in the near future, industry practice will lead to Canadian Syncrude, which is sweet, becoming part of the Domestic Common

[5] The production listed here includes: North Dakota, South Dakota, Montana, Wyoming, Colorado, New Mexico, Onshore Texas, Oklahoma, Kansas, Nebraska and Missouri.

[6] http://www.eia.gov/forecasts/steo/special/pdf/2013_sp_02.pdf

Stream. In such a circumstance, it could be deliverable under the WTI Contract and become part of deliverable supply.

Production in Canada is expected to grow substantially over the next decade. Table 1B in the Appendix provides production data for Western Canada. Alberta is the predominant producer and the predominant Canadian source for oil that has been delivered to Cushing. Light sweet crude oil from Canada is predominantly synthetic crude and its production rose from about 500,000 barrels per day in 2005 to 804,000 barrels per day in 2012.

As indicated above, the production data are provided not as direct inputs to deliverable supply, but to: 1) demonstrate that production levels are more than sufficient to support the actual flows of deliverable product to the delivery location; and 2) demonstrate that deliverable supply is likely to be increasing in the near future because of the on-going increases in both production that is currently eligible to deliver and that is qualitatively close to eligible product but not currently eligible to deliver.

D. Data for Crude Oil Flows to the Cushing Delivery Area

Over the last three years, pipeline capacity for delivering crude oil to Cushing increased by about 815,000 b/d according to the EIA[7]. The key development was the construction of the 590,000 b/d TransCanada Keystone pipeline that originates in Hardisty, Alberta, Canada. Phase 1 of the Keystone pipeline, which runs from Hardisty to Steele City, Nebraska, and on to Patoka, Illinois, was completed in June 2010. Phase 2 of the Keystone pipeline, which extended the pipeline from Steele City to Cushing, was completed in February 2011.

Until mid-2012, there was only one pipeline that could deliver crude oil from the Midwest to the Gulf Coast. The 96,000-bbl/d ExxonMobil Pegasus pipeline between Patoka, Illinois and Nederland, Texas originally shipped crude oil northward. The pipeline was reversed in 2006 in order to ship Canadian heavy oil to the Gulf Coast

Currently, there is approximately 1.8 million b/d of inflow pipeline capacity to Cushing and 1.455 million barrels per day of outflow capacity. In addition, 77.8 million barrels of storage capacity exists in the Cushing area which continues to grow steadily. It is anticipated that the outflow capacity will increase by

[7] http://www.eia.gov/forecasts/steo/special/pdf/2013_sp_02.pdf

500,000 to 1 million barrels per day over the next several years with the construction of pipeline additions flowing oil to the U.S. Gulf.

Based on information provided by pipeline and storage terminal operators, actual flows of oil to Cushing have ranged from 1.125 to 1.275 million barrels per day in recent years, with Domestic Light Sweet Common Stream Crude Oil averaging between 665,000 and 750,000 barrels per day.[8] On a 30-day monthly basis, this computes into 19.95 to 22.5 million barrels per month which converts into 19,950 to 22,500 of WTI contract equivalents of deliverable supply. Table 2 in the Appendix provides specific details of pipeline flows into and out of Cushing. We note that we asked operators of pipeline terminals in Cushing if they would share specific data on flows of Domestic Light Sweet Common Stream Crude Oil stored at their facilities and they responded that such data were confidential.

The Exchange collects this information periodically but not on either an on-going or scheduled basis. As indicated above, we did collect it when we updated the deliverable supply estimates in 2006 and 2011; and we collected it again in February 2013. Consequently, we are unable to provide a five year average of these data but we believe that an average of the 2006, 2011 and 2013 actual flows data would be very close to an actual five year average (if we were able to calculate it). The average of the 2006, 2011 and 2013 data is 17,850 to 21,800 contract equivalents.

E. Data for Crude Oil Storage in the Cushing Delivery Area

Table 3 in the Appendix provides the weekly Cushing storage calculation starting with January 2008 and continuing through January 2013. During that time period, inventories averaged over 32 million barrels and ranged from about 16 to 48 million barrels. Inventories ended 2012 at a record-high of 48.18 million barrels. Based on the lower end of the estimates, since January 2008, the contract equivalent of the WTI Contract stored in the delivery location was 15,594. NYMEX asked operators of storage in Cushing if

[8] The sources were: Plains All America, an aggregator and marketer of crude oil production and pipeline and storage terminal operator at Cushing; Enterprise, an aggregator and marketer of crude oil production and pipeline and storage terminal operator at Cushing; Enbridge, a pipeline and storage terminal operator at Cushing; and JSK Consulting, the principal of which is a seasoned Midcontinent oil market participant and professional with 40 years of experience in trading, operating transportation and storage in Cushing, and refining.

they would share specific data on quantities of Domestic Light Sweet Common Stream Crude Oil stored at their facilities and they responded that such data were confidential.

As of September 30, 2012, EIA reports that shell storage capacity at Cushing was 77.8 million barrels and working capacity was 55.008 million barrels.[9] Based on additional information from industry sources, we expect total shell capacity to increase to more than 80 million barrels by year-end 2013.

Currently, there is substantial excess working capacity at Cushing (nearly 18 million barrels) and, based on growth rates in the use of storage since 2009, there would be even more excess working capacity after the additions are completed in 2013. Finally, it should be noted that, at least on a temporary basis that can last several months, storage can exceed working capacity and it is common for an individual tank to reach 85-90% of shell capacity (which exceeds the 83% average underlying the EIA estimates).

The Exchange has estimated the average weekly storage of Domestic Light Sweet crude oil in Cushing for the 5 year period beginning January 1, 2008 and ending December 31, 2012; it is 32,486,000 barrels of oil, which converts into 32,486 contract equivalents of WTI contracts. The Exchange has further evaluated both operational practices at storage facilities as well as commercial practices by customers of storage facilities to determine if some components of inventoried product could rightfully be considered *not* to be readily deliverable.

With respect to operational practices, based on discussions with some industry experts, the Exchange conservatively estimates that 6.75% of stored product, on average, is required for operational minimums.[10] This converts into an estimated 2,193,000 barrels of Domestic Light Sweet crude oil based on the 5 year average storage level (2,193 contract equivalents); so we subtract this amount from the estimated average storage from 2008 through 2012. The adjusted estimate due to subtracting operational minimums is 30,293 contract equivalents.

[9] http://www.eia.gov/petroleum/storagecapacity/table2.pdf. Shell capacity is defined by EIA as the design capacity of a petroleum storage tank which is always greater than or equal to working storage capacity.

[10] We have been advised that, for older tanks, the operational minimum is 9% and, for newer tanks, it is 4.5%. Our assessment is that the majority of tanks at Cushing would qualify as newer. Nonetheless, to be conservative, we have applied the mid-point percentage—6.75%-- for all of Cushing.

With respect to commercial practices, the Exchange specifically sought whether storage customers were expressly allotting any stored barrels at Cushing for refining and was, therefore, unavailable for secondary market delivery. We consistently heard from market participants that was not the case; that barrels stored at Cushing are not specifically targeted for scheduled refining. Rather, refiners typically store barrels targeted for scheduled refining in tanks on the premises at their respective refineries or at other storage facilities. However, we did hear from one refiner that they keep barrels stored at Cushing for the contingency that there could be some unexpected interruption in their refinery supply; and, rather than refine the barrels stored at Cushing, they use them to trade for other barrels they would refine. We are adjusting for this *contingency storage* in our estimate of deliverable supply by subtracting it. We estimate this quantity to be 2 million barrel (or 2,000 contract equivalents) of Domestic Light Sweet crude oil. Therefore, the corresponding adjustment to the average Domestic Light Sweet crude oil stored from 2008 through 2012 (adjusted for operational minimums and contingency storage) is 28,293 contract equivalents.

ANALYSIS OF DELIVERABLE SUPPLY

Combining the average for 2006, 2011 and 2013 of industry-based estimates of physical flow of deliverable oil to the delivery area each month with the average industry-based estimates of deliverable oil stored in the delivery area between 2007 and 2012 (adjusted downwards for operational minimums and *contingency* storage) yields: 17,850 to 21,800 contracts equivalent plus 28,293 which ranges from 46,143 to 50,093 contract equivalents. The mid-point of this range, which is based on estimated 5-year averages for physical flows and storage, is 48,100 contract equivalents, which is our estimated deliverable supply.

Therefore, the current spot month position limit for the WTI Crude Oil Futures contract of 3,000 contracts is equivalent to 6% of the total monthly deliverable supply. It is requested that the spot month position limit for the Crude Oil Weekly Option contract aggregate into the WTI Crude Oil Futures contract.

APPENDIX

Table 1A
U.S. Midcontinent Oil Production[11][12]
(Thousands of Barrels per Month)

Jan-2008	62,115
Feb-2008	57,884
Mar-2008	63,368
Apr-2008	60,737
May-2008	63,303
Jun-2008	61,145
Jul-2008	63,687
Aug-2008	64,283
Sep-2008	61,180
Oct-2008	65,749
Nov-2008	64,707
Dec-2008	65,225
Jan-2009	64,590
Feb-2009	59,749
Mar-2009	64,066
Apr-2009	62,737
May-2009	64,009
Jun-2009	62,204
Jul-2009	63,419
Aug-2009	62,484
Sep-2009	62,924
Oct-2009	64,284
Nov-2009	63,738

[11] The production listed here includes North Dakota, South Dakota, Montana, Wyoming, Colorado, New Mexico, Onshore Texas, Oklahoma, Kansas, Nebraska and Missouri.

[12] http://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbbl_m.htm

Dec-2009	64,321
Jan-2010	64,386
Feb-2010	60,927
Mar-2010	67,554
Apr-2010	66,603
May-2010	68,783
Jun-2010	67,465
Jul-2010	70,386
Aug-2010	71,112
Sep-2010	70,248
Oct-2010	73,126
Nov-2010	72,872
Dec-2010	75,731
Jan-2011	76,474
Feb-2011	67,222
Mar-2011	78,673
Apr-2011	76,850
May-2011	80,717
Jun-2011	79,793
Jul-2011	84,127
Aug-2011	87,187
Sep-2011	86,987
Oct-2011	92,475
Nov-2011	93,326
Dec-2011	96,650
Jan-2012	91,735
Feb-2012	87,799
Mar-2012	95,468
Apr-2012	95,516

May-2012	101,190
Jun-2012	99,688
Jul-2012	104,498
Aug-2012	107,508
Sep-2012	106,831
Oct-2012	112,296
Nov-2012	109,604
Average	**75,487**

Table 1B
Western Canada Crude Oil Production
(Thousand Barrels per Day)[13]

CONVENTIONAL	2008	2009	2010	2011	2012
Total Light and Medium	589	563	569	606	702
Net Conventional Heavy to Market	350	308	309	312	323
TOTAL CONVENTIONAL	**939**	**871**	**878**	**917**	**1025**
OIL SANDS					
Upgraded Light (Synthetic)[1]	557	646	660	705	804
Oil Sands Heavy [2]	916	996	1,162	1,296	1310
TOTAL OIL SANDS AND UPGRADERS	**1,473**	**1,642**	**1,822**	**2,001**	**2,115**
Total Light Supply	1,146	1,209	1,229	1,311	1,506
Total Heavy Supply	1,266	1,304	1,471	1,608	1,633
WESTERN CANADA OIL SUPPLY	**2,412**	**2,513**	**2,700**	**2,918**	**3,139**

Notes:
1. Includes upgraded conventional
2 Includes: a) imported condensate b) manufactured diluent from upgraders and c) upgraded heavy volumes coming from upgraders

[13] http://www.capp.ca/forecast/Pages/default.aspx

Table 2
Crude Oil Flows to Cushing
(Barrels/Day)[14]

Outgoing Pipelines	**Capacity (B/D)**	**Owner**
Seaway Pipeline	400,000	Enterprise
BP (to Chicago)	200,000	BP
Occidental Centurion	60,000	Occidental
Ozark (to Wood River, IL)	225,000	Enbridge
Osage (to Eldorado, KS)	135,000	Magellan / NCRA
Plains (to Coffeyville, KS)	125,000	Plains
ConocoPhillips (to Ponca City, OK)	102,000	ConocoPhillips
ConocoPhillips (to Borger, TX)	53,000	ConocoPhillips
PAA Red River Pipeline	30,000	Plains All America
Sun (to Tulsa)	55,000	Sunoco
West Tulsa (to Tulsa)	50,000	Enbridge
Eagle	20,000	Blue Knight
TOTAL ESTIMATE	**1.455 Million B/D**	

Incoming Pipelines	**Capacity**	**Owner**	**Estimated Flows (in Barrels/Day)**
Keystone XL Pipeline	590,000	Transcanada	200,000 to 225,000 BD (Heavy sour)
Basin Pipeline	450,000	Plains	400,000 to 440,000 (75% WTI)
Occidental Pipeline	120,000	Occidental	100,000 to 120,000 (100% WTI)
Spearhead Pipeline	240,000	Enbridge	120,000 to 140,000 (Canadian sour)
White Cliffs Pipeline	70,000	SemGroup	65,000 to 70,000 (100% WTI)
Plains Oklahoma Pipeline	100,000	Plains	90,000 to 100,000 (100% WTI)
Cherokee Pipeline	50,000	Plains	40,000 to 50,000 (100% Sour)
Ark City Pipeline	30,000	SemGroup	25,000 to 30,000 (100% WTI)
MV Magellan Pipeline	30,000	SemGroup	25,000 to 30,000 (100% WTI)
Midcontinent Pipeline	50,000	Sunoco	45,000 to 50,000 (100% WTI)
Bakken Crude via Rail	90,000	Various	15,000 to 20,000 (100% WTI)
TOTAL ESTIMATE	**1.820 Million B/D**		**1,125,000 to 1,275,000**

Estimated WTI inbound flows of 665,000 B/D to 750,000 B/D (Monthly 19.95 to 22.5 Million Barrels)

[14] Sources: Enterprise Products, Plains All American Pipeline Company, JSK Consulting, and other industry sources. Please note this table was prepared in February 2013.

Table 3 Cushing Storage[15]

Average of Weekly Stocks Thousand Barrels		
Year	Month	
2008	Jan	16,416
	Feb	16,660
	Mar	17,752
	Apr	18,588
	May	20,864
	Jun	20,864
	Jul	19,658
	Aug	18,113
	Sep	15,864
	Oct	15,594
	Nov	20,067
	Dec	26,778
2009	Jan	33,239
	Feb	34,560
	Mar	32,509
	Apr	29,628
	May	29,773
	Jun	28,697
	Jul	31,449
	Aug	32,471
	Sep	28,366
	Oct	25,547
	Nov	28,923
	Dec	34,177
2010	Jan	33,780
	Feb	30,451
	Mar	30,477
	Apr	33,668
	May	37,621
	Jun	36,950
	Jul	36,807
	Aug	36,692
	Sep	34,895
	Oct	34,274
	Nov	33,256

[15] http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=W_EPC0_SAX_YCUOK_MBBL&f=W

	Dec	36,272
2011	Jan	37,546
	Feb	37,769
	Mar	40,592
	Apr	41,154
	May	40,409
	Jun	38,049
	Jul	36,882
	Aug	33,754
	Sep	31,585
	Oct	31,324
	Nov	31,621
	Dec	30,339
2012	Jan	29,037
	Feb	32,237
	Mar	38,651
	Apr	41,619
	May	45,725
	Jun	47,596
	Jul	46,162
	Aug	44,895
	Sep	43,874
	Oct	43,912
	Nov	44,657
	Dec	48,177
Average		**32,486**

Cash Market Overview and Analysis of Deliverable Supply

Natural Gas Oil Weekly Option

New York Mercantile Exchange, Inc. ("NYMEX" or "Exchange") is intending to launch a Natural Gas Weekly Option, contract for trading on CME Globex and the NYMEX trading floor.

Contract	Commodity Code	Rule Chapter
Natural Gas Weekly Option	ON1-ON5	1012

Methodology and Data Sources: Key Components of Estimated Deliverable Supply

In estimating Henry Hub deliverable supply we relied on Commission long-standing precedent, which provides that the key component in estimating deliverable supply is the portion of typical production and supply stocks that could reasonably be considered to be reliably available for delivery.

Accordingly, there are three factors NYMEX considered in updating the existing Henry Hub deliverable supply estimates:

(1) Natural gas production that can flow to the delivery location;

(2) Delivery capacity of the delivery mechanism; and

(3) Storage information.

While we considered all of the above factors, the determination of deliverable supply with respect to the Henry Hub has historically been subject to being defined by the delivery capacity of the delivery mechanism; in other words, delivery capacity has historically served as a constraint that defines deliverable supply. As detailed below, due to the fact that production levels and stored product with ready access exceed delivery capacity, this continues to be the case.

Natural Gas Production

To determine production estimates, NYMEX reviewed information gathered from two sources: Bentek, a wholly owned subsidiary of Platts and the U.S. Department of Energy ("DOE") Energy Information Administration ("EIA").

Bentek is an industry leader in the provision of data aggregation and collation from the Interstate Natural Gas Pipelines' electronic bulletin boards.[16] Interstate natural gas pipelines are subject to Federal Energy Regulatory Commission ("FERC") oversight and jurisdiction. As part of its regulatory oversight, FERC requires interstate pipelines to operate publicly accessible electronic bulletin boards which provide information on scheduling, available capacity and natural gas flows on a near real-time basis. Among other things, Bentek collects and disseminates collated data from these electronic bulletin boards daily. Given this, the Bentek data presented can be more current than the EIA data, which are typically subject to a minimum two-month delay in publication.

EIA data are a definitive source for production information and EIA does provide marketed production data for Federal U.S. Gulf Coast offshore production as well as onshore production for individual states such as Louisiana or Texas; these data include, however, some onshore production that would not be able to readily access the delivery point.

Bentek provides greater geographic detail than the EIA data by providing both U.S. Gulf Coast offshore and onshore production and we believe that the Bentek data provides only onshore or offshore natural gas production that has ready access to the delivery point. In any event, as is discussed below, NYMEX believes that the Bentek data underestimates the total production with ready access to the Henry Hub but, nonetheless, represents a reasonable basis for production estimates.

[16] Bentek collects details on the flow of interstate pipeline natural gas from the production source, commonly known as the wellhead, to the local distribution company's (including municipal operated distributors) delivery point, commonly known as its city-gate, beyond which point the pipeline ceases to be a federally regulated interstate pipeline.

Henry Hub Delivery Capacity

In addition to production that can readily access the delivery point, the Exchange takes into account the delivery capacity of the delivery facility, the Henry Hub. Generally, deliverable supply is mathematically bounded by production and stored product (with ready access) and delivery capacity. Excepting for the coincidence where these equal each other, then either one or the other is the binding factor in determining deliverable supply. In terms of the Henry Hub, delivery capacity is the binding factor and this will be detailed further below. The source of the Henry Hub pipeline receipt and delivery capacity is the Sabine Pipe Line Co. website. As part of FERC regulation, interstate pipelines are required to provide daily capacity information that includes receipt and delivery design, scheduled and available for all certificated interconnections. [17]

State of Louisiana and Producing Area Natural Gas Storage

Storage data are provided on a weekly basis by EIA and are approximately four business days old upon release. These data are provided by general region—East, West and Producing. Producing includes the U.S. Gulf Coast region which includes the delivery location for the NG contract. The EIA also collates data at the individual state level but provides these data with a time lag of approximately six months. At these frequencies of release, there are no official storage data with greater geographic detail than either the Producing region or state level. We did not try to estimate which portion of stored natural gas was readily accessible to the delivery location.

The Henry Hub Physical Delivery Mechanism

Terminating obligations in the NYMEX Henry Hub Natural Gas futures contract are fulfilled by delivering pipeline quality natural gas to the Henry Hub pipeline interconnection designated by the buyer. The Henry Hub consists of interconnections with 12 interstate and intrastate pipelines and related infrastructure. The Plant is owned and operated by Chevron Corporation. Of the 12 pipelines, 11 have interconnections to receive natural gas at the Henry Hub and 10 to deliver processed “dry” natural gas from the Henry Hub. The deliveries pipelines source their natural gas from the U.S. Gulf Coast region, both onshore and offshore, which extends from Texas to Alabama. Henry Hub has two compressor

[17] Information available at http://www.sabinepipeline.com

stations that enable natural gas to move from lower pressure pipeline Henry Hub receipt interconnections to higher pressure downstream Henry Hub pipelines.

Henry Hub also offers an intra-Hub tracking and transfer service, a form of in-system title transfer and documentation, to accommodate trading and delivery needs of its customers. This service, which is offered by Sabine Hub Services Company, a non-federal jurisdictional subsidiary of Chevron, enhances the natural gas trading environment for producers, marketers, and end users with respect to meeting their physical and financial requirements. In addition, the number of interruptible transportation customers of Henry Hub has grown to approximately 160 market participants.

Physical Market Trading Structure and Term Contracts

Physical Market Trading Structure

Typically, there is a chronology of sales and purchases of natural gas in the U.S. market that starts with a sale from producer and finishes with a purchase by an end-user to consume the natural gas, typically far downstream of the U.S. Gulf Coast. First-sales are from producers to marketers or other middleman-type firms with delivery at the production point or where natural gas first enters the pipeline system (or liquids processing facility attached to the system). The first-sale buyer transports it from the point of sale downstream. Typically, the first-sale buyer resells the natural gas to someone other than the end-user. Sales to end-users, who do not further resell the natural gas but ultimately consume it, are final-sales.

As implied, sometimes end users also resell natural gas, frequently during the same commercial cycle in which they purchased it. Other buyers of resold natural gas also either resell it or store it and resell it later. A common commercial practice is the first-sale and multiple subsequent re-sales occurring in the same delivery cycle; this line of re-sales usually includes a final sale, but not always, since a significant portion of natural gas is stored.

Henry Hub is essentially an active reseller market where buyers either: resell the natural gas to someone else at Henry Hub; transport it downstream for delivery and re-sale to someone else; transport it downstream to consume it; or transport it downstream to store it. Most of the sales and deliveries in the Henry Hub are comprised of volumes for re-sale, storage or final-sales. In fact, the commercial physical market in Henry Hub sales is estimated to be 6-10 times the multiple of physical natural gas that flows

through Henry Hub, which is a direct indication that most sales are for re-sale. *Gas Daily* and *Inside F.E.R.C.* publish transaction information for delivery at Henry Hub but do not capture all transactions that occur at the Henry Hub.

Term Contracts

The Exchange contacted and surveyed natural gas market participants regarding common commercial practices, including the use of term contracts, in the North American natural gas market.[18] The responses we received were consistent and can be summarized as follows:

- Most first-sales of production are sold term, as indicated above, typically for delivery on the producing property or nearest entry to the pipeline system, including liquids processing plants, and typically to middleman-firms. These middleman-firms typically resell the natural gas to other middleman-firms or to market participants performing that function or to end-users. Gulf Coast market participants estimated re-sales ranging from 50% to over 90%—skewing towards the higher end. Some market participants indicated they did not know of exceptions but did not estimate 100% of first sales to be ultimately resold.
- No restrictions typically apply to the resale of natural gas bought first-sale on a term basis from producers. In fact, restrictions would clearly not be applicable because sales are typically to marketers or others acting in a middleman-firm role with the expressed responsibility of reselling the natural gas. The participants with whom we spoke indicated that they had not encountered any restrictions. Several market participants did point out that "burner-tip" sales—i.e. to utilities—could entail a restriction on the utility from reselling the natural gas; however, they made clear that such sales, in their experience, were downstream of first-sales and first re-sales as well, especially in the U.S. Gulf Coast.
- Henry Hub is largely downstream of first-sales; some first-sales take place there but, typically, not as part of a term sale. Consequently, natural gas production that is readily accessible to Henry Hub in terms of transportation is also readily accessible commercially. Natural gas that has

[18] The Exchange contacted 15 firms, surveying 10, as well as a market participant group that included several dozen members. The individually contacted firms included major producers and marketers. The Energy Market Participant Group was organized through Hunton & Williams LLP to discuss and comment on regulatory issues.

readily accessible transportation to Henry Hub is not otherwise committed and unavailable to be delivered at Henry Hub.

- Term sales do not result in reductions to the deliverable supply for Henry Hub. All market participants agreed that natural gas purchased on a term sale is available for re-sale and delivery, including to the Henry Hub and that all market participants downstream of first-sales participate in the market for resale (as some first-sellers do).
- Our sources expressly advised us that any production sold long-term was available for re-sale, which is especially the case in the U.S. Gulf Coast market and the Henry Hub.

The 1996 Deliverable Supply Estimate Underlying the Existing Position Limit and Market Changes Since 1996

The 1996 Position Limit Approval and Deliverable Supply Estimate

In October 1996, NYMEX received approval from the Commission for its currently effective spot month position limits for the Henry Hub Contract. The determinative factor for the deliverable supply estimate at that time was capacity. The receipt capacity at that time was approximately 6,705 Henry Hub Contract equivalents (NG contract unit: 10,000 MMBtu).

Market Changes since the 1996 Position Limit Approval

Since the approval of the position limits for the Henry Hub Contract in 1996, deliverable supply has been materially impacted by a number of important and significant changes in the domestic natural gas market and the operation of Henry Hub including: a change of ownership in Chevron Corporation's acquisition of Texaco Corporation; interconnection increases at Henry Hub; and storage capacity increases near the Henry Hub.

NYMEX's Updated Deliverable Supply Estimate and Supporting Data

As indicated above, the factors that NYMEX considered in updating deliverable supply are natural gas production, delivery capacity at the Henry Hub, and natural gas storage. The following sections set forth recent data regarding each of these components and identify the updated deliverable supply estimate supported by the data.

A. Data for Natural Gas Production

In performing our analysis of deliverable supply at the Henry Hub, we first reviewed EIA data and determined that certain production levels reported by EIA, while containing relevant data, would include production that would not be accessible to be delivered at the Henry Hub. Tables 1-3 provide EIA data on Federal Offshore Louisiana and Texas marketed natural gas production by month from January 2008 through November 2012. Federal Offshore production is a subset of production that is readily accessible to be delivered at the Henry Hub but the onshore Louisiana and Texas production includes production from parts of each state that would not be readily accessible to the Henry Hub.

Federal Offshore Production since 2008 has ranged from 6,196 contract equivalents in September 2008, when Hurricane Ike disrupted oil and natural gas production in the U.S. Gulf Coast, to 24,106 contracts equivalent in January 2008. Since 2008, the monthly average has been 17,281 contract equivalents, and in 2012 through November (the most recent month available at the time the analysis was performed), the monthly average was 12,682 contract equivalents. During 2012 (through November), the monthly production ranged from 10,934 contract equivalents in September to 14,385 contract equivalents in March.

Since 2008, the range for onshore Louisiana is 8,816 contract equivalents in September 2008 (again during Hurricane Ike) to 27,545 contract equivalents in December 2011. For onshore Texas, the range is 49,967 contract equivalents in February 2011 to 62,876 contract equivalents in December 2011.

As indicated above, NYMEX believes that not all onshore Louisiana and Texas is readily accessible to the Henry Hub. Consequently, even though EIA is the pre-eminent official source for production data, we reviewed the Bentek production estimates in order to identify information for specific offshore and onshore areas that are accessible to the Henry Hub.

Table 5 provides Bentek's estimates for 2009, 2010, 2011 and 2012 (through December 28) of daily production for Onshore and Offshore Louisiana, Texas, Mississippi and Alabama in million cubic feet. Applying daily average offshore production accessible to the Henry Hub as estimated by Bentek over 30-day periods for each of these years, yielded totals that were comparable to EIA's monthly average of Federal offshore production: 2009— 21,984 (Bentek) contract equivalents versus 20,241 (EIA) respectively; 2010—19,728 (Bentek) contract equivalents versus 18,709 (EIA) respectively; 2011—16,317contract equivalents (Bentek through December 28) versus 15,103 contract equivalents

respectively, and 2012-14,007 (Bentek) contract equivalents versus 12,682 contract equivalents (EIA through November) respectively.

One reason for the differences between Bentek's and EIA's data is that Bentek's data would also include state offshore production that is directed to the Interstate pipeline system, which is a base source from which Bentek retrieves data. Bentek's average 30-day period estimate of onshore production that was accessible to the Henry Hub during this period was: 2009— 7,407contract equivalents; 2010— 5,826 contract equivalents; 2011- 5,817 contract equivalents; and 2012 5,634 (through December 28) contract equivalents. Therefore, in terms of the total production for offshore and onshore regions accessible to the Henry Hub, Bentek estimates that the average number of contract equivalents of production per 30-day periods was 29,391 in 2009, 25,554 in 2010, and 22,134 in 2011, and 19,641 (through December28). We believe that Bentek's estimates underestimate production that can readily access the Henry Hub because we believe additional in-State production areas would not be included in Bentek's U.S. Gulf Coast estimates. Consequently, we believe that any estimates based on the use of these data are conservative.

Declining natural gas production levels in the U.S. Gulf Coast area over the past several years reflect a supply response to relatively low prices—in nominal terms, levels last seen in 2001-2. Contemporaneously, natural gas production levels have increased in other areas, including areas that have reasonable access to the Henry Hub. The Exchange monitors production regularly and, in light of the continued production in the Gulf Coast region and other areas, anticipates the continuing central role provided by the Henry Hub as a delivery mechanism for natural gas. For instance, the EIA reported in July 2011 that, in the U.S. Gulf Coast region, there is 100 trillion cubic feet of recoverable natural gas resource in shale formations. (The analysis was current as of the time EIA's study was published but based on drilling data available in January 2009; additional recoverable natural gas reserves since then would not have been included.)

The production quantities included in these estimates represent production that is tendered in the secondary (or spot) market and which could easily access the Henry Hub delivery mechanism to dependably fulfill a secondary (or spot) market delivery there. The actual delivery path for production depends on the actual commercial activity each month in the secondary market, including delivery obligations for NYMEX natural gas contracts. There are multiple delivery points (including the Henry

Hub) where such secondary market deliveries can take place for this production and the actual delivery locations for specific production each month fluctuates with its corresponding secondary market transactions.

B. Data for Henry Hub Delivery Capacity

The inflowing natural gas daily receipts capacity at the Henry Hub is 2,955,000 MMBtu which converts into 296 contracts per day and 8,865 contracts per 30-day month. The daily deliveries capacity at Henry Hub, outflowing natural gas, is 2,570,000 MMBtu which converts into 257 contracts per day and 7,710 contracts per month.

Additionally, displacements[19] via counter flow scheduling are standard practice in both the natural gas pipeline system and at the Henry Hub. By way of illustration, for the Henry Hub between January 1, 2008 and January 31, 2013, the highest daily displacement expressed as a percentage of capacity experienced at 7 of the 11 receipts pipeline interconnections was 80% and higher—four over 100% and one as high as 196%. Over the same time period for the 9 delivery pipelines, six of them have been 66% or higher than—including 106% and 197%. These numbers indicate both the importance of displacement overall and to how high a level of displacement can be reached across multiple interconnection points. The Exchange has confirmed with the pipeline operator that incorporating displacement into a calculation of delivery capacity is both reasonable and appropriate.

In incorporating displacement operating capacity into the estimate for deliverable supply, the Exchange employed equivalent methodology to incorporating forward-haul operating capacity: 1. Confirmation that system supplies with access to displacement at Henry Hub exceed operating displacement. 2. Incorporating displacement operating capacity, which equal 100% of the forward-haul capacity. The Exchange confirmed system supply access to Henry Hub displacement operating capacity with outside vendor Genscape. Regarding displacement operating capacity, he Exchange consulted with the pipeline operator who also confirmed that recognizing a system capability of displacement which equaled 100% of

[19] Displacement refers to the common practice of accommodating the scheduling and transportation of natural gas in opposite directions at pipeline interconnection points. Where such bi-directional flows or system nominations are common, displacement increases the effective flow capacity. The use of displacement is standard practice at the Henry Hub.

design capacity for each interconnection point was reasonable. (The highest daily displacement levels attained between January 1, 2008 and January 31, 2012 reinforce this.)

Based on the methodology described immediately above, the Exchange incorporated operating displacement estimates of 2,955,000 MMBtu per day for the receipts interconnection points and 2,570,000 MMBtu per day for the deliveries interconnection points.[20] Combining the design capacity with the displacement estimates results in total receipts capacity of 5,910,000 MMBtu per day and deliveries capacity of 5,140,000 MMBtu per day. In terms of 30-day monthly contracts equivalents, this converts into 17,730 contracts for receipts capacity and 15,420 contracts for deliveries capacity. Applying the displacement capacity to deliveries capacity, which is less than the receipts capacity, yields a delivery capacity of 15,420 contracts.[21]

C. Data for Natural Gas Storage in State of Louisiana and Producing Area

Tables 4 and Chart 1 provide storage information from EIA for Louisiana and Producing Regions respectively. Producing regions include: Alabama, Arkansas, Kansas, Louisiana, Mississippi, New Mexico, Oklahoma, and Texas. For Louisiana, since 2008, the number of contract equivalents stored has ranged from 40,075 for March 2008, to 63,768 for October 2012. EIA does not provide storage levels at greater geographic detail than these levels on a regular basis. As previously indicated, we believe that the combination of production and storage is not the determinative factor in estimating deliverable supply for the Henry Hub—delivery capacity is.

ANALYSIS OF DELIVERABLE SUPPLY

As indicated in Table 5, the monthly production with ready access to Henry Hub delivery location has averaged 19,641contract equivalents year-to-date in 2012 (through December 28). In 2009, the production averaged 29,391 contracts and, it averaged 25,554 contracts and 22,134 in 2010 and 2011

[21] We have deliberately strived to apply conservative estimates in this analysis. The use of the 25th percentile as the base for applying displacement estimates has resulted in substantial discounts in capacity from what would obtain had we employed either the system *capability* estimate (of design capacity) or the maximum achieved levels of displacement over the January 1, 2008 – January 31, 2013 period we examined. As we continue to monitor the market, we may approach the Commission on applying less conservative displacement estimates.

respectively.[22] (We believe these also underestimate production readily accessible to the Henry Hub, which is consistent with our intent to estimate conservatively.) As noted above, the delivery capacity is equal to 8,867 contracts per 30-day month. Due to the fact that production levels (and stored product) exceed delivery capacity, delivery capacity is the binding factor in estimating deliverable supply, which has been the case since the Henry Hub Contract was introduced in 1990. Accordingly, the Exchange's estimate of deliverable supply is 15,420 contract equivalents.

Therefore, the current spot month position limit for the Henry Hub Natural Gas Futures contract of 1,000 contracts is equivalent to 7% of the total monthly deliverable supply. It is requested that the spot month position limit for the Natural Gas Weekly Option contract aggregate into the Henry Hub Natural Gas Futures contract.

Table 1
Federal Offshore--Gulf of Mexico Natural Gas Marketed Production
(Million Cubic Feet)[23]

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2008	241,064	228,507	239,263	209,165	208,428	219,044	230,193	211,888	61,961	133,579	157,377	173,874
2009	195,525	184,696	207,335	195,000	203,298	210,961	223,920	211,532	200,721	207,439	190,220	198,268
2010	202,102	188,046	209,373	193,806	192,728	177,531	178,573	190,298	177,334	183,545	171,021	180,704
2011	178,597	152,160	168,311	160,766	162,416	149,309	147,208	149,986	123,410	141,464	137,005	141,696
2012	142,008	130,179	143,846	134,980	131,754	118,676	125,411	111,871	109,338	123,400	123,580	

[22] The recent reduction in production constitutes a market supply response to historically low prices; the U.S. Gulf Coast region remains a vital source of natural gas.

[9] Source: EIA http://www.eia.gov/dnav/ng/hist/n9050fx2m.htm

Table 2
Louisiana Natural Gas Marketed Production
(Million Cubic Feet)[24]

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2008	116,750	109,119	117,523	114,700	121,073	118,955	123,401	119,936	88,164	114,570	116,842	116,935
2009	117,724	109,038	121,175	120,190	126,861	123,191	130,019	135,035	132,683	142,318	143,288	147,086
2010	152,114	144,750	166,194	166,844	177,121	181,200	194,020	198,162	198,036	202,153	205,389	224,116
2011	224,410	208,495	246,230	242,398	255,559	243,809	257,767	266,831	263,106	274,314	270,841	275,447
2012	272,582	239,333	255,661	245,529	257,700	254,294	262,353	257,453	245,857	250,263	235,773	

Table 3
Texas Natural Gas Marketed Production
(Million Cubic Feet)[25]

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2008	560,422	525,439	572,389	561,741	593,781	574,002	599,241	601,936	548,192	607,763	596,417	619,369
2009	627,592	549,812	611,626	577,383	589,499	563,018	568,827	576,556	539,050	550,208	521,418	543,985
2010	553,583	506,387	569,082	539,504	575,647	542,364	569,554	568,846	550,540	574,093	573,241	592,453
2011	588,714	499,667	599,244	579,060	606,707	579,536	600,815	605,105	590,030	622,392	612,834	628,759
2012	613,189	569,943	606,319	595,958	612,934	590,034	613,711	619,633	605,386	616,125	594,834	

Table 4
Louisiana Natural Gas Underground Storage Volume
(Million Cubic Feet)[26]

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2008	44,149	40,965	40,075	40,824	42,675	44,309	45,933	47,595	46,488	49,779	50,682	49,774
2009	45,251	43,144	44,609	46,863	51,224	52,501	54,600	55,979	58,417	59,297	59,734	54,479
2010	47,879	42,441	43,099	45,598	47,685	49,883	51,347	52,189	55,564	60,366	61,746	58,370
2011	53,068	47,935	49,432	50,869	53,639	54,109	53,000	52,660	55,156	60,736	62,396	61,938
2012	58,960	55,677	58,333	58,150	58,949	60,098	59,731	59,756	61,873	63,768	62,637	

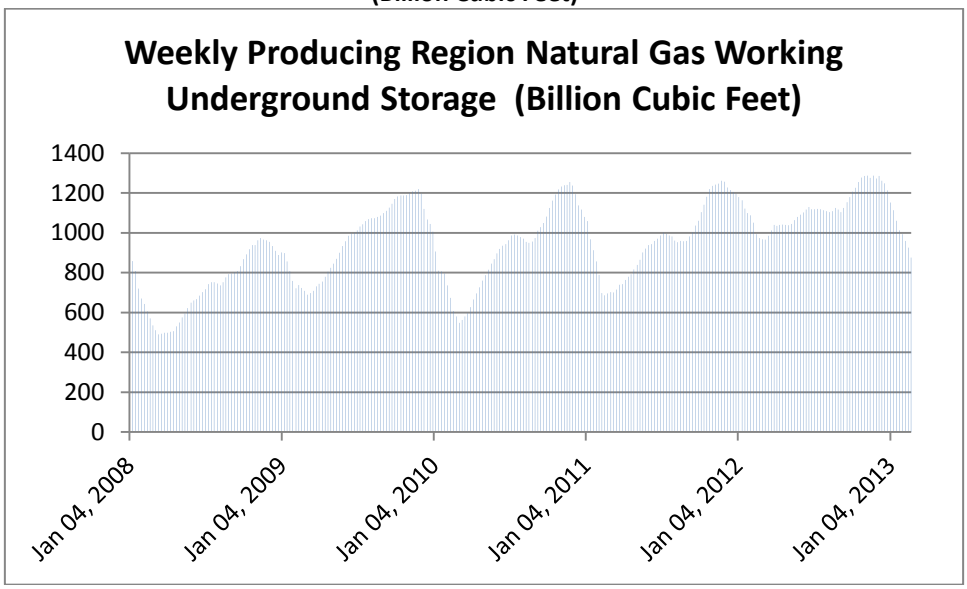
[24] Ibid. http://www.eia.gov/dnav/ng/hist/n9050la2m.htm

[25] Ibid http://www.eia.gov/dnav/ng/hist/n9050tx2m.htm

[26] Source: EIA http://www.eia.gov/dnav/ng/hist/n5030la2m.htm

Chart 1

Producing Region Natural Gas Working Underground Storage (Billion Cubic Feet)[27]



[27] Source: EIA

Table 5
US Gulf Natural Gas Production Accessible to Henry Hub
(Production in million cubic feet per day)[28]

Available LA/TX/MS/AL Natural Gas Supply	2012	2011	2010	2009
Bentek LA Offshore YTD	3,261	3,860	4,761	5,382
Bentek LA Onshore YTD	750	803	772	888
Bentek TX Offshore YTD	303	312	237	292
Bentek TX Onshore YTD	1064	1,053	1,073	1,472
Bentek MS Offshore YTD	395	478	744	761
Bentek AL Offshore YTD	710	789	834	893
Bentek AL-MS-FL Onshore YTD	64	83	97	109
Total Bentek LA, TX, MS/AL	6,547	7,378	8,518	9,797
Daily Contract Equivalent (CE)	655	738	852	980
30-Day Month CE	19,641	22,134	25,554	29,391
25% of 30-Day Month CE	4,910	5,534	6,389	7,348

Available Natural Gas Supply	2012	2011	2010	2009
Total Bentek Offshore LA, TX, MS/AL	4,669	5,439	6,576	7,328
Daily Contract Equivalent (CE)	467	544	658	733
30-Day Month CE	14,007	16,317	19,728	21,984

Available Natural Gas Supply	2012	2011	2010	2009
Total Bentek Onshore LA, TX, MS/AL	1,878	1,939	1,942	2,469
Daily Contract Equivalent (CE)	188	194	194	247
30-Day Month CE	5,634	5,817	5,826	7,407

[28] Source: Bentek

Contract Name	Rule Chapter	Commodity Code	Contract Size	Contract Units	Type	Settlement
Crude Oil Weekly Option - week 1	1011	LO1	1,000	Barrels	Am. Option	Exercises into Physical Futures
Crude Oil Weekly Option - week 2	1011	LO2	1,000	Barrels	Am. Option	Exercises into Physical Futures
Crude Oil Weekly Option - week 3	1011	LO3	1,000	Barrels	Am. Option	Exercises into Physical Futures
Crude Oil Weekly Option - week 4	1011	LO4	1,000	Barrels	Am. Option	Exercises into Physical Futures
Crude Oil Weekly Option - week 5	1011	LO5	1,000	Barrels	Am. Option	Exercises into Physical Futures
Natural Gas Weekly Option - week 1	1012	ON1	10,000	MMBtu	Am. Option	Exercises into Physical Futures
Natural Gas Weekly Option - week 2	1012	ON2	10,000	MMBtu	Am. Option	Exercises into Physical Futures
Natural Gas Weekly Option - week 3	1012	ON3	10,000	MMBtu	Am. Option	Exercises into Physical Futures
Natural Gas Weekly Option - week 4	1012	ON4	10,000	MMBtu	Am. Option	Exercises into Physical Futures
Natural Gas Weekly Option - week 5	1012	ON5	10,000	MMBtu	Am. Option	Exercises into Physical Futures

Group	Diminishing Balance Contract	Reporting Level	Spot-Month position comprised of futures and deliveries	Spot-Month Aggregate Into Futures Equivalent Leg (1)	Spot-Month Aggregate Into Futures Equivalent Leg (2)	Spot-Month Aggregate Into Ratio Leg (1)	Spot-Month Aggregate Into Ratio Leg (2)	Spot-Month Accountability Level
Crude Oil		25		CL		1 LO1 : 1 CL		
Crude Oil		25		CL		1 LO2 : 1 CL		
Crude Oil		25		CL		1 LO3 : 1 CL		
Crude Oil		25		CL		1 LO4 : 1 CL		
Crude Oil		25		CL		1 LO5 : 1 CL		
Natural Gas		25		NG		1 ON1 : 1 NG		
Natural Gas		25		NG		1 ON2 : 1 NG		
Natural Gas		25		NG		1 ON3 : 1 NG		
Natural Gas		25		NG		1 ON4 : 1 NG		
Natural Gas		25		NG		1 ON5 : 1 NG		

Spot-Month

Daily Accountability Level (For Daily Contract)	Initial Spot-Month Limit (In Net Futures Equivalents) Leg (1) / Leg (2)	Initial Spot-Month Limit Effective Date	Spot-Month Limit (In Contract Units) Leg (1) / Leg (2)
	3,000	For CL: Close of trading 3 business days prior to last trading day of the contract	3,000,000
	3,000	For CL: Close of trading 3 business days prior to last trading day of the contract	3,000,000
	3,000	For CL: Close of trading 3 business days prior to last trading day of the contract	3,000,000
	3,000	For CL: Close of trading 3 business days prior to last trading day of the contract	3,000,000
	3,000	For CL: Close of trading 3 business days prior to last trading day of the contract	3,000,000
	1,000	For NG: Close of trading 3 business days prior to last trading day of the contract	10,000,000
	1,000	For NG: Close of trading 3 business days prior to last trading day of the contract	10,000,000
	1,000	For NG: Close of trading 3 business days prior to last trading day of the contract	10,000,000
	1,000	For NG: Close of trading 3 business days prior to last trading day of the contract	10,000,000
	1,000	For NG: Close of trading 3 business days prior to last trading day of the contract	10,000,000

Single Month						All Mon		
Single Month Aggregate Into Futures Equivalent Leg (1)	Single Month Aggregate Into Futures Equivalent Leg (2)	Single Month Aggregate Into Ratio Leg (1)	Single Month Aggregate Into Ratio Leg (2)	Single Month Accountability Level Leg (1) / Leg (2)	Single Month Limit (In Net Futures Equivalents) Leg (1) / Leg (2)	All Month Aggregate Into Futures Equivalent Leg (1)	All Month Aggregate Into Futures Equivalent Leg (2)	All Month Aggregate Into Ratio Leg (1)
CL		1 LO1 : 1 CL		10,000		CL		1 LO1 : 1 CL
CL		1 LO2 : 1 CL		10,000		CL		1 LO2 : 1 CL
CL		1 LO3 : 1 CL		10,000		CL		1 LO3 : 1 CL
CL		1 LO4 : 1 CL		10,000		CL		1 LO4 : 1 CL
CL		1 LO5 : 1 CL		10,000		CL		1 LO5 : 1 CL
NG		1 ON1 : 1 NG		6,000		NG		1 ON1 : 1 NG
NG		1 ON2 : 1 NG		6,000		NG		1 ON2 : 1 NG
NG		1 ON3 : 1 NG		6,000		NG		1 ON3 : 1 NG
NG		1 ON4 : 1 NG		6,000		NG		1 ON4 : 1 NG
NG		1 ON5 : 1 NG		6,000		NG		1 ON5 : 1 NG

th		
All Month Aggregate Into Ratio Leg (2)	All Month Accountability Level Leg (1) / Leg (2)	All Month Limit (In Net Futures Equivalents) Leg (1) / Leg (2)
	20,000	
	20,000	
	20,000	
	20,000	
	20,000	
	12,000	
	12,000	
	12,000	
	12,000	
	12,000	