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January 19, 2011

OFFICE OF THE  
SECRETARIAT

**VIA E-MAIL**

Mr. David Stawick  
Office of the Secretariat  
Commodity Futures Trading Commission  
Three Lafayette Centre  
1155 21st Street, N.W.  
Washington, D.C. 20581

**Re: Rule Certification. New York Mercantile Exchange, Inc. Submission #11-029: Notification Regarding the Listing of the Crude Oil Volatility Index (VIX®) Option Contract on CME Globex® and CME ClearPort®**

Dear Mr. Stawick:

The New York Mercantile Exchange, Inc. ("NYMEX" "Exchange") is notifying the Commodity Futures Trading Commission ("CFTC" or "Commission") that it is self-certifying the listing of a new Crude Oil Volatility Index (VIX) Option (Chapter 983; Code CVP) for trading on CME Globex and for submission for clearing through CME ClearPort beginning at 6:00 p.m. on Sunday, January 23, 2011 for trade date Monday, January 24, 2011.

The underlying futures contract of this option contract is the Crude Oil Volatility Index (VIX) Futures, which is based on the volatility index for crude oil calculated by the Chicago Board Option Exchange's methodology that combines NYMEX's options market data on CME Globex. The Crude Oil Volatility Index (VIX) will be a 30-day forward looking index value on option implied volatility.

Specifications for the Crude Oil Volatility Index (VIX®) Option contract:

- Commodity code: CVP
- Option Type: European
- Settlement Type: Financial
- Underlying: Crude Oil Volatility Index (VIX) Futures (Code: CVF)
- Multiplier: \$500
- Minimum Price Fluctuation: 0.01 index points = \$5
- Minimum Strike Price Interval: 0.50 index points
- Trading Months: 12 consecutive months
- First Listed Month: April 2011
- Expiration Time and Date: Contract will expire at 2:30 p.m. Eastern Time (1:30 p.m. CT) thirty (30) calendar days prior to the expiration of the NYMEX Light Sweet Crude Oil Option (LO) for the same contract month. If such day is not an Exchange business day, trading shall cease on the business day immediately prior.
- Rule Chapter: 983

The Exchange is also notifying the CFTC that it is self-certifying the waiver of fees associated with the trading and clearing of the option contract through June 30, 2011.

Pursuant to Section 5c(c) of the Commodity Exchange Act ("Act") and CFTC Rules 40.2 and 40.6, NYMEX hereby certifies that the listing of the option contract and the waiver of transaction fees comply with the Act, including regulations under the Act.

Should you have any questions concerning the above, please contact the undersigned at (212) 299-2207 or Bob Biolsi at (212) 299-2610.

Sincerely,

/s/ Felix Khalatnikov  
Dir & Assoc General Counsel

Attachments: Contract terms and conditions  
Cash market overview and analysis of deliverable supply

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**Chapter 983**  
**Crude Oil Volatility Index (VIX<sup>®</sup>) Option**

**983.01 EXPIRATION**

A Crude Oil Volatility Index (VIX) Option contract shall expire at 2:30 p.m. thirty (30) calendar days prior to the expiration of the NYMEX Light Sweet Crude Oil Option (LO) for the same contract month. If such day is not an Exchange business day, trading shall cease on the business day immediately prior.

**983.02 TYPE OF OPTION**

A Crude Oil Volatility Index (VIX) Option contract is a financially settled European-style option. The option cannot be exercised prior to expiration.

**983.03 TRADING UNIT**

On expiration of a call option, the option will be financially settled by subtracting the strike price from the underlying settlement price of the Crude Oil Volatility Index (VIX) Futures contract times \$500, or zero, whichever is greater. On expiration of a put option, the option will be financially settled by subtracting the underlying settlement price of the Crude Oil Volatility Index (VIX) Futures contract from the strike price times \$500, or zero, whichever is greater.

**983.04 HOURS OF TRADING**

The Crude Oil Volatility Index (VIX) Option contract is available for trading on the Globex<sup>®</sup> trading platform and for clearing through CME ClearPort<sup>®</sup> from 6:00 p.m. Sundays through 5:15 p.m. Fridays (New York Prevailing time), with a 45-minute break each day between 5:15 p.m. and 6:00 p.m., except on Exchange holidays.

**983.05 STRIKE PRICES**

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

- (A) On the first business day of trading in an option contract month, trading shall be at the following strike prices: (i) the previous day's settlement price for the underlying Crude Oil Volatility Index (VIX) Futures contract rounded off to the nearest one-half (0.50) index point increment, unless such settlement price is precisely midway between two one-half (0.50) index point increments in which case it shall be rounded off to the lower one-half (0.50) index point increment; (ii) the ten strike prices which are ten one-half (0.50) index point increments higher than the strike price described in section (i) of this Rule 983.05(A); and (iii) the ten strike prices which are ten one-half (0.50) index point increments lower than the strike price described in section (i) of this Rule 983.05(A).
- (B) Thereafter, on any business day prior to the expiration of the option, new strike prices for both puts and calls will be added, such that at all times there will be at least ten one-half (0.50) index point increment strike prices above and ten one-half (0.50) index point increment strike prices below the at-the-money strike price available for trading in all option contract months. The at-the-money strike price will be determined in accordance with the procedures set forth in Subsection (A) of this Rule 983.05.
- (C) Notwithstanding the provisions of subsections (A) and (B) of this Rule, if the Exchange determines that trading in financially settled Crude Oil Volatility Index (VIX) Option contract will be facilitated thereby, the Exchange may, by resolution, change the increments between strike prices, the number of strike prices which shall be traded on the first day in any new option contract month, the number of new strike prices which will be introduced on each business day or the period preceding the expiration of a Crude Oil Volatility Index (VIX) Option contract in which no new strike prices may be introduced.

**983.06 TRADING MONTHS**

Trading shall be conducted in the months determined by the Exchange.

**983.07 PRICES AND FLUCTUATIONS**

Prices shall be quoted in hundredths of an index point. The minimum price fluctuation shall be 0.01 index point, or \$5 per contract.

**983.08 ABSENCE OF PRICE FLUCTUATION LIMITATIONS**

Trading in Crude Oil Volatility Index (VIX) Option shall not be subject to price fluctuation limitations.

## CASH MARKET OVERVIEW

### Volatility Index (VIX®)

The VIX methodology has been the basis of indexes on various products as published by the Chicago Board Options Exchange (CBOE). A step by step review of the methodology can be found on their website (<http://www.cboe.com/micro/vix/vixwhite.pdf>). The index itself is an estimate of the composite "implied" volatility of option contracts as traded in options on underlying assets, indexes, and futures contracts. Unlike a historical volatility measure, the VIX methodology is a prospective look at the volatility embedded in option contracts for a specific future time interval. In the above contract for crude oil, this prospective time interval is 30 days in the future.

Since the advent of organized option markets since 1970's, the options markets have relied heavily on the "implied volatility" of the underlying asset as a means of ascertaining the fair value of an option contract. This implied volatility is quantified by the models option traders utilize to determine fair option values. The calculation is somewhat sensitive to not only the underlying contract month but also the option strike price and its distance from the "at-the-money" option. The overall compilation of the option implied volatility is generally referred to as the "volatility surface". In recent years, the Chicago Board Options Exchange has abstracted from the various option models in use and developed an algorithm that relies solely on option prices, and their relationship to the associated strike prices (see White Paper referred above). As a result, the VIX has become a measure of composite market implied volatility and uncertainty. As such, it has become a standard measure of risk.

Due to the extraordinary market fluctuations that have occurred in the modern finance era, markets have been focused on hedging not only price risk but also volatility risk. This volatility risk is important in hedging the direction of volatility, abstracted from price. While currently volatility trades as a component of option strategies, (e.g. straddles, strangles, and delta hedges) these strategies are a composite of both price and volatility. As prices change, the positions generally need to be rebalanced. The VIX calculation, however, does not require rebalancing as it is not directly affected by price movements. As such, it becomes a measure of pending risk and uncertainty, and is an important trade input for option traders, commercial interests, and financial intermediaries, and speculative interests.

Crude oil is ideally suited for the VIX calculation. Option contracts on crude oil are extremely active, with high open-interest, global interest, and liquid trading volume. Crude oil options trade actively in open-outcry, as well as on the Globex® electronic trading system, and also clear large volumes on the CME ClearPort clearing system. Option prices are directly linked among the three platforms, and traders would easily arbitrage any significant price discrepancy among them

For volatile commodities such as crude oil, option trading has become prominent. As of 12/31/2010, option open interest on crude oil was approximately 3.8 million contracts.

**Data History**

Since the VIX calculations on crude oil are calculated by the Chicago Board Options Exchange from the midpoints of bids/offers on Globex, a non-continuous data history from 2007 is provided on the CME Group website at <http://www.cmegroup.com/trading/options-volatility-indexes.html>.

The data history is not continuous because of its enormous size. A more recent data and continuous history is now compiled by the Exchange. Attached is a continuous end of day time series that has been carried by data vendors as of 9/13/2010:

<b>CRUDE OIL VIX</b>	
<b>Date</b>	<b>Index</b>
9/13/2010	32.44
9/14/2010	32.70
9/15/2010	32.61
9/16/2010	32.52
9/17/2010	31.87
9/20/2010	32.49
9/21/2010	33.22
9/22/2010	32.18
9/23/2010	31.14
9/24/2010	30.41
9/27/2010	30.99
9/28/2010	31.68
9/29/2010	31.26
9/30/2010	30.27
10/1/2010	30.44
10/4/2010	31.76
10/5/2010	31.77

Date	Index
10/6/2010	31.51
10/7/2010	33.24
10/8/2010	32.87
10/11/2010	33.64
10/12/2010	33.71
10/13/2010	33.18
10/14/2010	32.88
10/15/2010	34.17
10/18/2010	32.96
10/19/2010	34.51
10/20/2010	34.00
10/21/2010	35.16
10/22/2010	33.52
10/25/2010	33.82
10/26/2010	33.21
10/27/2010	33.15
10/28/2010	32.26
10/29/2010	32.32
11/1/2010	33.26
11/2/2010	33.64
11/3/2010	32.54
11/4/2010	31.08
11/5/2010	29.76
11/8/2010	28.84
11/9/2010	29.44
11/10/2010	28.83
11/11/2010	28.79
11/12/2010	30.57
11/15/2010	30.89
11/16/2010	32.07
11/17/2010	33.68
11/18/2010	31.35
11/19/2010	31.40
11/22/2010	31.87
11/23/2010	32.26
11/24/2010	30.66
11/26/2010	31.29
11/29/2010	31.25
11/30/2010	32.17
12/1/2010	31.09

Date	Index
12/2/2010	31.11
12/3/2010	31.79
12/6/2010	32.41
12/7/2010	32.20
12/8/2010	31.55
12/9/2010	30.61
12/10/2010	29.67
12/13/2010	29.68
12/14/2010	29.51
12/15/2010	28.83
12/16/2010	29.43
12/17/2010	28.37
12/20/2010	27.86
12/21/2010	27.07
12/22/2010	26.09
<del>12/23/2010</del>	<del>26.48</del>
12/27/2010	27.43
12/28/2010	28.01
12/29/2010	28.22
12/30/2010	29.73
12/31/2010	29.34



## ANALYSIS OF DELIVERABLE SUPPLY

VIX is a weighted average implied volatility index derived from the first two nearby option contracts of a market. The healthiness of the index hence is determined by the market depth of the underlying options. Considering open interest levels as a proxy of market robustness, the below table shows the average end-of-month open interest of the sum of the first two nearby contracts for the NYMEX Crude Oil Option.

Year	Month	Open Interest	
<b>2008</b>	Jun	1,562,411	
	Jul	1,422,502	
	Aug	1,068,557	
	Sep	2,153,796	
	Oct	2,215,240	
	Nov	1,046,621	
	Dec	1,029,809	
	<b>2009</b>	Jan	1,093,001
		Feb	687,746
		Mar	1,500,334
		Apr	1,400,965
		May	631,014
Jun		703,149	
Jul		787,926	
Aug		592,512	
Sep		2,005,011	
Oct		2,039,628	
Nov		812,233	
Dec		965,195	
<b>2010</b>	Jan	990,966	
	Feb	739,727	
	Mar	1,486,534	
	Apr	1,545,081	
	May	934,779	
	Jun	929,051	
	Jul	831,804	
	Aug	683,074	
	Sep	2,059,696	
	Oct	1,959,168	
	Nov	795,603	
	Dec	989,754	
<b>Average</b>		<b>1,214,932</b>	

While the actual VIX Index is calculated by averaging bid/ask quotes on the Globex trading platform and not actual trades, the depth and liquidity of the overall option markets is relevant to deliverable supply. Option trades between the Globex trading platform, open-outcry, and the broker-led CME ClearPort clearing system are directly substitutable and easily arbitrated. Consequently, the true deliverable supply should be represented by the entire crude oil option markets.

The Exchange proposes to aggregate positions of the Crude Oil Volatility Index (VIX) Option into the underlying Crude Oil Volatility Index (VIX) Futures. The proposed speculative position limits are as follows:

<b>Crude Oil Volatility Index (VIX) Option (in contract units)</b>	
Spot Month:	6,000
Any One Month:	20,000
All Month:	80,000

These limits are a small fraction of the existing open interest in each of the first two nearby option contracts for the crude oil option contract. A typical spot month limit of 25% of the average open interest since 2008 would be approximately 304,000 contracts.

While a 1% change in implied volatility (1.00 VIX index points) for crude oil on a 30-day at-the-money option would amount to about \$100 at current market values. This would amount to a \$500 change in value for the Crude Oil VIX futures contract. Hence, 5 options would equate to one VIX futures. It can be estimated then that 6,000 Crude Oil VIX futures would equate to about 30,000 Crude Oil VIX options, which is approximately 2.5% of average month-end open interest since 2008 as shown in the above table.

While the actual VIX is calculated on the basis of bid/ask quotes, volumes over the final settlement period would be useful in determining the integrity of the final settlement process. This final settlement period would be the last half hour of open-outcry trading (2:00 P.M. to 2:30 P.M.) on termination day.

Below are the volumes during the final settlement period on Globex for the Crude Oil options since April of 2009 to the end of year 2010.

**Average Crude Oil Option Volume during the Final Settlement Period (Front and Second Month Contracts):**

Three Days Before VIX Futures Expiration Date	<b>1,621.00</b>
Two Days Before VIX Futures Expiration Date	<b>1,712.67</b>
One Day Before VIX Futures Expiration Date	<b>2,137.81</b>
On VIX Futures Expiration Date	<b>1,979.81</b>
All	<b>1,442.17</b>

It should be noted that Exchange-wide (including open-outcry, Globex and ClearPort) the volumes are much greater, but these statistics are given as a proxy for the stability and integrity of the final settlement process.