CME Group

Christopher Bowen
Managing Director and Chief Regulatory Counsel
Legal Department

September 20, 2013

VIA E-MAIL

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

RE: Regulation 40.6(a) Rule Certification. Chicago Mercantile Exchange Inc. Submission #13-433R: REVISED – Modification to Settlement Methodology for Options on CME Eurodollar Futures

Dear Ms. Jurgens:

Chicago Mercantile Exchange Inc. ("CME" or the "Exchange"), pursuant to Commodity Futures Trading Commission ("CFTC" or "Commission") Regulation 40.6(a), hereby notifies the Commission that it plans to implement a modification to the manner in which options on Eurodollar futures contract months are settled. The modification to the settlement procedure will become effective on Monday, October 7, 2013.

Please note that the Exchange is submitting CME Submission No. 13-433R to provide a marked version of the changes that will be adopted to the CME Group Daily Settlement Procedure document as referenced in Exhibit A. The earlier submission inadvertently did not show the revisions with additions underscored and deletions overstruck as indicated. No other portion of CME Submission No. 13-433 has been revised.

In order to more closely align the Exchange's In-The-Money (ITM) option valuations with the ITM option valuations used by market participants, CME is modifying the existing daily settlement procedures in options on Eurodollar futures. Based on a thorough analysis and review of extensive empirical evidence, the CME Settlement Team has determined that a yield curve should be used for cost-of-carry calculations for ITM options on Eurodollar futures. Using a yield curve to calculate theoretical values for ITM options on Eurodollar futures will allow for a unique interest rate to match option listings in accordance with the days remaining to the option contract's expiration.

Our analysis shows that the yield curve derived from CME Eurodollar futures is most closely aligned with the marketplace and is the yield curve the Exchange will rely upon. CME's Eurodollar futures market is open, transparent and highly liquid, trading two million contracts each business day. Eurodollar futures imply an interest rate curve that reflects the marketplace's costs of borrowing and lending money out to ten (10) years. The CME Settlement Team will use a weighted average of the interest rates implied by the Eurodollar futures daily settlement prices to create a yield curve that is applicable and relevant to options on Eurodollar futures calculations.

ITM options are settled automatically by the Exchange in accordance with the put-call parity equation set forth in the CME Group Daily Settlement Procedures document publicly available on the CME Group website. In options on Eurodollar futures, the interest rate used is the rate implied by the daily settlement of the expiring quarterly Eurodollar futures month. Under the revised methodology, ITM options will still be settled automatically in accordance with that equation, however the interest rate used will be a weighted average of the rates implied by the daily settlements of the Eurodollar futures contract months up to (but not including) the contract month of the expiring options contract.

The Exchange has reviewed the designated contract market core principles ("Core Principles") as set forth in the Commodity Exchange Act ("CEA" or "Act") and has identified that the modification to the settlement procedures for options on Eurodollar futures may have some bearing on the following Core Principles:

- Contracts Not Readily Subject to Manipulation: While the current procedure for settling options on Eurodollar futures yields reliable settlement prices, the modified procedure will use a weighted average of the interest rates implied by the daily settlements of the Eurodollar futures contract months up to (but not including) the contract month of the expiring options contract as opposed to reliance on the rate implied by the daily settlement of the expiring quarterly Eurodollar futures contract month. The revised methodology will have no impact on the Exchange being able to continue to demonstrate that options on Eurodollar futures are not readily subject to manipulation.

- Prevention of Market Disruption: The Global Command Center, the CME Group Settlement team and the Market Regulation Department each have the capacity to identify abnormal price movements during the settlement period and to take remedial actions as appropriate relative to their respective functions. The applicable settlement methodology for a particular product has not impeded the ability of the Exchanges to effectively monitor trading and mitigate the potential for market disruptions. The change in options on Eurodollar futures settlement price determinations will not diminish the Exchange's ability in this regard.

- Availability of General Information: The Exchange will update the aforementioned CME Group Daily Settlement Procedures document on our website on Monday, October 7, the effective date of the change.

- Daily Publication of Trading Information: CME will continue to publish daily settlement prices in options on Eurodollar futures without interruption.

The Exchange certifies that the modification to the settlement procedures for options on Eurodollar futures complies with the Act and regulations thereunder. There have been no substantive opposing views to the proposed revision. A copy of the revised CME Group Daily Settlement Procedures document is attached as Exhibit A, with additions underscored and deletions overstruck.

The Exchange certifies that this submission has been concurrently posted on the CME Group website at http://www.cmegroup.com/market-regulation/rule-filings.html.

If you have any questions regarding this submission, please contact the undersigned at 212.299.2200 or via email at Christopher.Bowen@cmegroup.com. Please reference CME Submission No. 13-433R in any related correspondence.

Sincerely,

/s/ Christopher Bowen
Managing Director and Chief Regulatory Counsel

Attachment: Exhibit A – CME Group Daily Settlement Procedures Document

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

CME Group

Exhibit A

CME Group Daily Settlement Procedures

Equity Futures: For S&P and NASDAQ, the settlement price of the lead* month contract is the midpoint of the closing range determined based on pit trading activity between 15:14:30-15:15:00 Central Time ("CT"). For all other equity indices, the Volume Weighted Average Price (VWAP) of trades executed on Globex between 15:14:30-15:15:00 CT is used to determine the settlement prices for the lead month contracts. Back month contract months are settled to traded or quoted spread relationships. E-mini S&P and Nasdaq are settled to the value derived from the Big S&P and Nasdaq.

Equity Options: Exchange staff identifies "seed strikes" that include the at-the-money straddle and several out-of-the-money calls/puts. The midpoints of the bid/ask quotes in the seed strikes on Globex are used to create an implied volatility skew. The skew is adjusted based upon the underlying settlement price to automatically generate the out-of-the money settlement prices, and the in-the-money options are settled automatically, using the method referenced on page 4 of this document. For longer dated options for which no Globex data exists, market participants provide bid/ask data for the seed strikes. Adjustments may be made to incorporate relevant pit data.

Non-Treasury Interest Rate Futures: Settlement prices in the front 12 quarterly Eurodollar contract months are based on Globex bid/ask activity between 13:59:00-14:00:00 CT. Settlement prices may be adjusted within the bid/ask range to accommodate calendar spreads and butterflies. Back month contract months are settled by Exchange officials based on market participant input, taking into account a CME-conducted survey for the last 5-year bundle as well as the additional Eurodollar futures settlement guidelines referenced on page 3 of this document. The Serial contract months settle to the VWAP of the prices on Globex between 13:59:00-14:00:00 CT or the midpoint of the bid/ask, with adjustments made to incorporate relevant spread activity. All other Non-Treasury Interest Rate contracts, excluding Fed Funds, are settled using Globex trades and bid/ask activity between 13:59:00 – 14:00:00 CT. Fed Fund settlements for months with more than 10,000 open interest settle to the mid-point of the bid/ask at 14:00 CT, provided that the quantity on both the bid and offer are 50 or more contracts, with adjustments made within those bid/asks to accommodate consecutive month calendar spreads of 100 contracts or greater. All other months settle to the net change of the previous month that was derived using the methodology described above, provided it does not violate the resting bid/ask of 25 contracts or greater.

Non-Treasury Interest Rate Options: Similar to the procedure used in equity options, settlements in the front year of expirations are generated based on the skew derived from taking the midpoint of the bid/ask quotes in Exchange-designated seed strikes from the pit and from Globex. The skew is adjusted based upon the underlying settlement price. The additional guidelines referenced on page 3 of this document are also utilized. All other contract months are settled by Exchange officials based upon input from market participants.

Treasury Futures: http://www.cmegroup.com/trading/interest-rates/files/U.S._Treasury_Futures_Settlement_Procedures.pdf

Treasury Options: Same as Equity Options

FX Futures: For the Australian Dollar, Canadian Dollar, Euro, Pound, Swiss, and Yen, please refer to this link: http://www.cmegroup.com/trading/fx/files/daily-fx-settlements.pdf
For Peso and Kiwi, Globex trades in the lead month between 13:59:30-14:00:00 CT are used to derive the VWAP; back months are settled based on traded/quoted spread relationships. All other FX futures are settled based on cash market information, taking into account the forward rate, or any other information deemed relevant by staff.

FX Options: Same as Equity Options

Agricultural Futures: Livestock products are settled to the midpoint of the trades or the last valid price in the pit (including trades, higher bids, lower offers, or nominal close based on prior settle if no activity) between 12:59:30-13:00:00 CT. Dairy products are settled to the VWAP of the trades or the last valid price on Globex between 13:09:30-13:10:00 CT. Please refer to this link for Grain and Oilseed procedures: http://www.cmegroup.com/trading/agricultural/files/daily-grains-settlement-procedure.pdf

Agricultural Options: Market participants provide quotes in Exchange-designated seed strikes which are used to generate the implied volatility skew and the skew is adjusted to the underlying futures settlement price. Dairy products are settled using a flat volatility determined by the at-the-money straddle.

Agricultural Index Futures: S&P GSCI Excess Return futures settlements are based on trades that occurred on Globex or via Block during the settlement window (13:39:30 to 13:40:00). If no trades occur during the settlement window, this contract settles to the best Globex bid/offer closest to the forward rate calculation using the spot rate and dealer submitted cost of carry at 13:39:59. The forward rate calculation formula can be found under the contract specs on CMEGroup.com. The S&P GSCI settlements for the front months are settled to the midpoint of the trades in the pit or the last valid price between 13:39:30-13:40:00 CT(including trades, higher bids or lower offers or nominal close based on prior settle if no activity). Back month contract months are settled to traded or quoted spread relationships. The DJ UBS Commodity Index settlements are based on the VWAP of trades executed on Globex between 13:29:00-13:30:00 CT.

Weather Futures: For outright monthly contract months, a combination of the last sale, higher bid, lower offer or midpoint of the bid/ask is used to derive settlements. For strips, if there is a Globex trade or a block trade, such trades are taken into account; if no such trades exist, the sum of the individual component months will determine the settlement. OTC market information is also referenced where appropriate.

Weather Options: Option trades are converted to “standard deviations” using a model based on Stephen Jewson’s model for pricing Weather. This standard deviation creates prices in the entire options series which is then applied to the open strikes.

Housing Futures and Options: The futures are settled to the last trade or better bid/offer on Globex. Absent a trade or better bid/offer, the prior day settlement is used. The options are settled using volatility skews derived from the midpoints of the bid/ask in a given strike, tied to a futures level.

Energy Futures: The front month in NYMEX WTI Crude Oil, Natural Gas, Heating Oil, and RBOB futures is settled at the VWAP of trades occurring on Globex between 14:28:00-14:30:00 Eastern Time (“ET”). The settlements of the 2nd through 6th contract months are determined based on Globex spread data. All other contract months are settled by Exchange staff, in consultation with market participants, based upon traded/quoted spread relationships.

Energy Options: Exchange staff, in consultation with market participants, establish the at-the-money volatility and create the volatility surface for the out-of-the money puts and calls for all option series based on traded/quoted outrights and spreads, which is input into an options pricing model to determine the settlements for all strikes. Settlements may be adjusted to accommodate relevant orders.

Metal Futures: The active contract month in the Gold, Silver, Platinum, and Palladium are settled to the VWAP of the trades executed on Globex during the defined settlement time period. All other contract months are settled based on traded/quoted spread relationships, as determined by Exchange officials, in consultation with market participants. The active contract month in Copper is settled based on the VWAP of all trades occurring on Globex and in the pit during the closing range. All other contract months are settled based on traded/quoted spread relationships, as determined by Exchange officials in consultation with market participants.

Metal Options: Exchange officials, in consultation with market participants, establish the at-the-money volatility and create the volatility surface for the out-of-the money puts and calls for all option series based on traded/quoted outrights and spreads, which is entered into an options pricing model to determine the settlements for all strikes. Settlements may be adjusted in accommodate relevant orders.

ClearPort Clearing: Unless otherwise specified in the contract terms or settled pursuant to one of the methods set forth above, Exchange staff will determine settlement prices based on relevant market data including, but not limited to, cleared prices, pricing data from market participants, the settlement prices of related products and any other pricing data from sources deemed reliable by staff.

Notwithstanding the foregoing, in the event the aforementioned calculations described in this advisory cannot be made or if staff, in its sole discretion, determines that anomalous activity yields results that are not representative of the fair value of the contract, staff may determine an alternative settlement price.

If you have any questions, please call the CME Globex Command Center at 312.456.2391 or in Europe at 44.207.623.4708.

***For settlement purposes, the “lead” month is defined as the contract month determined to be the most active or liquid, and may not always be the contract month closest to expiry. The method for making this determination varies by product.**

Eurodollar Futures: Back-Month Settlement Guidelines

The first twelve quarterly contract months are settled based on the bid/ask of both outright and spread trades, with all other quarterly months settling based on the following guidelines.

1. Outright Orders (including both single months and strips)
2. Packs (Years 4-10 Blues through Coppers)
3. 3-month Calendar Spreads
4. 6-month Calendar Spreads
5. Pack vs. Pack Spreads
6. 12-month Calendar Spreads
7. Calendar Spreads Beyond 12 months
8. Butterfly Spreads (monthlies)*
9. Bundles
10. Butterfly Strip Spreads

Notes:

- All orders must be actively bid or offered to the market in the Blues and Golds (years four and five) at least **2 minutes** prior to the close. Orders in the Purples through Coppers (years six through ten) must be actively bid or offered to the market at least **10 minutes** prior to the close.

- A daily survey of the pit community will be utilized to assist in the determination of the last five-year bundle settlement. The settlement price for the last five years will be based upon the average price levels obtained from three surveys conducted in the last 10 minutes prior 14:00 CT.

- In the event that the above guidelines are not followed for any reason, written documentation will be required, which will include information on who was involved and what orders went into the decision.

- *All Butterfly Spreads will be considered, with 3-months having higher priority than 6-months, 6-months more than 9-months, etc.

Eurodollar Options Settlement Guidelines

Orders Eligible for Settlement Consideration

1. Outright Options (out-of-the-money only)
2. Straddles (at-the-money only, no contingent futures)
3. Strangles (equidistant from the at-the-money only)
4. Call and Put Spreads (out-of-the-money and at-the-money only)
5. Butterflies/Iron Butterflies/Ratios (1X2 only)
6. Condors/Christmas Trees
7. Outright Options vs. Futures (market delta only)
8. Intermonth Straddle (at-the-money only) and Call/Put Spreads (out-of-the-money only)

Notes:

- Orders not part of these Settlement Guidelines will not be considered in the daily settlement process.
- Outright markets on EOS will be considered for settlement purposes.
- No spreads with 2 or more legs that are in-the-money will be considered.
- No spreads that include a leg that is CAB offered will be considered.
- Put-Call parity will not be violated but the cost of carry may be adjusted when appropriate.
- Customers are reminded that orders must be openly bid or offered at least two minutes prior to the close to be eligible for consideration.
- Daily settlements cannot be changed after 3:00 P.M. CT unless under consideration prior to that time.
- Settlements should reflect mid-market prices whenever possible.
- In-the-money options are settled automatically at parity as described below.

In-the-Money Options Put-Call Parity Equation (Excludes legacy NYMEX Products)

In-the-money options are settled automatically by the Exchange in accordance with the put-call parity equation, taking into account the appropriate cost of carry.

In-the-money options settlement = (Out-of-the-money settlement + Intrinsic Value) – Cost of Carry

$$\text{Cost of carry} = \frac{\text{Intrinsic Value} \times \text{Interest Rate} \times \text{Days to Expiration}}{360} - \text{Risk of Early Exercise}$$

The cost of carry is rounded to the nearest minimum increment of the underlying futures contract.

For all products except Eurodollar options, the interest rate used is the average of the Broker Loan Rate and the Fed Fund Target Rate. In Eurodollar options, the interest rate used will be a weighted average of~~is~~ the rates implied by the daily settlements of the Eurodollar futures contracts up to (but not including) the options expiration~~expiring quarterly Eurodollar future month~~.