TESTIMONY
OF
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EXECUTIVE CHAIRMAN
CME GROUP INC.
BEFORE THE

Subcommittee on Capital Markets, Insurance and Government Sponsored
Enterprises of the
HOUSE COMMITTEE ON FINANCIAL SERVICES
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I am Terrence A. Duffy, executive chairman of CME Group Inc. Thank you Chairman Kanjorski and Ranking Member Garrett for inviting us to testify today. You asked us to discuss issues surrounding the activity in the equity markets on Thursday, May 6, 2010, including our thoughts on market integrity and how our markets functioned on that date, the effectiveness of the existing market structure rules and the role of technology in our markets.

CME Group is the world's largest and most diverse derivatives marketplace. We are the parent of four separate regulated exchanges, including Chicago Mercantile Exchange Inc. ("CME"), the Board of Trade of the City of Chicago, Inc. ("CBOT"), the New York Mercantile Exchange, Inc. ("NYMEX") and the Commodity Exchange, Inc. ("COMEX"). The CME Group Exchanges offer the widest range of benchmark products available across all major asset classes, including futures and options on futures based on interest rates, equity indexes, foreign exchange, energy, metals, agricultural commodities, and alternative investment products. The CME Group Exchanges serve the hedging, risk management and trading needs of our global customer base by facilitating transactions through the CME Globex® electronic trading platform, our open outcry trading facilities in New York and Chicago, as well as through privately negotiated CME ClearPort transactions.

The equity index futures contracts traded on CME Group designated contract markets provide an essential risk management function, allowing investors to hedge their exposure against a portfolio of shares or equity options. The most significant equity index futures contract traded on the CME Group Exchanges is the E-mini S&P 500 futures contract. In 2009, average daily volume for the E-mini S&P 500 futures contract was 2,207,596 contracts.

I. Introduction

Over the past four days, CME Group has engaged in a detailed analysis regarding trading activity in its markets on Thursday, May 6, 2010. Our preliminary review indicates that <u>our markets functioned properly</u>. We have identified <u>no</u> trading activity that appeared to be erroneous or contributed to the break in the cash equity market during this period. Moreover, no market participant in our markets reported that trades were executed in error nor did the CME Exchanges cancel ("bust") or re-price any transactions as a result of the activity on May 6th.

In the following sections, we discuss: (1) the functioning of our markets on May 6, 2010, (2) the market dynamics in the futures market vis a vis the equity market, and (3) the relevant applicable CME and NYSE circuit breaker rules and (4) CME electronic functionality, particularly CME Stop Price Logic functionality and price banding, among others, which serve to protect our markets. Finally, we have also included preliminary recommendations as to changes that could avoid a recurrence of this type of event in the future.

II. The CME Markets Functioned Properly on May 6, 2010

a. CME Has Conducted an Initial Review of Detailed Trading Records

CME Group analyzed trading volume and activity throughout May 6 and focused particularly on the activity taking place during the period of 1pm to 2pm Central Time. Total volume in the June E-mini S&P futures on May 6th was 5.7 million contracts, with approximately 1.6 million or 28% transacted during the period from 1pm to 2pm Central Time. During that hour, the market traded in a range of 1143.75 to 1056, or 87.75 points - beginning the hour at approximately 1142 and ending the hour at approximately 1113. More than 250 firms and 9,000 User IDs were active in the market during this period of time.

During most of that hour, the bid/ask spread was a tick wide (.25 points) and the market traded in a largely orderly manner despite the significant sell off and subsequent rally. At approximately 1:45:28, following a sharp 12.75 point decline over a period of approximately 500 milliseconds on the sale of 1100 contracts by multiple market participants, the bid/ask spread momentarily widened to 6.5 points or 26 ticks.

At that point, one of CME Globex's risk management functionalities, a CME Globex Stop Price Logic event, which is discussed in more detail below, was triggered. As a result, the market was automatically paused for five seconds to allow liquidity to come into the market. The market subsequently reopened and was 1056.50 bid, at 1056.75 offered, and thereafter rallied more than 40 points to 1097 in the following three minutes and confirmed its upward recovery.

The Market Regulation Department reviewed a significant amount of activity during this period, a period that included more than 3 million system messages, and, in particular, reviewed the activity of entities whose trading activity during the one-hour period was significant and thus warranted further review. Market Regulation staff ultimately concluded that there were no anomalies represented by the level of activity or the trading strategies employed by market participants.

b. <u>CME Markets Provided an Important Price Discovery and Risk Transfer Function on May 6</u>

From a broader perspective, the cumulative record of May 6 trading activity underscores the fact that CME's futures markets, due to their high level of liquidity, provided an important price discovery and risk transfer mechanism for all market participants on that day.

The second-by-second trading range, which is an indicator of the liquidity in the market, shows that futures had much tighter bid-ask spreads than the comparable Exchange Traded Fund or ETF. The ETF which is most comparable to the E-mini S&P 500 futures is the SPDR S&P 500 ETF Trust (SPY). This demonstrates that, while all the markets were less liquid than in normal times, the liquidity in the futures market degraded much less than in the ETF markets (which, in turn, degraded much less than the individual stocks, especially stocks that are thinly traded.)

There is strong evidence that the futures market (E-mini S&P in particular) was much more liquid than the fragmented underlying stock market on May 6. During the period between 1:40 and 2:00 CST, the volume of E-mini S&P (notionally adjusted) was 3 to 4 times greater than the SPY volume and, at the peak of the market's volatility, was to 8 to 10 times greater.

The data does show that the E-mini S&P futures reached its low prior to when the stock market reaching its lows. This is consistent with the role of the futures market in anticipating market movements. Futures contracts, by design, provide an indication of the market's view of the value of the underlying stock index. Casual observation may lead to the conclusion that the Emini S&P futures prices appeared to lead the decline in the cash market. The chart, attached as Exhibit A, illustrates the comparative value of the E-mini, traded on the futures market, as compared to the equities markets. The chart demonstrates that the E-mini S&P moved virtually in tandem with the comparable cash instrument until the moment when our Stop Price Logic was implemented which caused our matching engine to pause for 5 seconds. At the time the Stop Price Logic was implemented, the E-mini S&P ceased its drop, while the cash market continued its steep decline. The E-mini S&P then rallied significantly for the remainder of the trading session. We believe this recovery was positively influenced by our Stop Price Logic functionality which stabilized market activity. This functionality is not available in the securities market. Consequently, while the broad based index markets – SPYs and CME E-mini S&P – were substantially recovering, there were continued price declines in individual stocks which persisted for minutes (not seconds).

If a seller made a decision to sell a large position, it was rational for that seller to turn to the most liquid market, notably the E-mini S&P futures contract, where there is significant market participant confidence. A review of the composition of the trading volume confirms that this was the case. Consequently, equity index futures perform an important price discovery function in the market. If the futures market had not been available as an alternative, the selling would have manifested itself somewhere else, potentially in a less liquid market, such as the underlying stock market or the OTC derivatives market. The relative tightness of the spread in the futures market underscores the fact that there were buyers in the market as well creating a concentration of liquidity that further supported the important price discovery and risk transfer role of the futures market.

III. Circuit Breaker Rules

One of the mechanisms that exchanges have implemented to curb market volatility are "circuit breaker" rules. Circuit breaker rules require an automatic halt in trading when pre-determined price levels are reached. CME Group Exchanges currently have circuit breaker rules in effect for equity index products which are consistent with the circuit breaker rules in the underlying equity

markets. The following is a brief history and summary of circuit breaker rules as developed by the equities markets and by CME.

Circuit breaker rules were originally introduced following the September 1987 market crash. The circuit breakers were implemented uniformly across all equities and options exchanges and were set at a fixed price level tied to the DJIA. If the DJIA declined 250 points (approximately 12% of the Index) from the prior day's close, a trading halt was imposed; if the DJIA declined 400 points, a subsequent two-hour trading halt was triggered. This rule was embodied in NYSE Rule 80B.

On October 27, 1997, the circuit breakers were triggered for the first time. A subsequent analysis of those events led to a modification of the circuit breaker rules to employ percentage declines of 10, 20 and 30% in the DJIA in lieu of the fixed point triggers previously used. That rule remains in effect.

The CME also adopted price limit rules for its equity index contracts. These price limits were coordinated with the NYSE Rule 80B trading halts when the latter were adopted in 1988. The price limit structure and levels have changed several times as the Exchange has gained more experience and as the trading halts in the equity market have been modified.

CME's rules originally included several intermediate price limits -- called "speed bumps" – triggered prior to a trading halt, which were in effect for ten-minute intervals. CME also imposed total daily limits on its domestic equity futures contracts, set at approximately a ten percent drop in the respective index.

In 1998, when the circuit breaker rules at NYSE and the other equity exchanges were changed to the 10, 20 and 30% level, CME adopted a price limit system of 2.5, 5, 7.5 and 10% limits, with a total daily limit of 20%. Later in 1998, CME adopted a 15% speed bump which triggered a 10 minute reserve period in the market. In 2001, CME amended the price limits to eliminate the 2.5% limit on all domestic stock indexes. The limits were triggered at 5, 10, 15 and 20%.

In January 2008, the decision was made to harmonize CME's limits to be fully consistent with the NYSE Rule 80B (and also consistent with the methodology employed by the CBOT with respect to the DJIA futures). Consequently, the 5%, 7.5%, 10%, 15% and 20% limits were eliminated in favor of the 10%, 20% and 30% employed by the NYSE. CME did, however, retain the references to the specific stock index that is the subject of the futures contract rather than tying these limits to movements in the DJIA, meaning, for example, that the E-mini S&P 500 circuit breakers are tied to price movements in the related index.

CME implements an unconditional futures trading halt in the equity index futures when the primary stock market is halted, regardless of whether a particular index product has hit a limit or not. CME also continued enforcement of 5% limit bid or offer policy during overnight electronic trading hours; if equity index futures are locked limited at 8:15 a.m. Central Time ("CT") and remain so at 8:25 a.m. CT in the lead month futures contract, there will be a trading halt in effect until the commencement of regular trading hours (floor and electronic trading). During the trading halt, the Exchange will provide an Indicative Opening Price of the re-opening of trading on CME Globex, if applicable. If the lead month futures contract is no longer locked limit at

8:25 a.m. CT, trading will continue with the 5 percent limit in effect. At 8:30 a.m. CT, the 5 percent overnight electronic trading hours limit no longer will be applicable.

On May 6th, the declines in the DJIA were just short of 10% at a time of day when the 20% trigger was in effect. Consequently, the circuit breakers in the primary and the futures markets were not triggered.

IV. CME Has Risk Management Controls to Mitigate the Potential for Disruption of its Markets

In addition to the circuit breaker rules described above, CME has in place numerous risk management processes, procedures and systems to preserve the integrity of its market in light of the many risks associated with maintaining a primarily electronic market. For example, CME is the only exchange in the world that requires pre-execution credit controls. Appended to the testimony as Exhibit B is a detailed list and description of the multitude of controls that the CME employs on its CME Globex system, including credit controls, messaging volume controls and risk protection policies and procedures.

There are certain risk protection tools employed by the CME which are important to note individually and which are relevant to today's discussion. One of these tools, CME Globex Stop Price Logic functionality, was employed on May 6 – its operation and effect are also described below.

a. Stop Price Logic Functionality

The CME Globex system has a Stop Price Logic functionality which serves to mitigate artificial market spikes that can occur because of the continuous triggering, election and trading of stop orders due to insufficient liquidity. If elected stop orders would result in execution prices that exceed pre-defined thresholds, the market automatically enters a brief reserved state for a predetermined time period, generally ranging from 5 – 10 seconds. During this period, no orders are matched and new orders other than market orders may be entered and orders may be modified and cancelled. The momentary pause that occurs when Stop Price Logic is triggered allows market participants the opportunity to provide liquidity and allows the market to regain equilibrium, thereby mitigating the potential for disruptive market moves.

The stop spike price and time parameters in the E-mini S&P futures are 6 index points and 5 seconds, respectively.

The Stop Price Logic was triggered on May 6th in the E-mini S&P 500 equity index. At 1:45:27, one second prior to going into reserve state, the front month E-mini S&P 500 equity index futures contract was trading just under the 1070.00 level. Multiple parties entered the market selling and taking the market down to 1062.00. There was a stop order to sell 150 contracts at 1062.00 which moved the markets to 1058.25. This trade triggered another 150 lot stop at 1059.00 which sold the market down to 1056.00. At this time renewed buying from multiple firms absorbed the volume at which point, the market started to trade off of the lows.

The front month E-mini S&P 500 equity index futures market went into reserve state as a result of Stop Price Logic functionality being triggered at 13:45:28. The market came out of this reserve state five seconds later. As a result of the stop, the decline in the E-minis halted and the market came out of the reserve state with an initial price of 1056.75.

b. Price Banding Functionality

To ensure fair, stable and orderly markets, CME Globex subjects all orders to price verification using a process called price banding. The platform utilizes separate mechanisms for futures price banding and options price banding. Price banding prevents the entry of erroneous orders such as a limit bid at a price well above the market or a limit offer at prices well below the market which could trigger a sequence of market-moving trades that require subsequent cancellations.

c. <u>Protection Points for Market and Stop orders</u>

This CME Globex functionality automatically assigns a limit price (Protection Point) to futures market orders and stop orders to preclude the execution of these types of orders at extreme prices in situations where there is insufficient liquidity to support the execution of the order within an exchange-specified parameter of the current market.

The Protection Point values vary by product, and in the E-Mini S&P futures the Protection Point is established at 3 index points. The CME Globex system calculates the limit price for a Market Protected Order by applying the Protection Point value to the best bid or offer price (depending on the order's side of market) and by applying the Protection Point value to the trigger price for a Stop Protected Order. Any unmatched quantity remaining for a Market Protected or Stop Protected Order after it is executed to the Protection Point limit becomes a Limit Order at the limit price.

d. <u>Maximum Order Size Protection</u>

This CME Globex functionality prohibits entry of an order into the trading engine which exceeds a pre-determined quantity. For E-mini S&P 500 futures, the order size is 2,000 contracts. This functionality provides protection against the so-called "fat finger" trades. Additional credit controls serve as a check to ensure that a single market participant is not sending in continuous orders at the maximum order size if such trading cannot be supported.

V. High Frequency Trading

An important issue raised in this discussion is the contribution of high frequency traders ("HFTs") to the current situation and their future role in the markets. As recently described in the SEC's Concept release on market structure, high frequency trading was identified as one of the most significant market structure developments in recent years. Although HFT is not clearly defined, "it typically is used to refer to professional traders acting in a proprietary capacity that engage in strategies that generate a large number of trades on a daily basis."

CME believes that HFTs play an important role in the markets, <u>particularly when such activities</u> are engaged in with the types of risk management procedures detailed in the previous section. HFTs are an important part of daily trading activity in the marketplace and this has developed in response to technological and trading strategy advances. This represents the natural evolution of technological advancements and improvements in the marketplace and the percentage of trading volume attributable to HFTs will likely continue to increase in the future. There is evidence that HFTs increase liquidity and transparency in the marketplace and narrow spreads which allows investors to buy and sell securities at better prices and at lower costs.

It is also important to note that not all HFTs are alike. A significant proportion of HFTs on the CME promote liquidity by providing continuous markets in our products. As illustrated by the events of May 6, in analyzing the role of one HFT, a majority of that entity's trading executed during the relevant one-hour period was related to that firm's market making activities. Thus, before considering restrictions on HFT activity, consideration should be given to the beneficial role played by HFTs in providing liquidity during normal market activity as well as during times of increased market turmoil.

The use of high frequency trading by proprietary trading firms, investment banks, hedge funds and index traders, among others, has made the marketplace more efficient and competitive for all market participants. Careful consideration should given to any decision to place significant restrictions or limitations on HFTs would be harmful to the marketplace and result in less efficient and less liquid markets. It is also important to note that automated trading or algorithmic trading has its origins in Europe. Accordingly, efforts to place limits or impose regulatory burdens on HFTs in the United States may encourage HFTs to shift the trading they currently conduct in the United States to Europe and other foreign jurisdictions that are already well-equipped to handle additional growth in both equities and futures.

CME Globex employs many risk management policies and procedures which assist in the mitigation of risk associated with any type of electronic trading, including that of HFTs. In addition, the CME Group Exchanges are proactive in monitoring the trading activity of HFT entities. All Automated Trading Systems ("ATS") using CME Globex are required to identify themselves as an "ATS" and register with the CME Group Exchanges. Subsequent to their registration, the CME Group Exchanges are able to monitor the trading activity of ATSs on both a real time and post-trade basis. CME has required ATS registration for its equity index products since 2006. This policy has now been expanded to ATS' for all products and we currently have over 10,000 ATS registered.

VI. Preliminary Recommendations

As noted previously, CME has endeavored to extensively examine the activity in our markets on May 6, 2010. Based on our analysis to date, we would make the following preliminary recommendations regarding potential changes to improve the functioning of the markets during times of severe turmoil. Of course, as we continue to study the situation, we would be happy to contribute our further thoughts and recommendations.

- Circuit breakers, including circuit breakers for individual stocks such as that implemented
 by the NYSE, must be harmonized across markets. The lack of consistency exacerbated
 the decline in certain individual stocks as the NYSE exercised its Liquidity
 Replenishment Rule to slow down its markets and orders were then directed to less liquid
 electronic trading venues.
- Stop Price Logic functionality should be adopted across markets, on a product basis, to prevent cascading downward market movements.
- The current circuit breaker levels of 10, 20 and 30 percent, the duration of the halt and the time of day at which such triggers are applicable, should be reevaluated in light of current market conditions to determine whether any changes are warranted. Any such changes must be implemented across all market venues.

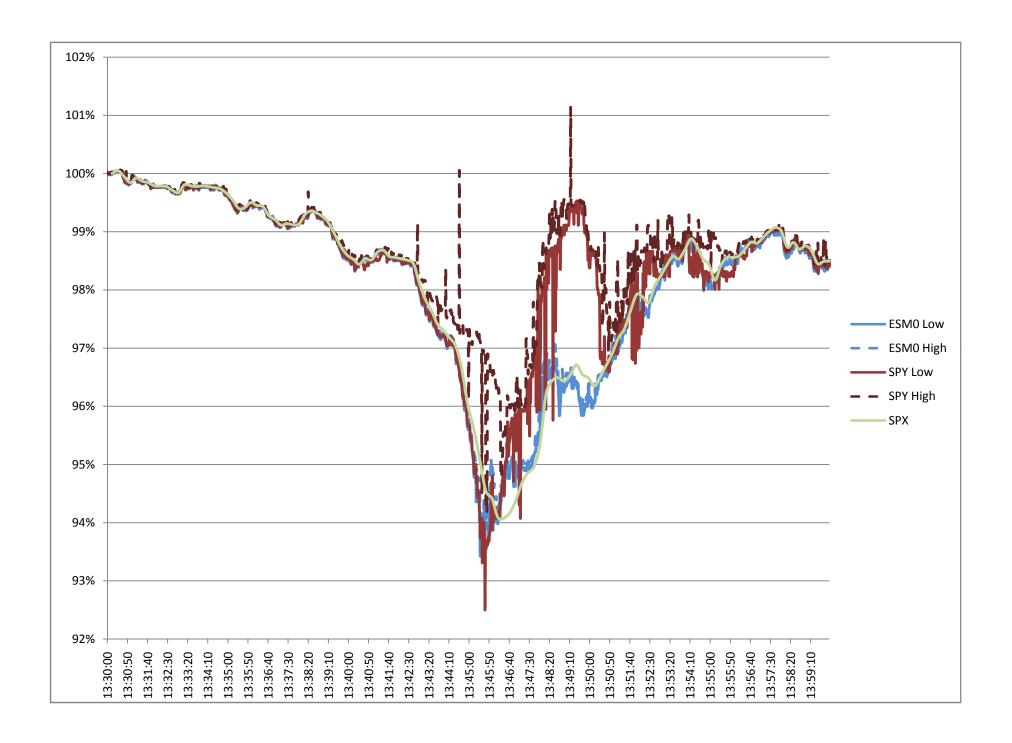


Exhibit B

CME Group Inc. - Risk Management and Risk Protection Controls

The following is an outline of the risk management services and applications and risk protection tools, policies and rules employed by CME Group.

Risk Management Services and Applications

The CME Group maintains several risk management applications and services to protect CME Globex customers and clearing firms.

Globex Credit Controls:

CME Globex Credit Controls provides pre-execution risk controls that enable Clearing Firm Risk Administrators to set credit limits through the CME Globex Credit Controls (GC²) tool. Clearing Firm Risk Administrators are able to define firm level trading limits and select real-time actions if those limits are exceeded, including:

- e-mail notification
- order blocking
- order cancellation

CME Globex Credit Controls functionality is available in both Manual and Automated modes.

Manual Mode

• Enables risk administrators to maintain manual credit control limits by setting a maximum order size and the capability to block new orders

Automated Mode

- Automated credit control management defined by Clearing Firm Risk Administrators
- View open and filled orders by executing firm
- Auto-cancel orders

Drop Copy:

The Drop Copy service allows customers to receive real-time copies of CME Globex Execution Report and Acknowledgement messages as they are sent over link order entry system sessions. Drop Copy aggregates link messages, enabling customers to aggregate positions and monitor orders for sessions guaranteed by one or more clearing firms upon approval of the clearing firms.

Features:

- Ability to monitor orders and activity
- Aggregated execution and reject messages

Cancel on Disconnect:

Upon an ungraceful dropped CME Globex to link user connection, Cancel on Disconnect (COD) cancels all resting session/day futures and options orders for that session. Customers are responsible for re-entering any orders cancelled by COD.

Features:

- Opt-in, subscription-based
- Free service

CME Globex Messaging Volume Controls

• Latencies in CME Globex markets can be caused by customers sending messages at sustained, high frequencies. To protect all market participants from the negative effects of this extraordinary and excessive messaging, CME Group implemented automated controls at the link session level to monitor for excessive new order, order cancel and order cancel/replace messaging. If a link session exceeds the designated message per second (MPS) threshold over a rolling three second window, subsequent messaging will be rejected until the average MPS rate falls below the threshold.

Mass Quote Governor

- Mass Quote Governor limits the rate at which firms can submit mass quotes. Excessive
 mass quotes impact CME Group trading engines and result in excessive amounts of
 market data, which impacts the customer. Mass Quote Governor eases the bandwidth
 and processing constraints on CME Group and firms receiving market data. This allows
 CME Group to provide a more stable and reliable market
- Mass Quote Governor measures the number of quotes per second (QPS) for each Market Maker mass quote enabled iLink session. The QPS is measured during a CME Group defined time interval. If a firm exceeds their allotted QPS as measured over the defined time interval, subsequent mass quote messages are rejected during the next time interval.

Risk Protection Tools

The CME Globex electronic trading infrastructure incorporates several risk protection tools to provide added safeguards to customers and clearing firms.

Price Banding

• To ensure fair, stable and orderly markets, CME Globex subjects all orders to price verification using a process called price banding. The platform utilizes separate mechanisms for futures price banding and options price banding.

• Price banding prevents the entry of erroneous orders such as a limit bid at a price well above the market or a limit offer at prices well below the market which could trigger a sequence of market-moving trades that require subsequent cancellations.

Futures Price Banding

A Price Band Variation (PBV) is a static value that varies by product. It is symmetrically applied to both the upside (for bids) and downside (for offers) to determine the Price Band Variation Range (PBVR). The Banding Start Price (BSP) is a dynamically calculated value that determines the PBVR. The BSP uses market activity such as trades, best bid and offer, implied bid and offer or indicative opening price to ensure that the most current and relevant information is used to calculate the PBVR.

Enhanced Options Price Banding

Enhanced Options price banding is identical to futures price banding, with the following modifications. Based on market conditions, the reference price is set to the:

- Last Price of the option or spread;
- Theoretical Options Price (TOP), based on well established options pricing algorithms; or,
- Last Price in combination with the TOP, if practical.

The width of the price bands is determined by one of the following:

- A fixed PBV for the entire option series, identical to the current price banding practice;
- A dynamic PBV based on the delta of the option, as estimated by the TOP calculation; or,
- A dynamic PBV based on a percentage of the TOP, where the percentage is based on the delta of the option.

Stop Order Logic Functionality

Stop Order Logic functionality helps to mitigate artificial market spikes that can occur
because of the continuous triggering, election and trading of stop orders. On CME
Globex, if elected stop orders would result in execution prices that exceed pre-defined
thresholds, the market automatically enters a very brief reserved state. During this period,
new orders are accepted but trades do not occur until the reserve state expires, thereby
providing an opportunity for the market to regain equilibrium.

Protection Points for Market & Stop Orders

• Market and Stop Order protection points permit orders to be filled within a pre-defined range of prices without having to manually define a limit price. Any Remaining Quantity for a Market Protected or Stop Protected Order will become a Limit Order at the Limit Price Calculated by the Trading Engine.

Maximum Order Size Protection

Maximum order size protection is embedded CME Globex functionality that prohibits entry of an order into the trading engine which exceeds a pre-defined maximum quantity.

Market Maker Protections

Market Maker Protections (MMPs) are parameters set by the Market Maker to provide a degree of risk protection by limiting their quote execution exposure. MMPs are available exclusively to CME-registered Market Makers specifically using Globex Mass Quote functionality. MMP parameters are set specifically for each Mass Quote Session Identification (Mass Quote ID). When their defined protection values are met or are exceeded within a 15 second interval, the protections are triggered. The MMP functionality is supported for all premium traded options and volatility traded options. MMPs are not available for Futures Instruments.

CME Group Provided Applications

FirmSoft

- FirmSoft is an order management tool which provides real-time visibility and cancel functionality for working and filled orders, across multiple firm IDs, in the CME Globex order management database. Access to FirmSoft can be granted based on one or more Trader ID(s), session(s) and/or account numbers.
- FirmSoft provides important risk mitigation functionality during system failures.
- With FirmSoft, customers can view and cancel orders for iLink and EOS Trader.

FirmSoft users can view:

- Current order status
- Fill information, including partial fills and fills from mass quotes
- Net positions
- Cancel replace history
- CME Globex timestamps

If enabled, FirmSoft users can cancel:

- An individual order
- A group of orders
- All working orders and mass quotes

<u>Front –End Clearing System (FEC)</u>

The Front-End Clearing System (FEC) provides real-time trade position details. In addition, FEC gives a clearing member firm back office staff an integrated method for entering and processing a variety of trade data.

Risk Protection Policy and Rules

Accessing CME Globex

• The CME Group Rule Book outlines certain requirements for gaining access to CME Globex, including the requirement that all connections to CME Globex must be

Error Trade Policy

• The following shall be applied to balance the adverse effects on market integrity of executing trades and publishing trade information inconsistent with prevailing market conditions while preserving legitimate expectations of trade certainty by market participants. This rule authorizes the Globex Control Center ("GCC") to adjust trade prices or cancel (bust) trades when such action is necessary to mitigate market disrupting events caused by the improper or erroneous use of the electronic trading system or by system defects. Notwithstanding any other provisions of this rule, the GCC may adjust trade prices or bust any trade if the GCC determines that allowing the trade to stand as executed may have a material, adverse effect on the integrity of the market. Please refer to Rule 588 of the Rule Book for complete details of the CME Group Error Trade policy.

General Rules and Requirements for Entering Orders on CME Globex

Automated Trading System (ATS)

- An ATS that does not require an individual to initiate or manually confirm the creation of a specific instruction must be assigned, and must transmit into CME Globex, a unique TAG 50 that identifies the person who operates, administers and/or monitors the ATS. If the ATS operator is responsible for multiple trading models, algorithms, programs, or systems which trade the same product, and which potentially could trade opposite one another, then each model, algorithm, program or system must be assigned a unique TAG 50. Any deviation from this requirement must be approved by CME Market Regulation before being implemented.
- Some trading entities have assigned groups of individuals that work together to operate and monitor ATSs. For example, a firm may have one person who adjusts pricing parameters, but others who continuously monitor positions or risk and make decisions as to trading size. In these team situations, the individuals may use a single TAG 50 subject to the approval of CME Market Regulation. When registration is required, these team TAG 50s must be properly registered. Team TAG 50s may only be used in true team situations. Entities may not bundle all their ATS operators under one TAG 50 if those operators primarily work independently or at different times of the day.
- When ATS spreading functionality is the primary source of order entry, or if there is a large amount of order traffic from the operator, then a separate TAG 50 must be assigned to distinguish the automated orders from the manual orders.

ATS TAG 50 Registration Requirements

- CME requires clearing members to register all ATS TAG 50s.
- The clearing firm must associate each ATS TAG 50 with the name of the person who is directly responsible for controlling the trading of the ATS, and must select the ATS attribute on the registration screen to indicate that the TAG 50 represents an ATS. Each ATS operator must provide accurate and up-to-date information to their clearing firm concerning ATS TAG 50s. The TAG 50 that is registered must exactly match the TAG 50 that is submitted on CME Globex orders entered through iLink connections.
- Clearing firms must ensure that all TAG 50s including ATS TAG 50s, which require registration, are appropriately registered and must correct any errors and make any necessary updates to TAG 50 registrations.
- For Team ATS registrations, all of the same information as individual registration is required including each person's designated role as part of the team. These roles include: Desk Manager/Head Trader, Trader, Risk Monitor, Trading Monitor, or Other. If there are changes to the Team over time, it is the responsibility of the trading entity and the clearing firm to ensure that those changes are promptly and accurately recorded.

CME Group Globex Messaging Policy

• The CME Globex Messaging Policy creates fair business guidelines by which customers are billed a surcharge for overly high message rates. This policy benefits all customers trading on CME Globex by discouraging excessive messaging abuses, which in turn helps to ensure that CME Globex maintains the responsiveness and reliability that our customers around-the world have come to expect from it when trading the CME Group electronic markets. Under the CME Globex Messaging Policy, each clearing member firm (active or in active clearing member firms that maintain relationships with CME Clearing) must not exceed product-specific benchmarks, individually tailored to the valid trading strategies of each market. CME Group calculates benchmarks based on a perproduct Volume Ratio, defined as the number of messages submitted for each executed contract in a given product. If a clearing member firm exceeds a benchmark, they will be issued two notices within a rolling 30 business day period.

ATS Messaging

- ATSs are treated like any other market participant and are subject to the messaging policy which applies to all message flow.
 - (The Exchange sponsors Market Maker programs which may not be subject to all ATS provisions.)

Implementing this volume control for new order and order cancel/replace messaging is designed to:

- Support valid trading activity.
- o Prevent a malfunctioning trading system from impacting the markets.