

June 22, 2011

**Via Electronic Mail:** [rule-comments@sec.gov](mailto:rule-comments@sec.gov)

Ms. Elizabeth M. Murphy  
Secretary  
U.S. Securities and Exchange Commission  
100 F Street, N.E.  
Washington, D.C. 20549

**Re: Comments Regarding SEC Release No. 34-64547; File No. 4-631**

CME Group Inc. (“CME Group”) appreciates the opportunity to comment on the Joint Industry Plan (the “Plan”) recently submitted by the national stock exchanges and the Financial Industry Regulatory Authority, Inc. (the “Participants”).<sup>1</sup> CME Group is one of the world’s largest and most diverse derivatives marketplaces. We operate four separate exchanges, including the 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 based on interest rates, equity indexes, foreign exchange, energy, metals, agricultural commodities and alternative investment products.

Under the Plan, the Participants would establish a system of single security circuit breakers designed to prevent trades in individual “NMS Stocks” (as defined in the SEC’s Regulation NMS Rule 600(b)(47)) from occurring outside of certain specified price bands. The Plan couples dynamic limit up-limit down price banding with trading halt mechanisms that, when triggered by a limit condition persisting for 15 seconds, would halt trading of an affected security on all venues for a minimum of five minutes. The Federal Register release reflects that the Plan is intended to address extraordinary market volatility events such as those that occurred on May 6, 2010. The Plan would operate on a one-year pilot basis and would replace the existing single-stock circuit breaker pilot program currently in effect.

CME Group fully supports the Plan’s fundamental goals of promoting fair and orderly markets and mitigating the negative impacts of sudden and extraordinary price movements in NMS stocks, such as those that resulted in more than 20,000 transactions being cancelled on May 6<sup>th</sup> and many thousands more being allowed to stand at prices that challenged investor confidence in the integrity of the markets. Although market fundamentals clearly contributed to the broader market instability on May 6<sup>th</sup>, the absence of automated mechanisms in certain venues to prevent erroneous trades and to address transitory liquidity gaps led to gross distortions in the prices of many securities that, in turn, created additional uncertainty among market participants and further challenged liquidity.

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<sup>1</sup> See SEC Release No. 34-64547 (May 25, 2011), 76 FR 31647 (June 1, 2011).

Liquidity is clearly the most important facet of market quality and a critical element in the defense against disorderly markets. Liquidity is, however, inherently dynamic – that is the nature of markets and how prices are discovered – and technology and market structures have elevated the speed with which liquidity can be sourced, consumed and withdrawn. Inevitably, supply and demand imbalances will occur from time to time, and as the events of May 6<sup>th</sup> demonstrated, demand for liquidity can at times legitimately overwhelm its supply in even the most liquid markets. CME Group believes, however, that sound structures and rules, effectively coordinated where appropriate, can significantly strengthen the orderliness of price discovery and resilience of markets during periods of turbulence.

CME Group agrees with the Participants that all venues should employ automated means to ameliorate the impact of transitory liquidity gaps and reduce the need to cancel transactions. However, as proposed, we believe the Plan sets forth an overly complicated and insufficiently coordinated structure that, in a macro-liquidity event, will have the unintended consequence of undermining rather than promoting liquidity. CME Group's view is that transitory liquidity gaps in a particular security can be mitigated by simpler and less disruptive means, and further, that mechanisms that apply to broad-based ETFs must be considered in the context of other financial products that are based upon the same underlying index. The Participant's proposal fails to model or back test how the Plan would operate in a macro-liquidity event such as that which occurred on May 6<sup>th</sup> or how it would interact with the market-wide circuit breaker structure which itself is presently being evaluated by the securities and futures exchanges in consultation with the SEC and CFTC. Failing to holistically examine and fully understand the interaction of these different volatility mechanisms prior to implementation represents an unnecessary risk that must be addressed before proceeding.

### **Concerns Regarding Single Stock Trading Halts In Macro-Market Events**

The Plan would replace the existing single-stock circuit breaker pilot program with a system of market-wide limit up-limit down requirements designed to prevent trades in individual NMS stocks, ETFs and ETNs from occurring outside of certain dynamically adjusted price bands. The Plan would complement these limit up-limit down requirements with trading halt mechanisms that would halt affected securities for a minimum five minute time period in the event a limit condition persisted for 15 seconds; during the 15-second period, the security could continue to trade within the specified price limits.<sup>2</sup> The limit up-limit down price bands would be defined relative to the average price over the preceding rolling five minutes, provided, however, that each price band would remain in effect for a minimum of 30 seconds and would be adjusted only if the reference price has moved 1% or more from the prior reference price. For Tier 1 NMS stocks, including those in the S&P 500 Index, the Russell 1000 Index and approximately 350 ETFs and ETNs referencing a variety of equity, interest rate and commodity indexes, the price band would be 5% from the reference price provided the reference price was at least \$1. All other NMS stocks with a reference price of at least \$1 would have price bands of 10%.

CME Group has consistently argued that single security circuit trading halts that meaningfully interrupt price-discovery serve to exacerbate rather than remediate uncertainty among market

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<sup>2</sup> It is unclear from the Plan whether options on the same security will be permitted to continue to trade at synthetic prices outside of the limits during the 15 second limit state.

participants in a macro-market event and consequently may serve to undermine rather than promote liquidity during broadly volatile periods.

As one important example, single stock trading halts would apply to ETFs that are based on equity indexes that also underlie other financial products including index futures, options on index futures, cash-index options and options on ETFs. The events of May 6<sup>th</sup> clearly revealed the important linkages between markets and the unhelpful impacts on liquidity supply and demand when those linkages cannot be relied upon by market participants or otherwise break down as the result of uncoordinated actions across comparable markets. In fact, one key lesson of the events of May 6<sup>th</sup> is that closely linked markets should have coordinated halting mechanisms, yet the proposed single stock trading halt requirements include exchange-traded products based on broad-based indexes that are not coordinated with other index futures and options or with the current market-wide circuit breakers. CME Group continues to believe that inconsistent treatment of the same beta exposure will add further stress to the market during periods of market turbulence.

Secondly, in a macro-market event, multiple constituent stocks in an index could be halted without a market-wide circuit breaker being triggered, and individual stocks would be halted and opened on staggered timelines, creating complexity and confusion in understanding the index calculation and the true value of the index. Market participants would be required to determine for themselves the relevance of the index values that are disseminated during the time period when various index-component stocks have been halted, and the resulting inability to discover accurate prices and perform appropriate risk management would impair liquidity provision in index-based products. This, in turn, would serve to compound the problem by negatively affecting liquidity in critical benchmark products and also make it more difficult for the halted stocks to replenish liquidity.

To date, the single security circuit breakers implemented in 2010 have triggered trading halts principally as the result of erroneous order entry rather than market-wide volatility events. To the extent the objective is to reduce the likelihood of erroneous trades, there are well proven means for preventing and addressing these types of errors that are significantly less disruptive to the broader market than halting the market for five or more minutes. The same is true with respect to addressing transitory liquidity gaps. While implementing a limit state for up to 15 seconds to allow liquidity to be replenished before halting the market is arguably an improvement over an automatic five minute halt, it also adds another layer of complexity, and the methodology continues to allow for a variety of asynchronous results across the market in a period of market wide volatility if the limit state leads to halts being implemented.

Simplicity, clarity and appropriate coordination are important components of any volatility methodology if the objective is to engender market participant confidence and allow for the effective operational execution of the rules during a macro-market event. As noted above, CME Group believes it is premature to propose the rule without further study to model and fully evaluate the impacts of the proposed structure in a macro-market circumstance, including how the calculations of broad-based indexes would be affected, how related products will be impacted, and how the single-security and market-wide circuit breakers will interact; additionally, it is important, before proceeding, to fully understand how market centers would implement and execute the new rules and manage the price limits, single security halts and market wide circuit breakers across a broad variety of instruments during a macro-market event.

## **Properly Calibrated Market-Wide Circuit Breakers Combined With Automated Volatility and Risk Management Functionality is a Better Alternative**

CME Group has asserted that the most important action regulators can take to shield the market from the type of macro-market price destabilization observed on May 6<sup>th</sup>, 2010, is to reconsider the efficacy of the current levels and durations of the coordinated market-wide circuit breakers given the changes in market structure that have occurred since their original implementation. We believe that properly designed, calibrated and coordinated market-wide circuit breakers will provide a critical buffer against the type of price swings that threaten the market infrastructure and impair investor confidence. Additionally, we believe that a properly structured market-wide circuit breaker regime will obviate the need for the type of lengthy, complex and potentially disruptive halts in single stocks and exchange-traded products that have been proposed.

In conjunction with effective market-wide circuit breakers, CME Group strongly believes that market centers should implement additional automated volatility mitigation and risk management functionality to minimize the potential for error trades and transitory liquidity gaps to undermine market integrity and investor confidence. However, these mechanisms should be implemented in ways designed to minimize the risk of causing collateral distress to markets and market participants and in ways designed to minimize operational risk.

Market centers have the ability to employ a variety of automated functionality that would mitigate the potential for disruptive erroneous trades to occur and that allow for the management of transitory liquidity gaps in a particular security in a more efficient and less disruptive manner than the potentially lengthy and uncoordinated halts in the proposed Plan. Specifically, we recommend the Participants adopt the following types of functionality rather than the trading halts called for in the Plan:

- (1) automated dynamic price banding that prevents the entry of erroneously priced orders;
- (2) automated order quantity limits that prevent the entry of “fat finger” order quantities;
- (3) automated market and stop order protection points that mitigate the impact of market or stop orders entered in illiquid conditions; and
- (4) automated volatility mitigation functionality that *briefly* pauses or limits trading to allow liquidity to be sourced.

With respect to the fourth point above, response times in today’s highly automated trading environment are measured in single digit milliseconds, and the objective should be to attract liquidity with the least amount of disruption to continuous trading and price transparency. In CME Group’s experience with its stop logic functionality, we have found that in most circumstances, five seconds is a sufficient period of time in which to source liquidity, but our functionality is designed to allow for extending the pause in increments as necessary to attract liquidity. As indicated above, we believe that the proposed five minute trading halts have the potential to be very disruptive to the market in a macro-market event.

All of the functionalities identified above are currently used by CME Group and are described below.

**Price Banding:** CME Globex subjects orders to price verification upon entry using a process referred to as price banding. Price banding is designed to prevent the entry of orders at clearly erroneous prices, such as a bid at a limit price substantially above the market, thereby mitigating the potential for a market disruption. For each futures product, CME Group establishes a Price Band Variation parameter which is a static value that is symmetrically applied to the upside for bids and the downside for offers relative to a reference price. In the E-mini S&P 500 futures, for example, this parameter is currently set at 12 index points (approximately 1% of the current index value).

The reference price, referred to as the Banding Start Price, is a dynamically calculated value based on market information such as last trade price, best bid and offer price or the indicative opening price. Orders entered at prices beyond the Price Band Variation parameter relative to the reference price are rejected by the Globex engine. Price banding functionality for options on futures is similar to futures price banding except that the Banding Start Price may reference theoretical option prices based on established option pricing models in addition to last trade price. Additionally the width of the option price bands may be either a static value for a particular option series or a dynamic value that adjusts based on the option's delta or a delta-adjusted percentage of the option's theoretical price.

**Protection Points:** CME Group employs proprietary functionality that applies a limit price (protection point) to each market order entered on the CME Globex platform and to each stop order entered without a limit price. This functionality prevents orders from being filled at significantly aberrant price levels because of the absence of sufficient liquidity to satisfy the order at the time the market order is entered or the stop order is triggered. The protection points for each product are generally defined as one half of the product's "Non-Reviewable Range," a value that is established in connection with the exchanges' Trade Cancellations and Price Adjustments rule. The protection point is measured from the best bid price for sell market orders, the best offer price for buy market orders, and the stop trigger price for stop orders. Any quantity on the order that is unfilled at the protection point level becomes a resting limit order at that price and creates the opportunity to source liquidity. In the E-mini S&P 500 futures contract, for example, this parameter is set at 3 index points (approximately  $\frac{1}{4}$  of 1% of the current index value.)

**Order Quantity Protections:** Maximum order size protection is embedded Globex functionality that precludes the entry of an order into the trading engine if the order's quantity exceeds a pre-defined maximum quantity. Orders entered for a quantity greater than the prescribed maximum quantity are rejected by the Globex engine. This functionality helps to avoid market disruptions by preventing the entry of erroneous orders for quantities above the designated threshold. In the E-mini S&P 500 futures contract, this parameter is set at 2,000 contracts (approximately \$130 million in notional value at the current index value.)

**Stop Logic Functionality:** CME Group's proprietary Stop Logic functionality serves to mitigate artificial and disruptive market spikes which can occur because of the continuous triggering, election and trading of stop orders in an illiquid market condition. On CME Globex, if elected stop orders would result in execution prices that exceed pre-defined thresholds, the market

automatically enters a reserve period for a prescribed number of seconds; the length of the pause ranges from 5 to 20 seconds and varies based on the characteristics of the product and time of day at which the stop logic event is triggered. During the reserve period, new orders are accepted and an indicative price is published, but trades do not occur until the reserve period expires, thereby providing an opportunity for participants to respond to the demand for liquidity. If contra-side liquidity is not sourced during the initial reserve period, the price band will increase by another increment and a second iteration of the stop logic will commence. This process will continue until liquidity is sourced or for up to a maximum of twelve iterations. In the E-mini S&P futures the stop logic price parameter is 6 index points (approximately ½ of 1% of the current index value) and the time parameter is 5 seconds during regular trading hours and 10 seconds outside of regular trading hours.

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CME Group believes the various types of automated functionality described above represent more effective and efficient solutions to the concerns that the Plan is designed to address and avoid harmful collateral consequences and operational challenges. Although we recognize that there remain opportunities to continue to innovate, as well as refine and improve these types of automated functionalities to further protect the integrity of the markets, we believe that the Plan as proposed would have unintended consequences that would exacerbate rather than mitigate market disruptions in a macro-market liquidity event.

We appreciate the opportunity to comment on the Plan and urge the Commission to take into account our comments and those provided by other market participants. We are happy to discuss any questions concerning the comments contained in this letter and are otherwise available to assist the Commission in its efforts to enhance the stability and integrity of the markets.

Please feel free to contact me at (312) 930-8275 or via email at [Craig.Donohue@cmegroup.com](mailto:Craig.Donohue@cmegroup.com), Bryan Durkin, Chief Operating Officer, at (312)435-3687 or [Bryan.Durkin@cmegroup.com](mailto:Bryan.Durkin@cmegroup.com), or Dean Payton, Deputy Chief Regulatory Officer, at (312) 435-3658 or [Dean.Payton@cmegroup.com](mailto:Dean.Payton@cmegroup.com).

Sincerely,



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