

August 27, 2010

Ms. Elizabeth M. Murphy
Secretary
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-1090

Re: Release No. 34-62411, File No. SR-FINRA-2010-033, Proposed Rule Change Relating to FINRA Rule 6121 (Trading Halts Due to Extraordinary Market Volatility); Release No. 34-61358, File No. S7-02-10, Concept Release on Equity Market Structure

Dear Ms. Murphy:

EWT, LLC (“EWT”) appreciates the opportunity to provide the Securities and Exchange Commission (the “Commission”) with comments on the Proposed Rule Changes Relating to FINRA Rule 6121 (Release No. 34-62416, the “Proposed Amendments”), and some of the questions posed by the Concept Release on Equity Market Structure (Release No. 34-61358, the “Concept Release”).

I. Overview

EWT strongly supports the Commission’s efforts to create, maintain, and grow fair, efficient and orderly markets. The events of May 6, 2010 have yet to be fully understood, but nevertheless have prompted a wide range of theories and rule-making proposals. As an active participant in the equities, options and futures markets, EWT experienced firsthand the events of May 6 as they unfolded across multiple markets. Based upon our vantage point on that day, taken in combination with our years of experience in various markets throughout the world and their handling of unexpected volatility and erroneous transactions,¹ we respectfully offer our observations on both these events and some related recommendations. In so doing, we have focused on the following four key areas:

- **Inaccurate NBBO feeds.** Market center trading system problems (e.g., severely lagged and discontinuous market data) revealed single points-of-failure in the market infrastructure. In particular, as illustrated below, the poor performance of National Best Bid or Offer (“NBBO”) feeds was a significant contributor to the aberrant events of that day. In our view, these feeds could be improved significantly through investment in available technology.

¹ EWT is a proprietary, self-clearing broker-dealer registered with the Commission under Section 15 of the Securities Exchange Act of 1934. EWT is a member of the Financial Industry Regulatory Authority, the New York Stock Exchange, and NASDAQ. Together with its affiliates, EWT operates across more than 50 exchanges and market centers around the world.

- **Inconsistent and Ambiguous Market Center Practices.** While they may be well-intentioned, certain inconsistent market center practices (*e.g.*, Liquidity Replenishment Points or “LRPs”) and ambiguous rules regarding potentially erroneous transactions fragmented and curtailed liquidity provision on May 6 by increasing uncertainty under extreme market conditions. Replacing these practices and rules with uniform, industry-wide rules establishing limits on upward and downward price movement in a given period of time (*i.e.*, a limit-up/limit-down approach) and consistent rules for canceling erroneous transactions would accomplish the same objectives with fewer unintended consequences.
- **Market Orders.** “Market” and “stop” orders likely steepened the market decline on May 6 by intensifying selling pressure. A limit-up/limit-down approach would address this issue by providing a *de facto* collar on market orders. In the absence of a limit-up/limit-down approach, we recommend that customer market orders be collared or converted to limit orders by their brokers prior to submission to a trading center and that broker-dealers be required to specify a limit price on all orders.
- **Concentrations of Liquidity Risk.** Reliance on a small subset of firms or systems to provide or control liquidity as a result of exchange-specific incentive programs left the National Market System vulnerable on May 6 to failures by single firms or systems. To address these issues, the Commission should set uniform standards for market making, and require that all exchange-based market maker incentive programs be non-exclusionary and open to all who qualify.

As a general principle, we recommend that any market structure or rule changes be undertaken on an open, consistent and market-wide basis. The events of May 6 were due in large part to inconsistent market center behavior. Therefore, we support a uniform approach administered by the Commission rather than a disjointed collection of conflicting rules that are separately and unilaterally implemented at the exchange level.

II. May 6: Background and Timeline of Events

Numerous macroeconomic concerns – such as the Greek debt crisis,² prospects of a hung Parliament in the United Kingdom³ and revelations of additional losses at Government

² See “Moody’s warns of Greek contagion for banks,” Barbara Kollmeyer, MarketWatch, May 6, 2010, available at <http://www.marketwatch.com/story/moodys-warns-of-greek-contagion-for-banks-2010-05-06>.

³ See “Sterling falls as market awaits UK election results,” Tamawa Desai, Reuters, May 6, 2010.

Sponsored Enterprises⁴ – weighed on the markets in early May, and particularly on May 6.⁵ These concerns were reflected in the rapid rise of the Chicago Board Options Exchange Volatility Index (“VIX”) measurement of volatility expectations, which, by the time the market opened on the morning of May 6, had climbed over 60% from its recent low on April 20. While the VIX held steady at this elevated level for the morning, at 1:10pm EDT the VIX began to rise further, climbing with increasing speed by 2:00pm.⁶ By 2:30pm, the VIX had topped 30, a level not seen since the tail end of the financial crisis in July 2009, and a level that represented a 20% increase over the prior day’s close.⁷

As the VIX rose during the day, the equity markets themselves plummeted under heavy volume. The Chicago Mercantile Exchange’s S&P 500 E-Mini future, a benchmark for the broader equities market, had declined 2.9% from the prior day’s close by 2:30pm, dropping from 1163.90 to 1130.00 – had the market closed at this time, it would have been the second worst single day in almost a year. Ten minutes later, the broad market decline significantly intensified, and between 2:40pm and 2:45pm the CME S&P 500 E-Mini future dropped from 1,113.75 to a low of 1,056.00, an additional decline of over 5%.

At 2:45:28pm, the decline halted abruptly as the CME’s Globex stop price logic was triggered,⁸ pausing trading in the benchmark contract for five seconds. While the futures market began to rebound immediately thereafter, the equities market entered a second period characterized by aberrant trading. During this period, although the overall market had already reached its nadir, liquidity in individual stocks declined to insufficient levels and erroneous transactions were executed. This period lasted until roughly 3:00pm, by which time the market had largely recovered and the aberrant trades ceased.

III. May 6: Observations and Recommendations

⁴ See “Freddie Mac Seeks Billions More After Big Loss,” Associated Press, May 5, 2010.

⁵ Additionally, a rising chorus of market observers had noted that the fourteen-month-old bull market – which had gained an unprecedented 60% over the period – had stalled and that a “correction” (i.e. material market decline) was likely in the near term. Later in May the market did in fact decline in a “correction” that dipped to levels below the May 6 intraday lows, and has traded below that level on numerous dates in June and July.

⁶ All times are in Eastern Daylight Time.

⁷ Concurrently, demand increased for gold and US Treasuries, suggesting a “flight to quality” for investors wary of increasing risk to the economic recovery.

⁸ In the case of the S&P 500 E-Mini contract, the CME’s Globex stop price logic is triggered when a marketable stop order (or series of orders) would result in trades that are more than six index points below the current market, placing the market in a “reserve” state where orders can be placed and canceled, but no trades are consummated until adequate liquidity is again available (in this case, within five seconds).

While the gradual early morning market decline on May 6 may be in large part explained as a reaction to the macroeconomic climate, the market's steep decline in the afternoon of May 6 cannot be solely explained on this basis. Based on our observations on that day, it appears that the key contributing factors included: rapid deterioration of market data systems from approximately 2:25pm onward; inconsistent and ambiguous market center practices that increased uncertainty and led to gaps in liquidity; "market" and "stop" orders that led to erroneous trades and intensified selling pressures; and concentrations of liquidity risk in small subsets of firms and systems.

A. Inaccurate NBBO Feeds

A key factor to consider in the decline is the rapid deterioration of market data, which undermined confidence at a critical time, and, similar to the 1987 stock market crash, could have easily encouraged panic selling. As one Federal Reserve economist noted:

The market crash of 1987 is a significant event not just because of the swiftness and severity of the market decline, but also because it showed the weaknesses of the trading systems themselves and how they could be strained and come close to breaking in extreme conditions. The problems in the trading systems interacted with the price declines to make the crisis worse. One notable problem was the difficulty gathering information in the rapidly changing and chaotic environment. The systems in place simply were not capable of processing so many transactions at once. Uncertainty about information likely contributed to a pull back by investors from the market.⁹

The same observations would aptly characterize the events of May 6. In particular, beginning at 2:25pm, our firm observed that data feeds used by the exchanges to benchmark prices against the NBBO began to lag the actual markets on exchange systems by a significant amount, creating uncertainty about pricing information.¹⁰ The initial delays persisted for less than a second, generally resulting in small yet noticeable pricing discrepancies.

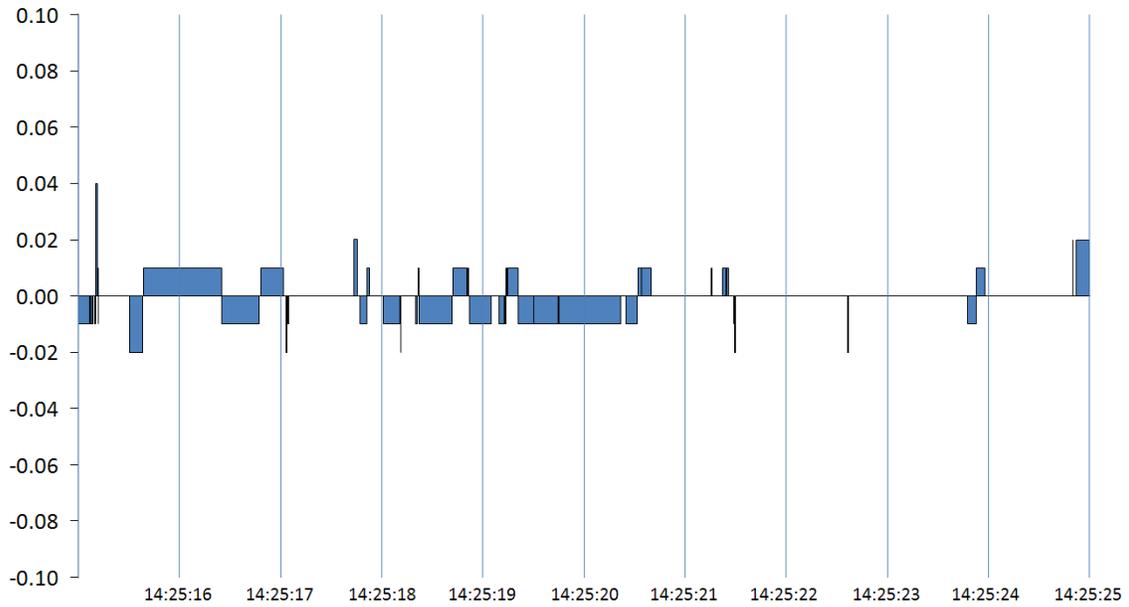
The graph below illustrates the observed difference in price between an NBBO feed and the actual market for the "Oil Services Holdr" ("OIH") security at 2:25pm, demonstrating both the duration of the lags and the magnitude of the pricing discrepancies at that time:¹¹

⁹ See "A Brief History of the 1987 Stock Market Crash with a Discussion of the Federal Reserve Response," 2007, Mark Carlson, Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board, Washington, D.C.

¹⁰ The NBBO data used in our analysis is derived from the Consolidated Quote System ("CQS") data and the NASDAQ OUCH Pricing Feed ("a real-time direct data feed that indicates how NASDAQ execution system views the National Best Bid and Offer...[that] uses the consolidated market data." [sic]). Examples from 2:25 –2:35pm are based upon the NASDAQ-supplied data, while examples from 2:40 – 2:45pm are based upon the direct CQS data.

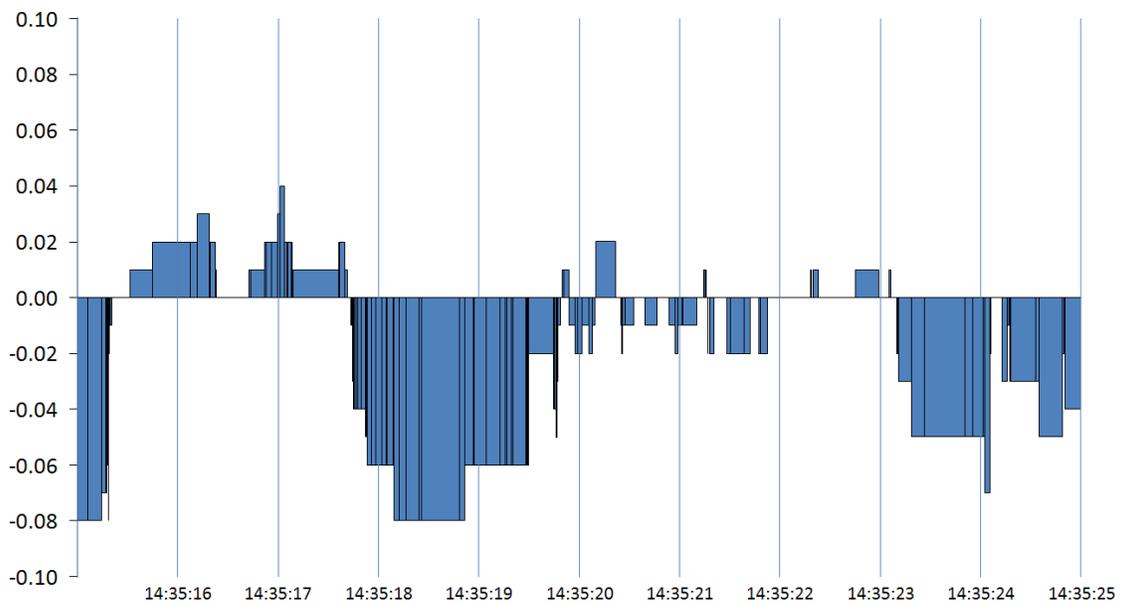
¹¹ Due to consolidation processing overhead, the consolidated feed may lag exchange market data by a handful of milliseconds. See Concept Release at page 26. Accordingly, our analysis excludes any ephemeral differences persisting for ten milliseconds or less.

Actual bid vs. NBBO feed for OIH: 14:25:15 - 14:25:25 EDT

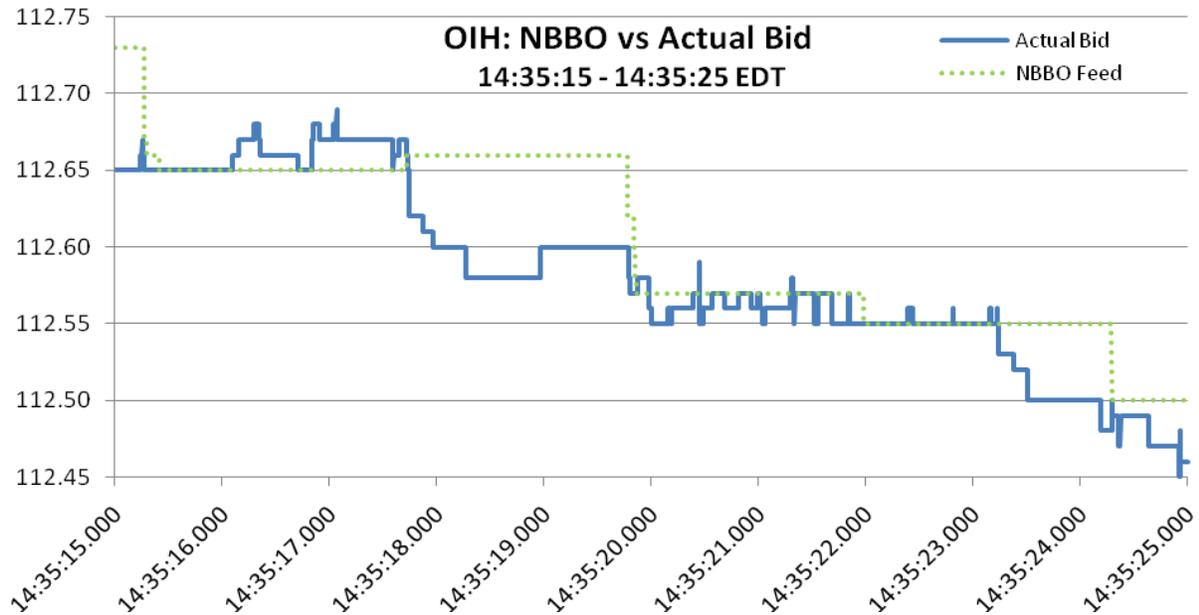


In the next ten minutes, the delays became even more significant, as updates appeared to lag by as much as two seconds –two hundred times the typical lag – causing significant price discrepancies in the rapidly-moving market:

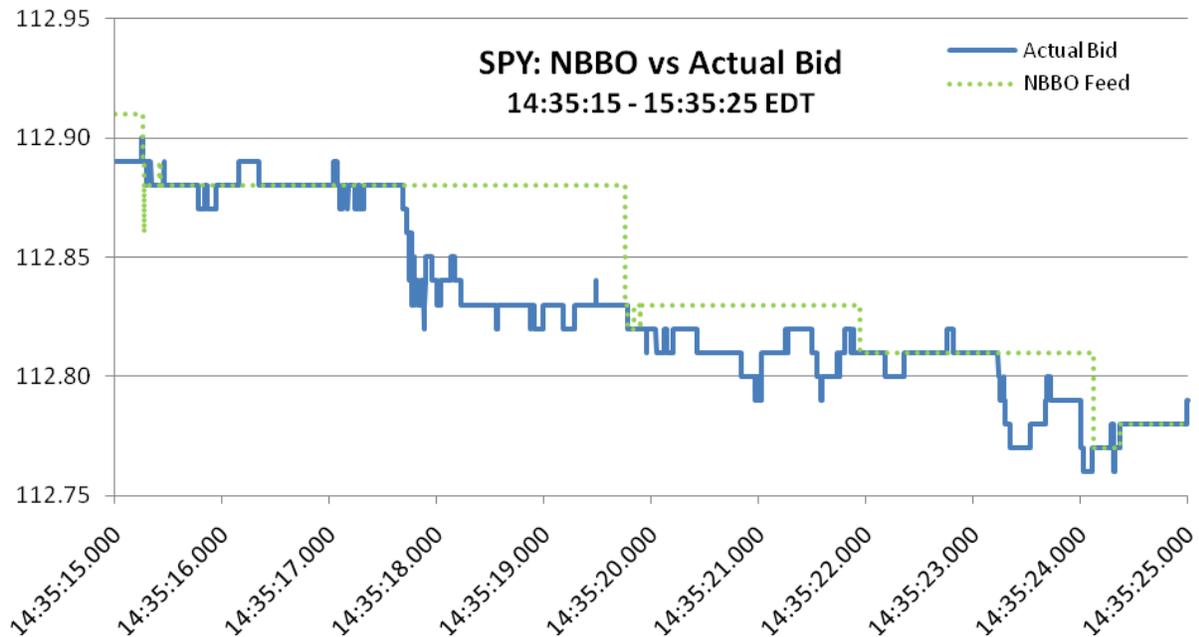
Actual bid vs. NBBO feed for OIH: 14:35:15 - 14:35:25 EDT



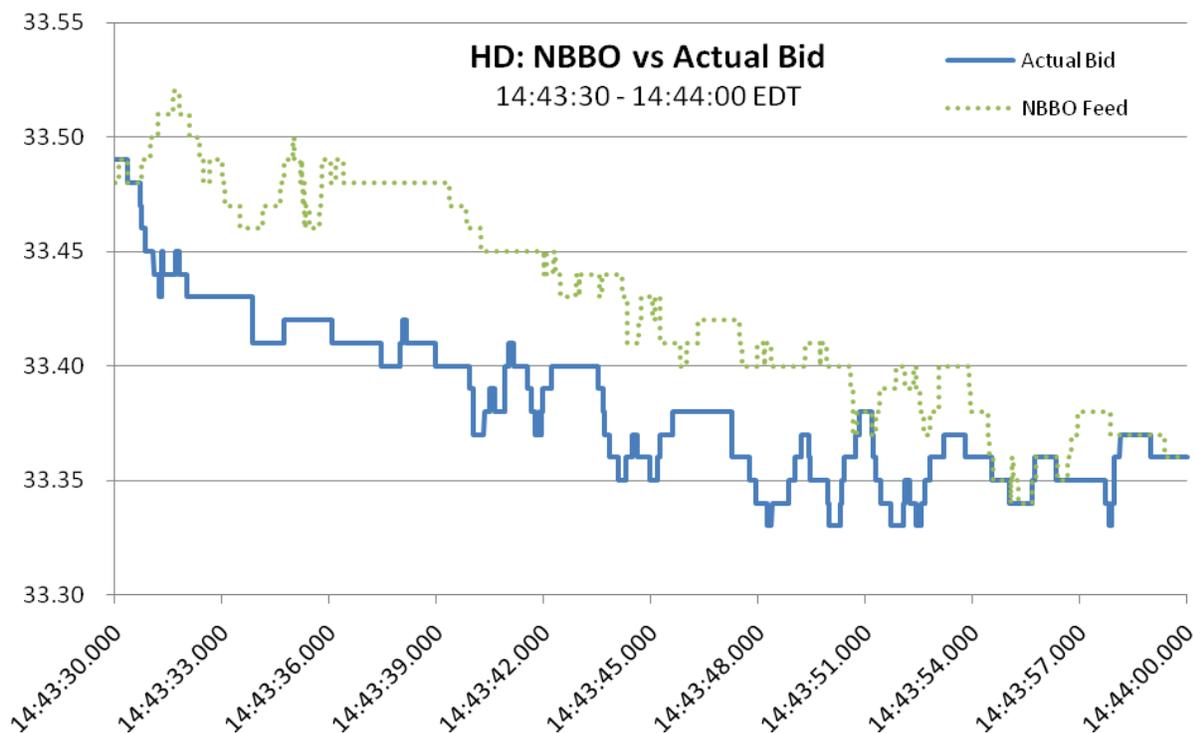
As these graphs clearly indicate, the lagged data in a fast-moving market resulted in the NBBO feed providing a materially incorrect view of the pricing data, both lagging behind and updating in a less continuous fashion than the actual bids:



Our data indicates that lagged and incorrect market data was not isolated to a single ticker on this NBBO feed. Indeed, the same pattern is evident in the S&P 500 ETF (“SPY”):



Additional problems surfaced as the market began to rapidly decline, and delays widened to more than ten seconds, resulting in yet further significant pricing discrepancies, such as the one below in Home Depot (“HD”):



Large delays and other inaccuracies in an NBBO feed, such as those described above, can cause significant disruptions in trading, as exchanges and brokers will reject orders that appear to trade-through the lagged NBBO data, but are in fact valid. For example, at 2:35:17pm the NBBO feed for OIH displayed a best bid of 112.65 and a best offer of 112.69. At the time, the actual best bid was on the BATS Exchange for 112.68, and NASDAQ and NYSE Arca displayed the best offers at 112.71. If a market participant tried to immediately buy by placing a bid at 112.71, they would be rejected for a perceived trade-through of the purported NBBO, when in fact the order did not cross the true NBBO at all. Further, a participant trying to better the current best bid by placing an order to buy at 112.69 would also be rejected. Our understanding is that unexpected order rejections such as these were a significant factor that caused many participants to declare “self help” on market centers or otherwise withdraw from the markets on May 6. In addition to causing erroneous rejections of orders, a lagged NBBO feed would result in mispriced executions on any orders that are “pegged” to the NBBO, which also constitute a significant source of liquidity.

When market data delays are measured in seconds it becomes an especially serious concern. Market data forms the backbone of the National Market System, but also

constitutes a single point-of-failure in the system. Should NBBO data prove to be inaccurate, participants face either unexpected rejections of orders (as noted above) or orders that inexplicably remain unexecuted due to the actual market price differing significantly from the price displayed on a poor quality market data feed. As neither outcome is expected, the participants are likely to re-submit their orders, increasing the load on systems that were already operating at peak capacity. After repeated inexplicable rejections and unexpected executions, exchange systems are effectively no longer reliable participants in the National Market System. Either “self help” is declared, or, if multiple exchanges are exhibiting this behavior, market participants may withdraw from the market altogether until exchange systems resume operating in a predictable and conformant manner. As mentioned above, similar behavior was observed in connection with, and likely exacerbated the severity of, the 1987 stock market crash.

We would urge further investigation of the performance of NBBO feeds on May 6, and, as we noted in our original comment letter on the Concept Release, we strongly advocate investing in these feeds to improve their performance and reliability.¹² Such improvements are quite feasible – numerous commercial and exchange systems consistently handle peak volumes of data without exception – and we believe that the necessary improvements could likely be funded from a portion of the existing market data sharing revenue. In tandem, we would suggest that the Commission consider authorizing alternative consolidated NBBO feeds to supplement the current single-points-of-failure, CQS and the UTP Quotation Data Feed (“UQDF”). The failure of these systems can wreak havoc on the markets. While the existence of direct exchange data feeds somewhat mitigates the risk, broker-dealers currently have no obligation to subscribe to backup data feeds to ensure Regulation NMS compliance.¹³ We would urge the Commission to consider requiring market centers and broker-dealers to connect to multiple, independent and redundant market data sources.

B. Inconsistent and Ambiguous Market Center Practices

As market data quality deteriorated, the National Market System became increasingly vulnerable to the uncertainty arising from inconsistent and ambiguous market center practices in two key areas: trading pauses and erroneous transactions. Recently instituted market-wide circuit breakers and recently proposed uniform clearly erroneous transaction rules are important steps toward addressing these issues. As a longer-term solution, however, we recommend that the Commission work with FINRA and the exchanges to replace the current five minute halt under market-wide circuit breakers with a limit-up / limit-down approach.

¹² See Letter from Peter Kovac, Chief Operating Officer, EWT, LLC, to Elizabeth M. Murphy, Secretary, the Commission, dated April 22, 2010, at page 13.

¹³ Notably, under Regulation NMS, market centers and broker dealers are required to have backup order routing arrangements if they wish to avail themselves of ISO exceptions, but no parallel requirements exist for market data. See “Responses to Frequently Asked Questions Concerning Rule 611 and Rule 610 of Regulation NMS”, Question 4.02, at <http://www.sec.gov/divisions/marketreg/nmsfaq610-11.htm#sec4>.

1. Trading Pauses

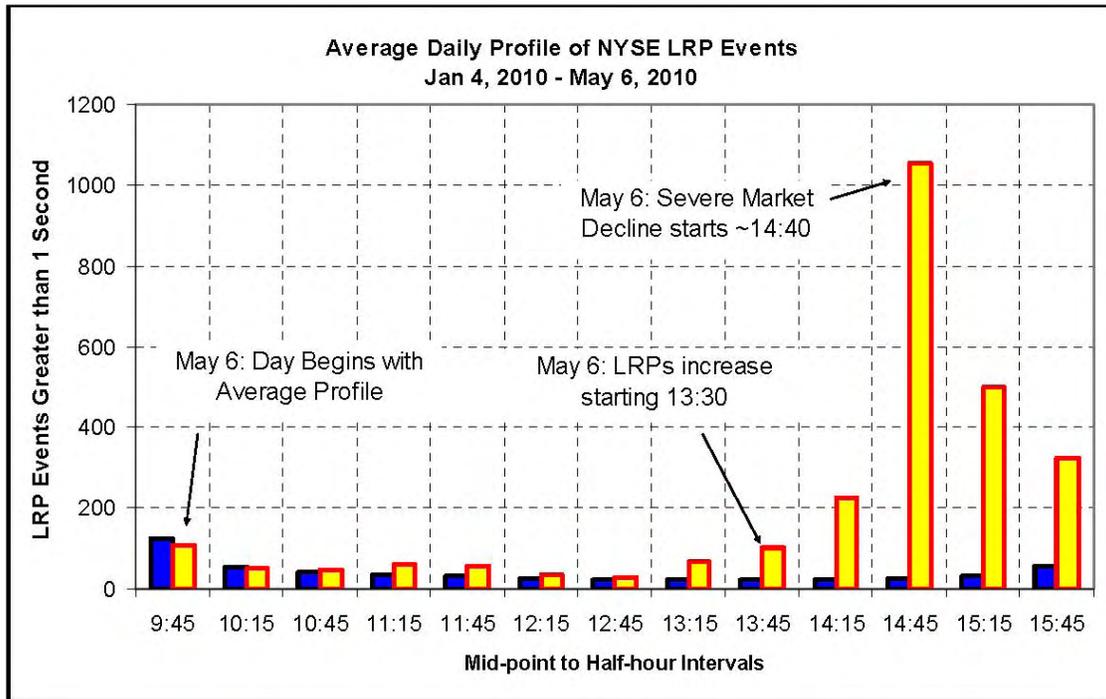
Under normal market conditions, the loss of liquidity during a single-exchange trading pause (such as an LRP) has limited impact, given the ample liquidity in the remainder of the market. However, under the extreme market conditions of May 6, any sudden and significant removal of liquidity had the potential to cross the “tipping point” and create instability and dramatically increase volatility – the opposite of the intended purpose of these pauses.

When an LRP is triggered on the NYSE (the only market center that currently supports this practice), normal automatic execution of matching orders is suspended while the Designated Market Maker (“DMM”) conducts a manual auction. As automatic execution is no longer available, the DMM effectively removes *all* quotations on the NYSE from the NBBO data feed by declaring it to be “non-firm”, and participants seeking best execution under Regulation NMS have the option to ignore the now-inaccessible quotations displayed by the NYSE. Many participants do, in fact, choose to ignore the NYSE’s LRP quotations, largely for two reasons: first, while participants can enter orders into an LRP freely, they are not guaranteed the ability to subsequently cancel those orders, even if the rest of the market moves dramatically against them during the LRP;¹⁴ second, participants have no indication of how long an LRP will last. In sum, an LRP participant loses control of an order and does not even know when the outcome of their order – execution or no execution – will be revealed, presenting even greater risk in highly volatile conditions. Accordingly, many opt out of joining the LRP process. For customers who had resting orders on the NYSE prior to the LRP, they face the disconcerting reality that, while they had entered “firm” orders into the National Market System, someone else has withdrawn their orders from the National Market System and they have little control over how and when their orders will re-enter the markets.

The result is that the liquidity normally provided through the NYSE – not to mention the NYSE’s contribution to price formation – is withdrawn from the markets at the times when it is most needed. On a typical day, LRPs are relatively uncommon after the market open. However, as noted below in the graph provided by the CFTC-SEC Preliminary Report on May 6, the use of LRPs increased dramatically on May 6, with over 1,000 LRPs triggered between 2:30pm and 3:00pm:¹⁵

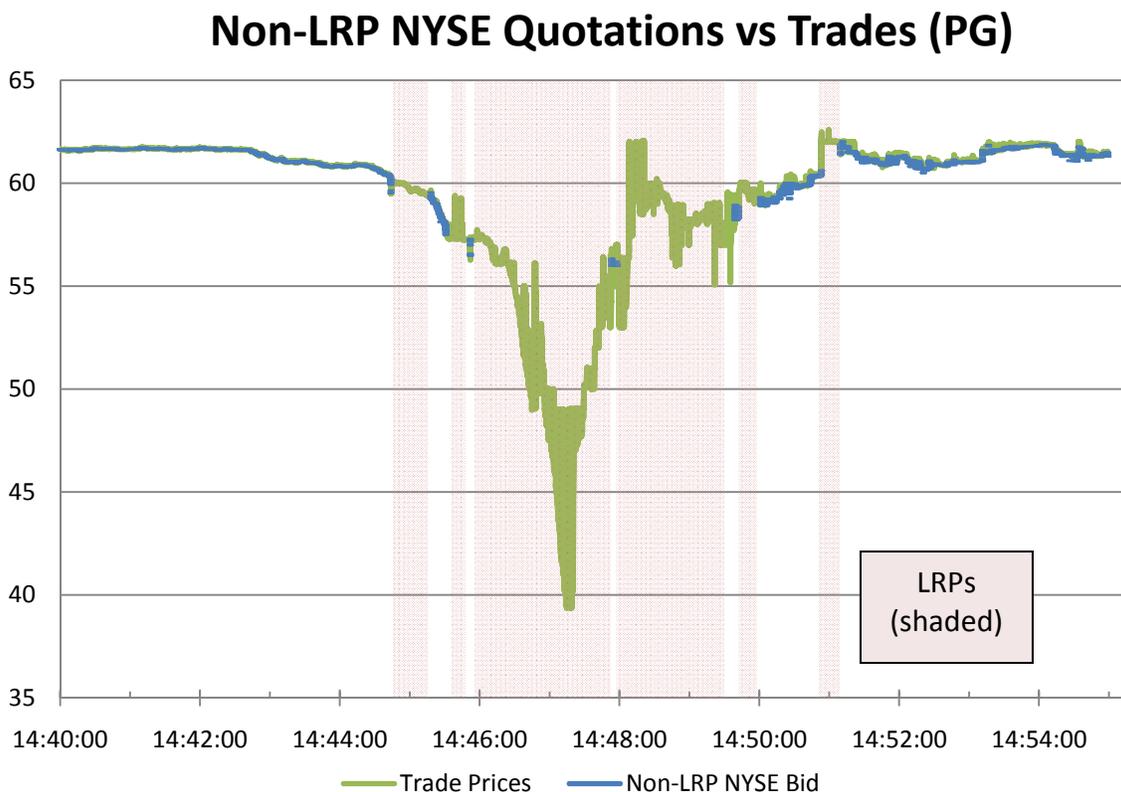
¹⁴ Once an order is entered, participants are free to request a cancellation, but their order will only be canceled if the DMM manually approves the cancellation request. This creates a situation where an overburdened DMM is needlessly required to perform additional manual work in a severely compressed timeframe to ensure that an investor’s request is honored; it also could potentially create an incentive akin to a free option on the participant’s order, since the DMM may ignore the cancel request and execute against orders that were on the book when the LRP began.

¹⁵ Preliminary Findings Regarding the Market Events of May 6, 2010”, Report of the Staffs of the CFTC and SEC to the Joint Advisory Committee on Emerging Regulatory Issues, May 18, 2010 (“CFTC-SEC Staff Report”) at 23.



The LRP model is especially problematic in securities for which the NYSE is the primary source of liquidity and price discovery. Although the LRP process is controlled by a single participant, the DMM, it affects all investors transacting on the NYSE by putting the market into “manual” mode, depriving all NYSE orders of the opportunity to execute in any market. Moreover, this process effectively withdraws all quotations submitted to the NYSE from the market, leaving market participants to route to other, less liquid market centers. These orders are then more likely to exhaust the remaining liquidity available at the NBBO and execute against quotations that are farther away from the midpoint of the market. Ultimately, this can lead to trades made against stub quotations on those markets – resulting in the clearly erroneous trades seen on May 6.

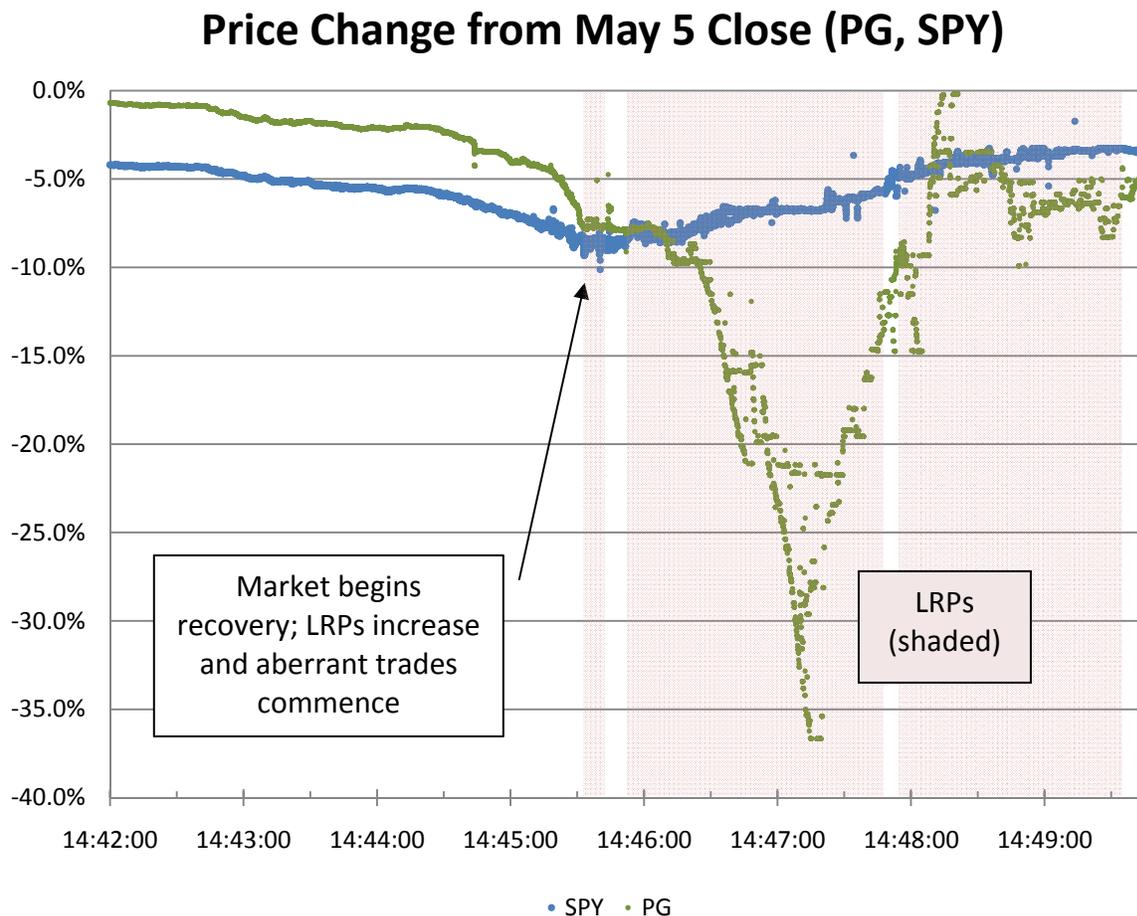
The graph below clearly illustrates the impact of LRPs withdrawing liquidity in Proctor and Gamble (“PG”) on May 6:



The disappearance of firm quotations beginning shortly after 2:45:30pm, as illustrated by the disappearance of the blue lines in the graph above, indicates LRP events during which the liquidity of the NYSE was withdrawn from the market. Once a substantial source of liquidity was removed from the markets, incoming orders exhausted the remaining liquidity near the NBBO and executions occurred at prices substantially away from the NBBO – as indicated by the green line in the graph above, detailing trades executing at aberrant prices. Although the LRP program avoided clearly erroneous transactions on the NYSE on May 6, it seems to have weakened the National Market System overall by completely removing most liquidity in these securities, resulting in a substantial number of clearly erroneous transactions on all other market centers.

Trading pauses on single markets can also cause the performance of a stock for which a trading pause is triggered to diverge significantly from the equity markets as a whole, which can undermine confidence in that stock even without any underlying change to the fundamentals of the relevant company. This can be seen clearly by comparing the relative

change in the price of SPY compared to the prior day's close, and the relative change in the price of the common stock of PG compared to the prior day's close, as shown in the graph below:



As the graph illustrates, both securities dropped steadily in price beginning at about 2:42pm, with SPY declining 8.8% and PG declining 6.3% by 2:45:28pm, the time that the CME E-Mini S&P future's stop price logic was triggered. After that point, their trajectories diverged. Trading continued uninterrupted in SPY, and it began to recover as quickly as it had fallen. In contrast, trading in PG on the NYSE was interrupted by multiple LRPs, and, with insufficient liquidity to meet demand, trades in PG occurred at prices over 35% lower than the prior day's close, with consecutive trades sometimes occurring at prices more than 10% above or below the preceding trade.

This process not only played out on May 6, but also on June 16, the first date on which the new Rule 80C volatility circuit breakers were activated. At 3:07pm on June 16, the NYSE triggered an LRP in shares of Washington Post Company ("WPO"). The NYSE regularly accounts for 45-50% of all trading volume in WPO, and thus, by triggering an LRP, a very significant portion of the liquidity in WPO disappeared. Immediately after the LRP commenced,

a market order (or equivalent) exhausted all the available non-NYSE liquidity at the NBBO and executed against the only remaining quotations on the book, which were obviously off-market. These quotations resulted in purchases at a price of more than \$919 per share, in a stock that normally trades at half that value. The pattern of May 6 was again quite clear: an LRP is triggered, removing a substantial source of liquidity, and when the remaining liquidity is unable to support an incoming order, trades occur at off-market prices.

While the intention of the LRP program to dampen volatility is laudable, the Commission should carefully examine whether or not any perceived benefits outweigh the demonstrable negative impact on market-wide liquidity. Other similar proposed programs, such as the NASDAQ Volatility Guard, should be subjected to the same careful analysis – it is unclear what benefits the markets accrue from maintaining three overlapping systems of volatility pauses, each with different computations and potentially destabilizing side effects. Moreover, it would be more productive, in our view, to channel the resources used to develop volatility pauses for single markets toward development of a uniform, market-wide limit-up/limit-down solution.

2. Erroneous Transactions

Numerous market participants have also cited uncertainty regarding trade cancellation rules as a factor curtailing their ability to provide liquidity during times of market stress.¹⁶ Simply put, market participants are reluctant to execute a trade where there is uncertainty about whether the trade will be reversed. When a trade is canceled, any related transactions that were completed to hedge the risk of the now-canceled trade are no longer risk-reducing, but rather increase the risk – as the position they were intended to hedge no longer exists, the hedging position itself becomes a risk position. Worse still, this information typically arrives with a significant delay, often after the market has closed and remedial action is not feasible. Volatile markets exacerbate the situation, as trades are not only more likely to be canceled, but when they are canceled the resultant risk in the now-unhedged position is even greater.

We note that on May 6, the broad market decline approached 10%, which is the threshold for a “Multi-Stock-Event” for a Clearly Erroneous Transaction filing.¹⁷ Uncertainty

¹⁶ See, e.g., Statement of George U. Sauter, Managing Director and Chief Investment Officer, The Vanguard Group, Inc. at June 2, 2010 Market Structure Roundtable; Letter from Ira P. Shapiro, Managing Director, Blackrock, Inc., to Elizabeth M. Murphy, Secretary, the Commission, dated July 20, 2010 at 2; and Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, the Commission, dated July 19, 2010 at 2.

¹⁷ See FINRA Rule 11892. Note that the 10% threshold is applied against a Reference Price, which, normally is defined as “the consolidated last sale immediately prior to the execution(s) under review, except for unusual circumstances.” Unusual circumstances include “periods of extreme market volatility, sustained illiquidity, or widespread systems issues”, each of which was present in some measure on May 6. Under these circumstances FINRA may select the prior day’s close as the Reference Price. Coincidentally, a 10% market decline also crosses the threshold of NYSE Rule 80A’s market-wide circuit breakers, albeit only prior to 2:30pm.

regarding whether or not transactions would stand, particularly in a volatile market, undoubtedly reduced the amount of capital committed and liquidity provided to the markets after that time. Unambiguous and more highly proscriptive rules that are uniformly implemented across all markets would mitigate these problems in the future.

3. Circuit Breakers and a Limit-Up / Limit-Down Approach

In the wake of the events of May 6, a general consensus emerged in support of additional safeguards to curb trading activity that is not indicative of healthy price formation. In the interest of quickly restoring investor confidence, the expedient solution of volatility-based trading pauses was conceived and agreed upon in an extraordinarily compressed timeframe. We commend all involved for their hard work, and urge continued efforts to refine these mechanisms and eliminate other disparate and contradictory market center responses to volatility, which undermine the efficacy of any market-wide solutions.

However, after a month of operation, it is clear that the circuit breaker pilot program, although well-intentioned, is not the optimal solution. It has halted trading six times, and five of the six occurrences have been in error and resulted in needless uncertainty for the issuers affected. As discussed below, we believe that adopting a limit-up/limit-down approach would produce a consistent solution that provides minimal disruption to the market and simultaneously resolves issues related to both volatility and clearly erroneous transactions.

Halting a security is an extraordinary measure that has historically been used sparingly, with good reason. Unnecessarily halting a security may result in an erosion of investor confidence in that security, contributing to a further slide of the price following the conclusion of the halt. It is fortunate that the six incidents to date have occurred on relatively quiet days, but the impact in a more volatile market could be much more severe. Unnecessary halts also reduce investors' ability to manage their investments, a prospect that in the long term may decrease their willingness to provide capital to the securities markets.

Moreover, the halt of one security may impact liquidity in any number of related securities that participants use for coordinated hedging. Given the material and unintended consequences of a trading halt, we find it troubling that five of six instances of the volatility circuit breakers triggering have been clearly erroneous transactions. While the rules themselves permit the listing exchange to exclude clearly erroneous transactions from volatility computations, in practice this does not appear to be feasible. As a result, every day the markets are at risk of additional disruption due to commonplace errors that previously were rightfully ignored by market participants. Just as trading halts in a volatile market would likely multiply the negative impact of such disruptions, a similar trading halt in a market benchmark such as SPY could be expected to have serious repercussions throughout the market.

None of the trading halts to date has prevented aberrant trading; however, all six halts have prevented continuous healthy price formation. Five of the halts, in WPO, Citigroup ("C"), Anadarko Petroleum ("APC"), Cisco Systems ("CSCO") and Micron Technology

(“MU”), resulted from clearly erroneous transactions. The other halt, in Genzyme (“GENZ”), occurred on news of a potential acquisition of Genzyme, and disrupted the normal price formation that would occur as the markets digested the information: the stock rose 10%, halted for five minutes, quickly rose another 10% and triggered another halt, and the stabilized at a price above both halt levels.¹⁸ Of the fourteen minutes between the news event and the relative stabilization of the price, ten minutes were spent halted, while true price discovery was relegated to the intervening four minutes.

Additionally, the current volatility circuit breakers do not address clearly erroneous transactions and related timing issues. If a security were actually to decline 10% over five minutes, it is likely that additional transactions would occur outside the 10% band in the brief window between when the first triggering trade is executed and when each market center reads the listing exchange’s halt notice on the consolidated tape. For example, on June 16, the first trade executed at \$919.18 per share (roughly twice the preceding price) and triggered the circuit breaker, but two additional trades were completed afterward at \$919.18 and \$929.18, respectively. The possibility that trades can execute outside the 10% band, and after the triggering trade but before the pause is enforced, creates additional uncertainty. As on May 6, this uncertainty may cause liquidity providers to reduce their risk and commit less capital as a security approaches the 10% barrier – potentially resulting in a “magnet effect” that increases the likelihood of reaching the triggering price as liquidity dissipates near the 10% barrier.

With regards to exchange-traded funds (“ETFs”), volatility based circuit breakers for ETFs should be based solely on the price movement of the ETF itself, as has been currently proposed; the prospect of halting an ETF based on a halt in a component security, as some have discussed, leads to absurd results. For example, for over half of the components of the SPY ETF, a movement of 10% in that component results in a change of less than penny in the price of the SPY ETF itself. The prospect that the world’s most liquid ETF could be halted due to a price movement of less than one cent – which may be triggered by an erroneous transaction in that component, no less – is more likely to increase volatility than dampen it, and could cause unnecessary disruptions on markets throughout the world. Had ETFs such as SPY, XLF, and the many other ETFs containing C also been halted when trading in C was halted on July 6, over 10% of all market activity would have been halted due to a single erroneous trade report. We note that, historically, when trading in individual securities have been halted for news events, related ETFs continued to trade smoothly. Finally, we suggest that leveraged ETFs operate under a 20% band due to their increased leverage and in order to avoid needless disruptive triggering events on normal market moves.

In our view, the most effective refinement to the existing volatility circuit breaker program would be to replace the current five-minute halt with a limit-up/limit-down solution. In such a system, the current 10% band could be used to define the maximum/minimum price at

¹⁸ See “Circuit Breakers Halt Genzyme Twice, Sparking Debate”, Reuters, July 23, 2010.

which a transaction could occur during a five-minute window.¹⁹ Transactions outside this band would not be permitted, eliminating the possibility of (and uncertainty surrounding) clearly erroneous transactions triggering a false alert. Similarly, there is no “race condition” or brief window of time where transactions could occur at 11%, 12%, 50%, or anywhere outside of the 10% band, a problem with the current system outlined above. In contrast to a trading halt, while a security is in a limit-up or limit-down state, transactions could continue to occur within the original 10% band. After a predetermined period of time, the limit could be reset to a higher or lower price, as appropriate. Although the current duration of five minutes could be used, the empirical data from the activation of the CME’s Globex Stop Logic on May 6 indicates that pauses of a much shorter duration would sufficiently serve the intended purpose with minimal market disruption.

The ability to continue to trade a security is a key benefit of a limit-up/limit-down solution. The ultimate goal of the volatility circuit breakers is to curtail (and possibly reverse) activity that is not indicative of healthy price formation. A trading halt seeks to accomplish this indirectly by halting all transactions, and seeks to balance these benefits against numerous and significant unintended consequences. Conversely, a limit-up/limit-down solution directly addresses the issue, halting the accelerating trend while immediately providing the opportunity for the market to remedy the situation, all without the unintended consequences of a trading halt.

Furthermore, a limit-up/limit-down solution eliminates the dependency upon a single market center – a single point-of-failure – to coordinate dissemination of a halt and reopening. Disparate approaches to handling incoming orders during a halt and reopening after a halt become moot in this scenario, as all market centers simply apply the same, consistent rules for trading at all times. Likewise, the failure of a listing exchange to disseminate a halt message over the securities information processor – a possibility that becomes more probable in a scenario such as May 6, where exchange systems are behaving erratically – would not prevent the volatility pauses from being effective. A limit-up/limit-down solution would also closely mirror the futures markets and, with a few small adjustments, programs in both types of markets could be closely harmonized. The resultant consistency across all cash equities markets and the futures markets would substantially increase stability in times of market stress.

Given the demonstrated problems with the current circuit breaker system, we are wary of expanding the system in its current form. However, once the system is refined to adopt a limit-up/limit down approach to prevent erroneous transactions, it would be appropriate to expand the system to additional securities. Any expansion of the system prior to correcting these problems will only result in additional false triggers, to the detriment of the affected securities and the markets in general. Once the mechanics of such a system based on a limit-up/limit-down approach are robust enough to support additional securities, we believe a controlled rollout of the system to progressively less liquid securities is appropriate, with constant monitoring of the threshold levels in relation to the normal trading range for illiquid securities.

¹⁹ We also note that such systems have been successfully implemented without relying on a time window at all. The CME’s successful limit system is based on limits automatically derived from the prior day’s settlement price.

C. Market Orders

Non-limit “market” orders appeared to have played a significant role in the aberrant trading of May 6, resulting in execution prices that were not indicative of healthy price formation.²⁰ When visible liquidity at or near the NBBO was less than the quantity of the market order, some handlers of market orders continued to fill the orders by executing against bids or offers that deviated significantly from the NBBO.²¹ Aside from providing low quality executions for the original customer, these executions have secondary impacts on the market as a whole. First, a rapid series of indiscriminate transactions are printed to the consolidated tape that present a misleading picture of price formation. Second, the complete exhaustion of liquidity at or near the NBBO creates additional volatility and price uncertainty, often referred to as the price impact of the order. Minimizing price impact is one reason that large block orders are often parceled into smaller orders over time, carefully managing the liquidity required against the liquidity available. Finally, many issuers are justifiably concerned with the reputational risk associated with their securities trading down 50% or more.

It is likely that if non-limit market orders were not permitted, the worst of the aberrant trades of May 6 would not have occurred. We are therefore pleased to note that some exchanges are already revising their methods for handling market orders, and are supportive of further prudent policy initiatives on a market-wide basis in this area.²² Notably, the adoption of a limit-up/limit-down solution would also address the problem, creating a *de facto* collar for all market orders at the 10% level. In the absence of a limit-up/limit-down solution, we recommend that customer market orders be collared or converted to limit orders by their brokers prior to submission to a trading center and that broker-dealers be required to specify a limit price on all orders. In addition to preserving market integrity, such protections for individual investors will bolster confidence that market orders cannot be executed at off-market prices.

D. Concentrations of Liquidity Risk

The significant impact of an LRP on market-wide liquidity identifies another crucial single point-of-failure in our market system. The operation of the LRP is conducted by a single DMM, introducing into our markets a potentially risky dependency upon a single firm to operate continuously and to exercise judicious discretion, particularly in times of stress. Notably, this aspect of market structure grants the DMM the ability not only to withdraw its own liquidity from the market, but also to pull all of the liquidity from one of the nation’s largest exchanges from the National Market System. We question whether it is healthy for the markets to

²⁰ See CFTC-SEC Staff Report at 5.

²¹ This also highlights the value of “depth of book” liquidity beyond the NBBO. Without depth of liquidity near the NBBO, the number of clearly erroneous transactions would have been far worse. Conversely, the value of “dark liquidity” on May 6 was substantially less than under normal circumstances, as by its very nature it was unable to aid in discovery of liquidity for the general public.

²² See Notice of Filing and Immediate Effectiveness of Proposed Rule Change by NYSE Arca, Inc., to Establish Trading Collars for Market Orders (Release No. 34-63485; File No. SR-NYSEArca-201067).

concentrate such responsibility and risk in a single firm and posit, in the alternative, that our market structure would be better served by a robust, healthy ecosystem of numerous and diverse sources of liquidity.

The risks arising from dependence on a single point-of-failure also played a major role in the disproportionate representation of ETFs among the securities with clearly erroneous transactions on May 6. Of the 354 securities in which there were clearly erroneous transactions, a significant percentage were ETFs. Among these particular ETFs, liquidity is highly concentrated on a single venue – on average, more than 40% of total market volume for each of these ETFs occurs on NYSE Arca. Should there be problems with that particular exchange, the single largest source of liquidity in those securities is removed from the national markets. Thus, on May 6, once market participants had observed problems and declared “self help,” bypassing NYSE Arca, the National Market System lost a significant source of liquidity and became more vulnerable to the aberrant trading that ultimately occurred.

Although we recognize and support the fact that vigorous and fair competition will produce winners and losers among market centers, as well as improved efficiency and service for the National Market System as a whole, a substantial concentration of market share on a particular market center can increase systemic risk. While exchanges should be free to compete on pricing and quality of service, the Commission has recognized that there must be limits on the incentives employed by market centers to attract business, particularly where those incentives are exclusionary and therefore result in reliance on a small subset of firms. We believe that incentive programs that discriminate among participants warrant additional scrutiny, not only on the basis of fairness but also due to their tendency to distort liquidity and concentrate risk into a single firm on a single exchange.

Notably, the two examples of dependency on single points-of-failure cited above are also the only two exchanges that provide exclusive liquidity incentive programs, the DMM program on NYSE and the Lead Market Maker (“LMM”) program on NYSE Arca. The former program provides the one firm designated as a DMM with both fee incentives and the ability to step ahead of other orders in execution priority;²³ the latter program provides the one firm designated as the LMM with a substantial fee advantage over all other market participants.²⁴ By

²³ For example, under the “Hybrid Parity” system, it is possible that if a customer places a limit order to buy 1,000 shares and the DMM later places a limit order at the same price to buy 1,000 shares, when a marketable sell order arrives the original customer will fill on only 500 shares – the DMM receives the other half of the fill, effectively jumping ahead of the customer order in priority. The customer would receive \$0.13 per lot for adding liquidity. The DMM would receive \$0.15 to \$0.35 per lot for joining the original customer’s bid.

²⁴ For example, a typical market participant on NYSE Arca pays \$0.30 per lot to remove liquidity and receives \$0.22 per lot to add liquidity in Tape B securities, effectively paying a \$0.08 “add/remove” spread. In contrast, a LMM pays \$0.25 per lot to remove liquidity and receives \$0.40 per lot to add liquidity, *receiving* a \$0.15 “add/remove” spread. A consequence of this intentional fee arbitrage is that the designated LMM is the only market participant in the NMS that can add liquidity on a purchase and remove liquidity on a sale at the same price point and still profit (making \$0.15 per lot) –all other market participants (on NYSE Arca or elsewhere) would lose money if they removed liquidity in such a situation. Given that the LMM is the only participant that can conduct this strategy, it is not surprising that they maintain disproportionate market share.

granting economic incentives exclusively to a single firm, such programs may consolidate market share for a particular exchange, but at the cost of introducing a dependence upon a single point-of-failure for liquidity provision. Further, it is not clear that granting such exclusive privilege results in better market quality, nor that it can be done in such a way that precludes the abuses that often accompany exclusionary systems. For example, the predecessor of the DMM program, the NYSE specialist system, failed on both counts, and the Commission was compelled to bring enforcement proceedings against each of the seven specialist firms.²⁵

We strongly believe that market centers should not compete on market maker programs – which are more properly a market structure issue handled by the Commission – but should instead compete on pricing and quality of service. Competition through granting exclusionary privileges to certain firms, on the other hand, is likely to increase dependence on single firms to provide or control liquidity, with resulting unintended consequences that undermine the robustness of the National Market System. Accordingly, EWT continues to advocate for the Commission’s development of a universally applied definition of market-making that could be used in future rulemaking to support beneficial liquidity providing activities in selected and narrowly-defined circumstances.²⁶ We strongly feel that the definition of market making activity and the establishment of incentives for this activity should not be the left to individual market centers. To permit market centers to drive this critical regulatory issue not only ensures disparate and potentially conflicting rules, but it also encourages competition among exchanges on the basis of regulation – a situation which leads either to a race to the bottom in which market maker obligations are completely eviscerated, or to exclusive market maker designations that increase dependence on single firms.

In the same spirit, we strongly support the Commission’s efforts to distinguish between *bona fide* market making activity and market making firms. We believe that the activity of market making itself is an important function and should be protected through proper exemptions, but that entire firms should not operate under such exemptions merely based on a registration or other grant of status, or occasional market making activity. Furthermore, we note that, if such guidelines were adopted, stub quotations would clearly not qualify as *bona fide* market making activity. Accordingly, market centers could swiftly act to end this practice.

We encourage the Commission to appropriately support *bona fide* market making activity in its rulemaking, but recommend that the Commission carefully consider whether expansion of exclusionary market maker programs might increase the sort of concentration of risk that contributed to the failures of May 6. Almost 90% of all securities in which clearly erroneous transactions were executed on May 6 were supported by the DMM or LMM programs

²⁵ See Release Nos. 34-49498 (In re Bear Wagner Specialists), 34-49499 (In re Fleet Specialists, Inc.), 34-49500 (In re LaBranche & Co. LLC), 34-49501 (In re Spear, Leeds & Kellogg Specialists LLC), 34-5902 (In re Van der Moolen Specialists USA, LLC), 34-50075 (In re Performance Specialists Group LLC) and 34-50076 (In re SIG Specialists, Inc.).

²⁶ See Letter from Peter Kovac, Chief Operating Officer, EWT, LLC, to Elizabeth M. Murphy, Secretary, the Commission, dated June 19, 2009, at pages 5-6.

Ms. Elizabeth M. Murphy

August 27, 2010

Page 20

discussed above, despite the tremendous market structure and economic advantages such programs bequeath in return for liquidity commitments. As the Commission continues to address the structural issues revealed by the events of May 6, we hope that it will continue to promote a healthy and robust market populated by numerous market makers. In such a robust market place, our markets are not hostage to a single point-of-failure and will continue to provide high quality liquidity to the investing public.

* * *

The Commission has acted swiftly to analyze and respond to the events of May 6. We hope that the Commission will consider the initiatives outlined above as a means to further improve our markets and enhance the ability of market makers to provide meaningful liquidity in highly volatile markets. We would be pleased to discuss any of the comments or recommendations in this letter with the Commission staff in more detail. If you have any questions, please do not hesitate to contact the undersigned at (310) 651-9746.

Sincerely,



Peter Kovac
Chief Operating Officer and
Financial and Operations Principal

cc: Mary L. Schapiro, Chairman
Kathleen L. Casey, Commissioner
Elisse B. Walter, Commissioner
Luis A. Aguilar, Commissioner
Troy A. Paredes, Commissioner

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