



February 13, 2014

Ms. Melissa D. Jurgens
Secretary of the Commission
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street NW
Washington DC 20581

RE: CFTC Concept Release – Risk Controls and Systems Safeguards for
Automated Trading Environments (RIN 30-38 AD52)

Dear Ms. Jurgens,

Susquehanna International Group, LLP¹ (SIG) appreciates the opportunity to comment on the Concept Release (“the Release”) relating to risk controls and systems safeguards for automated trading environments. We commend the Commodity Futures Trading Commission (“CFTC”) on its decision to include the investment community in its deliberations on these important topics.

It was reassuring to see the Release emphasize error-checks *not just* for participants with exchange access (“firms”) *but also* for Designated Contract Markets (“exchanges”). While safeguards to prevent and detect order-errors must be scrupulously applied by firms, the exchanges govern and manage the order books and matching engines. This puts the exchanges in an excellent position to weed out aberrant orders before they can distort market prices.

The Release also does a good job of raising the full gamut of questions regarding high-frequency traders (HFTs). While it appears some commenters would prefer that the CFTC systematically reduce high-speed access, we believe the issue should be assessed in the light of the significant benefits that high-speed access brings to the markets. In this vein, most particularly, we believe it would be a grave mistake for exchanges to impose general speed-bump throttles or set minimum time displays for orders of any account type.

¹ SIG is comprised of multiple trading and investment entities, including top-tier market makers in listed stocks, options, futures and other derivative instruments in U. S. and foreign markets.

Slowing down the receipt and processing of order flow, other than to stop an error or address processing or capacity problems, could seriously impede fair value pricing – *in futures and related equity products* – and should be avoided. On the pages that follow, we provide the reasoning behind our views on high-speed access and offer comments on certain other questions raised in the Release.

a) Harmonizing Requirements Under Exchange Rules

In recent years, exchanges have responded to the challenges of electronic trading by implementing a broad range of erroneous order and volatility safeguards – such as price banding, daily price limits, QRMs for options, circuit breakers and maximum order size checks. *However, not all protections are available on all exchanges, and not all controls are available to all parties.* We encourage the CFTC to identify where variations exist and determine which controls and procedures need to be harmonized among exchanges.

Whether harmonizing old controls or developing new ones, implementing technology protocols requires close coordination between firms and exchanges. *Thus, the CFTC should avoid “federalizing” the rulemaking process.* It should, where it can, allow the exchanges to work with the firms on tailoring the rules for implementation in ways that best consider the technical intricacies between firms and exchanges. At the same time, however, it is important that the CFTC supervise the rule implementation process to ensure the systems development aspects are *principles-based* and allow firms “reasonableness” in meeting the technology requirements in manners suited to their systems and trading.

b) Fair and Equal Access Should be Offered to All Participants

The CFTC should not allow any rule that provides any participant with any material advantage over another in terms of latency, overhead or general ability to access an exchange. *MM, HFTs, ATSS, professional traders, institutional accounts and retail houses should all be offered the same market access to exchanges.* The same should apply to receiving trade-related information from an exchange. The exception in this case, however, is with respect to execution reports of booked orders. When booked orders are executed it makes sense to give the respective investor (receiving the execution) the execution report promptly and before the execution report has been publicly disseminated. Investors should be encouraged to provide liquidity to the book and should not be penalized at the hands of more quickly responding momentum traders that exhaust available hedges before the investor can respond to its own execution.

Saying that all participants should be afforded the ability to access exchanges on equal terms is not the same as saying that all participants should be required to subscribe to the same services. Access tools vary and each firm should be able to choose the mode of access consistent with the needs that derive from its type of business. MMs and HFTs often prefer to co-locate their systems around exchange systems and are willing to pay the added expenses to send orders at higher speeds. Conversely, the expense level for market access preferred by customer houses often depends on the trading interests of their customers – whether high-speed traders, long-term investors or something in-between. As individual access needs vary among firms, those that require faster access should be allowed to pay the expense for such access.

Investors benefit when those that pay the added expense for faster access use that access to add tradable liquidity for everyone else, which is very often the case. In equities, for example, concerns with high speed trading are real, but so is the fact that over 70% of trades in the S&P 500 stocks occur on penny wide markets.

c) Throttling

We recommend that the CFTC not allow exchanges to impose speed-bump throttles on order messaging as a means to slow down trading for its own sake. Of course, exchanges must be prepared to throttle or block order messages in the case of velocity events, credit limits and obvious-error scenarios. Exchanges also need the ability to properly address capacity and bandwidth peaking concerns. In addition, messaging fees and cancellation fees may be appropriate where a firm's order messaging causes processing issues that affect the ability of others to access the marketplace in a timely fashion, especially where the excessive order messaging lacks a reasonable level of liquidity value to the marketplace. *But throttling solely for the sake of delaying bona fide interest from reaching the market in the quickest fashion available would be counter-productive to the overall goal of providing the most liquid market possible².*

None of this, of course, should limit the ability of clearing firms to throttle orders at the exchange level in connection with credit limits set by the clearing firm for their respective customers. Also, exchanges should work with executing brokers to make this same credit limit protection available to them when executing for customers for whom they do not clear.

² See "Very Fast Money: High-Frequency trading on the NASDAQ (2013)(Allen Carrion, Lehigh University)

d) **Minimum Order Display Time**

No exchange should be allowed to impose a “minimum exposure time” for orders. Once sophisticated traders become aware that an order will be displayed for a certain period of time, it will be prone to market-harming gaming strategies. Depriving participants of the ability to withdraw bids or offers while related markets are fluctuating will discourage them from placing such bids and offers in the first place – which would undoubtedly cause wider markets (to account for the added risk). Any minimum exposure requirement at this time would constitute a senseless loss of liquidity to the markets³.

e) **Cross-Market Related Products**

The Release speaks to the issue of pricing errors in related markets and the dangers of those errors transferring corrupted pricing data to the futures market. Of course, the contrary is true as well – that errors in the futures market could distort the equity markets. Thus, the error-controls contemplated by the Release are important complements to the error-controls in the equities market brought about in connection with SEC Rule 15c3-5.

Futures and equity markets are already mindful that the ripple effects of significant errors can travel quickly to related markets, as evidenced by the many protections already in place at the exchanges. Certainly, advancing and enhancing the protections of current curbs, collars, price-bands and kill switches is vital to the efficiency of the markets going forward.

We should also remain mindful that unwarranted throttling of orders could likewise create disconnections in pricing between CFTC and SEC related products, as *the vast majority of futures products trade at prices highly correlated to related equity products*. Products are generally considered “related products” if they share common components and at least a 95% correlation in pricing. Consequently, the CFTC and SEC markets are inextricably linked by integrated pricing models and cross-market hedging strategies that interact to produce fair pricing in each market. Any factor that disconnects or reduces the symmetry of the two markets adds risk to both markets. It would not take much in terms of artificial speed-bumps on liquidity providers to cause a disconnection between CFTC and SEC related products. This would, of course, add risk to hedging while suppressing liquidity and price competition in both the futures and the related equity products.

³ See 2013 Abstract to “Equity Trading in the 21st Century” (Angel, Harris and Spatt)

Any cross-market pricing disconnections would be of particular concern to those of us that serve as market makers in stocks, ETFs, options and/or related futures (“Cross-MMs”). It is noteworthy that Cross-MMs contribute an enormous amount of liquidity to both markets through competitive pricing in these cross-market products. In this way, Cross-MMs not only help to maintain fair cross-market prices but also serve to backstop against excess volatility.

f) High-Frequency Traders (HFTs) vs Market Makers (MMs)

The Release poses the questions of whether to adopt a standard definition for high-frequency trading and whether HFT strategies should be subject to special regulations. The underlying issue is whether aggressive HFTs are reducing the quality and integrity of the markets through high-speed strategies that rely on an excessive amount of electronic order messaging but produce relatively less value in terms of benefits to investors. The related question at hand is whether to institute speed-bump order delays for HFT activities deemed excessive in the fashion above.

There is a considerable body of empirical evidence on the subject of whether HFTs constitute a net value or detriment to the efficient operations of the trading markets. *Most of the evidence suggests that the current level of electronic activity in futures, as a whole, is not only sustainable from a systems point of view but favorably contributes to overall market liquidity.* We accept that HFTs, overall, legitimately provide valuable liquidity.

While giving the HFTs their due, we also see basic differences between HFT trading and MM trading, and believe the CFTC should distinguish between the two if it determines to create a classification for HFTs. Specifically, while both parties routinely provide sizable liquidity at tradable prices, MMs have affirmative MM obligations and must meet specific customer and exchange commitments. In contrast, HFTs are more likely to follow an adverse selection bias that views liquidity-taking strategies as more attractive than liquidity-making. As such, in general, MMs are more inclined to stabilize prices and contribute less to short-term volatility than HFTs⁴. Notwithstanding the above, MMs and HFTs actively compete on pricing with each other and the resulting competition is healthy for the futures markets overall. Consequently, throttling either party to generally slow down trading will only serve to deny overall liquidity to all parties.

⁴ See, 2013 “The diversity of high-frequency traders” (Hagstromer, Norden – Stockholm University). See, High Frequency Trading and Price Discovery (2013-Broggaard, Riordan, Hendershott).

There is also the logistical aspect to classifying HFTs and their strategies. Although high-frequency strategies often include active pricing away from the best quote, the more valued tradable HFT liquidity will often come and go as circumstances change. This makes it extremely difficult to generally categorize HFTs, or their strategies, into certain classes and then restrict their activities by class. Attempting to do so would be fraught with implementation problems and, ultimately, counter-productive to maintaining efficiency in the markets.

In cases where order-traffic issues arise in regards to HFTs, it would be far better to directly harness and make HFT liquidity available to the public (by providing HFTs with their preferred access) and then, where need be, separately address the order traffic issues through universal and reasonably devised market access protocols such as high-cancellation fees and quote-to-trade restrictions. Currently, we do not see the utility of adopting a definition for HFTs or HFT strategies for the purpose of special regulations.

g) Bandwidth

Although we prefer the menu approach to market access discussed above, where firms are free to subscribe to the type of access to suite their individual needs, it is of course the case that bandwidth is not *ad infinitum*. Thus, if an exchange determines to allocate bandwidth at a premium price, all participants willing to pay the premium for additional bandwidth should be allowed to receive that service. When demand for bandwidth exceeds supply, however, it is best to allocate the bandwidth in a manner designed to elicit the most efficient liquidity for the product. For now, however, the level of access that participants prefer is generally available to them – albeit, sometimes at a price.

h) Excessive Messaging Policies

We previously mentioned that exchanges need the ability to regulate the speed of order messages in order to address processing problems. The CFTC should ensure that exchange “Excessive Messaging Policies”, “Cancellation-to-Trade” fee schedules and “Order-to-Trade” ratios are not set at rates so high as to become *de facto* impositions of artificial speed-bump throttles on traders or strategies. Exchanges should be required to justify new messaging fees and thusly ensure they do not unreasonably discourage competition or deny fair access to legitimate liquidity regardless of the participant’s account-type.

i) Latency

The paradoxical view often heard is that, because pre-trade controls can create latency, the firm that builds the safest order system may, in the process, make itself obsolete. The truth, however, is that firms can build the necessary pre-trade controls without creating a competitive disadvantage for themselves *if* the exchanges have the proper rules in place to afford firms a level playing field and ensure compliance from all firms.

One way to better ensure a more favorable outcome in this regard is by adopting rules that are principles-based and allow firms reasonableness in their approach. Giving a firm a technological goal to meet is far different, and far better, than issuing a rigid set of technical requirements that ignore the idiosyncratic characteristics of the firm's internal systems and trading behavior. Firms need flexibility to install systems safeguards and risk controls in the manner best suited given their unique systems configurations. In this way, they can better implement the necessary controls while addressing related latency issues in the manner best suited for their system structure.

Notwithstanding the above, although flexibility is a key component, there should be no room for firms to skip or give short shrift to implementing protections in order to compete on latency. Standard "detect and prevent" goals need to be set at the exchange level and met at all levels.

For example, all orders should go through exchange self-trade checkpoints rather than just those of firms with identified concerns. Allowing firms to gain a latency advantage by skipping the self-trade checkpoint will only entice firms to not use the self-trade function and thereby add to wash trade concerns.

i) Exchange Controls

The CFTC should increase its focus on safeguards at the exchange level. When the SEC recently adopted its market access rules (Rule 15c3-5) it focused on participants rather than exchanges and, thereby, largely bypassed the place best suited for controls to catch errors – the exchange matching engine. *It is important to keep in mind that the exchanges operate at the nexus of electronic order flow interactions, which makes them ideally positioned to centrally monitor order and trade activity and to take protective action when necessary.*

Provided below are some thoughts on the issue of exchange controls:

Configurability: Once exchange order flow filters are in place, firms should be given optimal configurability and full transparency into interactions involving restrictions with their order flow at the exchange

level. If orders are stopped in transit at the exchange level, the event and reason for the flagging should be immediately made known to the firm.

Exchange Level Kill Switches: Current kill switch mechanisms at the futures exchanges are useful, but limited. An often noted and reasonable request with respect to kill switches is that firms should be able to tag accounts as “related” so that exchange kill switches can be enabled at a gateway level, firm level or an account level. In addition, exchanges should ensure a mechanism for kill switches to stop new orders and cancel old orders – but at the same time allow firm cancellations to go through. Importantly, kill switches should allow execution report “drop copies” to be returned to the firm even while new orders are being blocked.

The issue of combining position information for incoming orders by account or account group across markets should be studied. We appreciate that this presents great challenges, but the value of an effective cross-market exchange kill switch is too valuable to not fully pursue.

Quote Risk Monitors (QRMs): Currently, in our view, the tool with perhaps the most promise going forward is the Quote Risk Monitor tool. In brief, a QRM is an automatic quote-fade feature designed to gap-quote MMs who, at the time, are being subjected to unusual levels of buy/sell order flow in an assigned option class on a specific exchange over a short period of time. QRMs are designed to allow MMs the opportunity to adjust to dramatically changing market conditions and alert them to the possibility that the heightened incoming order flow may be the result of an error. Affording MMs the opportunity to adjust accordingly before being over-exposed to an error has proven to be of great value to options MMs. Indeed, many option MM firms are inclined to not furnish quotes as MM on any options market without the benefit of an exchange-provided QRM.

The QRM functionality needs to be expanded. There is an extremely promising risk-safeguard currently being proposed in the equity options market *whereby all the quotes by a firm on the respective exchange are withdrawn when a pre-set number of contracts trade in a pre-set number of options classes on that exchange*. The CFTC should explore similar filings by futures exchanges. Eventually, the hope would be that a firm’s quotes could be pulled on *multiple* exchanges when cross-market activity breaks a threshold. While it would involve extensive coordination and cooperation by the various options and futures exchanges, it is well-worth pursuing.

Collars, Circuit Breakers and Obvious Errors: The markets benefit greatly from collars, price-bands (Limit-Up/Limit-Down) and MWCB rules, as they have already shown to be excellent tools for curbing runaway

errors and blocking trades from occurring at obvious error prices. In short, enforcing reasonable standards to block errors from executing in the market obviates the need for more complicated processes involving busts and adjustments in a moving market. *In this connection, obvious error rules and procedures should be synchronized among exchanges as much as possible – including both futures and equities.*

ATS Testing: Appropriate testing procedures are essential to the task of preventing major market disruptions and should be standardized, where possible. Also, the Eurex model of allowing members to create their own private simulation DCM has been a valuable addition to testing capabilities. The exchanges should consider offering this capability to firms.

Self-Trading: Although each exchange should offer self-trade block functionality, and make sure all orders go through the self-trade check, the parameters should be set by the firms. The firms are most familiar with their strategies and trading desks and the profit centers behind each order, and can therefore best identify which orders should avoid trading with certain other orders. The firms should have the ability to reject or cancel either side to avoid a self-trade. Also, the process should be customizable at the aggregation unit level and user-defined tag level.

Most importantly, the exchanges should recognize that minor self-trade instances will occasionally occur. *The exchanges should focus their wash-trade attention on activities that create material market misperceptions, and avoid imposing strict disciplinary actions for immaterial instances.*

Drop Copies: Last, *but far from least*, all exchanges need to make drop copy reports readily available to participants for all order processes. This is a simple and inexpensive risk management tool that should be relatively easy to implement by exchanges while extremely valuable to firms.

Again, thank you for the opportunity to comment on the Release. We would be happy to discuss any of the matters or opinions discussed herein. Please feel free to contact the undersigned.

Sincerely,



Gerald D. O'Connell
SIG – Chief Regulatory Officer

cc: Acting Chairman Mark Wetjen
Commissioner Bart Chilton
Commissioner Scott O'Malia
Sebastion Pujol Schott – Division of Market Oversight
Marilee Dahlman – Division of Market Oversight
Camden Nunery – Office of the Chief Economist
Sayee Srinivasan – Office of the Chief Economist