October 1, 2012

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

Re: Roundtable Discussion "Technology and Trading: Promoting Stability in Today's Markets" (File No.: 4-652)

Dear Ms. Murphy:

Thank you for the opportunity to provide comments to the U.S. Securities and Exchange Commission (the "Commission") in response to its October 2, 2012 roundtable "Technology and Trading: Promoting Stability in Today's Markets."

An Agenda for Responsible Trading

In recent years, as markets have become increasingly electronic and competitive, market quality has improved dramatically, saving investors billions of dollars. However, some are concerned that the combination of electronic markets and computer trading has increased the risk of market disruptions.

All market participants have a common interest in ensuring that trading is done responsibly, which means taking practical steps to enhance and ensure the stability of our market systems. This should be an area for collaboration between the financial industry, government and the investing public.

Responsible risk management requires a multi-layered structure of independent safeguards. While many of these safeguards already exist, it is an appropriate time to revisit and enhance these defenses.

To that end, there are four common-sense areas of focus that would improve the way risks are addressed while maintaining the strengths of our markets, each discussed in greater detail below:

1. Expanding pre-trade risk controls, particularly at exchanges and other trading venues
2. Improving post-trade risk control systems and standards
3. Enhancing information sharing on trading incidents and near-misses
4. Improving testing procedures for computer trading systems

Pre-trade Risk Controls

Why are these important?

Effective pre-trade risk controls are critical to prevent mistaken manual entry of orders ("fat finger" trades) or other errors from getting into the market, causing trading losses and disrupting the orderly operation of markets.

What exists today?

In recent years, there have been a number of industry and regulatory initiatives to define and describe best practices for validation of orders prior to their submission into electronic markets. These controls are an essential foundation for protecting the integrity of the markets.

- Industry groups have drawn on the experience of their members to publish robust and broadly applicable guidelines for electronic trading risk management, including pre-trade risk controls, such as limits on the size and frequency of allowable orders.[1]
- For equity markets, the SEC's market access rules[2] are designed to eliminate "unfiltered" or "naked" access to securities markets and require brokers to have a system of risk management controls and supervisory procedures in place to manage financial and operational risks.
- For futures markets, a sub-committee to the CFTC Technology Advisory Committee recommended similar pre-trade risk controls for firms with direct market access and noted the important pre-trade roles of trading firms, clearing firms and exchanges.[3]
- Many exchanges currently offer voluntary pre-trade risk checks before orders enter the exchange's matching systems. However, in most cases, these checks are optional and may slow down order flows. Some markets also charge fees to use their risk controls, which discourages use.

What should we do now?

In their role as gatekeepers, exchanges and other trading venues should improve the pre-trade risk checks on their systems. All orders should be subject to the same required checks, with the pre-trade order limits configured by exchange members or by their clearing firms. To avoid a race-to-the bottom, these controls should be mandatory and free. They should be kept simple, focusing on controls for order size and frequency. To facilitate coordination, there may be a role for regulators to work with the exchanges to set minimum standards.

What shouldn't be done?

Regulation should not throw up speed bumps in competitive markets. Computer technologies are capable of conducting robust pre-trade risk checks in a manner that will not increase costs for investors, while ensuring responsible trading activity.

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[1] *See, e.g.,* http://www.futuresindustry.org/downloads/Trading_Best_Pratices.pdf and http://www.futuresindustry.org/downloads/Market_Access-6.pdf.

[2] Rule 15c3-5 under the Securities Exchange Act of 1934.

[3] *See* http://www.cftc.gov/ucm/groups/public/@swaps/documents/dfsubmission/tacpresentation030111_ptfs2.pdf.

Post-trade Risk Controls

Why are these important?

Post-trade risk controls based on independent crosschecks are critical to verify that trading systems are performing as expected by confirming trading positions and outstanding orders.

What exists today?

Most major exchanges offer information services such as electronic drop copies and "echo sessions" for all trading activity, which help verify the accuracy of trading activity.[4] Many trading firms and clearing firms use these services to reconcile their trading activities and manage risks. The Futures Industry Association has encouraged their use by recommending near-real time reconciliation of internal trading records with drop copies.

What should we do now?

Standards for the post trade risk checks provided by exchanges could be improved to make sure that all of the important pieces of data related to a trade are included. This information should also be made available directly to multiple parties, including exchange members, clearing firms, ISVs, etc. This would improve the ability of traders, brokers, and clearing firms to catch and prevent errors by building systems that can independently verify trading activity and automatically suspend trading if necessary. Exchanges should also explore adding broad post-trade limits for a second line of defense against unintended trading activity on that exchange. To this end, we support the recent proposal of the "industry working group" to establish and enforce certain post-trade limits.[5] Manual "kill switches" may provide further post-trade risk management benefits as a measure of last resort.

What shouldn't be done?

Regulation should not throw up speed bumps in competitive markets. Computer technologies are capable of conducting robust post-trade risk checks in a manner that will not increase costs for investors, while ensuring responsible trading activity.

Information Sharing

Why is this important?

Recent events have highlighted several areas where improved information sharing among market participants on trading problems or "near misses" could help prevent, troubleshoot, and mitigate trading risk.

What exists today?

During unusual market events, communication among market participants is conducted on an ad hoc basis. Market participants are often left to media reports and informal sources of information about what is going on, making real-time decision making challenging. Post-incident investigations are typically time-consuming and, for a variety of reasons, kept

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[4] A "drop copy" is an electronic message from a trading venue indicating the details of an executed trade, out-of-band from an order entry session. An "echo session" is a similar out-of-band stream of messages that includes confirmations of orders, cancels, and other trading related messages, in addition to executions.

[5] *Group calls for trading 'kill switch,'* Financial Times, September 29, 2012.

confidential. Also, near misses and smaller incidents are rarely publicized; therefore, it is difficult for market participants to get enough information in a timely to improve their current risk management practices and prevent known errors from recurring.

What should we do now?
During an unusual market event, stakeholders need better ways to communicate about ongoing impacts and mitigations. A central clearinghouse or "hotline" to share this information in real time would help.

Post-incident, an industry-operated central information clearinghouse would help to communicate to other industry participants about the material facts and circumstances surrounding unusual market events and near-misses. This would help to avoid future errors, in part, by industry participants learning from each other. The reporting system would be voluntary and anonymous, yet contain enough information about the nature of events that other participants can learn something from the disclosure. In that way, we can all learn from mistakes.

What shouldn't be done?
A "gotcha" approach which discourages the kind of sharing and learning that leads to substantial error reduction going forward.

Testing

Why is this important?
While testing should not be relied upon exclusively to catch all potential problems, good testing procedures can reduce the likelihood that costly errors and unexpected interactions are caught and corrected in advance.

What exists today?
While exchanges offer some conformance testing facilities these systems often have limited availability, limited functionality, and cost money. For more comprehensive testing, trading firms must develop their own testing solutions in-house or contract with third parties. There are, however, a number of well-established best practices for testing software.[6]

What should we do now?
An industry-wide trading test bed should be developed where trading systems and algorithms can be more thoroughly tested and evaluated in "real life" conditions, with more kinds of tests made available, including scenario and stress testing. This could not only benefit testing of computer systems, but also enhance training for system operators. This should be treated as a low-cost industry utility to encourage widespread use and participation.

What shouldn't be done?
Regulatory algorithm certification is not a feasible solution. It is highly impractical, expensive, unlikely to be effective, and would create moral hazards and new risks. Similarly,

[6] *See, e.g.,* http://www.futuresindustry.org/downloads/Software_Change_Management.pdf.

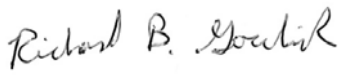
mandatory testing procedures based on a checklist of traditional change management protocols would discourage evolution of appropriate practices.

Conclusion

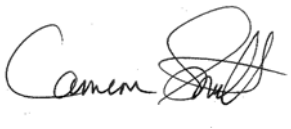
Thank you for the opportunity to provide these comments with respect to the topics to be considered on October 2.

We look forward to an ongoing dialogue with Commission staff on these important issues.

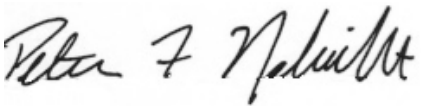
Sincerely,



Richard Gorelick
CEO, RGM Advisors



Cameron Smith
President, Quantlab Financial



Peter F. Nabicht
Executive Vice President, Allston Trading