

March 16, 2016

Mr. Christopher J. Kirkpatrick
Secretary
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street NW
Washington, DC 20581

Re: Notice of Proposed Rulemaking – Regulation Automated Trading (RIN 3038-AD52)

Dear Mr. Kirkpatrick:

Citadel LLC¹ (“Citadel”) appreciates the opportunity to provide comments to the Commodity Futures Trading Commission (the “Commission”) on its notice of proposed rulemaking regarding automated trading (“Regulation AT”) on U.S. designated contract markets (“DCMs”).²

Over the past two decades, technological innovation has fundamentally changed how market participants transact on DCMs, spurring a transition to electronic trading and supporting the use of increasingly sophisticated execution strategies. The growth of electronic trading has improved market conditions for investors by increasing transparency and fostering competition, leading to better pricing and deeper liquidity. In parallel, greater automation has improved the operational soundness and stability of our markets, minimizing the incidence of trade breaks and other errors that frequently resulted from manual processes and enabling the efficient transmission of order information and trade confirmations.

However, the market’s transition to electronic trading has also introduced new operational risks that deserve the attention of regulators, trading venues and market participants. We firmly support Commission efforts to improve market resiliency and operational stability, given their fundamental importance to investor confidence. The Commission’s Regulation AT proposal would establish minimum risk management standards around the design, testing and monitoring of algorithmic trading systems and the entry of orders by those systems onto DCMs. Importantly, these proposed risk controls include order cancellation (“kill switches”) and connectivity monitoring systems at the DCM level, recognizing that exchanges sit at the center of trading and therefore are best positioned to monitor activity across a wide variety of participants. In addition, the Commission’s proposal would increase the level of disclosure required to be provided by DCMs regarding their trading protocols and market making or other incentive programs offered to participants.

¹ Citadel is a global financial firm built around world-class talent, sound risk management, and innovative market-leading technology. For more than a quarter of a century, Citadel’s hedge funds and capital markets platforms have delivered meaningful and measurable results to top-tier investors and clients around the world. Citadel operates in all major asset classes and financial markets, with offices in the world’s leading financial centers, including Chicago, New York, San Francisco, Boston, London, Hong Kong, and Shanghai.

² 80 Fed. Reg. 78824 (Dec. 17, 2015) (the “**Reg AT Proposal**”).

While we believe there are several modifications that should be made in order to appropriately calibrate these proposals, in large part the Commission has leveraged both industry best practices and recent regulatory initiatives in other asset classes. However, in a sharp departure from established precedent, the Regulation AT proposal also includes a requirement for market participants to maintain a source code repository that is available for summary inspection by the Commission and other government agencies. As discussed in further detail below, we urge the Commission to remove this requirement and focus on the elements of the proposal directly linked to improving market resiliency and stability.

I. Source Code is Highly Sensitive Intellectual Property and Not a Standard Book or Record

The source code utilized by an investment firm is often its most valuable intellectual property and critical to its overall commercial success and viability. Nearly every aspect of the investment process, from data analysis to strategy development to trade execution, can be deciphered from the source code employed to assist with these tasks. The Commission's Regulation AT proposal requires market participants to maintain a source code repository that is available for summary inspection by the Commission and other government agencies, as is currently the case for general books and records maintained by a firm. In seeking to treat source code in the same manner as an ordinary business record, such as a trade confirmation, the Commission's proposal alters the status quo in an unprecedented manner without adequate justification and fails to thoroughly consider the associated risks and costs for market participants.

Requiring source code to be available for summary inspection by the Commission and other government agencies significantly increases the likelihood of unauthorized disclosure. Risks include accidental disclosure by Commission staff, disclosure and/or use by Commission staff following an employment move to the private sector, and security breaches due to cyberattacks, which could be expected to increase in frequency if the Commission was known to possess source code that could unlock the trading strategies of the world's most successful investment firms. Disclosure of a firm's source code to other market participants would reveal not only the firm's current investment portfolio, but also its expected future trading activity, exposing its most sensitive proprietary information and leaving it defenseless against the rest of the market. Similar to other types of highly confidential intellectual property, such as recipes or formulas for consumer products, it is difficult to overstate the commercial impact that the unauthorized disclosure of source code would have on an investment firm.

Given the enormous risks associated with making source code available for summary inspection similar to a general book or record, it is perhaps unsurprising that the Commission's proposal appears to be completely unprecedented. Furthermore, the Commission fails to adequately explain the concern this proposal is intended to address. While we agree that source code may play an important role in any investigation into manipulative or otherwise disruptive trading activity, and therefore should be maintained by investment firms, the Commission provides no explanation as to why the current subpoena process is insufficient. The subpoena process provides important procedural safeguards, including limiting disclosure requests to actual investigations of wrongdoing and allowing firms to apply for a protective order so as to ensure any disclosed materials are appropriately handled and maintained.

We urge the Commission to reconsider its proposal to equate proprietary source code with standard business records and to require it to be made available for summary inspection and disclosure to the Commission and other government agencies. The existing subpoena process has proven effective in appropriately balancing the interests of public and private sector stakeholders and in affording source code the protective treatment that is required for it to be safely disclosed. Abandoning this established precedent would create enormous risks for nearly every investment firm trading on a Commission-regulated DCM. The Commission should remove this aspect of the proposal and focus instead on the risk management requirements that can further improve market resiliency and stability.

II. Further Enhancing Market Resiliency and Transparency

A. The Commission Should Calibrate the Regulation AT Definitions to Ensure a Level Playing Field and Focus on Trading Activity that Can Impact Market Resiliency

The requirements in the Commission’s Regulation AT proposal apply to “AT Persons”, which include (a) firms registered with the Commission that engage in algorithmic trading on DCMs and (b) previously unregistered firms that now must register with the Commission as a result of engaging in algorithmic trading via direct electronic access on DCMs. While this definition of an “AT Person” captures a large number of market participants, it excludes unregistered trading firms that engage in algorithmic trading but do not have direct electronic access to a DCM. In order to maintain a level playing field, we believe the Commission should apply the proposed risk management standards uniformly to the relevant trading activity, without regard to the registration status of the firm or the method of connectivity to the DCM.

Certain other definitions in the Regulation AT proposal would benefit from revision in order to ensure the focus remains on trading activity that can impact market resiliency. The proposal requires “AT Persons” to implement risk controls that are designed to prevent an “Algorithmic Trading Compliance Issue” or an “Algorithmic Trading Disruption.” However, the definition of an “Algorithmic Trading Compliance Issue” includes, among others, events that violate a firm’s own internal requirements, while the definition of an “Algorithmic Trading Disruption” includes, among others, all events that disrupt the algorithmic trading of a firm. We urge the Commission to focus on trading activity that can impact the proper functioning of the market, instead of purely internal events within a firm that do not impact other market participants, such as an inadvertent violation of an internal trading-related process. In addition, regarding any violation of a firm’s internal processes as an “Algorithmic Trading Compliance Issue” could result in a race to the bottom, contrary to the overall goals of reducing operational risk and enhancing market resiliency.

B. Certain of the Proposed Risk Management Requirements Appear to be Overly Prescriptive

The Regulation AT proposal sets forth important risk management requirements that can improve market resiliency. In addition to controls at the trading firm and clearing firm level, the proposal requires order cancellation (“kill switches”) and connectivity monitoring systems at the DCM. Given the central role of exchanges in monitoring activity across market participants, we strongly support execution venues having clear authority and responsibility to use kill switches to

immediately block activity that appears erroneous and likely to materially impact members or the market.

The Regulation AT proposal also requires DCMs to either apply, or provide and require the use of, self-trade prevention tools that are reasonably designed to prevent self-trading. In addition, DCMs are required to publicly disclose the amount of approved self-trading (by trade count and volume). Together, we believe these aspects of the proposal can increase transparency for market participants regarding trading activity on DCMs and enhance market efficiency and resiliency by requiring the implementation of effective self-trade prevention tools.

However, certain of the proposed requirements relating to testing and monitoring of algorithmic systems appear overly prescriptive and may not accommodate different types of trading strategies and investment firms. For example, with respect to system testing, the current proposal requires regular back-testing and stress testing of each algorithmic trading system. With respect to system monitoring, the proposal sets forth several required elements, including the triggering of automated alerts whenever message behavior breaches design parameters and control panels that allow monitoring staff to interact with the algorithmic system in real-time, including being able to disengage the system and cancel resting orders.

Given that the testing and monitoring requirements must be implemented across a wide range of firms, systems and investment strategies, the Commission should seek to avoid prescriptive requirements that deviate from industry best practices and that may be overly onerous when generally applied under Regulation AT. For example, back-testing using historical data may not be appropriate for every system that falls within the scope of the Regulation AT proposal. In addition, the Commission should clarify that Regulation AT is not intended to require firms to maintain an additional layer of personnel dedicated solely to real-time monitoring of algorithmic trading systems and that trading personnel can fulfill certain of these responsibilities. It should also be clear that compliance staff are not expected to review source code in connection with their general monitoring and surveillance responsibilities.

C. The Commission Should Extend the Operational Transparency Requirements to All Registered Trading Venues

Under the Regulation AT proposal, a DCM is required to publicly disclose (a) descriptions of its trading protocols and matching engine and (b) the details of any market maker or trading incentive programs. We commend the Commission on proposing rules that would significantly increase the amount of public information required to be disclosed by DCMs and believe the Commission should clarify that platform revenue share agreements are a type of incentive program.

We also urge the Commission to require the same level of information to be provided by all regulated trading venues, including swap execution facilities (“SEFs”). While the Commission expressed concerns about imposing additional requirements on SEFs that may decrease market liquidity,³ minimum operational transparency standards do not impose significant burdens on

³ See the Reg AT Proposal at 78827, FN 14.

platform operators and provide critical information to market participants assessing the relative merits of these trading venues. Applying the operational transparency requirements to all trading venues regulated by the Commission also serves to level the playing field, as DCMs may directly compete with other types of venues by listing swaps or economically similar contracts. A cornerstone to open, fair and efficient markets is providing investors with sufficient transparency, which removes information asymmetries and enables trading venues and market participants to compete on the merits.

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We appreciate the opportunity to provide comments on the Commission's automated trading proposal. Please feel free to call the undersigned at (312) 395-3100 with any questions regarding these comments.

Respectfully,

/s/ Adam C. Cooper

Senior Managing Director and Chief Legal Officer