CME Group

Bryan T. Durkin
President

May 1, 2017

VIA ONLINE SUBMISSION

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

Re: Supplemental Notice of Proposed Rulemaking on Regulation Automated Trading ("Regulation AT"), RIN 3038-AD52

Dear Mr. Kirkpatrick:

CME Group Inc. ("CME Group") appreciates this opportunity to provide comments on the Commodity Futures Trading Commission's ("CFTC" or "Commission") supplemental notice of proposed rulemaking regarding Regulation Automated Trading ("Supplemental Proposal").[1] On March 16, 2016, CME Group submitted a comment letter[2] in response to the Commission's initial notice of proposed rulemaking regarding Regulation Automated Trading ("Initial Proposal" and, as modified by the Supplemental Proposal, "Reg AT").[3] CME Group submitted another comment letter on June 24, 2016, when the comment period for the Initial Proposal was re-opened following the Commission staff's June 10, 2016 roundtable.[4] In this letter, we present additional concerns raised by the Supplemental Proposal, address other related areas, and propose an efficient, effective, and appropriately tailored[5] principles-based alternative to Reg AT.

CME Group is the parent of four U.S.-based designated contract markets ("DCMs"): Chicago Mercantile Exchange Inc. ("CME"), Board of Trade of the City of Chicago, Inc. ("CBOT"), New York Mercantile Exchange, Inc. ("NYMEX"), and the Commodity Exchange, Inc. ("COMEX") (collectively, the "CME Group Exchanges" or "Exchanges"). These Exchanges offer a wide range of products available across all major asset classes, including: futures and options based on interest rates, equity indexes, foreign exchange, energy, metals, and

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1 *See* Regulation Automated Trading, 81 Fed. Reg. 85,334 (Nov. 25, 2016) ("Supplemental Proposal").

2 *See* Letter from CME Group to CFTC re Notice of Proposed Rulemaking on Regulation Automated Trading (RIN 3038-AD52), dated Mar. 16, 2016.

3 *See* Regulation Automated Trading, 80 Fed. Reg. 78,824 (Dec. 17, 2015) ("Initial Proposal").

4 *See* Letter from CME Group to CFTC re Reopening of Comment Period re Regulation Automated Trading (RIN 3038-AD52), dated June 24, 2016.

5 *See* Exec. Order No. 13,772, 82 Fed. Reg. 9965 (Feb. 3, 2017) (setting forth Trump Administration Core Principles for regulating the financial system).

agricultural commodities. The CME Group Exchanges serve the hedging, risk management, and trading needs of our global customer base by facilitating transactions through the CME Globex® electronic trading platform, our open outcry trading facility in Chicago, as well as through privately negotiated transactions. CME Group also operates a swap execution facility ("SEF") as well as CME Clearing, a derivatives clearing organization ("DCO") which provides clearing and settlement services for exchange-traded and over-the-counter derivatives transactions.

I. EXECUTIVE SUMMARY

CME Group is committed to protecting the integrity of our markets. We have as great a stake in this goal as the Commission. Our ongoing self-regulatory efforts focus on the same objective as Reg AT – reducing the risks to market integrity from all types of trading. As trading technology develops, so, too, do our efforts to protect our markets. We support many of the substantive protections that Reg AT seeks to achieve. However, Reg AT, as proposed, contains serious flaws that make it unrealistic, unworkable, and ineffective.

Most troublingly, Reg AT threatens potentially limitless liability for DCMs. As proposed, Reg AT would require DCMs to ensure that all AT Persons[6] and executing futures commission merchants ("FCMs") comply with Reg AT. Furthermore, the Supplemental Proposal would impose inconsistent and unattainable standards on DCMs – in some instances, requiring a DCM to implement risk controls that *will* prevent and reduce any potential risk of disruptions. That standard, coupled with an obligation to act as a *de facto* compliance officer for all market participants subject to Reg AT, could expose a DCM to unlimited liability.

The Supplemental Proposal is based on two misconceptions that impair the Commission's ability to adopt a workable and effective framework. First, Reg AT is built on the faulty legal premise that unless someone engaged in Algorithmic Trading[7] is registered with the Commission, the CFTC cannot impose requirements on that person. As described in greater detail below, registration is not required to ensure compliance with Reg AT. Second, the Supplemental Proposal does not reflect accurately the differing roles of DCMs and FCMs when detailing the level of granularity at which risk controls must be set. DCM controls manage market-wide risk, while FCM controls manage customer-specific risk.

If the Commission decides to proceed with Reg AT, we believe the Commission should do so under a rule set that would result in dramatically lower costs and complexity than the Supplemental Proposal would impose. We have included in Appendix A to this letter a truly principles-based alternative to Reg AT. This framework would outline broad market integrity objectives to be accomplished through risk controls and other measures, but it would allow each DCM and Algorithmic Trader (as defined in Appendix A) to exercise its discretion in adopting specific methods and practices to attain these goals based on its unique risk profile and role in the market.

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6 "AT Person" is defined in the Supplemental Proposal at 85,391.

7 "Algorithmic Trading" is defined in the Initial Proposal at 78,937.

Instead of answering the Commission's questions and reiterating our many concerns with the Supplemental Proposal, we hoped that it would be more helpful to the Commission if we focused our efforts on articulating an efficient, effective, and appropriately tailored principles-based alternative to Reg AT.

II. OVERVIEW OF SPECIFIC COMMENTS

A. Reg AT threatens potentially uncapped liability for DCMs by requiring them to ensure that all AT Persons and executing FCMs comply with Reg AT.

Reg AT does not contain a legal compliance standard that a DCM must meet to avoid liability. Instead, a DCM is obligated to establish a program for *effective* periodic review and evaluation of AT Persons' and executing FCMs' compliance with Reg AT.[8] CME Group is concerned that it could be held liable for any Algorithmic Trading Disruption[9] occurring on the CME Group Exchanges under the theory that CME Group's program for evaluating the errant AT Person's and its executing FCM's compliance with Reg AT was *ineffective* because an Algorithmic Trading Disruption occurred. As currently proposed, Reg AT could go as far as to hold CME Group liable if that AT Person or its executing FCM caused an Algorithmic Trading Disruption on a non-CME Group trading platform.

This staggering potential for liability results from Reg AT's inappropriate attempts to require DCMs to act as the *de facto* compliance officers of all AT Persons and executing FCMs. DCMs are self-regulatory organizations; in that role, DCMs adopt rules and detect and deter rule violations. DCMs are not guarantors of traders' or clearing members' compliance with the DCM's rules or federal rules. As we and others stated in response to the Initial Proposal, DCMs lack the resources and the technical capability to determine whether the quantitative settings or calibrations of an AT Person's risk controls are adequate to comply with Reg AT. Yet the Supplemental Proposal would put DCMs on the hook for that assessment and determination, with the threat of enormous liability if a subsequent disruption occurred.

Furthermore, Reg AT would require a DCM to functionally certify an AT Person's (and an executing FCM's) compliance with Reg AT and then possibly investigate their non-compliance. Any such investigation by a DCM could be an implicit admission by that DCM that it failed to comply with its obligation to remediate any insufficient mechanisms, policies and procedures, or calibrations of the AT Person's risk controls.

In these respects, Reg AT fundamentally misunderstands – or attempts to fundamentally alter – the role of a DCM. With this new role would come the risk of potentially uncapped liability. We echo Acting Chairman Giancarlo's call for the Commission "to revisit [the proposed DCM review program] and provide a more workable solution that does not hold DCMs

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[8] *See* proposed § 40.22 (requiring a DCM to "establish a program for *effective* periodic review and evaluation of AT Persons' compliance with §§ 1.80 and 1.81 of this chapter and executing FCM compliance with § 1.82 of this chapter" (emphasis added)).

[9] "Algorithmic Trading Disruption" is defined in the Initial Proposal at 78,937.

liable for identifying and remediating inadequate settings of AT Persons."[10] Reg AT should not require DCMs to evaluate AT Persons' and executing FCMs' compliance with Reg AT or identify and remediate inadequate quantitative settings or calibrations of AT Persons' risk controls.

B. Reg AT should consistently require DCM risk controls to be "reasonably designed to prevent an Algorithmic Trading Disruption and reasonably designed to mitigate the effects of any Algorithmic Trading Disruption."

CME Group believes the Commission should propose a realistic, workable, and consistent standard applicable to DCM risk controls. In the Supplemental Proposal, the Commission has taken some steps toward meeting that objective, but we note several ways in which the proposed standard should be improved.

CME Group previously commented that requiring DCMs to prevent disruptions is an unachievable standard. CME Group is encouraged to see the Supplemental Proposal's addition of "reasonably designed" to proposed § 40.20 and proposed § 38.255(b). However, we are concerned that the Commission has not consistently applied that important modifier. The Supplemental Proposal would require DCMs to set pre-trade risk controls at a level or levels of granularity "that *will* prevent and reduce the potential risk of an Electronic Trading disruption."[11] Furthermore, for all Electronic Trading Order Messages that are submitted to a DCM through direct electronic access ("DEA"), the Supplemental Proposal would require a DCM to make available to the executing FCM systems and controls that enable the FCM to set pre-trade risk controls at a level or levels of granularity "that *will* prevent and reduce the potential risk of an Electronic Trading disruption."[12] Neither proposed § 40.20(a)(2) nor proposed § 38.255(b)(1)(ii) moderates the DCM's obligation through the term "reasonably designed." Without that important modifier, Reg AT would not reflect in all applicable areas the Commission's acceptance of the reality that no DCM can be sure to prevent an adverse trading event at all times and in all circumstances.

The Commission should recognize that a "reasonably designed to prevent" standard will not require perfect prevention. As former Chairman Massad noted when releasing the Initial Proposal, no control – like no rule – can always prevent disruptions and other operational problems that may arise from Algorithmic Trading.[13] We agree. If the "reasonably designed to prevent" standard is interpreted to mean that perfect prevention is required, the standard would be unworkable and impose limitless liability on DCMs.[14] Instead, "reasonably designed to

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[10] Supplemental Proposal at 85,399.

[11] *See* proposed § 40.20(a)(2) (emphasis added).

[12] *See* proposed § 38.255(b)(1)(ii) (emphasis added).

[13] *See* Initial Proposal at 78,943.

[14] We note that in other contexts, Commission staff has interpreted regulations to contain higher standards than their literal meaning indicates. For example, in CFTC Letter 16-69, the Division of Clearing and Risk of the *(cont'd)*

prevent" disruptions should be a flexible standard that would permit many different DCM system designs, risk controls, and risk control calibrations to achieve compliance. The nature of this standard is principles-based, not prescriptive.

CME Group believes that, instead of replicating the standard in § 38.255 ("prevent and reduce the potential risk of"), Reg AT should require DCM risk controls to be "reasonably designed to prevent an Algorithmic Trading Disruption and reasonably designed to mitigate the effects of any Algorithmic Trading Disruption." This would eliminate any ambiguity associated with a requirement to "prevent and reduce the potential risk of an Algorithmic Trading Disruption."[15] The Commission should carry through this standard to any risk control requirements it imposes on AT Persons and executing FCMs.

CME Group believes Reg AT should apply realistic and workable standards to DCMs. Unfortunately, the Supplemental Proposal falls short by, in some instances, requiring a DCM to prevent any disruptions associated with Algorithmic Trading. CME Group requests that the Commission revise Reg AT to consistently require any DCM risk controls to be "reasonably designed to prevent an Algorithmic Trading Disruption and reasonably designed to mitigate the effects of any Algorithmic Trading Disruption."

C. Proposed § 1.85 should not apply to DCMs offering front end systems or applications.

CME Group appreciates the Commission's consideration of the significant issues raised by commenters regarding how AT Persons using third-party systems would be effectively unable to comply with proposed § 1.81. While proposed § 1.85 seeks to address some of these challenges, the text of proposed § 1.85 does not completely preclude its potential application to DCMs that provide market participants with front end order entry systems.

If, for example, CME Direct order entry functionality is considered to be Algorithmic Trading, then AT Persons utilizing CME Direct would be required to comply with proposed

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CFTC took the position that the phrase "*minimal* credit, market and liquidity" risk means "*least possible* credit, market and liquidity risk" and the phrase "in a manner which *minimizes* the risk of loss or of delay" means "in a manner that *makes as small as possible* the risk of loss or delay" when used in the Commission's DCO regulations. *See* CFTCLTR No. 16-69, Comm. Fut. L. Rep. (CCH) ¶ 33,827 (Aug. 8, 2016), *available at* http://www.cftc.gov/idc/groups/public/@lrlettergeneral/documents/letter/16-69.pdf (emphasis added). Alternatively, using the same dictionary cited in that letter, the phrases at issue could mean "*very small or slight* credit, market or liquidity risk" and "in a manner that *reduces or keeps to a minimum* the risk of loss or delay." *See* Merriam-Webster Dictionary (definition of "minimal"), https://www.merriam-webster.com/dictionary/minimal (last visited May 1, 2017); Merriam-Webster Dictionary (definition of "minimize"), https://www.merriam-webster.com/dictionary/minimize (last visited May 1, 2017). This kind of interpretation gives us pause when considering the performance standards applicable to DCMs.

[15] CME Group is concerned that market participants might question whether "reduce the potential risk of" means (1) reduce the potential that an Algorithmic Trading Disruption occurs, which sounds like "prevent" or (2) reduce the potential risk an Algorithmic Trading Disruption presents to the market, which sounds like "mitigate."

§ 1.81. Given that CME Direct would be considered a third-party system and that AT Persons would not have access to CME Direct source code or information regarding its testing, proposed § 1.85 would allow AT Persons to comply with their proposed § 1.81 obligations by obtaining from CME Group a certification attesting that CME Direct meets the applicable requirements of proposed § 1.81.

As we understand Reg AT, the certification is supposed to be provided by third-party providers who, generally, are not otherwise regulated. When we make software – such as CME Direct – available, we are subject to the same overarching self-regulatory obligations that govern our day-to-day activities. Therefore, CME Group believes it would be unnecessary and duplicative to require an AT Person to receive a certification from a regulated DCM stating that the DCM's front end order entry system meets applicable regulatory requirements. Instead, AT Persons should be permitted to presume that when a DCM provides software that could be considered an Algorithmic Trading system, the DCM has complied with its statutory and regulatory obligations. CME Group requests that the Commission carve out DCM order entry systems and applications from Reg AT's third-party system provider certification requirements.

D. <u>When providing pre-trade risk controls to executing FCMs and when implementing DCM-level pre-trade risk controls, a DCM should have discretion to determine the level of granularity at which those controls function.</u>

Proposed § 38.255(b) would require a DCM to make systems and controls available to executing FCMs. Those systems shall enable the executing FCM to set the pre-trade risk controls at levels of granularity "which shall include *as appropriate* the level of each customer, product, account number or designation, and one or more identifiers of the natural persons or the order strategy or Algorithmic Trading system associated with an Electronic Trading Order Message."[16] Furthermore, proposed § 40.20(a)(2) would require a DCM to implement pre-trade risk controls and set them at levels of granularity "which shall include *as appropriate* the level of each trading firm, by product or one or more identifiers of the natural persons or the order strategy or Algorithmic Trading system associated with an Electronic Trading Order Message."[17]

When discussing these regulations in the preamble to the Supplemental Proposal, the Commission states: "By 'as appropriate,' the Commission means such level or levels of granularity as are technologically feasible and reasonably effective at preventing and reducing the potential risk of an Electronic Trading disruption. . . . As implementation of controls at each such level becomes technologically feasible, AT Persons, FCMs and DCMs should update their practices to optimize the placement of their risk controls at the most effective level."[18] CME Group disagrees with this interpretation. Instead of solely considering what is technologically possible, the phrase "as appropriate" in proposed § 38.255(b)(1)(ii) and proposed § 40.20(a)(2) should contemplate a level of flexibility that reflects a DCM's unique role.

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[16] *See* proposed § 38.255(b)(1)(ii) (emphasis added).

[17] *See* proposed § 40.20(a)(2) (emphasis added).

[18] Supplemental Proposal at 85,356.

For example, a DCM does not necessarily have customer-level information. At great cost to the DCM, it may be technologically possible for a DCM to make available customer-level controls to executing FCMs pursuant to proposed § 38.255(b). But customer-level controls are not necessarily relevant to the DCM, whose role is to protect the market. An executing FCM, however, may need customer-level controls to satisfy its risk management obligations. A DCM should not have to incur the costs associated with developing controls that are not relevant to a DCM's role. As proposed, § 38.255(b) would require a DCM to make available to the executing FCM controls at each level the executing FCM needs to comply with Reg AT. CME Group believes this requirement is inappropriate because it fails to consider the differences between the role of an executing FCM and the role of a DCM.

Similarly, at great cost to the DCM, it may be technologically possible for a DCM to implement controls at the levels of granularity described in proposed § 40.20(a)(2). But implementing controls at these levels of granularity does not necessarily further a DCM's objective of managing risks to the market. Instead of requiring a DCM to implement controls at these levels of granularity as soon as it becomes technologically possible for a DCM to do so, as the Commission suggests in the preamble to the Supplemental Proposal, § 40.20(a)(2) should provide a DCM with discretion to determine the level of granularity at which those controls function.

Furthermore, CME Group continues to support the principle that orders should be subject to at least two layers of risk controls. Reg AT could be read to allow an AT Person to delegate its compliance with proposed § 1.80(a) to its executing FCM, which, in turn, would only use the controls provided to it by a DCM pursuant to proposed § 38.255. This would subject an order to only the DCM-level controls. DCM-level controls are designed to manage market-wide risk; the more granular FCM-level controls are designed to manage customer-specific risk. Allowing delegation that would ultimately result in subjecting an order to only the DCM's risk controls is inconsistent with the goal of Reg AT, which is to protect markets by subjecting orders to two layers of risk controls.

E. <u>The Commission should not require AT Person registration or use an arbitrary volume-based quantitative test to establish which market participants would be classified as AT Persons.</u>

CME Group commends the Commission for acknowledging commenters' concerns that the Initial Proposal would have imposed unnecessary burdens and obligations on a larger population of market participants than was likely intended. However, we strongly oppose (a) requiring AT Person registration and (b) imposing an arbitrary quantitative volume threshold test to determine which persons should be subject to the requirements of Reg AT.

CME Group believes requiring AT Persons to register with the Commission does not advance the goals of Reg AT. As we stated previously, registration is not required to ensure compliance with Reg AT or any other regulatory obligation the Commission may impose. Today, *all* market participants – whether commercial end users, pension funds, farmers, ranchers

or algorithmic traders – must comply with *all* aspects of the CEA and CFTC regulations which apply to their activities.

For example, the Commission's position limits regime applies to all market participants equally, regardless of registration status.[19] In order to claim a bona-fide hedge exemption, a commercial end-user is not required to register with the CFTC, although it is required to file an application with the relevant exchange, comply with certain reporting requirements, and submit to the Commission's books and records and special call authorities.[20] Should an end-user violate a federal limit, the Commission is empowered to bring an enforcement action against such participant.[21] Indeed, CFTC enforcement actions demonstrate that the Commission is well aware that non-registrants are required to comply with certain CEA provisions and CFTC regulations.[22]

The purpose of registration is not to require a person to comply with the CEA or CFTC regulations. To the contrary, the purpose of registration is to subject someone to the CEA's statutory disqualification filter and ensure that persons Congress has determined are bad actors cannot register with the Commission.[23] Under the Commission's proposal, a person found to have violated the CEA within the last ten years is not subject to the testing, monitoring, and risk

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19 *See* 17 C.F.R. pt. 150 (2016).

20 *See, e.g.*, 17 C.F.R. pts. 18, 19, 150 (2016).

21 *See* CEA § 6(d) ("If *any person (other than a registered entity)*, is violating or has violated subsection (c) or *any other provisions of this Act or of the rules, regulations, or orders of the Commission thereunder*, the Commission may, upon notice and hearing . . . make and enter an order directing that such person shall cease and desist therefrom . . . ." (emphasis added)).

22 *See, e.g.*, Opinion and Order at 9-13, *CFTC v. Li*, No. 1:15-cv-05839 (N.D. Ill. Dec. 9, 2016), ECF No. 82 (finding that defendant, who had never been registered with the Commission, *see* Complaint at 3, *CFTC v. Li*, No. 1:15-cv-05839 (N.D. Ill. July 1, 2015), ECF No. 1, violated CEA provisions against fraud and misappropriation and fictitious sales and CFTC Regulation against noncompetitive trades by engaging in fraudulent "money pass" scheme); Order at 1-2, *In re Ruggles*, CFTC No. 16-34 (Sept. 29, 2016) (finding that respondent, who had never been registered with the Commission, engaged in fraudulent, fictitious, and noncompetitive futures and options trades in violation of CEA provisions regarding fraudulent and misleading contracts, prohibited transactions, and manipulation and CFTC Regulations prohibiting noncompetitive trades, fraud in commodity option transactions, and manipulative and deceptive devices); *CFTC v. Capuano*, No. 03 CV 9125 (GBD), Comm. Fut. L. Rep. (CCH) ¶ 30,391, 2006 WL 4050093, at *1-3 (S.D.N.Y. Nov. 8, 2006) (finding that defendant, who had never been registered with the Commission, violated the CEA by aiding and abetting "knowledgeable trades" scheme that violated CFTC Regulation against fraud in connection with foreign currency transactions subject to the CEA); Order, *In re Global Minerals & Metals Corp.*, CFTC No. 99-11, 1999 WL 440439, at *1-2 (June 30, 1999) (finding that respondents, who had never been registered with the Commission, violated the CEA by aiding and abetting manipulation of copper prices); *In re Liu*, CFTC No. 85-28, Comm. Fut. L. Rep. (CCH) ¶ 23,448, 1987 WL 103487, at *1, *4 (Jan. 21, 1987) (finding that respondent, who had never been registered with the Commission, violated the CEA and CFTC Regulations by holding positions in futures contracts that met or exceeded the reportable level for the contracts and failing to file a Form 40 with the Commission and continuing to make futures contracts while failing to file a Form 40).

23 *See* CEA § 8a(2) (authorizing the Commission to refuse to register certain persons, including any person: whose prior registration in any capacity has been revoked; who has been convicted of certain felonies; who has been found to have violated the CEA, the Securities Act of 1933, the Securities Exchange Act of 1934, or similar law; or whose principal is subject to a statutory disqualification under CEA § 8a(2)).

control requirements of Reg AT as long as his average daily volume remains below 19,999 contracts. Thus, all Reg AT's registration requirement accomplishes is ensuring that statutorily disqualified persons stay below the Commission's arbitrary volume-based quantitative threshold.

In the case of floor traders, the legislative history makes clear that Congress adopted the floor trader definition and registration requirement as a direct response to FBI and CFTC sting operations involving allegations that floor traders were conspiring with floor brokers to defraud customers through actions on the exchanges' trading floors.[24] Prior to the enactment of the floor trader registration requirement in 1992, the CEA had only required registration of intermediaries who dealt directly with customers or handled customer funds. Recognizing that floor trader registration would break from this history, the Commission reasoned before Congress that "[r]equiring the registration of floor traders may be beneficial because unregistered persons trading for their own accounts may aid floor brokers who are handling customer accounts in the commission of offenses that could affect customers. Registration thus would provide an additional regulatory tool to police those whose actions may indirectly affect customers to the same extent as those who deal directly with customers."[25] In other words, given the documented ability of persons trading on the floor of an exchange to indirectly harm specific customers, the floor trader registration requirement was a logical and necessary outgrowth of the floor broker registration requirement. In contrast, algorithmic traders do not pose the same risk to specific customers that floor trader registration was designed to address.

In our experience, volume is not an indicator of risk. We are concerned that the Commission's proposed volume-based quantitative test attempts to reverse engineer a definition that will yield a specific number of new registrants instead of focusing on whether those traders present identified risks. CME Group believes there is no way to fix this inherently flawed volume-based threshold method or to remove the arbitrary nature of the approach. The threshold test should be abandoned entirely.

The Supplemental Proposal states the "Commission believes a volume threshold test based on total trading volume across electronic trading facilities of all DCMs best matches the goals of AT Person regulation, including risk controls, recordkeeping, and testing and monitoring of automated systems that will *prevent and reduce the potential risk of market disruption* caused by technological malfunction or other error."[26] Thus, the justification for the "bright line" rule proposed by the Commission appears to now be based on the premise that those market participants that breach the 20,000 average daily volume threshold in a six month period are fundamentally more likely to introduce disruption or contagion into a well-functioning market than those that do not break that line. The Commission provides no evidence to support

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[24] *See, e.g.*, S. Rep. No. 102-22, at 2-3 (1991); 137 Cong. Rec. 1616-1618 (1991) (statement of Sen. Leahy, Chairman, S. Comm. on Agric., Nutrition, & Forestry).

[25] *Oversight Hearings With Regard to The Reauthorization of the Commodity Futures Trading Commission: Hearings Before the S. Comm. on Agric., Nutrition, and Forestry*, 101st Cong. 178 (1989) (testimony of Dr. Wendy L. Gramm, Chairman, CFTC).

[26] Supplemental Proposal at 85,342 (emphasis added).

this conclusion. Indeed, we disagree. We believe an *untested* algorithm trading below the Commission's proposed 20,000 average daily volume threshold presents greater risk of a disruption to our markets than an established, tested algorithm trading above the Commission's proposed threshold. The Commission's proposal would require only extremely high-volume traders to test their Algorithmic Trading systems and changes thereto, monitor their Algorithmic Trading systems, develop policies and procedures reasonably designed to ensure that their Algorithmic Trading systems comply with the CEA and rules and regulations thereunder, and designate and train staff responsible for Algorithmic Trading. We believe this arbitrary volume-based threshold could expose the system to significant risks.

Further, CME Group cautions that advocates of bright-line rules who see them as a way to guarantee particular policy outcomes should be wary of the unpredictable consequences that such rules can have. Here, the Commission's bright-line rule is likely to have adverse effects on the liquidity and price discovery function of our markets. Where the Commission draws the AT Person line may effectuate a significant and even dramatic shift to market-micro structures or liquidity pools. Market participants looking to avoid the onerous burdens and costs associated with continuing AT Person status will simply throttle back their activity and walk the line. Looking at this reaction in the context of an event similar to the October 15, 2014 U.S. Treasury market "flash rally" poses very serious implications for the integrity of financial markets during times of stress, especially in markets where proprietary trading firms, also referred to as Principal Trading Firms ("PTFs"), play a key role in liquidity provision and price discovery – including during volatile market conditions.[27]

According to the Joint Staff Report on the U.S. Treasury Market on October 15, 2014, during the period leading up to and including the most volatile period of the day,[28] PTFs increased their trading activity in the 10-year Treasury-Note futures market, providing the majority of order book liquidity and a tight bid-ask spread. In contrast, during the most volatile period, bank-dealers widened their bid-ask spread and generally pulled back their participation. It is important to note that, while the event itself was significant, continued pricing spurred by PTFs filling the void left by bank-dealers allowed market participants to continue transacting, even during the most volatile period of the day, leading to a much more orderly market. If, however, the cost of being designated an AT Person outweighs the benefits, we may see a significant reduction in market liquidity during periods of volatility at exactly the time that markets need liquidity.

Finally, imposing a steadfast quantitative threshold today provides little flexibility to adjust such threshold in the future outside of the CFTC's formal, cumbersome, and time-consuming rulemaking process. Accordingly, we urge the Commission to abandon the definition of AT Person in the Supplemental Proposal.

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[27] U.S. Dep't of the Treasury, Bd. of Governors of the Fed. Reserve Sys., Fed. Reserve Bank of N.Y., U.S. Sec. & Exch. Comm'n & U.S. Commodity Futures Trading Comm'n, *Joint Staff Report: The U.S. Treasury Market on October 15, 2014*, at 23 (2015), *available at* http://www.sec.gov/reportspubs/special-studies/treasury-market-volatility-10-14-2014-joint-report.pdf.

[28] The time period of 9:33 to 9:45 a.m. ET is known as the event window.

F. The Supplemental Proposal fails to address why the proposed risk controls must be implemented for DCM trading but not for FBOT trading.

The Initial Proposal excluded FBOTs from its proposed risk controls, while applying those same controls to DCMs.[29] Despite comments highlighting this inconsistency, including from CME Group, the Supplemental Proposal fails to address this disparity in treatment and continues to subject DCM trading to proposed risk controls while excluding FBOT trading. Failing to remedy this disparity would create an uneven playing field between DCMs and their foreign competitors. Furthermore, it vitiates the CFTC's purpose in proposing Reg AT because it ignores CEA provisions and Commission regulations that contemplate that electronic trading, including, presumably, Algorithmic Trading, will occur on FBOTs[30] and is inconsistent with the Commission's purpose of promulgating a forward-thinking regulatory program that purports to reduce the risks associated with the burgeoning use of Algorithmic Trading.

The Commission cannot ignore the inconsistency in claiming to regulate the expanding and changing use of Algorithmic Trading to prevent market risk while simultaneously excluding FBOTs from the ambit of that regulation. If the Commission indeed believes that Algorithmic Trading involves risks that warrant additional regulation, it must propose a regulatory response that is consistent with the CEA and Commission regulations, and that regulates DCMs and FBOTs comparably, without singling out DCMs for significantly more burdensome regulatory treatment without adequate justification.

G. The Supplemental Proposal's attempt to extend pre-trade risk control requirements to cover all Electronic Trading does not explain what those pre-trade risk controls should accomplish.

The Supplemental Proposal introduces the terms "Electronic Trading disruption" and "disruption associated with Electronic Trading" and uses them interchangeably and without defining them. In contrast, the Supplemental Proposal retains the originally proposed definitions of "Algorithmic Trading Disruption," "Algorithmic Trading Compliance Issue," and "Algorithmic Trading Event." The inconsistent use of "Electronic Trading disruption" and "disruption associated with Electronic Trading" and the ambiguity surrounding their meaning would make it difficult for a DCM to implement appropriate risk controls under proposed § 40.20 or make available to executing FCMs effective systems and controls under proposed § 38.255. Therefore, CME Group requests that the Commission consistently use and define the term "Electronic Trading Disruption."

H. The proposed special call process provides the CFTC an end-run around the subpoena process.

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29 *See* Initial Proposal at 78,827.

30 *See, e.g.*, CEA § 4(b)(1)(A) (requiring FBOTs that provide market participants located in the U.S. with direct access to their electronic trading and order matching system to register with the Commission).

The Supplemental Proposal provides that the CFTC may use a special call – a non-subpoena, regulatory information demand – to obtain Algorithmic Trading Source Code.[31] Algorithmic traders expend enormous funds and resources developing and protecting proprietary Algorithmic Trading infrastructure and software. They are deeply committed to keeping their Algorithmic Trading strategies confidential and preventing any dissemination of those strategies. The Supplemental Proposal raises serious concerns because the Commission would be able to obtain, via a special call, not just technical and historical data, but also algorithmic traders' current and future investment and execution strategies.

Today, the subpoena process strikes an appropriate and constitutional balance between a firm's right to protect its propriety Algorithmic Trading information, and the Commission's interest in obtaining that information. The special call process, as presently proposed, would subvert that balance, infringe upon firms' constitutional rights, and jeopardize their information security.

III. PROPOSED ALTERNATIVE

CME Group and the Commission share the same goal: to protect the market from potential disturbances or aberrations caused by algorithmic trading. Unfortunately, neither the Initial Proposal nor the Supplemental Proposal provides a clear justification for why additional federal regulation is necessary or appropriate to accomplish this goal or how the new rules would fulfill that objective in a workable manner. This fundamental shortcoming of Reg AT is likely based on a misunderstanding of the extensive protections already in place as a result of the collective desire of all concerned – exchanges, clearing members, industry organizations, and other market participants – to build a resilient, workable, and cost-effective system to protect market integrity.[32]

If the Commission nevertheless decides to proceed with Reg AT, CME Group believes that any new federal regulations should be truly principles-based. We have included for the Commission's consideration such an alternative to Reg AT in Appendix A. We view this alternative as a complete substitute for Reg AT. This framework would allow the Commission to adopt federal regulations governing algorithmic trading with dramatically lower costs and complexity than the current proposal.

This alternative would outline broad market integrity objectives to be accomplished through risk controls and other measures. But the alternative avoids prescribing precisely *how* someone must comply with these core principles. We expect the specific method of compliance would vary, based on the different roles, business operations, and risk management obligations of DCMs and Algorithmic Traders (as defined below). By articulating broad, flexible principles, our proposal would complement and bolster the significant work the industry has already done in addressing the risks presented by algorithmic trading.

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[31] *See* proposed § 1.84(b).

[32] *See* Letter from CME Group to CFTC re Notice of Proposed Rulemaking on Regulation Automated Trading (RIN 3038-AD 52), Section II.D, dated Mar. 16, 2016 (describing CME Group risk controls).

Unlike Reg AT, this principles-based regulatory framework would not stifle innovation in the area of risk management or risk being outpaced by changes in technology and electronic trading. Instead, it would provide the flexibility necessary to empower and incentivize CME Group and other market participants to act proactively and to continue developing cutting edge technologies and risk systems that promote market integrity.

A. Scope

We recommend a targeted approach that would subject only Algorithmic Trading (as defined below), and not all electronic trading, to additional federal regulation. This approach is consistent with recent actions taken by the Financial Industry Regulatory Authority ("FINRA")[33] and the European Union[34] and our experience as a market operator. If, in the future, the Commission determines that electronic trading presents risks not adequately addressed by the current regulatory framework, the Commission should propose a separate rulemaking to address that issue.

As discussed above, CME Group is concerned that by applying Reg AT only to "AT Persons," the Commission impedes its ability to appropriately address the risks it believes algorithmic trading presents. Our recommended approach has no volume threshold and, therefore, in some ways could be perceived to be broader in its application. However, our recommended approach is much more in line with the best practices already developed by the industry and set forth in, for example, the Futures Industry Association's ("FIA") Principal Traders Group's *Recommendations for Risk Controls for Trading Firms*[35] and FIA's *Guide to the Development and Operation of Automated Trading Systems*.[36] The principles-based approach we envision balances the need for effective supervision and risk management of algorithmic trading, while promoting a flexible approach that can be tailored to the particular circumstances of an Algorithmic Trader and can adapt to changing conditions and needs over time. Furthermore, our alternative would *not* mandate CFTC registration.

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[33] *See generally* FINRA Regulatory Notice 15-09, Equity Trading Initiatives: Supervision and Control Practices for Algorithmic Trading Strategies (providing guidance on effective supervision and control practices for firms engaging in algorithmic trading strategies); FINRA Regulatory Notice 16-21, Qualification and Registration of Associated Persons Relating to Algorithmic Trading (discussing the SEC's approval of an amendment to NASD Rule 1032(f), which requires each associated person who is primarily responsible for the design, development, or significant modification of an algorithmic trading strategy relating to equity, preferred, or convertible debt securities, or who is responsible for the day-to-day supervision or direction of such activities, to pass the Series 57 exam and register as a Securities Trader.)

[34] *See generally* Article 17 of Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 (addressing investment firms engaged in algorithmic trading).

[35] *See* FIA Principal Traders Group, *Recommendations for Risk Controls for Trading Firms*, (Nov. 2010), *available at* http://www.futuresindustry.org/downloads/Trading_Best_Pratices.pdf.

[36] *See* FIA, *Guide to the Development and Operation of Automated Trading Systems*. (Mar. 2015), *available at* https://fia.org/sites/default/files/FIA%20Guide%20to%20the%20Development%20and%20Operation%20of%20Automated%20Trading%20Systems.pdf.

We support using the Commission's proposed definition of "Algorithmic Trading." We believe that definition is consistent with what we consider to be algorithmic trading and adequately captures the type of trading the Commission is intending to subject to additional regulation.

We propose abandoning the Commission's definition of "AT Person" and instead adopt the term "Algorithmic Trader," which would be defined simply as "any person that engages in Algorithmic Trading."[37] This broad definition reflects our view that anyone engaged in Algorithmic Trading, regardless of the level of that trading,[38] should have certain responsibilities.[39] Our proposed straightforward definition would enable entities to know with confidence whether they are Algorithmic Traders and would avoid the regulatory gaps and unintended consequences of an arbitrary distinction (such as volume, whether a trader has Direct Electronic Access, etc.) among those who engage in Algorithmic Trading.

B. Pre-Trade and Other Risk Controls

We have drafted in our alternative § 1.80 a requirement that each Algorithmic Trader implement pre-trade and other risk controls. As detailed later, we expect that those controls would vary, based on the nature and level of an Algorithmic Trader's activity. Furthermore, our framework would allow an Algorithmic Trader to develop its own controls or rely on controls provided by a third party. Instead of delineating the specific controls an Algorithmic Trader *must* use, we articulate a standard that would enable each Algorithmic Trader to use controls appropriate for the nature and level of its trading. As stated above and in our prior comment letters, CME Group believes it is critically important that any regulation of Algorithmic Trading articulate a realistic, workable, and consistent standard applicable to Algorithmic Traders' and DCMs' risk controls. To that end, under our framework, an Algorithmic Trader would be required to implement pre-trade and other risk controls that are "reasonably designed to prevent an Algorithmic Trading Disruption and to mitigate the effects of any Algorithmic Trading Disruption."

Under this framework, an "Algorithmic Trading Disruption" would be defined as "an event resulting from Algorithmic Trading that materially disrupts the operation of the designated contract market or materially disrupts the ability of other market participants to enter orders or trade on that designated contract market." We believe this definition is more targeted than the CFTC's proposed definition of "Algorithmic Trading Disruption." Furthermore, we have

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[37] The term "person" would have the meaning contained in CFTC Regulation 1.3(u), which says "[t]his term includes individuals, associations, partnerships, corporations, and trusts." 17 C.F.R. § 1.3(u) (2016). Thus, both individuals and firms could be Algorithmic Traders.

[38] *See* Section II.E, *supra*, for an explanation of why CME Group does not support a volume threshold for determining which entities engaged in Algorithmic Trading should be regulated. In our alternative framework, one Algorithmic Trading order would make a person an Algorithmic Trader.

[39] In one instance, however, we differentiate between Algorithmic Traders that develop, design, or can modify the functionality of the Algorithmic Trading systems or strategies they use, and those who cannot.

eliminated the concept of an "Algorithmic Trading Compliance Issue," which we believe is inconsistent with principles-based regulation. All traders are already required to comply with the CEA, CFTC regulations, DCM rules, and applicable registered futures association rules. Therefore, requiring anyone to implement pre-trade and other risk controls that would prevent an Algorithmic Trading Compliance Issue is duplicative and unnecessary. Instead, our proposed framework focuses on preventing an Algorithmic Trading Disruption and mitigating the effects of any Algorithmic Trading Disruption.

Requiring Algorithmic Traders to prevent all disruptions is an unachievable standard. Therefore, our framework would require risk controls that are "*reasonably designed* to prevent an Algorithmic Trading Disruption." Similarly, an Algorithmic Trader must also have controls that are "*reasonably designed* . . . to mitigate the effects of any Algorithmic Trading Disruption." These standards do not require perfection or impose limitless liability in the event of an Algorithmic Trading Disruption. CME Group believes that a "reasonably designed" standard would be realistic, workable, and appropriately flexible.

We expect that each Algorithmic Trader's pre-trade and other risk controls would differ, depending on the nature and level of the relevant person's Algorithmic Trading. Indeed, this framework would require an Algorithmic Trader to take into account, and make its risk controls appropriate for, any Algorithmic Trading conducted on behalf of or through the facilities of such Algorithmic Trader.

As noted above, an Algorithmic Trader could be an individual or a firm. In the case of an individual unassociated with a firm, that individual Algorithmic Trader would be required to implement pre-trade and other risk controls appropriate for that specific trader. In the case of an individual associated with a firm and trading on behalf of that firm, the individual would likely leverage the pre-trade and other risk controls implemented or provided by the firm. When providing those controls, however, the firm must take into account the Algorithmic Trading conducted on behalf of the firm (which may vary among individuals trading on behalf of the firm) and make the pre-trade and other risk controls appropriate for that individual Algorithmic Trader. Thus, the controls applied to individuals trading on behalf of the same firm may vary.

Finally, our framework would permit an Algorithmic Trader to develop its own controls or rely on controls provided by a third party, including an executing or clearing FCM. If an Algorithmic Trader were to rely on controls provided by a third party, it would remain the Algorithmic Trader's responsibility to ensure that any controls provided by that third party are "reasonably designed to prevent an Algorithmic Trading Disruption and to mitigate the effects of any Algorithmic Trading Disruption." In this instance, we would expect an Algorithmic Trader to obtain a certification or other affirmation from the third party stating that the controls are reasonably designed to prevent an Algorithmic Trading Disruption or reasonably designed to mitigate the effects of any Algorithmic Trading Disruption, as applicable.

C. Standards for Algorithmic Trading

In addition to the risk control requirement described above, our framework would impose on Algorithmic Traders a few other principles-based obligations. First, an Algorithmic Trader

would be required to supervise any person authorized to engage in Algorithmic Trading for or on behalf of the Algorithmic Trader. As above, "person" would have the meaning contained in CFTC Regulation 1.3(u), and would thus include individuals, associations, partnerships, corporations, and trusts.

For example, in the case of an Algorithmic Trader that is a firm, that firm would have a duty to supervise any employee[40] authorized to engage in Algorithmic Trading for or on behalf of the Algorithmic Trader. We would also expect that within a firm, where there are Algorithmic Trading groups or teams, the team leaders would have a duty to supervise any members of their teams engaged in Algorithmic Trading. In the case of an individual Algorithmic Trader unassociated with any firm, that Algorithmic Trader would have a duty to supervise any person[41] he or she authorizes to engage in Algorithmic Trading on his or her behalf.

An Algorithmic Trader would also be required to supervise any employee of such Algorithmic Trader authorized to develop, design, or modify the functionality or operation of one or more of the Algorithmic Trading systems or strategies of such Algorithmic Trader. We would not, however, expect an Algorithmic Trader to supervise a vendor that provided an Algorithmic Trading system to the Algorithmic Trader.

Additionally, all Algorithmic Traders would be required to implement and be subject to *appropriate* policies and procedures for monitoring and taking appropriate actions regarding the activity of any Algorithmic Trading system or strategy deployed by such Algorithmic Trader while that Algorithmic Trading system or strategy is in operation. We find FINRA's guidance on this topic to be instructive, and we would expect that many of FINRA's suggested actions would demonstrate compliance with our proposed requirement. FINRA states that those engaged in algorithmic strategies should consider:

- implementing controls, monitors, alerts, and reconciliation processes that enable the firm to quickly identify whether an algorithm is experiencing unintended results that may indicate a failure at the firm or in the market;

- periodically evaluating the firm's controls and associated policies and procedures to assure that they remain adequate to manage access and changes to the firm's infrastructure including, but not limited to, the hardware, connectivity, and algorithms;

- implementing a protocol to track and record significant system problems;

- documenting and periodically reviewing parameter settings for the firm's risk controls, and making any parameter changes deemed appropriate;

- implementing checks on downstream market impacts;

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[40] The individual would, under our proposed definition, also be an Algorithmic Trader.

[41] The person would, under our proposed definition, also be an Algorithmic Trader.

- making system capacity scalable to the extent a firm anticipates growth and peak levels of market activity such as messaging volume;

- implementing security measures to limit code access and control system entitlements;

- placing appropriate controls and limitations on a trader's ability to overwrite or otherwise evade system controls; and

- implementing controls to manage outbound message volume via threshold parameters.[42]

We would expect Algorithmic Trading strategies to be monitored by staff having adequate training, experience, and tools that enable them to monitor and control the Algorithmic Trading systems and troubleshoot and respond to operational issues in a timely and appropriate manner. An Algorithmic Trader should have processes to ensure trading operations staff is trained on the expected operating parameters of any Algorithmic Trading system for which they are responsible, including, for example, the expected number of orders per a specified unit of time, maximum position, and maximum open order quantities of an algorithm. Additionally, we would expect an Algorithmic Trader to have policies and procedures to ensure that appropriate staff involved in supporting the Algorithmic Trading have the necessary authorizations with relevant exchanges, brokers, or clearing firms to inquire about order status, manage orders, execute trades by voice or screen, and invoke exchange error trade policies. For some Algorithmic Traders, it may be appropriate for the person to have a management console or other reporting mechanism to convey information about the actions and market exposure and to have the capability to control the Algorithmic Trading strategy.

Factors including, but not limited to, the size, sophistication, and risk profile of an Algorithmic Trader would dictate whether its policies and procedures are appropriate. We are not recommending that all Algorithmic Traders have written policies for monitoring and taking appropriate actions regarding the activity of any Algorithmic Trading system or strategy and procedures, as the definition of "Algorithmic Trader" could cover many different types of traders in terms of their levels of trading sophistication and activities. In this regard, our recommendation ensures that Algorithmic Traders are granted some level of flexibility. But we understand that it would be prudent for an Algorithmic Trader to put its policies and procedures in writing to demonstrate that it complies with this requirement. In the case of an individual that is an Algorithmic Trader because he or she is engaged in Algorithmic Trading on behalf of a firm that is an Algorithmic Trader, we expect that the individual would satisfy his or her obligation by relying on the policies and procedures adopted by the firm.

Our framework would require an Algorithmic Trader to take immediate and reasonable action once it knows, or reasonably should have known, it caused an Algorithmic Trading Disruption. This remedial action should remove the risk of disruption caused by the Algorithmic Trading activity. For example, an Algorithmic Trader might immediately disconnect the errant

[42] *See* FINRA Regulatory Notice 15-09, Equity Trading Initiatives: Supervision and Control Practices for Algorithmic Trading Strategies at 6-7.

Algorithmic Trading system. Again, this is a principles-based regulation that would allow the facts and circumstances of the disruption to dictate the appropriate action.

Our framework would require a subset of Algorithmic Traders to adopt and implement *written* policies and procedures reasonably designed to prevent an Algorithmic Trading Disruption and to mitigate the effects of any Algorithmic Trading Disruption. We are aware of the large number of Algorithmic Traders that rely on basic algorithmic strategies provided by independent software vendors where the user cannot modify the underlying logic or code. Examples may be users of autospreader functionalities, volume or time weighted algorithms, or parent/child order functionalities. We do not want to place undue burdens on these Algorithmic Traders, who generally present a lower risk of causing an Algorithmic Trading Disruption. Conversely, Algorithmic Traders that develop, design, or have the ability to modify the functionality or operation of the Algorithmic Trading systems or strategies they use present a higher risk of causing an Algorithmic Trading Disruption. We believe that with this ability should come additional responsibility. For that reason, these Algorithmic Traders – ones that develop, design, or have the ability to modify the functionality or operation of an algorithm – should be required to adopt and implement written policies and procedures reasonably designed to prevent an Algorithmic Trading Disruption and to mitigate the effects of any Algorithmic Trading Disruption. An Algorithmic Trader who can only change the parameters of the Algorithmic Trading system or strategy – such as the instrument or commodity code, quantity, price, timing, or duration of the strategy – would not be considered to have the ability to modify the functionality or operation of an Algorithmic Trading system or strategy and, thus, would not be required to adopt and implement written policies and procedures reasonably designed to prevent an Algorithmic Trading Disruption and to mitigate the effects of any Algorithmic Trading Disruption.

Any Algorithmic Trader required to adopt and implement written policies and procedures reasonably designed to prevent an Algorithmic Trading Disruption and to mitigate the effects of any Algorithmic Trading Disruption would be required to maintain those policies and procedures for five years.

D. Reports by Traders

Any Algorithmic Trader required to adopt and implement written policies and procedures reasonably designed to prevent an Algorithmic Trading Disruption and to mitigate the effects of any Algorithmic Trading Disruption, as detailed above, would also have to furnish those policies and procedures to the Commission within a reasonable time after a request by the Commission or its designee. This would enable the Commission to determine whether and how an Algorithmic Trader that develops, designs, or can modify the functionality of the Algorithmic Trading systems or strategies it uses is complying with the requirement to adopt and implement written policies and procedures. We believe this rule would be more appropriate than the Commission's proposal under Reg AT, which is to have the DCM act as a *de facto* compliance officer for all Algorithmic Traders by requiring a DCM to review and evaluate AT Persons' compliance with Reg AT. Our framework would not, however, prevent a DCM from adopting a rule requiring this subset of Algorithmic Traders to furnish these written policies and procedures to the DCM if the DCM believes such a rule is appropriate.

E. DCM Obligations

The final portion of our proposed framework would add new principles-based obligations to Part 38 of the CFTC's regulations. First, our framework would require a DCM to monitor for disruptions resulting from Algorithmic Trading. To complement the proposed requirements applicable to Algorithmic Traders, our framework would require a DCM to adopt and implement rules imposing appropriate regulatory obligations on Algorithmic Traders that use the DCM's facilities. We carry through to the DCM regulations the standard articulated above: the DCM must impose upon Algorithmic Traders appropriate regulatory obligations that are "reasonably designed to prevent an Algorithmic Trading Disruption and to mitigate the effects of any Algorithmic Trading Disruption."

This principles-based regulation would provide DCMs flexibility in determining the obligations it imposes on Algorithmic Traders using its facilities. These obligations could include, for example, using certain risk controls. CME Group believes it is more appropriate for a DCM, rather than the Commission, to delineate specific risk controls that an Algorithmic Trader must use. A DCM could also require testing, supervision, and access to an Algorithmic Trader's policies and procedures. We leave to the informed discretion of a DCM the decision of what regulatory obligations it should impose on an Algorithmic Trader to protect the DCM's market. Any guidance provided in Appendix B to Part 38 should be consistent with this approach and should not contain additional mandates.

Finally, our framework would require a DCM to have a reasonable means to identify those Algorithmic Traders subject to its jurisdiction.[43] CME Group believes that such a requirement would, in turn, enable the CFTC to ascertain the identity of an Algorithmic Trader without requiring CFTC registration of all Algorithmic Traders.[44] As stated above, non-registrants are required to comply with CFTC regulations. To the extent that the Commission's goal in proposing a CFTC registration requirement was to identify Algorithmic Traders, the CFTC could do so pursuant to this proposed DCM regulation.

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We are happy to discuss any questions the Commission or its staff might have with respect to the comments contained in this letter. Please do not hesitate to contact me at (312) 435-3687 or via email at Bryan.Durkin@cmegroup.com.

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[43] Our proposed framework would not require a DCM to provide a comprehensive list of all Algorithmic Traders subject to its jurisdiction, as we believe such a requirement would be unduly burdensome. Instead, when the Commission needs to know the identity of one or more Algorithmic Traders, it could reach out to a DCM to determine the identity of that Algorithmic Trader.

[44] We do not propose requiring each Algorithmic Trader to provide its name and contact information to each DCM on which it trades. Instead, a "reasonable means to identify" an Algorithmic Trader subject to a DCM's jurisdiction could include the DCM obtaining that information from an Algorithmic Trader's clearing member.

Sincerely,

Bryan T. Durkin
President

cc: Acting Chairman J. Christopher Giancarlo
Commissioner Sharon Y. Bowen
Amir Zaidi, Director, Division of Market Oversight
Sebastian Pujol Schott, Associate Director, Division of Market Oversight

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Appendix A: A Principles-Based Alternative to Reg AT

This appendix sets forth the principles-based rules we suggest the Commission adopt instead of the currently proposed Reg AT.

17 CFR Part 1 – General Regulations Under the Commodity Exchange Act

§ 1.3 Definitions.

(xxxx) *Algorithmic Trading*. This term means trading in any commodity interest as defined in paragraph (yy) of this section on or subject to the rules of a designated contract market, where:

(1) One or more computer algorithms or systems determines whether to initiate, modify, or cancel an order, or otherwise makes determinations with respect to an order, including but not limited to: the product to be traded; the venue where the order will be placed; the type of order to be placed; the timing of the order; whether to place the order; the sequencing of the order in relation to other orders; the price of the order; the quantity of the order; the partition of the order into smaller components for submission; the number of orders to be placed; or how to manage the order after submission; and

(2) Such order, modification or order cancellation is electronically submitted for processing on or subject to the rules of a designated contract market; provided, however, that Algorithmic Trading does not include an order, modification, or order cancellation whose every parameter or attribute is manually entered into a front-end system by a natural person, with no further discretion by any computer system or algorithm, prior to its electronic submission for processing on or subject to the rules of a designated contract market.

(yyyy) *Algorithmic Trader*. This term means any person that engages in Algorithmic Trading.

(zzzz) *Algorithmic Trading Disruption.* This term means an event resulting from Algorithmic Trading that materially disrupts the operation of the designated contract market or materially disrupts the ability of other market participants to enter orders or trade on that designated contract market.

§ 1.80 Risk Controls for Algorithmic Trading.

(a) Each Algorithmic Trader shall implement pre-trade and other risk controls that are reasonably designed to prevent an Algorithmic Trading Disruption and to mitigate the effects of any Algorithmic Trading Disruption.

(1) In designing and implementing such risk controls, the Algorithmic Trader shall take into account, and make such controls appropriate for, any Algorithmic Trading conducted on behalf of or through the facilities of such Algorithmic Trader.

(2) The pre-trade and other risk controls designed and implemented pursuant to this section may be developed internally by such Algorithmic Trader or provided by any third party.

§ 1.81 Standards for Algorithmic Trading.

(a) Each Algorithmic Trader shall be responsible for supervising the activity of:

(1) any person authorized to engage in Algorithmic Trading for or on behalf of such Algorithmic Trader; and

(2) any employee of such Algorithmic Trader authorized to develop, design, or modify the functionality or operation of one or more of the Algorithmic Trading systems or strategies of such Algorithmic Trader.

(b) Each Algorithmic Trader shall implement and be subject to appropriate policies and procedures for monitoring and taking appropriate actions regarding the activity of any Algorithmic Trading system or strategy deployed by such Algorithmic Trader while such Algorithmic Trading system or strategy is in operation.

(c) Once an Algorithmic Trader knows or reasonably should have known about an Algorithmic Trading Disruption resulting from that person's Algorithmic Trading activity, that Algorithmic Trader shall take immediate and reasonable remedial measures to remove the risk of disruption caused by such Algorithmic Trading activity.

(d) Each Algorithmic Trader that develops, designs, or has an ability to modify the functionality or operation of one or more of the Algorithmic Trading systems or strategies being used by such Algorithmic Trader shall adopt and implement written policies and procedures reasonably designed to prevent an Algorithmic Trading Disruption and to mitigate the effects of any Algorithmic Trading Disruption. An Algorithmic Trader shall not be found to have the ability to modify the functionality or operation of an Algorithmic Trading system or strategy if the Algorithmic Trader can only change the parameters of the Algorithmic Trading system or strategy, such as the instrument or commodity code, quantity, price, timing, or duration of the strategy. Each Algorithmic Trader required to adopt and implement written policies and procedures pursuant to this subsection shall maintain those policies and procedures for a period of five years.

17 CFR Part 18 – Reports by Traders

§ 18.06 Algorithmic Trading Policies and Procedures.

Upon request by the Commission or its designee, an Algorithmic Trader shall, within a reasonable time, furnish to the Commission written policies and procedures as specified in §1.81(d).

17 CFR Part 38 – Designated Contract Markets Subpart E – Prevention of Market Disruption

§ 38.251 General Requirements.

A designated contract market must:

. . . .

(e) Monitor and evaluate market conditions, trading and messaging volumes, and price movements to detect market disruptions, operational disruptions of the DCM, or disruptions to other market participants resulting from Algorithmic Trading;

(f) have a reasonable means to identify those Algorithmic Traders subject to its jurisdiction; and

(g) adopt and implement rules to impose on Algorithmic Traders that use the designated contract market's facilities appropriate regulatory obligations that are reasonably designed to prevent an Algorithmic Trading Disruption and to mitigate the effects of any Algorithmic Trading Disruption.

17 CFR Appendix B to Part 38 – Guidance On, and Acceptable Practices in, Compliance with Core Principles

Core Principle 4 of section 5(d) of the Act: PREVENTION OF MARKET DISRUPTION.

. . . .

(b)(5) *Risk controls for trading*. An acceptable program for preventing market disruptions should demonstrate appropriate trade risk controls, in addition to pauses and halts. Such controls should be adapted to the unique characteristics of the markets to which they apply and should be reasonably designed to prevent market disruptions, including Algorithmic Trading Disruptions, and to mitigate the effects of an Algorithmic Trading Disruption without unduly interfering with that market's price discovery function. The designated contract market may choose from among controls that include: pre-trade limits on order size, price collars or bands around the current price, message throttles, cancellation order controls (kill switches), maximum order size limits, and daily price limits, or design other types of controls. Within the specific array of controls that are selected, the designated contract market also should set the parameters for those controls, so long as the types of controls and their specific parameters are reasonably designed to prevent market disruptions, including Algorithmic Trading Disruptions, and to mitigate the effects of an Algorithmic Trading Disruption. If a contract is linked to, or is a substitute for, other contracts, either listed on its market or on other trading venues, the designated contract market should, to the extent practicable, coordinate its risk controls with any similar controls placed on those other contracts. If a contract is based on the price of an equity security or the level of an equity index, such risk controls should, to the extent practicable, be coordinated with any similar controls placed on national security exchanges.

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