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March 16, 2016

Via Electronic Submission

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

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

Dear Mr. Kirkpatrick:

The Futures Industry Association (“FIA”)¹ welcomes the opportunity to submit this letter (the “Letter”) in response to the Commodity Futures Trading Commission’s (“CFTC’s” or “Commission’s”) Notice of Proposed Rulemaking (“NPR”) designed to enhance the regulatory regime for automated trading on U.S. designated contract markets (“DCMs”) (“Regulation AT”).² FIA is disappointed in the Commission’s decision to not grant an extension of the comment period, as requested by FIA as well as many other market participants, in order to prepare a more thorough response to proposed Regulation AT.

As recognized in the proposed rulemaking, FIA member firms have taken a leadership role in identifying risks and strengthening safeguards in the futures markets globally. Since April 2010, FIA has published six papers proposing industry best practices and guidelines related to these important topics.³ FIA also provided a comprehensive response (“CR Response”)⁴ to the Commission’s 2013 Concept Release on Risk Control and System Safeguards for Automated Trading Environments (“Concept Release”).⁵

¹FIA is the leading trade organization for the exchange-traded and centrally cleared derivatives markets worldwide. FIA’s membership includes international and regional banking organizations, clearing houses, exchanges, brokers, vendors and trading participants. FIA’s mission is to support open, transparent and competitive markets, protect and enhance the integrity of the financial system and to promote high standards of professional conduct. Further information is available at www.fia.org.

² Regulation Automated Trading, 80 Fed. Reg. 242 (Dec. 17, 2015).

³ These papers were published by FIA itself, FIA Principal Traders Group, and/or FIA European Principal Traders Association: [Market Access Risk Management Recommendations](#) (Apr. 2010); [Recommendations for Risk Controls for Trading Firms](#) (Nov. 2010); [Order Handling Risk Management Recommendations for Executing Brokers](#) (Mar. 2012); [Software Development and Change Management Recommendations](#) (March 2012); [Drop Copy Recommendations](#) (Sept. 2013); [Guide to the Development and Operation of Automated Trading Systems](#) (Mar. 2015) (“Guide”).

⁴ Letter from Walter L. Lukken, President and CEO, FIA, to Melissa D. Jurgens, Secretary, CFTC (Dec. 11, 2013), available at https://secure.fia.org/downloads/CFTC_Concept_Release_on_Risk_Controls_121113.pdf.

⁵ 78 Fed. Reg. 56542 (Sept. 12, 2013).

FIA believes that automated trading systems substantially contribute to liquidity and price discovery on futures markets worldwide. As we wrote in the CR Response:

These systems, based on decision rules programmed by humans, use publicly available information to generate, submit, monitor, and revise buy and sell orders continuously throughout the trading day. We wish to highlight that today's electronic markets are more efficient, open, and transparent than they have ever been. We believe that automated trading technology has provided many benefits to the overwhelming majority of futures market participants. Market quality metrics have improved across the board as trading has become more automated and competitive. Trading costs are lower, markets are deeper and more liquid, discrepancies in prices across related markets are reduced, and prices better reflect information about the value of the commodities underlying futures contracts.⁶

Despite these many significant benefits, automated trading systems have the capacity to disrupt markets and impair liquidity if they act inappropriately by design or by error. Although no system of controls can prevent all disruptive events, properly placed controls can help to mitigate some of those events. FIA therefore supports the Commission's stated goals in proposing rules for automated trading systems to:

- Mitigate the risks arising from algorithmic trading activity,
- Increase transparency with respect to DCM programs and activities, and
- Update Commission rules in response to the evolution from pit trading to electronic trading.

When commenting on any proposed regulation, FIA attempts to recommend alternative solutions in areas where we disagree with what the Commission has proposed. In past efforts related to the regulation of automated trading, we have worked with a wide range of constituencies to develop recommendations. Although our response represents more than 200 participants working thousands of hours since the NPR was released, we have not had the opportunity to review responses from other organizations, discuss how they differ, and seek consensus solutions. Absent the extension of time to the Regulation AT comment period we and others requested, FIA has instead focused our efforts on responding to the most challenging aspects of the NPR and educating the Commission on why the rules as proposed are unworkable.

The other area that suffered from lack of sufficient time was an examination of the Commission's cost-benefit analysis. We hope to provide additional insight on where the Commission underestimated the impact and cost of the proposed rulemaking and overestimated the benefits. Although we are currently not able to specifically quantify the costs, based on our

⁶ CR Response at 2.

experience we believe that the costs are substantially higher than estimated in the proposed rule and the articulated benefits do not justify the costs.

We look forward to working with the Commission and our constituencies to develop a workable approach to the regulation of automated trading.

Overview

At a high level, we commend the Commission for the substantial effort that was evident in the drafting of this NPR and specifically for acknowledging the important role that pre-trade and other risk controls play in mitigating market disruption. We believe, however, that proposed Regulation AT incorrectly seeks to apply requirements that relate to disparate elements to one narrowly defined group, *i.e.*, “AT Persons.”⁷ Each of those disparate elements of Regulation AT is not appropriate for those covered by the proposed definition (both by being over-inclusive and under-inclusive, depending upon the particular proposed required element). Accordingly, FIA believes that in order to apply particular requirements to the appropriate scope of market participants, it would be more efficient and effective for the Commission to break apart its NPR into two or potentially three separate components, each with its own defined scope of application:

1. Pre-trade and other risk controls to help protect market integrity,⁸
2. Policies and procedures for the development, testing, deployment and monitoring of Algorithmic Trading (including third-party software)⁹, and
3. Registration (if necessary).

Although we appreciate that the CFTC in the proposed rulemaking sought to enumerate the type of pre-trade and other controls that are already employed widely by those persons who use electronic trading systems, we note that there needs to be more flexibility for when a particular control is needed and how that control may be applied and administered. To better allow for the continued evolution of electronic trading within U.S. futures markets, we recommend that a core principle approach would work better than the prescriptive requirements in proposed § 1.80 (and referenced in other proposed rules such as §§ 1.82, 38.255 and 40.20). By taking this approach, we believe this section of the NPR could likely be completed quickly and final rules implemented in a short time.

On the other hand, we believe that the CFTC’s proposed requirements for policies and procedures for the development, testing, deployment, and monitoring of algorithmic trading

⁷ Although we use the term “AT Person” in this Letter in commenting on certain aspects of the NPR that employ the term, we do not believe the term is appropriate or should be included in any final rule for the reasons set forth in the Letter.

⁸ This would also include the Self-Trade Prevention sections of the NPR.

⁹ This would also include the NFA, Annual Report, DCM Market Maker and Trade Matching Transparency, and Source Code sections of the NPR.

systems require substantial work, including careful analysis and consideration of the treatment of third-party systems, as well as a better understanding of the anticipated benefits and actual costs. We also believe that any proposal regarding potential registration should be deferred until it can be better understood whom the CFTC hopes to cover with such a requirement, whether registration is necessary, and whether the anticipated benefits of such registration truly outweigh anticipated costs.

Pre-Trade and Other Risk Controls. FIA believes that all electronic trading should be subject to pre-trade and other risk controls appropriate to the nature of the activity. Several examples of Algorithmic Trading events that took place in the securities markets were cited in the NPR. We note that these events were exacerbated by the fact that pre-trade risk controls had been bypassed,¹⁰ and although such controls would not have prevented these incidents occurring they would likely have mitigated the risk caused by the event.

Pre-trade and other risk controls may be self-developed or provided or implemented by third parties, including FCMs or DCMs. As a result, § 1.80 should be more principles-based so it can be applied to all electronic trading, regardless of the registration status of the person or entity trading. To be clear, FIA is not advocating that every market participant implement its own risk controls; rather, we believe that all electronic orders should be subject to appropriate risk controls and such controls could be provided by FCMs or DCMs. Accordingly, § 1.80, as we propose it to be changed, should not be tied to the CFTC's proposed definition of AT Person, and should instead provide a principles-based guideline for the implementation of pre-trade risk controls appropriate to the type of electronic trading in which the participant engages.

As an additional protection for market integrity, we strongly believe that § 1.82 also should be more principles-based, requiring all FCMs that facilitate electronic access to implement pre-trade and other risk controls for all customers trading electronically as part of their overall risk management program.¹¹

¹⁰ See Press Release, SEC, SEC Charges Knight Capital With Violations of Market Access Rule (Oct. 16, 2013), <https://www.sec.gov/News/PressRelease/Detail/PressRelease/1370539879795> (“An SEC investigation found that Knight Capital did not have adequate safeguards in place to limit the risks posed by its access to the markets, and failed as a result to prevent the entry of millions of erroneous orders. Knight Capital also failed to conduct adequate reviews of the effectiveness of its controls.”).

¹¹ Gregg E. Berman, Associate Director, Office of Analytics and Research, Division of Trading and Markets, SEC, delivered a speech on June 18, 2013, in which he explained the SEC's findings on why a large cap stock may experience sharp price spikes: “And what we generally have found is that sudden spikes are not typically caused by any of the reasons I just mentioned [departure of liquidity providers, algorithm gone wild, attempted market manipulation, combination of parties or algos inadvertently piling on in an uncontrollable fashion]. Rather, they tend to be triggered by old-fashioned human mistakes: a trader sends a large limit order to a market center but inadvertently drops the limit price thereby creating an oversized market order; an investor makes a fat-finger mistake and sends a market order for 100 times more shares than he wanted; a portfolio manager enters a large order into the wrong screen, resulting in an unanticipated request for immediate execution instead of having the flow managed.” A transcript of the speech, given at the SIFMA TECH Conference, is available at: <http://www.sec.gov/News/Speech/Detail/Speech/1365171575716>.

We believe applying principles-based risk controls to all electronic trading is consistent with how most FCMs operate today, and they are incentivized to control trading activity for which they are responsible. The CFTC's stated intention in § 1.82 (and, by inclusion, § 1.80) is to give market participants "latitude in the design and implementation of required controls"; however, as we will discuss, using § 1.80 as a template for risk controls across all market participants, including FCMs and DCMs, is both too prescriptive and duplicative as proposed. To this point, we also believe that §§ 38.255 and 40.20, which apply to DCMs, should be more principles-based.

Software Development, Testing, Deployment and Monitoring. FIA is concerned that many of the proposed requirements related to the testing of Algorithmic Trading systems set forth in § 1.81 are not practical and do not reflect how software is customarily developed, tested, deployed and monitored. In general, FIA believes the rules are too prescriptive and try to apply one-size-fits-all requirements without regard for the size and complexity of operations and their potential to disrupt a market. Additionally, they prescribe the same types of requirements for a myriad of Algorithmic Trading strategies that should have very different testing requirements (*e.g.*, back-testing using historical data may not confirm the functioning of an automated order routing system). Further, the rules also do not adequately differentiate between Algorithmic Trading systems designed by market participants and those designed and licensed by a third party. FIA believes that rather than specifying requirements of what should be included in an AT Person's policies and procedures, the CFTC should require solely that policies and procedures address the relevant topic in a manner that is appropriate to an AT Person's circumstances.

Registration. As we will discuss, the AT Person registration obligation adds further confusion to the proposed rule by applying the requirements of the other elements of Regulation AT to the wrong group of market participants. Registration requirements should be considered only after risk controls and software guidelines are in place. At that point, it should be clear whether registration is required and, if so, which group of market participants would be in that category. Moreover, establishing a registration requirement in order to enforce rules is unnecessary. As discussed in greater detail in Attachment A, FIA believes the CFTC has ample legal authority to impose requirements on non-registrants that trade on U.S. futures markets in order to prevent disruptive practices expressly described in Section 4c(a)(5) of the Commodity Exchange Act ("CEA"), as well as "any other trading practice that is disruptive of fair and equitable trading."¹² Using this authority, the CFTC has a statutory basis to enact rules to require all algorithmic traders (whether registered as AT Persons or not) to comply with requirements meant to avoid prohibited conduct.

¹² According to Section 4c(a)(6) of the Act, the CFTC:

may make and promulgate such rules and regulations as, in the judgment of the Commission, are reasonably necessary to prohibit the trading practices described in paragraph (5) and any other trading practice that is disruptive of fair and equitable trading.

Regulation AT is one of the most significant proposed rulemakings to be undertaken by the CFTC and will impact large numbers of market participants, not just a subset of firms engaged in specific types of activity. It needs to be implemented in a manner that protects market integrity yet allows for continued evolution of trading practices in an increasingly automated world with constantly evolving technology. If Regulation AT is not properly drafted and implemented, it has the potential to disrupt current risk management safeguards that have developed and been proven effective over time, and may even discourage market participants from continuing these time-tested risk management practices.

Summary of FIA's Specific Comments

In order to respond to the NPR, FIA formed 10 working groups. The groups included more than 200 participants from futures commission merchants ("FCMs"), DCMs, trading firms and commercial end users. Each group met weekly throughout the comment period. FIA also met multiple times with Commission staff to better understand their objectives in certain sections of the rule.

Consistent with our high-level statements above, FIA is providing in Attachment A comments as well as responses to the Commission's questions divided into the following categories: Definitions/Registrations, Risk Controls (AT Persons, FCM, and DCM); Source Code (Books and Records); Development, Testing, Deployment and Monitoring; Self-Trade Prevention; Annual Reports; NFA; and DCM Market Maker Transparency. A brief summary of each of those categories is discussed below.

I. Definitions/Registrations

The definition of AT Person fails to work with other proposed requirements of Regulation AT. FIA members spent considerable time trying to understand the scope, application and impact of the proposed definition of AT Person. As proposed, the various requirements of Regulation AT apply to, and therefore are intricately linked to, the definition of AT Person. We therefore spent many hours attempting to draft an alternate definition that would better meet the Commission's objectives. Unfortunately, despite our best efforts, we were unable to come up with a workable definition because the various requirements of Regulation AT should not apply to a singularly defined group known as "AT Persons." As a result, we believe defining AT Person is not only unnecessary, but also counterproductive. For example, the proposed definition of AT Person would require a narrow group of market participants to implement pre-trade and other risk controls whereas, as discussed more fully herein, risk controls should apply to all electronic trading. At the same time, the proposed definition of AT Person would impose a host of unnecessary and burdensome documentation, reporting and testing costs and requirements under § 1.81 that not only would be inappropriately applied to all AT Persons, but certainly should not apply to a more broadly defined group of AT Persons.

II.-IV. Risk Controls (AT Person, FCM, and DCM)

All electronic trading, not just that engaged in by AT Persons, should be subject to pre-trade and other risk controls reasonably designed to mitigate market disruption. All persons that trade electronically have the potential to disrupt markets. For this reason, FIA has consistently advocated for all electronic trading, including algorithmic and manual trading, to be subject to pre-trade risk controls and other measures to help minimize the likelihood of a market disruption. These risk controls should be reasonably designed to mitigate market disruption caused by: (i) excessive messages and (ii) errant orders. In determining whether such risk controls are reasonably designed, market participants should consider the nature of the trading activity, guidelines regarding types of controls to implement, and controls that are implemented by the DCM on which they are trading.

Requirements for pre-trade and other risk controls should be more principles-based. As we will discuss in more detail in our comments on FCM, DCM and AT Person risk controls, we believe the focus should be on applying risk controls to all electronic orders appropriate to the nature of the trading as opposed to focusing on the type of market participant executing those trades. Because different types of risk controls are appropriate at different points in the trade flow and different risk controls are appropriate for different types of traders, mandating a specific type of control based on a specific type of market participant is misguided. For example, a market participant may use sophisticated algorithms for high-volume trading while another participant may trade very low volume manually. Either type of participant may be a Principal Trading Firm, Commodity Trading Advisor (“CTA”), Asset Manager or Commercial User, especially as the use of third-party Algorithmic Trading tools becomes increasingly prevalent. It would be inappropriate to require exactly the same type of control for both types of activity. Setting risk controls for all electronic trading is more effective than requiring only certain market participants to implement risk controls. In the end, it is not as relevant who implements a risk control but rather that all electronic orders are subject to risk controls so as to mitigate the effects of inadvertent disruption to the market. We believe that a principles-based rule would give all market participants the flexibility they need to set appropriate risk controls in the appropriate locations.

Regulation AT’s required duplication of identical risk controls across the lifecycle of a trade introduces risk. In addition to failing to apply risk controls to the universe of market participants that trade electronically, FIA does not believe, as the Commission has proposed through its current wording, that pre-trade and other risk controls should be duplicated in precisely the same manner across the trade execution chain: (i) market participant; (ii) FCM; and (iii) DCM. Pre-trade and other risk controls should permit flexibility such that the controls will be appropriate for their location, with varying degrees of sophistication and granularity depending on who is setting the controls.

Regulation AT’s risk controls at the Clearing FCM do not reflect market practice regarding how an FCM provides risk controls within its own systems or oversees risk controls for Direct Electronic Access (“DEA”). As FIA has previously indicated, risk controls at the FCM are an important means of protecting market integrity for all market participants,

regardless of whether they engage in Algorithmic Trading or manually send orders electronically to a DCM.

Regulation AT does not reflect that market participants may choose to use another FCM for market access that is not their clearing FCM, and then give up trades after execution, in which case the FCM facilitating access to the DCM should set risk controls appropriate to the type of activity in which the customer engages. Market participants may also choose to trade on a DCM through a variety of trading tools, which may be developed internally, provided by an FCM or a third party, or even provided by the DCM itself. Orders can be placed using DEA or routed through infrastructure provided by an FCM or a third party. However, ultimately the FCM that is gate-keeping access to the DCM should implement appropriate risk controls.

Accordingly, Regulation AT should be modified such that § 1.82 provides a principles-based requirement for FCMs¹³ facilitating electronic access to a DCM for their customers, or for their own trading, such that they should implement appropriate risk controls depending upon the type of activity or type of access. This is consistent with Securities and Exchange Commission (“SEC”) § 15c3-5 and would mitigate inadvertent market disruptions through both Algorithmic Trading and manual entry of electronic orders. Where a market participant uses DEA instead of access to a DCM via an FCM's order routing infrastructure, § 1.82 should be complemented by similar tools provided by the DCM to the gatekeeper FCM, as discussed in § 38.255. Once again, FIA believes that such controls provided by the DCM to the FCM should be principles-based and not overly prescriptive to accommodate the wide variety of trading and access models of an FCM's clients.

V. Source Code (Books and Records)

Regulation AT fails to protect market participants' critically important and sensitive proprietary information. FIA strongly objects to the CFTC's proposed requirements regarding the retention of source code and potentially making source code available upon request for inspection by any representative of the CFTC or the Department of Justice (“DOJ”). FIA believes that this relaxed standard of inspection without requiring any formal process of law potentially violates source code owners' constitutional rights. Source code is the lifeblood of many firms' commercial success, and the Commission's proposal is unprecedented among government agencies. The law requires that such proprietary information be made available to the government only under the most limited circumstances with the strictest controls to protect the information against disclosure and misappropriation. Given the irreparable harm that could result to a source code owner, we see no compelling reason why the CFTC, or any other government agency, should be able to access highly confidential intellectual property without making a reasonable showing of cause and obtaining a subpoena. We know of no precedent for a regulatory agency expressly requiring such unfettered access to a company's core intellectual

¹³ We note that it is possible for an FCM clearing member of a DCM to delegate facilitation of electronic access to another entity (*e.g.*, an omnibus account). In such a situation, we would expect the delegated entity to implement appropriate pre-trade and other risk controls, and the delegating FCM to help ensure that such controls are in place.

property with comparable tax protection. Source code should not be made available to the CFTC or the DOJ under the routine inspection process of existing CFTC § 1.31.

VI. Software Development, Testing, Deployment, and Monitoring

Regulation AT's § 1.81 is too prescriptive to encourage and facilitate effective risk management policies. Section 1.81 is a further example of why the definition of AT Person does not work. Section 1.81 would impose one-size-fits-all documentation, testing and monitoring obligations on all market participants covered by the definition of AT Person. Rather than taking the approach of broadly identifying topics that should be addressed by relevant policies and procedures and leaving it to the discretion of the AT Person to develop internal requirements most suited to its actual business, § 1.81 often mandates highly specific, burdensome and costly elements that could be unworkable for certain firms, and could prove impractical and ineffective as markets and technology evolve. Worse, by requiring firms to implement written policies and procedures and treating any violation, including a violation of a firm's own internal policies and procedures, as an Algorithmic Trading Compliance Issue, § 1.81 potentially penalizes AT Persons who adopt the most robust internal requirements. This undesirable result highlights the inherent danger of rigid rules. Adopting core principles instead of prescriptive rules would be consistent with the approach recently taken by NFA requiring all of its members to enact elements of an Information Security Program.¹⁴ Rather than dictate the outcome of specific elements, NFA simply requires members to address each of the enumerated topics.

VII. Self-Trade Prevention

Regulation AT's self-trade prevention requirements are unnecessary and could prevent legitimate market activity. FIA historically shared the CFTC's concerns regarding self-trading, and many of its members have worked with DCMs to develop and implement current DCM systems designed to prevent problematic self-matches.¹⁵ As a result of these DCM tools and a better understanding by DCMs of the source of some self-trades, we understand that today the incidences of problematic self-trading are statistically insignificant.¹⁶ FIA commends the Commission for acknowledging and agreeing with our longstanding position that self-trades resulting from the matching of orders for accounts with common beneficial ownership, where such orders are initiated by independent decision makers, are not problematic ("approved self-trades"). Accordingly, FIA believes the self-trading measures contemplated by § 40.23 – particularly making such measures mandatory – are unnecessary, and worse, conflict with the intent of Congress, and could prevent legitimate trading.

¹⁴ 9070 – NFA Compliance Rules 2-9, 2 – 36 and 2-49: Information Systems Security Programs (approved Aug. 20, 2015).

¹⁵ Letter from Walter Lukken, President and CEO, FIA, to Melissa Jurgens, Secretary, CFTC, at 25-27 (Dec. 11, 2013) https://secure.fia.org/downloads/CFTC_Concept_Release_on_Risk_Controls_121113.pdf.

¹⁶ See FIA's detailed response to Self-Trade Prevention in Attachment A.

VIII. Annual Reports

The annual report requirement is overly burdensome with no attendant benefits. The reliance of Regulation AT on a system of annual reports to be prepared by AT Persons and clearing member FCMs is unnecessary and, for FCMs, redundant because they already are required to prepare and file annually a CCO Annual Report.¹⁷ Worse, for AT Persons, a recent FIA survey shows the annual reports will require the production of potentially tens of thousands of snapshots of quantitative risk parameter settings at moments in time which are long past by the time the annual report is submitted and reviewed. We fail to understand the potential value of this exercise in the oversight and safeguarding of our markets. In consulting with DCMs, we also have concerns that they will be unable to meaningfully process and analyze the wide variety of policies and procedures related to the development and compliance of Algorithmic Trading Systems. The objectives of § 1.83 can be met less onerously and more practically by requiring AT Persons solely to certify that they materially comply with the requirements of Regulation AT and make such certifications available upon request.¹⁸

IX. NFA

Any rules applicable to Registered Futures Associations should not result in duplicative rules or rules that are not principles-based.

X. DCM Market Maker Transparency

Requirements related to market maker and trading incentive programs should be equally applied across all trading venues

Finally, the NPR substantially underestimates the costs and difficulty of complying with the many prescriptive requirements of Regulation AT. The Commission's cost and benefit considerations substantially underestimate the costs of complying with the many prescriptive requirements of Regulation AT. In proposing to mandate certain pre-trade risk controls, the Commission has misunderstood how the industry has implemented best practices and how pre-trade controls differ in application by DCMs, FCMs, and market participants. We are extremely concerned with the very prescriptive and costly audit trail required to prove compliance. Certainly any marginal benefits to be achieved by adopting such requirements as proposed would not be justified by the overwhelmingly high costs that the industry would likely incur to meet such obligations. Should the CFTC agree with FIA and limit the scope of Regulation AT to the

¹⁷ 17 C.F.R. § 3.3(e). The Annual Report must be submitted to the Commission within 90 days of the FCM's fiscal year-end.

¹⁸ This would be consistent with SEC requirements under Rule 15c3-5. This rule requires, among other things, that a broker-dealer, on at least an annual basis, review its business activity in connection with its market access to assure the overall effectiveness of its risk management controls and supervisory procedures. The broker-dealer's Chief Executive Officer, or equivalent officer, must on an annual basis certify that the broker-dealer's controls and procedures comply with the requirements of Rule 15c3-5. 17 C.F.R. § 240.15c3-5(e)(2).

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required use of risk controls for all electronic trades applied in the manner we have described, we think the benefit of having such controls would justify those more limited costs.

* * *

FIA fully supports the Commission's goals and objectives in enhancing the regulatory regime for automated trading but is very concerned that Regulation AT will not achieve these goals. As we have noted previously, we believe that principles-based requirements can evolve with the market, be appropriate to the role of the market participant, avoid unnecessary complexity, and ultimately will best serve the market. We strongly believe the Commission needs to focus initially on risk controls, work with the industry to further consider rules appropriate for system developers and third-party service providers, and consider registration requirements separate from automated trading requirements.

In the following pages, we address in detail the questions raised in the NPR. We hope the Commission will carefully consider our response and preserve the market infrastructure improvements that are already in place, and carefully weigh the cost-benefit of any regulation the Commission believes is warranted.

We expect it would take several years to implement Regulation AT as proposed. Should the Commission focus initially on the risk controls portion of the proposed rulemaking, the implementation timeframe could be considerably less. We would appreciate the opportunity to continue to work with the CFTC on all areas of automated trading.

Please contact Allison Lurton, Senior Vice President and General Counsel, at 202-466-5460, if you have any questions about FIA's comments or recommendations.

Respectfully submitted,



Walter L. Lukken
President and Chief Executive Officer

Enclosure: Attachment A

cc: Honorable Timothy G. Massad, Chairman
Honorable Sharon Bowen, Commissioner
Honorable J. Christopher Giancarlo, Commissioner
Vincent A. McGonagle, Director, Division of Market Oversight
Sebastian Pujol Schott, Associate Director, Division of Market Oversight

ATTACHMENT A

I. Definitions and Registrations
§§ 1.3, 170.18 (Questions 1-27)

INTRO	<p>FIA believes that all persons that engage in Algorithmic Trading – in fact all those trading electronically – may potentially disrupt markets and, therefore, should be subject to reasonable principles-based requirements aimed at avoiding market disruptions regardless of whether they are registered with the CFTC or not. FIA strongly believes that it is not the registration status of a person engaged in Algorithmic Trading that creates the risk of a market disruption, but rather, it is the act of Algorithmic Trading itself. FIA has consistently advocated for all persons engaged in electronic trading, including Algorithmic Trading, to utilize pre-trade risk controls and other measures appropriately and reasonably designed to address the activity to help minimize the likelihood of a market disruption. It is with that principle in mind that FIA provides comments to the proposed definitions and registration requirement of Regulation AT.</p> <p><u>AT Person</u></p> <p>FIA members spent considerable time trying to understand the scope, application and impact of the proposed definition of AT Person. We also spent many hours attempting to draft an alternate definition that would better meet the Commission’s objectives. Unfortunately, despite our best efforts, we were unable to come up with a workable definition. Our experience informs us that defining AT Person may not only be unnecessary but may also be counterproductive. Limiting risk controls and safeguards only to AT Persons complicates the rulemaking and does not enhance the oversight of Algorithmic Trading for a number of reasons:</p> <ol style="list-style-type: none">1. All persons that trade electronically have the potential to disrupt markets. Attempting to isolate a particular group of market participants by the way they access markets, their registration status, or otherwise, creates a group that is incorrectly sized. Introducing a registration requirement confuses the issue and is at best self-limiting. It is not the registration status of a person engaged in Algorithmic Trading that creates the risk of causing a market disruption, but rather it is the Algorithmic Trading itself.2. The markets are becoming increasingly automated, and tools for accessing markets and executing trades are becoming more sophisticated, more affordable and more available. One can readily imagine a time in the not-too-distant future when all market access will have an algorithmic component.3. There is a heavy reliance on third-party vendors that provide, among other services, trading software and hosted market connectivity
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solutions. Increasingly, imbedded in these vendor offerings are various automated trading tools which can range from a simple timed-release order type all the way to a more complex synthetic spreader application or benchmark algorithms. These tools can be accessed through a variety of means. Regardless of how such tools are deployed, it is important to note the increasing division of responsibilities between provider and end user, and how that complicates any requirements for development, testing and deployment.

Classification Based On Direct Electronic Access

We found the definition of AT Person to be the most challenging of the proposed definitions. As proposed, there are two primary triggers for being classified as an AT Person:

1. Being currently registered in some capacity with the Commission while engaging in Algorithmic Trading on a DCM, or
2. Using DEA to engage in Algorithmic Trading for your own account on a DCM while not otherwise registered with the Commission.

Meeting these criteria triggers a registration requirement and classification as an AT Person.¹⁹

FIA is confused by the use of DEA as a trigger for classification of a currently unregistered entity as an AT Person. Practically speaking, this means that the Commission is separating non-registered Algorithmic Trading DCM participants into two distinct groups: (1) those that utilize DEA and thus must register with the Commission and ultimately be held to § 1.80 and § 1.81 and (2) those that do not utilize DEA and thus are not required to register with the Commission and are not ultimately held to § 1.80 and § 1.81. We do not see the basis for such a distinction and to impose such a distinction with respect to currently unregistered entities. Indeed, the CFTC does not propose a similar distinction with respect to currently registered entities. To create such an arbitrary distinction is punitive to unregistered entities utilizing DEA as well as to entities who are already registered with the Commission and do not utilize DEA.

FIA believes this distinction is misguided because regardless of the market access mechanism utilized, Algorithmic Trading operations are materially similar both in day-to-day operations as well as potential market impact. In practice today, DEA is merely an element of technical infrastructure as a result

¹⁹ Although we use the term “AT Person” in this Letter in commenting on certain aspects of the NPR that employ the term, we do not believe the term is appropriate or should be included in any final rule for the reasons set forth in the Letter.

of the pre-trade risk controls already implemented under the requirements of § 1.73, which prohibits electronically connecting directly to a DCM without risk controls set by a clearing member of the DCM.

If the Commission seeks to impose a registration requirement on a class of market participants that is not otherwise registered it should propose to do so, but not as part of this NPR. In attempting to do so in this NPR, the Commission introduced inappropriate differentiating criteria (*e.g.*, DEA) to limit the scope of AT Persons – but as a byproduct, it has also needlessly complicated the NPR and limited the application of market integrity protecting steps (*e.g.*, only AT Persons must abide by §§ 1.80 and 1.81).

As we have already commented, because the definition of AT Person is poorly formed, FIA believes defining AT Person is counterproductive and ultimately unnecessary. By further separating registration requirements from risk control requirements (as well as other policy and procedure requirements), the Commission can make sure all electronic trading, including Algorithmic Trading, regardless of registration status or market access mechanism, are subject to reasonable principles-based requirements. FIA believes the CFTC has ample legal authority to compel compliance from non-registrants that trade on U.S. futures markets in order to prevent disruptive practices as expressly described in Section 4c(a)(5) of the CEA, as well as “any other trading practice that is disruptive of fair and equitable trading.”²⁰ Using this authority, the CFTC has a statutory basis upon which to enact rules to require all electronic, including Algorithmic Traders (regardless of registration status) to comply with requirements to avoid such prohibited conduct.

Algorithmic Trading

In general, FIA supports the **definition of Algorithmic Trading** as proposed in § 1.3(ssss). However, FIA believes that a slight modification is warranted to clarify that only systems that automatically initiate, modify or cancel orders are covered by Regulation AT. FIA also believes that the layout of § 1.3(ssss) can be made clearer. FIA would propose the following amended language and layout for this rule:

Algorithmic Trading means trading in any commodity interest as defined in § 1.3(yy) where:

1. One or more algorithms or systems automatically determines individual parameters of orders or whether to initiate, modify, or cancel an order,

²⁰ According to CEA § 4c(a)(6), the CFTC:

may make and promulgate such rules and regulations as, in the judgment of the Commission, are reasonably necessary to prohibit the trading practices described in paragraph (5) and any other trading practice that is disruptive of fair and equitable trading.

including but not limited to:

- a. The product to be traded;
 - b. The venue where the order will be placed;
 - c. The type of order to be placed;
 - d. The timing of the order;
 - e. Whether to place the order;
 - f. the sequencing of the order in relation to other orders;
 - g. The price of the order;
 - h. The quantity of the order,
 - i. The partition of the order into smaller components for submission;
 - j. The number of orders to be placed; or
 - k. How to manage the order after submission.
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.

We believe it is very important to note that where an order is generated by an algorithm, but its submission to the market is via a natural person who has the discretion to decide whether or not to place the order or amend any of its parameters based on their knowledge of the market, such orders should not be considered Algorithmic Trading. Nevertheless, we note that the natural person entering orders generated by the algorithm should still have responsibilities for oversight and should help ensure appropriate risk controls are in place to avoid entering incorrectly sized orders into the market.

Algorithmic Trading Compliance Issue

FIA has concerns with several facets of the **definition of Algorithmic Trading Compliance Issue** in § 1.3(tttt). FIA strongly believes that no violation of an AT Person's own internal requirements should constitute an Algorithmic Trading Compliance Issue. FIA also questions the applicability and practicality of making a violation of an AT Person's clearing member's requirements an Algorithmic Trading Compliance Issue as well. Instead, this should be reflected in regular dialogue between the AT Person and the FCM facilitating electronic access to the DCM.

FIA believes that the CFTC should – as FIA has advocated for years – encourage AT Persons to implement and maintain the most robust risk and other controls related to their Algorithmic Trading systems. However, if AT Persons perceive that it might be considered a regulatory breach to violate an internal requirement – as may potentially be the case under proposed § 1.81(c) – they are not incentivized to develop the most robust standards, but only those standards that they believe would satisfy minimum expectations of the CFTC. This would go against the spirit and objective of the NPR.

Moreover, as proposed, a breach not only of internal requirements, but also of a relevant clearing member’s requirements (regardless of whether the AT Person was informed of such requirements or given sufficient notice and time to make appropriate changes) would constitute an Algorithmic Trading Compliance Issue. Again, we have concerns that this might discourage AT Persons from utilizing clearing members with tougher requirements. The rule is also not clear as to whether the relevant clearing member is the clearing member that carries the AT Person’s trades or the clearing member that facilitates electronic access to a DCM.

There is no materiality threshold in the proposed definition of Algorithmic Trading Compliance Issue. FIA strongly believes that an Algorithmic Trading Compliance Issue should only be an event at an AT Person that has caused any Algorithmic Trading of such entity to operate in a manner that does not materially comply with relevant laws and rules and causes a market disruption. The following would be a more appropriate definition of Algorithmic Trading Compliance Issue:

This term means a material event at an AT Person that has caused any Algorithmic Trading of such entity to operate in a manner that does not comply with the Commodity Exchange Act or the rules and regulations thereunder, the rules of any designated contract market to which such AT Person submits orders through Algorithmic Trading, or the rules of any registered futures association of which such AT Person is a member.

Algorithmic Trading Disruption or Algorithmic Trading Event

FIA generally has no objection to the CFTC’s proposed **definitions of Algorithmic Trading Disruption and Algorithmic Trading Event**, as set forth in § 1.3(uuuu) and § 1.3(vvvv), respectively. However, FIA recommends removing the phrase “disrupts, or materially degrades” in the definition of Algorithmic Trading Disruption and replacing it with the phrase “materially disrupts.” We believe the word “degrades,” in the context of this definition, is unclear. We do, however, note that various market quality rules such as CME

Group Rule 575, “Disruptive Practices Prohibited” use the phrase “disruption” in the context of “manipulation”, and we emphasize that an Algorithmic Trading Disruption that may occur in the context of Regulation AT should not be seen as intent to cause market disruption. Also, if a disruption affects only a market participant’s activity and has no adverse impact on a DCM or FCM, it should be excluded from this definition.

Direct Electronic Access

FIA has significant concerns about the **definition of Direct Electronic Access** as set forth in § 1.3(yyyy). As stated previously, FIA believes that all market participants trading electronically, no matter how they access DCMs, must utilize pre-trade and other risk controls appropriate to the nature of their trading. Accordingly, to the extent that the definition of Direct Electronic Access has been proposed principally to identify persons who should be required to be registered under the proposed expanded definition of Floor Trader, the definition is unnecessary.

That being said, if the CFTC believes it is necessary to retain a definition of Direct Electronic Access, it should clarify what the phrase “passing through a separate person who is a member of the relevant DCO” means. We surmise from the NPR that the CFTC considers Direct Electronic Access to be orders routed by any person without passing through pre-trade risk controls and order cancellation systems contemplated by §§ 1.82(b) and (c) that are either implemented or administered by the clearing member that guarantees or facilitates electronic access to the relevant DCM. If that was the intent, the CFTC should clarify as such.²¹ A possible definition of Direct Electronic Access (§ 1.3(yyyy)) to accomplish this might be as follows:

This term means an arrangement where a person electronically transmits an order to a Designated Contract Market via the DCM Application Programming Interface without the order first being routed through any order routing system²² that is under the administrative control of a separate person who is a futures commission merchant facilitating electronic access for its customers.

²¹ As already is the case, there can be no electronic routing of orders to DCMs without an order first passing through limits set by a separate person who is a member of the relevant derivatives clearing organization (“DCO”). Under § 1.73, each FCM that is a clearing member of a DCO and provides electronic market access or accepts orders from customers for automated execution must screen such orders for compliance with certain risk-based limits.

²² FIA considers third-party automated order routing systems that provide market access as a service, such as, in certain cases, those provided by Trading Technologies, CQG, etc., to generally be considered an extension of the infrastructure of the FCM facilitating electronic access to the DCM, and not Direct Electronic Access even though they connect directly to the DCM Application Programming Interface. The FCM facilitating access for customers through these systems has the ability to set pre-trade and other risk controls, as well as allowing or denying access through administrative controls provided to the FCM.

	<p>Although FIA does not agree with all the definitions, we will address the questions below to provide further clarification on revisions we think appropriate.</p>
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	“Algorithmic Trading” -- § 1.3(zzzz)
1	Is the Commission’s definition of “Algorithmic Trading” generally consistent with what algorithmic trading is understood to mean in the industry? If not, please explain how it is inconsistent and how the definition should be modified. In your answer, please explain whether the definition inappropriately includes or excludes a particular type or aspect of trading.
Response	<p>The proposed definition of Algorithmic Trading is broad in scope, and includes a wide range of potential participants that use automated trading strategies. It is generally consistent with what Algorithmic Trading is understood to mean in the industry. We have proposed a minor change to the CFTC’s proposed definition, as reflected in the introduction to this section.</p> <p>FIA agrees that automated trading strategies where an order, modification or cancellation is manually entered into a front-end system by a natural person should be excluded from the definition of Algorithmic Trading. In this instance, a natural person can determine not to place any order he or she may consider would be disruptive to current market conditions. In essence, he or she is acting as a pre-trade risk filter.</p> <p>It is also important to note that many market participants use automated order routing systems (“AORS”) to transmit their own orders or the orders of customers to DCMs. These AORSs have varying degrees of discretion over how, when, and with what parameters an order is sent. If any discretion over how, when and with what parameters to send an order is granted to the AORS then we believe it becomes an automated order routing algorithm, and would be included in the definition of Algorithmic Trading. FIA requests that the Commission provide clarity on this point so that AORSs which act solely as a conduit to a DCM without any discretion are not considered within the scope of the definition of Algorithmic Trading or Regulation AT. FIA notes that the use of an AORS to solely route an AT Order (as defined in the NPR) without further discretion should not remove the responsibility of a participant otherwise engaged in Algorithmic Trading from meeting their obligations for the development, testing, deployment and monitoring of Algorithmic Trading.</p>
2	Should the Commission adopt a definition of “Algorithmic Trading” that is more closely aligned with any definition used by another regulatory organization?
Response	FIA believes that the proposed definition of Algorithmic Trading with the minor modification FIA proposes is already reasonably aligned with similar definitions by other regulatory organizations.
3	For purposes of the Commission’s definition of Algorithmic Trading, is it necessary for the Commission to define “computer algorithms or systems”? If so, please explain what should be included in such a definition.
Response	No. FIA does not believe that the proposed definition of Algorithmic Trading should include additional definitions regarding computer algorithms or systems. As FIA wrote in its CR Response, computer programs may be made up of numerous algorithms that make decisions or contribute information in a

	decision tree process that contributes to the ultimate decision to take an action in a market. We do not believe that further granularity or distinction is required.
4	Should the Commission’s definition of “Algorithmic Trading” include systems that only make determinations as to the routing of orders to different venues (which is contemplated in the proposed definition)? With respect to the definition of “Algorithmic Trading,” should the Commission differentiate between different types of algorithms, such as alpha-generating algorithms and order routing algorithms?
Response	<p>As discussed in FIA’s response to Question 1, AORSs are currently employed on a broad basis to route orders from market participants with varying degrees of discretion over how, when, and with what parameters an order is sent.²³</p> <p>FIA requests that the Commission provide clarity on this point so that AORSs which act solely as a conduit to a DCM without any discretion over orders that are not considered within scope of Regulation AT, unless there is additional functionality providing discretion over how to send an order that meets the criteria of the proposed definition of Algorithmic Trading. If any discretion is granted to the AORS – such as the choice of venue, or slicing an order into smaller parts, for example – then we believe it becomes an automated order routing algorithm, and would be included within the definition of Algorithmic Trading.</p> <p>FIA has not historically differentiated between different types of algorithms and does not believe that it is appropriate to do so within the context of Regulation AT. All types of electronic trading have the potential to cause market disruption which should be minimized through the application of appropriate risk controls reasonably designed to address the activity. Further, as markets and technology have evolved so have the algorithms used by trading systems such that it may be difficult to create bright line tests to determine an algorithm’s “type.”</p>
5	Is the Commission’s understanding correct that most entities using automated order routers will be using similar or related automated technology to determine other parameters of an order?
Response	<p>It is our belief that AORSs are currently used by many market participants, which may include introducing brokers (IBs) and FCMs. Not all of these firms currently utilize similar or related automated technology to determine other parameters of an order. Many firms that provide AORS technology are simply acting as a conduit routing orders, without making any determination regarding any aspect of the order submitted by their customers, although the firm should still be cognizant of their obligation under any proposed regulation.</p> <p>As discussed previously, if the AORS provides discretion over the submission of an order that meets the criteria within the proposed definition it should be</p>

²³ We emphasize that FIA believes that all AORSs should utilize pre-trade risk controls reasonably designed to address the activity and to mitigate the possibility of disruption in the event of a system malfunction.

	considered Algorithmic Trading.
6	The Commission posits a scenario in which an AT Person submits orders through Algorithmic Trading, and a non-clearing FCM or other entity acts only as a conduit for these AT Person orders. If the non-clearing FCM or other entity does not make any determinations with respect to such orders, the conduit entity would not be engaged in Algorithmic Trading, as that definition is currently proposed. Should the definition of Algorithmic Trading be modified to capture a conduit entity such as a non-clearing FCM in this scenario, thereby making the entity an AT Person subject to Regulation AT? In other words, should non-clearing FCMs be required to manage the risks of AT Person customers? How would non-clearing FCMs do so if the non-clearing FCMs do not have risk controls comparable to the risk controls specified in proposed § 1.82?
Response	<p>As we discuss further in our responses to Questions 49 through 56 regarding FCM Risk Management, it is common for a market participant engaged in Algorithmic Trading to utilize an FCM other than their clearing FCM to facilitate access to a DCM. In such case, the FCM providing market access electronically should be responsible for setting pre-trade and other risk management controls appropriate to the activity of the market participant.</p> <p>As we have stated at various points during this response, any type of electronic activity has the potential to cause market disruption, and it is the pre-trade risk controls reasonably designed to address the activity and employed by the FCM (through its own infrastructure or that of a third party) that mitigate the chance of disruption. To this point, the FCM providing electronic access to a DCM should be required to implement principles-based risk controls as discussed in the § 1.82 section of this Letter and document their usage, including the use of third parties for such controls (<i>e.g.</i>, IBs, DCMs, etc.).</p> <p>If the FCM facilitating electronic access to the DCM routes orders without providing further discretion on how orders are placed on the DCM, then they should not be considered an AT Person. If the FCM provides additional Algorithmic Trading functionality regarding how orders are placed on the DCM then they should be required to meet their obligations for the development, testing, deployment and monitoring of Algorithmic Trading.</p>
7	The Commission, recognizing that natural person traders who manually enter orders also have the potential to cause market disruptions, is considering expanding the definition of Algorithmic Trading to encompass orders that are generated using algorithmic methods (<i>e.g.</i> , an algorithm generates a buy or sell signal at a particular time), but are then manually entered into a front-end system by a natural person, who determines all aspects of the routing of the orders. Such order entry would not represent Algorithmic Trading under the currently proposed definition. The Commission requests comment on this proposed expansion of the definition of Algorithmic Trading, which the Commission may implement in the final rulemaking for Regulation AT. The Commission requests comment on the costs and benefits of this proposal, in addition to any other comments regarding the effectiveness of this proposal in

	terms of risk reduction.
Response	<p>Algorithmic Trading should not include trading ideas generated by computer programs that are manually entered into a front-end trading system with no further direction by any computer system or algorithm, prior to the electronic submission of the order for processing subject to the rules of a DCM.</p> <p>Given the transparency afforded to market participants by DCMs and the ever growing wide-spread adoption of technology within the trading industry, the overwhelming majority of trading on DCMs is aided by computer in some capacity. There are many market participants that use spreadsheets, charting tools, and other “light-weight” technology to perform automated calculations that ultimately inform a trader’s manual trading actions. Such tools are significantly more widely adopted than Algorithmic Trading tools.</p> <p>To expand the definition of Algorithmic Trading to include algorithmically informed, but manually entered, orders would dramatically expand the scope of the persons and systems captured by the AT Person definition with little benefit to offset the substantial cost associated with Regulation AT. Indeed, there are other controls that already apply to such trading so as to mitigate against market disruption. For example, a trader placing an order based on an Algorithmic Trading model’s signal has discretion on how to enter the order, can take steps to help ensure that the order does not cause market disruption, and be responsible for ensuring that appropriate risk controls are in place to avoid incorrectly sized orders being entered into the market.</p>
	“Algorithmic Trading Compliance Issue” -- § 1.3(tttt)
8	Should the definition of Algorithmic Trading Compliance Issue be modified to include other potential compliance failures involving an AT Person that may have a significant detrimental impact on such AT Person, the relevant DCM, or other market participants?
Response	<p>No. FIA believes that the proposed definition of Algorithmic Trading Compliance Issue is already too broad. It should not be expanded to include other potential compliance failures.</p> <p>The definition of Algorithmic Trading Compliance Issue should not include violations of an AT Person’s own internal requirements or the requirements of an AT Person’s clearing member. Inclusion of such requirements may discourage an AT Person from adopting best-in-class internal requirements, or utilizing the services of a clearing member with relatively stringent requirements.</p> <p>Also, the definition does not specify which is the relevant clearing member (executing or carrying broker) and, in any case, holds an AT Person to a clearing member’s requirements of which it may not have been made aware, or has been given insufficient notice or time to make confirming changes.</p> <p>Finally, FIA believes there should be a materiality threshold in the proposed</p>

	definition, which should include the criteria that an Algorithmic Trading Compliance Issue caused disruption to the market.
	“Algorithmic Trading Disruption” -- § 1.3(uuuu)
9	Should the definition of Algorithmic Trading Disruption be modified to include other types of disruptive events that may originate with an AT Person?
Response	No. Although FIA generally agrees with the definition of Algorithmic Trading Disruption, we recommend that the phrase “disrupts, or materially degrades” be replaced by the phrase “materially disrupts” as the word “degrades” is too amorphous. We do, however, note that various market quality rules such as CME Group Rule 575, “Disruptive Practices Prohibited” use the phrase “disruption” in the context of “manipulation”, and we emphasize that an Algorithmic Trading Disruption that may occur in the context of Regulation AT should not be seen as intent to cause market disruption.
10	Should the definition be expanded to include other types of disruptive downstream consequences that may result from an Algorithmic Trading Disruption originating with an AT Person, and which may negatively impact the relevant designated contract market, other market participants, or other persons? Alternatively, should the scope of the definition be reduced, and if so, why?
Response	As discussed in FIA’s response to Question 9, FIA believes that the definition of Algorithmic Trading Disruption should remain broad and principles-based. A disruption contained within a participant’s Algorithmic Trading system that does not lead to a subsequent material market disruption should not be considered to be operationally similar to a situation where the ability of other participants to engage in price discovery or risk transfer is materially impacted by the failure of an Algorithmic Trading system.
11	In addition, should the reference to “materially degrades” in the definition of Algorithmic Trading Disruption be expanded or otherwise modified to encompass other types of disruptions that may impact the relevant designated contract market, other market participants, or other persons? Please provide examples of real-world events originating with AT Persons (as defined under Regulation AT) that resulted in disruptions that may not be captured by the reference to “materially degrades” in the definition.
Response	Please see FIA’s response to Questions 9 and 10.

	“AT Order Message” -- § 1.3(www)
12	<p>Please comment on the proposed scope of the Commission’s definition of AT Order Message. Is the proposed definition too expansive, in that it would limit the submission of messages that do not have the potential to disrupt the market? Alternatively, is the scope of the AT Order Message too limited, in that it could allow messages not related to orders (<i>i.e.</i>, heartbeat messages or requests for mass quotes) to intentionally or unintentionally flood the DCM’s systems and slow down the matching engine? Please explain how this definition would be more appropriately limited or expanded.</p>
Response	<p>FIA generally supports the definition of AT Order Message.</p> <p>FIA believes that all messages sent to a DCM have the potential to cause disruption if they are sent erroneously. As a result, FIA has historically advocated for the use of appropriately tailored pre-trade risk controls, quality controls, supervision and monitoring to minimize the possibility of disruption. Where message throttles are employed by any party, we strongly advocate that cancellation messages should not be rejected by the throttle because a participant may be trying to minimize their risk exposure; however, we recognize that it may be in the discretion of whoever is supervising the order messages to take action if it is believed that excessive cancellation messages are causing material disruption for other market participants.</p>
	“AT Person” -- § 1.3(xxxx)
13	<p>The Commission notes that the FIA <i>Guide</i> recommends certain pre-trade risk controls and contemplates three levels at which these controls can be placed: automated trader, broker, and exchange. FIA defines “automated trader” as any trading entity that uses an automated system, including hedge funds, buy-side firms, trading firms, and brokers who deploy automated algorithms, and defines “broker” as FCMs, other clearing firms, executing brokers and other financial intermediaries that provide access to an exchange.</p> <p>Should the Commission’s definition of “AT Person” explicitly include or exclude any of the classes of parties included in FIA’s term “automated trader”? Please explain. Are there any types of entities not present in this list that should be included in the “AT Person” definition?</p> <p>Should Regulation AT use the term “broker,” as understood by FIA? If so, please explain. Is there another term that would be more appropriate in defining the scope of AT Persons?</p>
Response	<p>As the Commission highlights, FIA is committed to the principle that all market participants have a responsibility to implement appropriate risk controls that are reasonably related and tailored to its activity. We do not believe that this responsibility to protect the integrity of the market should be tied to registration.</p> <p>FIA has advocated that all market participants that engage in electronic trading have a responsibility to help ensure that appropriate and reasonably tailored</p>

controls are in place regarding the automated trading tools that are used, as well as ensuring that there are appropriate controls in place regarding supervision and monitoring of their use. This responsibility covers all types of electronic trading, including Algorithmic Trading tools provided to market participants by FCMs and other third parties.

As explained in our introduction to this section, FIA, on principle, disagrees with the CFTC's approach to the **definition of AT Person** in § 1.3(xxxx). We believe that the term AT Person was introduced in an attempt to limit those that are captured by Regulation AT, but in doing so the Commission has incorrectly limited the scope of certain principles of Regulation AT that should be applied more broadly than allowed by the proposed definition.

Specifically, FIA believes:

1. That all persons who engage in electronic trading, including Algorithmic Trading, should utilize principles-based pre-trade risk and other controls as discussed in the sections on § 1.80, as well as being subject to pre-trade risk and other controls discussed in § 1.82.
2. That all persons who engage in Algorithmic Trading should adopt certain principles-based policies and procedures as discussed in the sections on § 1.81.

In both cases, if the participant is not already registered and is engaged in Algorithmic Trading without direct electronic access then they would be inappropriately excluded from those requirements of Regulation AT as proposed.

However, we understand – and agree – that the CFTC does not wish to introduce a rule that establishes thousands of new registrants – including, for example the farmer hedging their physical commodity risk utilizing a third-party trading system with Algorithmic Trading capabilities. Nor do we believe that the Commission would like to include third-party vendors who develop Algorithmic Trading systems for the use of market participants. As we have discussed previously, where a participant utilizes third-party software it is very difficult to comply with all of the requirements regarding software development, testing and deployment as currently proposed.

To these points, rather than over-complicate and, ultimately, improperly apply the requirements of Regulation AT to an incorrect definition of AT Person, we believe it is best to consider simplifying the regulation and implementing three separate rules:

1. Pre-trade and other risk controls to help protect market integrity;
2. Policies and procedures for the development, testing, deployment, and monitoring of Algorithmic Trading (including third-party software);

	<p>and</p> <p>3. Registration (if necessary).</p> <p>In the <i>Guide</i>, FIA’s definition of “broker” includes FCMs, other clearing firms, IBs, executing brokers and other financial intermediaries that provide access to an exchange. FIA believed that the term was appropriate within the <i>Guide</i> to allow the recommendations made to be used on other financial markets in the U.S. and globally where the term “FCM” may not be applicable. As we discuss regarding proposals under § 1.82, FIA has always advocated that pre-trade and other risk controls should be deployed by the broker actually providing market access, regardless of whether they are acting in an execution only or a clearing capacity.</p>
14	<p>Algorithmic Trading carries technological and personnel costs, and the Commission expects that such trading will be performed by entities, not natural persons. Is this a reasonable assumption? For purposes of quantifying the number of AT Persons that will be subject to the regulations, do you believe that any AT Person (a definition that encompasses the following persons if engaged in Algorithmic Trading: FCMs, floor brokers, swap dealers, major swap participants, commodity pool operators (“CPOs”), CTAs, IBs, and newly registered floor traders using Direct Electronic Access) will be a natural person or a sole proprietorship with no employees other than the sole proprietor?</p>
Response	<p>FIA believes that it is possible that a sole proprietorship may be engaged in Algorithmic Trading and could be captured by the newly proposed registration category. The technology and personnel costs typically associated with Direct Electronic Access and Algorithmic Trading have been mitigated due to the commoditization of such technologies and the economies of scale afforded to and by third-party service providers.</p>
15	<p>The Commission recognizes that a CPO could use Algorithmic Trading to enter orders on behalf of a commodity pool which it operates. In these circumstances, should the Commission consider the CPO that operates the commodity pool or the underlying commodity pool itself as “engaged in Algorithmic Trading” pursuant to the definition of AT Person?</p>
Response	<p>See our prior discussion about the problems with the proposed definition of an AT Person.</p> <p>Moreover, FIA believes that where the operator of a commodity pool engages in Algorithmic Trading they would ultimately be considered the AT Person because they decide how to execute trading strategies on behalf of the pool. The underlying pool itself and all of its constituent members should not be considered AT Persons in the current definition; it is ultimately the operator of the pool that is engaging in Algorithmic Trading.</p>

<p>16</p>	<p>The Commission notes that pursuant to § 1.57(b) of the Commission’s regulations IBS may not carry proprietary accounts. However, certain customer relationship may cause an IB to fall under the definition of AT Person. The Commission requests comment on the types of IB customer relationships that could cause IBs to fall under the definition of AT Persons. What activities are currently being conducted by IBs that could cause an IB to be considered engaging in Algorithmic Trading on or subject to the rules of a DCM and would therefore cause the IB to be considered an AT Person?</p>
<p>Response</p>	<p>An IB, as delegated by an FCM, may facilitate electronic access to a customer that falls under the definition of an AT Person. In this context, if the IB is simply providing access without further discretion in automated order routing that may fall in scope of Algorithmic Trading, the IB would not be considered an AT Person under the current proposal.</p> <p>If the IB provides Algorithmic Trading systems either developed in-house or provided by a third party, but does not trade on behalf of its own account, then it is our understanding from the NPR that the provision of Algorithmic Trading software would not make an entity an AT Person. However, to this point, as we have previously stated such activity should be subject to the same principles-based policies and procedures regarding the development, testing and deployment of Algorithmic Trading systems as discussed in the section of this Letter on § 1.81.</p>
<p>17</p>	<p>Should the definition of AT Person be limited to persons using DEA? In other words, should the definition capture persons registered or required to be registered as FCMs, floor brokers, SDs, MSPs, CPOs, CTAs, or IBs that engage in Algorithmic Trading on or subject to the rules of a DCM, or persons registered or required to be registered as floor traders as defined in § 1.3(x)(3), in each case if such persons are using DEA? The Commission requests comment on the costs and benefits of this approach, including comments on whether this more limited definition of AT Persons would adequately mitigate the risks associated with algorithmic trading.</p>
<p>Response</p>	<p>FIA believes that the potential risks around Algorithmic Trading are generally comparable regardless of whether a participant routes orders via an FCM’s infrastructure or whether they electronically connect directly to a DCM via “Direct Electronic Access.” Regardless of the market access mechanism utilized, Algorithmic Trading operations are materially similar both in day-to-day operations as well as potential market impact.</p> <p>Limiting the definition of AT Person to just those persons that use DEA would not adequately mitigate the range of risks associated with Algorithmic Trading. Although FCM hosted pre-trade risk controls provide additional protection for non-DEA market participants, they can still only provide a degree of mitigation against inadvertent market disruption.</p> <p>Our main concern is that despite potentially having Algorithmic Trading operations, non-DEA market participants under the current proposal would not</p>

	<p>be required to have principles-based policies and procedures on the development, testing and supervision of Algorithmic Trading systems as we discuss in the section on § 1.81.</p> <p>We strongly believe that DEA is merely an element of technical infrastructure and should not be used as a prong of the AT Person definition. We are concerned that if it remains in the definition market participants may consider foregoing DEA in an attempt to not be captured by the definition of an AT Person despite having an Algorithmic Trading operation.</p>
	<p>“Direct Electronic Access” -- § 1.3(yyyy)</p>
<p>18</p>	<p>Please explain whether the Commission’s proposed definition of DEA will encompass all types of access commonly understood in Commission-regulated markets as “direct market access.” In light of the proposed regulations concerning pre-trade and other risk controls and standards for the development, testing and supervision of algorithmic trading systems, do you believe that the proposed definition of Direct Electronic Access is too limited (or, alternatively, too expansive)? If so, please explain why and how the definition should be revised.</p>
<p>Response</p>	<p>FIA has concerns about the definition of Direct Electronic Access as set forth in § 1.3(yyyy). Among other things, the phrase “without the order first being routed through a separate person who is a member of a derivatives clearing organization...” is unclear.</p> <p>We note in particular that the proposed definition brings into scope all systems that connect electronically to the DCM matching engine outside of those provided by an FCM, notably:</p> <ul style="list-style-type: none"> a) DCM-provided Application Programming Interfaces (APIs); b) DCM-provided Graphical User Interfaces (GUIs), such as CME Direct and WebICE; and c) Third-party vendor provided or maintained AORS that, in certain cases, also provide access as a service, such as Bloomberg Tradebook, Trading Technologies, CQG and many others that are certified by the DCM for direct connection to their API, see (a). <p>We question if it was the intent of the Commission to include (b) and (c) in the definition of Direct Electronic Access. If that was indeed the intention, the scope of AT Persons will likely be orders of a magnitude larger than the CFTC was anticipating. We do not believe (b) and (c) should be included in the definition for the purposes of Regulation AT, although we do note that if a DCM or third-party vendor provides Algorithmic Trading tools to market participants they should be held to the same requirements for principles-based policies and procedures regarding development, testing and deployment of such tools as other participants are regarding their Algorithmic Trading software.</p>

	<p>As we have discussed previously, with the introduction of § 1.73 there can be no electronic routing of orders to DCMs without the order first passing through limits set by a separate person who is a member of the relevant DCO. This provision allows for an FCM (or their delegate) to have administrative control of pre-trade risk controls provided by the DCM to meet the requirements of § 1.73. AORS that provide market access independent of an FCM’s infrastructure but remain under the administrative control of the FCM, as discussed in (c) above, should not be considered DEA, but rather an extension of the FCM’s infrastructure and subject to principles-based pre-trade and other risk controls appropriate for the activity.</p> <p>Moreover, as stated in the introduction to this section, FIA believes that using Direct Electronic Access as a prong of the definition of AT Person is misguided and inappropriately limits the scope of participants covered by certain provisions of Regulation AT. Accordingly, to the extent that the definition of Direct Electronic Access has been proposed principally to identify persons who should be required to be registered as a Floor Trader, the definition is inaccurate and unnecessary, especially as many other types of market participants that may or may not be registered with the Commission are now utilizing DEA.</p> <p>To the extent the CFTC believes it is necessary to retain a definition, we believe that a possible definition of Direct Electronic Access (§ 1.3(yyyy)) might be as follows:</p> <p style="padding-left: 40px;">This term means an arrangement where a person electronically transmits an order to a Designated Contract Market via the DCM Application Programming Interface without the order first being routed through any order routing system²⁴ that is under the administrative control of a separate person who is a futures commission merchant facilitating electronic access for its customers.</p>
19	<p>Should the Commission define “routed” in its definition of DEA? If so, how? Are there specific examples of trading or routing arrangements where it would be unclear whether trading was performed through DEA?</p>
Response	<p>In previous work, FIA has noted that there are many ways in which market participants can access a DCM.</p> <p>As per our responses to Questions 1 and 4, we have highlighted that many participants may use an AORS to access a DCM, which in some cases may be provided by an FCM. We note that FCMs may also license an AORS from a third-party vendor, where they retain administrative control of the AORS in</p>

²⁴ As we have stated before, FIA considers third-party AORS that provide market access as a service, such as, in certain cases, those provided by Trading Technologies, CQG, etc., to generally be considered an extension of the infrastructure of the FCM facilitating electronic access to the DCM, and not Direct Electronic Access even though they connect directly to the DCM Application Programming Interface.

	<p>which case it should be considered an extension of the FCM’s infrastructure.</p> <p>In our response to Question 18, we have suggested that the definition of DEA in the context of Regulation AT be changed to clearly exclude DCM-provided user interfaces and the use of an AORS under the administrative control of an FCM. We also note that a participant engaged in Algorithmic Trading also using an AORS should be considered engaging in Algorithmic Trading, and subject to the same obligations for the development, testing, deployment and monitoring of Algorithmic Trading.</p> <p>We suggest that the Commission also provide a definition of an AORS for clarity, for example:</p> <p style="text-align: center;">Automated Order Routing System. This term refers to a system used to electronically route orders to a DCM without further discretion that may fall within scope of Algorithmic Trading.</p>
20	Should the Commission use the term “direct market access” instead of DEA, and if so why?
Response	No. FIA believes the term DEA to be more appropriate than “direct market access” given today’s market structure, though we note that, as more DCMs convert to completely electronic platforms, the word “Electronic” may become implied as it will ultimately be the only way to access a market. As such, “Direct Access” may become a more appropriate term to use in the future.
21	Should the Commission define sub-categories of DEA, such as sponsored market access?
Response	FIA believes that if the Commission adjusts their proposed definition of Direct Electronic Access as described above there will be no need to define further sub-categories of DEA because it would be clearly understood within the context of Regulation AT.
22	The Commission’s proposed definition of DEA in § 1.3(yyyy) differs from definitions of direct electronic access in § 38.607 and direct access for FBOTs in § 48.2(c). The Commission believes that the more technical definition in proposed § 1.3(yyyy) is appropriate for Regulation AT. The Commission solicits comment regarding proposed § 1.3(yyyy), whether all definitions of “direct” access should be harmonized across the Commission’s rules, and if so how. Do you believe that two definitions would create confusion with respect to Commission requirements as to direct electronic access? With respect to §§ 1.80, 1.82 and 38.255(b) and (c) provisions imposing risk control requirements on AT Persons, FCM and DCMs, should the Commission use the existing definition of direct electronic access provided in § 38.607?
Response	Although it would be ideal to have a consistent definition of Direct Electronic Access across all relevant rules, FIA believes it is more important to define DEA in a future-proof, unambiguous manner for the purposes of this rule - particularly as it is a trigger in the definition of who is included as an AT Person as the rule currently stands.

	<p>That said, we believe the definition of Direct Access as contemplated in § 38.607 is, in principal, functionally similar to our proposed definition in Question 18. Although our proposed definition makes the differentiating criteria associated with DEA clear where as those criteria are merely implied by § 38.607.</p>
23	<p>Should firms operating Algorithmic Trading systems in CFTC-regulated markets, but not otherwise registered with the Commission, be required to register with the CFTC? If not, what alternatives are available to fully effectuate the purpose and design of Regulation AT?</p>
Response	<p>In our CR Response, FIA stated that registration for such activities does not add additional benefit to the market. A registration requirement is typically designed to provide a regulator, such as the CFTC, with certain identification information regarding market participants or as a means to require registrants to meet certain standards or comply with requirements to which they are not already subject. For the former, we believe the identification information the Commission is looking to obtain via registration is already available in some capacity at DCMs and, where it is not available, the CFTC can work with DCMs to address their needs within the DCM’s current identification framework. For the latter, we believe the CFTC has ample legal authority to impose such standards on non-registrants that trade on U.S. futures markets in order to prevent disruptive practices as expressly described in Section 4c(a)(5) of the CEA, as well as “any other trading practice that is disruptive of fair and equitable trading.” Using this authority, the CFTC has a statutory basis to enact rules to require all Algorithmic Traders (whether registered or not) to comply with requirements to avoid such prohibited conduct.</p> <p>To this point we suggest that the expanded definition of Floor Trader and related registration requirements be removed from Regulation AT and proposed separately.</p> <p>We note that the Commission states that registration of entities with DEA as Floor Traders would enhance the pre-trade controls and risk management tools discussed elsewhere in the NPR by making such entities subject to the various regulations governing AT Persons.</p> <p>To this point, FIA has explained that the scope of Algorithmic Trading is broad and encompasses many market participants who may or may not be already registered with the CFTC. We further discuss the concerns around DEA in our response to Question 24. We see the increasing use of Algorithmic Trading as a continued evolution of the global futures marketplace, and have advocated that all parties engaged in Algorithmic Trading should have responsibility for ensuring that the appropriate risk controls and quality controls are in place around their activity. As such, formal registration with the Commission and/or an RFA if identified as an AT Person does not immediately address those responsibilities, except by introducing reporting overhead via § 1.83 to attest compliance with §§ 1.80 and 1.81.</p>

24	Should all firms deploying Algorithmic Trading systems be required to register with the Commission? Are there additional characteristics of AT Persons that should be taken into consideration for registration purposes? For example, should the Commission limit registration to trading firms meeting certain trading volume, order or message levels? In other words, should there be a minimum volume, order or message test in order to meet the definition of “floor trader,” or otherwise to meet the definition of AT Person? If so, what should be measured and what specific thresholds should be used?
Response	<p>FIA notes that the definition of Floor Trader uses the phrase “purchases or sells solely for such person’s own account.” This exemplifies certain types of participants that engage in Algorithmic Trading, most notably principal trading firms. However, as we have noted, Algorithmic Trading is continually expanding, and may include other firms that trade on behalf of their own account, or otherwise, including corporate customers, other commercial hedgers, CPOs, and many other types of organizations.</p> <p>If the aim of Regulation AT is to ensure that controls are in place across all Algorithmic Trading activity to minimize the possibility of market disruption, then we suggest that compliance should be focused on the principles of helping to ensure risk controls are followed for all electronic trading, rather than focusing on the registration of participants to enforce compliance.</p> <p>FIA has also advocated against introducing arbitrary metrics to categorize types of activity. Metrics such as volume or message thresholds will lock any rulemaking at a point in time defined by the technology available at the time the rule is proposed. It also creates a situation where a participant may concentrate on staying below proposed thresholds so as to avoid categorization/registration, rather than focusing on the core principles of Regulation AT regarding improving risk controls and quality controls around their software development life cycle.</p>
25	In the alternative, should the Commission broaden the registration requirements in proposed § 1.3(x)(3)(ii) so that all persons trading on a contract market through DEA are required to register, instead of only those who are engaged in Algorithmic Trading?
Response	FIA notes that the use of DEA has expanded in recent years, as different types of market participants look to simplify their DCM connectivity infrastructure and leverage DCM-provided co-location. This has resulted in many firms that may not be engaged in Algorithmic Trading connecting directly to a DCM. If the Commission were to require registration for all market participants using DEA the scope would dramatically increase or alternatively, it might discourage participants from connecting directly to a DCM despite the benefits afforded by DCM-provided colocation and DEA. ²⁵

²⁵ DCM-provided co-location and DEA are typically associated with low-latency DCM connectivity, but that perspective is relatively myopic. DCM hosted co-location services provide cost effective means to host the

	<p>We understand that the Commission is concerned that pre-trade risk controls at the DCM level may not be as robust as those provided by FCMs through their own infrastructure. FIA notes that DCM-provided controls have improved dramatically in the last several years. In particular, and since the implementation of CFTC § 1.73 in 2012, risk controls have been required for all DEA across DCMs. As we discuss in the sections on §§ 38.255 and 40.20, principles-based risk controls to help safeguard market integrity, should continue to evolve to a point where there should not be any concern regarding DEA versus non-DEA.</p>
26	<p>Please supply any information or data that would help the Commission in deciding whether firms may or may not meet the definition of “floor trader” in § 1a(23) of the Act.</p>
Response	<p>We note that there have been several definitions of “floor trader” used across regulatory authorities in the US. The proposed extension to the definition in § 1.3(x)(3) seems a reasonable, albeit confusing, way of defining a certain type of market participant, notably a firm trading on behalf of its own account, accessing a DCM using DEA for Algorithmic Trading, and not otherwise registered with the Commission.</p> <p>We note that the Commission estimates that there are approximately 100 proprietary trading firms who meet the proposed criteria of Floor Trader, and that the proposed registration requirement is believed by the Commission to be critical to ensuring all such firms are subject to the requirements of Regulation AT. However, as we have stated throughout the Letter, FIA firmly believes that the potential risks of Algorithmic Trading are not limited to current registrants plus the 100 “new” Floor Trader firms that the Commission believes require registration, and that these risks are ultimately only minimized by improved risk controls across all market participants trading algorithmically.</p> <p>On a related topic, the CFTC should clarify that if a market participant is a Floor Trader in one capacity they are not required to follow the rules associated with Floor Traders of a different capacity unless that firm happens to satisfy the prongs of both types of Floor Traders (<i>i.e.</i> Swaps Floor Trader and Regulation AT Floor Trader).</p>
27	<p>Do you believe that the registration of such firms as “floor traders” would help effectuate the purposes of the CEA to deter and detect price manipulation or any other disruptions to market integrity? If you believe that registration of such firms will not help effectuate the purposes of the CEA, or that the same purposes can be achieved by other means, please explain.</p>
Response	<p>As we have discussed in our responses to Questions 23-26, FIA does not believe that registration will effectuate the purposes of the CEA to deter and</p>

technology associated with electronic trading. With co-location comes benefits such as a secure climate controlled environment, 24-hour monitoring, and subsidized infrastructure services. Similarly, DEA dramatically simplifies the technical infrastructure associated with market connectivity when compared to first routing orders through an FCM.

detect price manipulation or any other disruptions to market integrity. FIA believes that the principles in Regulation AT regarding risk controls and software development, testing, deploying and oversight, as modified as we propose below in this Letter, will assist the Commission in their goal, in conjunction with the following:

1. Robust rules around disruptive trading in general,
2. Adequate supervision and surveillance of DCMs that evolves as trading practices evolve, and
3. Appropriate action in the event disruptive trading is observed.

This is fully in line with current practices adopted by the Commission and the DCMs it oversees.

II. AT Persons—Risk Controls
§ 1.80 (Questions 33-40)

<p>INTRO</p>	<p>FIA believes that all electronic trading, not just that engaged in by the narrow subset of market participants in the proposed definition of AT Person, should be subject to pre-trade and other risk controls. Instead of the prescriptive controls proposed by the CFTC on AT Persons, FIA believes that all electronic trading should be subject to pre-trade and other risk controls that are reasonably designed to mitigate market disruption caused by a) excessive messages and b) errant orders. In determining whether such risk controls are reasonably designed, market participants should consider the nature of the trading activity and the controls at the DCM. Such controls may be self-developed or those provided or implemented by third parties, including FCMs or DCMs.</p> <p>If the Commission insists on applying pre-trade and other risk controls only to AT Persons as defined in the NPR, we note that some of the Commission’s proposed controls for AT Persons are overly prescriptive and, as such, do not reflect current best practices.²⁶ Below are some of the problems with the controls as proposed in § 1.80.</p> <p><u>Maximum Execution Frequency</u></p> <p>Specifically, the maximum execution frequency per unit of time is not a control that has been recommended by FIA and is not one that is generally set pre-trade. Unintended executions can be better managed by the use of other controls such as order size limits and order price parameters. Some market participants may wish to implement repeated automated execution controls, but these controls are difficult to configure and should not be prescribed as part of a regulation.</p> <p><u>Order Cancellation System</u></p> <p>In addition, FIA does not recommend that the Commission mandate automated order cancellation systems or systems that enable “immediate” cancellation of orders. As FIA has stated previously, unintended or disruptive orders can be better prevented by the application of other pre-trade controls rather than so called kill switches. Order cancellation systems must be applied carefully and thoughtfully and only as a last resort in order to prevent the risk created by the blocking of legitimate orders.</p>
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²⁶ The pre-trade and other risk controls set out in § 1.80 are among the controls that FIA identified in our CR Response and in our *Guide*. We believe that these controls are currently used widely and effectively by all persons that might be defined as AT Persons under Regulation AT, and by other uses of automated trading, as well as FCMs and DCMs, as appropriate.

	<p><u>Inappropriate Duplication</u></p> <p>Importantly, FIA does not believe, as the Commission has proposed, that these controls should be duplicated in precisely the same manner across the trade execution chain: (i) market participant; (ii) FCM; and (iii) DCM. In addition, we do not support prescribing the specific location and configuration of such controls. These controls should permit flexibility such that the controls will be appropriate for their location, with varying degrees of sophistication and granularity depending on who is setting the controls. For example, FIA has repeatedly stressed that controls should be more granular at the market participant level and less granular at the DCM level, since a DCM does not have a total view regarding the creditworthiness, risk tolerance and trading style of individual market participants or FCMs. For example, order price parameters may be set at varying levels across products and traders at the market participant level but would be set at a consistent and explicit level by product by the DCM as part of its price collar.</p>
33	<p>Are any pre-trade and other risk controls required by § 1.80 ineffective, not already widely used by AT Persons, or likely to become obsolete?</p>
Response	<p>The pre-trade and other risk controls set out in § 1.80 are among the controls that FIA identified in our CR Response to the Commission’s Concept Release and in the <i>Guide</i>. We believe that most of these types of controls are widely, and effectively, used by AT Persons as currently defined, as well as FCMs and DCMs, as appropriate.</p> <p>The maximum execution frequency per unit of time is not a control that has been recommended by the FIA and is not one that is generally set pre-trade. Unintended executions can be better managed by the use of other controls such as order size limits and order price parameters. Some market participants may wish to implement repeated automated execution controls, but these controls are difficult to configure and should not be prescribed as part of a regulation.</p> <p>In addition, FIA does not recommend that the Commission prescribe automated order cancellation systems or systems that enable “immediate” cancellation of orders. As FIA has stated previously, unintended or disruptive orders can be better prevented by the application of other pre-trade controls. Order cancellation systems must be applied carefully and thoughtfully and only as a last resort in order to prevent the risk created by blocking legitimate orders.</p>
34	<p>Are there additional pre-trade or other risk controls that should be specifically enumerated in proposed § 1.80?</p>
Response	<p>The proposed controls set out in § 1.80 would need to be adjusted in line with FIA’s comments in order to provide an adequate baseline to help prevent Algorithmic Trading Events. Such adjustments include the location and granularity of such controls and less prescriptive requirements for maximum execution frequency controls and automated order cancellation systems. The Commission, therefore, should not prescribe additional pre-trade or other risk controls. Although the <i>Guide</i> recommends the implementation of other controls</p>

	at various stages of the trade execution chain, FIA has repeatedly stressed that extreme care should be taken in prescribing specific controls at any stage of a trade, including at the market participant level. Rather, the <i>Guide</i> provides a flexible framework for risk controls to be used by market participants, FCMs and DCMs, as appropriate.
35	Do you believe that the pre-trade and other risk controls required in § 1.80 sufficiently address the possibility of technological advances in trading, and the development of new, more effective controls that should be implemented by AT Persons?
Response	With the exception of maximum execution frequency controls and automated or “immediate” order cancellation systems, FIA believes that the types of controls proposed can be included in core principles but should not be mandated as this could prevent technological advances that could improve future controls.
36	The Commission welcomes comment on whether the regulation’s requirements relating to the design of controls and the levels at which the controls should be set are appropriate and sufficiently granular.
Response	As FIA has previously stated, the levels at which the controls should be set at a market participant level will vary widely depending on the nature of trading, the experience of the trader, and the types of products traded. FIA does not support prescriptive rules mandating the level at which controls are set.
37	The Commission notes that § 1.80(d) requires that prior to initial use of Algorithmic Trading, an AT Person must notify its clearing member FCM and the DCM that it will engage in Algorithmic Trading. The Commission welcomes comment on whether the content of that notification requirement is sufficient, or whether clearing member FCMs and DCMs should also be notified of additional information. For example, should AT Persons be required to notify their clearing member FCMs of particular changes to their Algorithmic Trading systems that would affect the risk controls applied by the clearing member FCM?
Response	<p>FIA believes that pre-notification of a market participant’s initial use of Algorithmic Trading is unnecessary and overly burdensome. When an FCM accepts a client, clients inform their FCMs whether they will be using an Algorithmic Trading system or manually trading. Moreover, most exchanges require operator IDs for algorithmic traders. Therefore, processes and systems are in place to manage all types of traders; singling out one group for a different type of risk monitoring would create imbalances.</p> <p>The breadth of the use of Algorithmic Trading, as that term is defined by the proposed rule, would require almost every client of an FCM and DCM to notify them of their use of Algorithmic Trading technology. Furthermore, identifying each change to a system would be extremely unproductive and burdensome, as it would necessitate hundreds of thousands of such notices a year for a single participant that uses software to trade.</p>
38	Is § 1.80(f)’s requirement that each AT Person periodically review its compliance with § 1.80 appropriate? Should there be more prescriptive and

	granular requirements to ensure that each AT Person periodically reviews its pre-trade and other risk controls and takes appropriate steps to update or recalibrate them in order to prevent an Algorithmic Trading Event? Alternatively, is § 1.80(f) necessary? Does the Commission need to explicitly require AT Persons to conduct a periodic review of their compliance with § 1.80?
Response	FIA supports a general requirement that market participants review compliance with, and effectiveness of, its risk controls. We do not believe the requirement should be more prescriptive or explicit.
39	AT Persons that are registered FCMs are required by existing Commission regulation 1.11 to have formal “Risk Management Programs,” including, pursuant to § 1.11(e)(3)(ii), “automated financial risk management controls reasonably designed to prevent the placing of erroneous orders” and “policies and procedures governing the use, supervision, maintenance, testing, and inspection of automated trading programs.” As described in § 1.11, an FCM’s Risk Management Program must include a risk management unit independent of the business unit; quarterly risk exposure reports to senior management and the governing body of the FCM, with copies to the Commission; and other substantive requirements. The Commission requests public comment regarding whether one or more of the proposed requirements applicable to FCMs in §§ 1.80, 1.81, 1.83(a), and 1.83(c) should be incorporated within an FCM’s Risk Management Program and be subject to the requirements of such program as described in § 1.11. In this regard, any final rules arising from this NPR could place all requirements applicable to FCMs in §§ 1.80, 1.81, 1.83(a), and 1.83(c) within the operational risk measures required in § 1.11(e)(3)(ii). Such incorporation could help improve the interaction between an FCM’s operational risk efforts and its pre-trade risk controls; development, monitoring, and compliance efforts; and reporting and recordkeeping requirements, pursuant to §§ 1.80, 1.81, 1.83(a), and 1.83(c). It could also help ensure that an FCM’s §§ 1.80, 1.81, 1.83(a), and 1.83(c) processes benefit from the same internal rigor and independence required by the Risk Management Program in § 1.11.
Response	FIA believes that the various rules regarding risk management that currently apply to FCMs, or that are proposed in this NPR, build a comprehensive framework for implementing the appropriate levels of risk management for different activities in which FCMs may engage. To that point, we do not believe that it is necessary to explicitly incorporate the requirements of §§ 1.80, 1.81 and 1.83 into § 1.11 if the FCM utilizes or provides Algorithmic Trading functionality for its customers.
40	The Commission proposes to adopt a multi-layered approach to regulations intended to mitigate the risks of automated trading, including pre-trade risk controls and other procedures applicable to AT Persons, clearing member FCMs and DCMs. Please comment on whether an alternative approach, for example one which does not impose requirements at each of these three levels, would more effectively mitigate the risks of automated trading and promote the

	other regulatory goals of Regulation AT.
Response	FIA has encouraged the implementation of the proposed controls at various stages of the trade execution chain including market participants, FCMs and DCMs. However, FIA has repeatedly stressed that controls should be more granular at the market participant level and less granular at the DCM level, because a DCM does not have a total view of the creditworthiness, risk tolerance and trading style of the individual market participants or FCMs. FIA believes that the proposed order size limits should be able to be set at the product and the market participant level at the DCM. Finally, FIA believes that the rule should not be overly prescriptive as to the level at which controls should be set but rather allow sufficient flexibility for market participants, FCMs and DCMs to set the controls as appropriate.

III. FCM—Risk Controls
§ 1.82 (Questions 49-56)

<p>INTRO</p>	<p>Pre-trade and other risk controls implemented at the level of the FCM facilitating electronic access to a DCM are an important means of mitigating risk to market integrity for all participants, regardless of whether or not they engage in Algorithmic Trading. As currently drafted, § 1.82 focuses on clearing FCMs providing pre-trade risk controls for an AT Person and, by inclusion of § 1.80,²⁷ is overly prescriptive as well as duplicative of other controls that are typically implemented at the market participant or DCM level.</p> <p><u>Pre-Trade and Other Risk Controls Should Apply to All Electronic Trading</u></p> <p>FIA strongly believes that all electronic trading should be subject to pre-trade and other risk controls that are reasonably designed to mitigate market disruption caused by a) excessive messages and b) errant orders. In determining whether such risk controls are reasonably designed, market participants should consider the nature of the trading activity and the controls implemented by other third parties, such as the FCM or DCM.</p> <p><u>Requirements Should Be on FCM Facilitating Access to DCM</u></p> <p>FIA believes that the Commission can better achieve its objective of protecting market integrity from disruption by extending the requirements to implement appropriate pre-trade and other risk controls that are reasonably designed to mitigate market disruption and tailored to the type of trading activity to an FCM providing electronic access to a DCM.</p> <p>It is important to note that market participants – including those that would fall under the proposed definition of an “AT Person” – can choose to route orders through an FCM that is not their clearer and give up the trades after execution on the DCM. FIA would expect non-clearing FCMs to provide the same standard of pre-trade risk management as an FCM that executes and clears for the market participant. Accordingly, we believe that <u>any</u> clearing member of a DCM that provides electronic access for its customers or its own trading on a DCM should implement pre-trade and other risk controls that are appropriate and reasonably designed to mitigate market disruption given the type of trading activity. Such FCM should be responsible for ensuring that appropriate risk</p>
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²⁷ It should be noted that certain elements of § 1.80 are more appropriate for parties engaged in Algorithmic Trading than those using more manual means of sending orders electronically to a DCM.

controls are applied to all electronic trading that it facilitates, even if the controls are implemented by a third party (such as an IB).²⁸

Pre-trade and other risk controls like those in proposed § 1.82 complement existing CFTC §§ 1.73 and 1.11,²⁹ and should provide a baseline for gate-keeping all electronic access to a DCM. Where a market participant chooses to use DEA instead of accessing a DCM via an FCM's order routing infrastructure, we suggest that § 1.82 be complemented by similar tools provided by the DCM to the gatekeeper FCM, as discussed in proposed § 38.255.

Risk Control Requirements Should be Principles-Based

We firmly believe that § 1.82 should be principles-based, and should not prescribe the types of controls that should be implemented. Implementation of particular risk controls is best left to the determination of the FCM providing electronic access, which should set controls that are appropriate and reasonably designed to mitigate market disruption given the type of trading activity in which their customers engage.

Inappropriate Duplication

As currently drafted, § 1.82 references the pre-trade and other risk controls set out in § 1.80. We note that these are among the controls that FIA identified in our CR Response and in our *Guide*. We believe that these controls are today widely, and effectively, used by most persons that might be defined as AT Persons under Regulation AT, as well as FCMs and DCMs, as appropriate. However, the Commission's proposal as written does not reflect best practices and may result in the implementation of duplicative and sometimes contradictory controls.

Importantly, FIA does not believe, as the Commission has proposed, that these controls should be duplicated in precisely the same manner across the trade execution chain: (i) market participant; (ii) FCM; and (iii) DCM. Pre-trade

²⁸ We note that it is possible for a clearing FCM of a DCM to delegate facilitation of electronic access to another entity (e.g., an omnibus account). In such a situation, we would expect the delegated entity to implement appropriate pre-trade and other risk controls, and the delegating FCM to help ensure that such controls are in place.

²⁹ CFTC § 1.11 requires FCMs to establish a risk management program designed to monitor and manage risks (the "Risk Management Program"). The Risk Management Program requires written policies and procedures that are approved by the governing body of the FCM, and circulated to the CFTC and the FCM's self-regulatory organization. The rule also requires an FCM to establish a risk management unit, independent from the relevant business unit, to administer the Risk Management Program. Among other things, the Risk Management Program must include, most relevantly, "automated financial risk management controls reasonably designed to prevent the placing of erroneous orders, including those that exceed pre-set capital, credit, or volume thresholds. The Risk Management Program shall ensure that the use of automated trading programs is subject to policies and procedures governing the use, supervision, maintenance, testing, and inspection of such programs." CFTC § 1.11(e)(3)(ii).

control requirements should permit flexibility such that the controls will be appropriate for their location and type of electronic access being provided, with varying degrees of sophistication and granularity depending on who is setting the controls. For example, FIA has repeatedly stressed that controls should be more granular at the AT Person level and less granular at the DCM level, because a DCM does not have a total view regarding the creditworthiness, risk tolerance and trading style of individual AT Persons or FCMs.

Maximum Execution and Order Frequency

The maximum execution frequency per unit of time is not a control that has been recommended by the FIA and is not one that is generally set pre-trade. Unintended executions can be better managed by the use of other controls such as order size limits and order price parameters; such controls, however, are typically implemented by FCMs by setting these levels for all market participants coming in through its infrastructure based on assessment of market reasonability (and does not typically tune these controls at the AT Person, account or session level). Although some FCMs may choose to implement such controls, they should not be prescribed as part of a regulation.

Similarly, the maximum order frequency per unit of time is a control that is typically set across all market participants and is not tuned to specific clients or types of clients as it is designed to protect the FCM's (or DCM's) infrastructure from disruptions.

Order Cancellation System and Alerts on Limit Breaches

Finally, order cancellation systems at the FCM must be operated thoughtfully and carefully to avoid unintentionally blocking legitimate orders and should be left to the reasonable discretion of the FCM to be exercised through prudent risk management. As FIA has noted previously, kill switches should be treated as a back stop, not as a primary risk control, and invoked only when absolutely necessary in the reasonable determination of the FCM. Better protection may be provided by appropriately tailored implementation of controls such as pre-trade order size limits, order throttles and order price parameters, among others. Alerts should be generated appropriate to the type of control, as limits are approached and if and when they are breached, as applicable. For instance, certain types of controls will materially reject any order that may cause a breach of a specific limit prior to the breach occurring; however, there may be specific situations that may require alerting thresholds to warn that continued activity may lead to a breach of the limit.

FCM as an AT Person

Where an FCM uses Algorithmic Trading for its own business, or provides Algorithmic Trading to its customers, FIA believes that the FCM should be

	<p>subject to the same principles-based requirements as any other person engaged in Algorithmic Trading, and the risks of inadvertent disruption should be mitigated by pre-trade and other risk control requirements in exactly the same way that such controls would be applied to customers of the FCM. Please see FIA’s comments with respect to AT Person – Risk Controls for a more in-depth discussion of such requirements.</p>
49	<p>Are any pre-trade or other risk controls required by § 1.82 ineffective, not already widely used by clearing member FCMs, or likely to become obsolete?</p>
Response	<p>As discussed throughout this Letter, pre-trade or other risk controls should not be prescriptive and should avoid inappropriate duplication. Instead, FIA believes that all electronic trading should be subject to pre-trade and other risk controls that are reasonably designed to mitigate market disruption caused by a) excessive messages and b) errant orders.</p> <p><u>Risk Control Requirements Should Not Be Prescriptive</u></p> <p>The types of risk controls detailed in proposed § 1.82 (and by inclusion § 1.80) are broadly in-line with the types of risk controls that FIA has proposed in its CR Response and the Guide. However, as noted in the discussion below, FIA believes that rules governing the application of particular controls such as maximum order frequency per unit of time, maximum execution frequency per unit of time, alerting of limit breaches, and immediate order cancellation functionality should not be prescriptive as to where they are located and how they are implemented.</p> <p>For example, quantitative controls such as maximum order size limits and order price parameters (referred to as Price Tolerance Checks in the <i>Guide</i>) are readily adjustable as market conditions change over time – a tighter price tolerance check may be suitable during times of low volatility, but may need to be loosened during times of higher volatility.³⁰</p> <p>Customer controls such as maximum order message frequency per unit time (referred to as Message Throttles in the <i>Guide</i>) are less likely to be implemented at the FCM level.³¹ Message throttles are going to change as the trading environment evolves and frequencies that may be appropriate at a particular point in time may become obsolete as trading technology – especially at the DCM – evolves. To this point, FIA has advocated that such throttles should primarily reside at the DCM based on the DCM trading platform capacity, be set</p>

³⁰ Although maximum order size is commonly implemented across various FCM platforms, many FCMs may not currently implement price tolerance checks due to the complexity of integrating real-time market data into order routing systems.

³¹ Message throttles implemented by many FCMs are set at a default value across customers using a particular type of market access and are not often calibrated on a per customer basis.

	<p>as part of the DCM’s messaging policy, and clearly published to market participants.</p> <p><u>Inappropriate Duplication</u></p> <p>As the Commission has noted, FIA has advocated that various risk controls should exist at multiple locations (market participant, FCM providing electronic access and DCM). However, some controls may be more appropriate at the market participant or the DCM level. Moreover, it is not always appropriate to duplicate certain types of controls across multiple points. Where they are duplicated they should be implemented for slightly different purposes. Duplication of exactly the same control at various points (AT Person, FCM, and DCM) does not represent an effective risk management framework and could introduce inadvertent disruption to participation in an otherwise orderly market.</p>
<p>50</p>	<p>Are there any aspects of proposed § 1.82 that pose an undue burden for clearing member FCMs and are unnecessary for purposes of reducing the risks associated with Algorithmic Trading? If so, please explain (1) the burden; (2) why it is not necessary to reduce the risks associated with Algorithmic Trading, particularly in the case of DEA. What alternatives are available consistent with the purposes of Regulation AT?</p>
<p>Response</p>	<p>As discussed, it is inappropriate to impose prescriptive pre-trade and other risk controls. Indeed, requiring all controls outlined in § 1.82 (and § 1.80) at the FCM level where such controls may not be optimal may create a significant burden for both existing and potential FCMs.</p> <p>FIA has generally advocated that message throttles and price tolerance checks should be optional at the FCM level. As stated in FIA’s response to Question 49, message order throttles and price tolerance checks have not been implemented by many FCMs, and if required, will necessitate technology development across those FCMs for the multiple automated order routing systems that they use to provide non-direct electronic access to customers.</p> <p>In addition, alerting on limit breaches and immediate order cancellation systems should be tailored to the specific requirements of the FCM, and care should be taken in prescribing specific controls in these areas.</p> <p>Moreover, not all controls are necessary to be implemented at the FCM because they are already more appropriately employed by others in the trade lifecycle. For example, FIA believes that the majority of market participants that would fall within the proposed definition of AT Person have suitable controls in place that are tuned to their trading strategies (as currently proposed in § 1.80). Moreover, DCMs already have robust message policies in place – including DCM defined message throttles – that are based on the trading parameters of their matching engine. As we discuss in other sections of the Letter, DCMs also have price collars in place to help prevent market dislocation and to reject orders</p>

	that are outside of current price bands.
51	Please describe the technological development that would be required by clearing member FCMs to comply with the requirement to implement and calibrate the pre-trade and other risk controls required by § 1.82(c) for non-DEA orders. To what extent have clearing member FCMs already developed the technology required by this provision, for example in connection with existing requirements under § 1.11, and §§ 1.73 and 38.607 for clearing FCMs to manage financial risks?
Response	<p>With the introduction of § 1.73 in 2012, clearing FCMs of a DCO implemented policies and controls, particularly with regards to establishing risk-limits based on position size, order size, margin requirement or similar factors and the requirement to screen orders for compliance with limits in an automated fashion in the case of electronic access/automated execution. These controls were implemented on a pre-trade or post-trade basis appropriate to the type of control, with many FCMs electing to implement maximum order size and/or maximum aggregate exposure limits (also known as intraday position limits in the <i>Guide</i>) on a pre-trade basis for electronic access/automated execution.³² Section 1.73 permitted FCMs to rely on appropriate risk controls provided by DCMs so that FCMs providing direct electronic access could comply with the rule. As such, FCMs have already implemented technology that is compliant with the more generic requirements of § 1.73.</p> <p>Requiring all FCMs facilitating electronic access to a DCM to similarly implement appropriate pre-trade risk controls is an important step towards ensuring that an FCM clearing on behalf of a customer does not incur undue risk from inadvertent trading due to lack of controls at the executing FCM.</p> <p>As it currently stands, proposed § 1.82 goes several steps further than § 1.73 by requiring the clearing FCM of an AT Person to make use of particular pre-trade risk controls for (at a minimum) message and execution throttles, order price parameters and maximum order size to be set at granular levels (at the discretion of the FCM) by product, account, or user. We do not believe that this is appropriate, as discussed elsewhere within our response to the NPR; for example, as stated in FIA’s response to Questions 49 and 50, message throttles and price tolerance checks have not been implemented on a widespread basis by FCMs as part of compliance with § 1.73, or otherwise, and such controls should be designed flexibly to avoid conflicts with controls at the AT Person or DCM level.</p> <p>Compliance with proposed § 1.82, including the suggested controls and</p>

³² FIA notes that § 1.73 imposes varying requirements on clearing FCMs dependent upon the type of trade flows involved, such as non-automated executions, give ups, and bunched orders.

	<p>granularity would require additional technology development across many FCMs, further burdened by the number of automated order routing systems (AORS) used for non-direct electronic access. These AORSs will require development, testing and implementation across both those developed internally and those provided by third-party independent software vendors (ISVs).</p> <p>To reduce the technology burden, and allow for the expansion of § 1.82 to all FCMs providing electronic access for customers to DCMs, we suggest that § 1.82 be a principles-based rule such that FCMs can determine the most appropriate controls for the types of customers and market access they provide, set a minimum standard to be reasonably designed to mitigate market disruption caused by a) excessive messages and b) errant orders, at the level they determine appropriate in the exercise of prudent risk management.</p>
52	Are there additional pre-trade or other risk controls that should be specifically required pursuant to proposed § 1.82?
Response	As discussed throughout this Letter, requirements for pre-trade and other risk controls should be principles-based and not prescriptive. Accordingly, no additional controls should be specifically required in § 1.82. Instead, FCMs should implement pre-trade and other risk controls that are reasonably designed to mitigate market disruption caused by a) excessive messages and b) errant orders.
53	Do you believe that the pre-trade and other risk controls required in § 1.82 sufficiently address the possibility of technological advances in trading and development of new, more effective controls that should be implemented by FCMs?
Response	<p>FIA remains an advocate of principles-based requirements regarding pre-trade and other risk controls so as to account for both technological and market evolution. FIA has advocated that controls should not be prescribed within rulemakings because such regulations are locked into a particular point in time and may make such regulation obsolete quickly.</p> <p>Regular reviews of industry best practices provide baselines for what controls are currently implemented within the industry, and can be regularly updated as electronic and Algorithmic Trading evolves over time.</p> <p>As discussed throughout this Letter, FIA believes that the NPR is overly prescriptive in a number of ways including how the maximum order and execution per unit of time controls, the order price parameters, the limit breach alerting, and the immediate order cancellation functionality should be implemented. We recommend that the Commission adopt regulations that are more flexible with regard to the location of the controls and how they are implemented.</p>

54	The Commission welcomes comment on whether the requirements of § 1.82 relating to the design of controls and the levels at which the controls should be set are appropriate and sufficiently granular.
Response	<p>FIA believes that the level of granularity at which controls should be set should be left to the discretion of the FCM and not prescribed by the rule.</p> <p>As discussed in FIA’s response to Questions 49, 50 and 51, many FCMs that currently implement certain pre-trade and other risk controls such as message throttles and price tolerance checks set such controls based on determining factors such as market specific levels and not often at the AT Person (or other participant) or more granular level. It is the view of FIA that the level at which such controls are set should be left to the discretion of the FCM to implement as long as such levels are reasonably designed to mitigate market disruption.</p>
55	Proposed § 1.82 does not require FCMs to have connectivity monitoring such as “system heartbeats” or automatic cancel-on-disconnect functions. Do you believe that § 1.82 should require FCMs to have such functionality?
Response	<p>Section 1.82 should not require FCMs to have connectivity monitoring such as “system heartbeats” or automatic cancel-on-disconnect functions.</p> <p>FIA has advocated the use of risk controls such as cancel-on-disconnect that take effect when heartbeats are lost between different systems. System heartbeats are standard within the Financial Information eXchange (FIX) Protocol used by many FCMs and DCMs to connect to their customers, as well as being standard within many proprietary protocols used by other DCMs. Such controls can be employed at various levels, such as between a customer and the DCM in the case of DEA, or between the FCM and the DCM when the FCM provides non-direct electronic access to its customers via an automated order routing system. However, FIA has always advocated that cancel on disconnect be <u>optional</u> as there are cases where such functionality is suboptimal.</p> <p>As detailed in the <i>Guide</i>, we recommend that an FCM utilize cancel-on-disconnect between its systems and a DCM if it is appropriate for the customer base of the FCM. For example, traditional hedgers, producers and investment managers may use resting orders to manage their risk, and cancellation of such orders without appropriate notification may introduce risk to these customers. On the other hand, one advantage of implementing cancel-on-disconnect for an FCM’s connection to a DCM is to manage its risk evenly across all customers in the event of loss of connectivity.³³</p> <p>In the case of non-direct electronic access, it is currently not standard to use</p>

³³ If this is the case, it is recommended that the FCM advise its customers that such functionality is used so that they are aware that their orders will be cancelled in the event of a system disconnect by the FCM. This would allow customers to manage their risk appropriately in the event that the FCM loses connection to the DCM.

	cancel-on-disconnect between an FCM and its customers. Indeed, such implementation would require significant technological investment at many FCMs.
56	Proposed § 1.82 requires clearing FCMs to implement controls with respect to AT Order Messages originating with an AT Person. The Commission is considering modifying proposed § 1.82 to require clearing FCMs to implement controls with respect to all orders, including orders that are manually submitted or are entered through algorithmic methods that nonetheless do not meet the definition of Algorithmic Trading. Such a requirement would correspond to the requirement under proposed § 40.20(d) that DCMs implement risk controls for orders that do not originate from Algorithmic Trading. If the Commission were to incorporate such amendments in any final rules arising from this NPRM, its intent would be to further reduce risk by ensuring that all orders, regardless of source, are screened for risk at both the clearing member FCM and the DCM level. Risk controls at the point of order origination would continue to be limited to AT Persons. The Commission requests comment on this proposed amendment to § 1.82, which the Commission may implement in the final rulemaking for Regulation AT. The Commission requests comment on the costs and benefits to clearing FCMs of this proposal, in addition to any other comments regarding the effectiveness of this proposal in terms of risk reduction.
Response	<p>FIA has advocated that risk controls should be employed equally across all participants trading electronically. Most pre-trade risk controls are applicable to all participants and are intended to mitigate the chance of a market disruption, regardless of the type of electronic trading activity. Incorrectly sized or priced orders can be placed manually as well as via Algorithmic Trading, and even simple trading systems have the ability to submit incorrect orders to the DCM regardless of whether the operator of the system falls under the definition of an AT Person.</p> <p>Moreover, we agree that the requirements for pre-trade and other risk controls should apply to <u>all</u> FCMs providing electronic access for customers to a DCM, regardless of whether they are executing and clearing for the customer or only providing access in an execution capacity. FCMs providing electronic access to a DCM should implement pre-trade risk controls that are reasonably designed to mitigate market risk and are appropriately tailored to the type of activity of the FCM's customers.</p>

IV. DCM—Risk Controls/Test Environment DCM
§§ 38.255, 40.20, 40.21 (Questions 64-68, 79-83 and 84)

<p>INTRO</p>	<p>FIA agrees that there should be pre-trade and other controls located at the DCM both to enable the FCM to perform its risk management role and for the DCM to help protect the market from disruption. However, FIA believes that it is neither appropriate nor practical to merely duplicate the controls for AT Persons or market participants as outlined in §§ 38.255 and 40.20. In particular, many of the proposed §§ 38.255 and 40.20 controls are flawed and cannot be effectively implemented by DCMs as written. Moreover, the proposed prescriptive requirements with respect to DCM test environments are cost prohibitive with no justifiable benefit.</p> <p><u>Proposed DCM Controls Are Flawed</u></p> <p>For the controls proposed in § 38.255 and § 40.20, FIA believes that DCMs do not have sufficient information to independently apply customized pre-trade risk controls at the market participant level. However, we believe that some DCM controls, while designed to help protect overall market integrity, also can help mitigate algorithmic events. For example, messaging policies can be applied to all market participants, with messages measured over a period of time rather than intraday; although these are not pre-trade controls, these policies have proven to incentivize messaging efficiency by participants, which also helps mitigate algorithmic events.</p> <p>Similarly, it is inappropriate to apply pre-trade execution throttles (message controls) at a granular level; the DCM can monitor messaging rates at network connection points and design systems that both protect the trading infrastructure and help mitigate algorithmic events. Regarding the pricing on specific orders, the DCM can set uniform and explicit price bands/price collars by product to help protect the market from excessive volatility as opposed to having each FCM or market participant set individual price parameters. It would be extremely expensive and complex to implement pre-trade order size limits that are more granular than the executing firm or the product level that is currently prevalent, and it might not be as effective as intended. DCM alerts on control breaches do not make sense – breaches should not happen if controls are in place. Rather, alerts should be generated as the result of an order rejection due to limits. In addition, alerting policies should be set such that FCMs and DCMs do not receive excessive or inappropriate alerting. Finally, rules requiring order cancellation tools should not be overly prescriptive and should not imply that such controls be applied in an automated fashion. Indeed, the implementation of automated order cancellation systems could result in the inappropriate blocking of legitimate orders. Order cancellation systems should be applied cautiously, allowing the DCM the opportunity to analyze order activity before such systems are applied.</p>
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Requirements for Risk Controls Offered to FCMs Should Be Less Prescriptive

FIA believes that the Commission should not be overly prescriptive in outlining the types of controls placed at the DCM and operated by the FCM. Rather the rule should recommend that FCMs be granted the ability to implement controls similar to those required of market participants going through FCM infrastructure. In lieu of the types of pre-trade and other risk controls set out in proposed §§ 1.80 and 1.82, FIA recommends that DCMs be required to offer controls to FCMs that could be applied across all orders and made available to market participants. In this regard, FIA recommends that § 1.82 authorize DCMs to implement: (i) maximum order size limits by product at a level that is sufficiently high so as not to contradict limits established by the market participant or the FCM; (ii) message policies that measure message traffic over a period of time before blocking or cutting off a market participant and that do not impose pre-trade message throttles on executions; and (iii) product- or spread-specific price collars that are set at the DCM's discretion rather than individually-tuned order price parameters.

Inappropriate Duplication

As FIA has repeatedly stressed, pre-trade and other risk controls should not, as the Commission has proposed, be duplicated in precisely the same manner across the trade execution chain: (i) market participants; (ii) FCM; and (iii) DCM. Pre-trade controls should permit flexibility such that the controls will be appropriate for their location, with varying degrees of sophistication and granularity depending on where the controls are set.

Test Environment

FIA recommends that DCM test environments be designed to reflect production environments as closely as possible. However, FIA does not believe that a test environment as prescribed in § 40.21 will be possible within the bounds of reasonable investment. Any costs would far outweigh the purported benefits. DCM test environments generally can only help ensure that an application conforms to the published market data and order entry specifications; they cannot ensure how an application will behave under actual market conditions.

Just as FIA recommends that requirements regarding the development and testing of Algorithmic Trading systems for market participants should be less prescriptive and more principles-based, FIA recommends that the requirements for DCMs to provide test environments should be similarly principles-based only.

For example, since FIA questions the benefit of back-testing for all Algorithmic Trading systems, it believes it is likewise improper to mandate that DCMs provide access to historical transactions. As stated previously in the Letter,

	<p>back-testing may not be appropriate for all circumstances.</p> <p>Although DCM test environments allow testers to interact with other market participants (or themselves) outside the production environment, they cannot truly emulate a real trading environment given the limitations of today’s technology. As a result DCM test environments can be used in only a limited fashion by market participants to test their Algorithmic Trading systems to verify compliance with the requirements of § § 1.80 (a)(c), 1.81(a)(1)(ii-iv) and 1.81(c)(1).</p> <p>As a result, FIA believes that although DCM’s should provide test environments, DCMs should only be required to provide test environments that simulate production environments to the maximum extent practical.</p> <p><u>Conclusion</u></p> <p>As we indicated in our Letter, FIA recommends that the Commission be less prescriptive in outlining where the pre-trade risk and other controls be located and how they be configured. Should the Commission decide to proceed with the controls as outlined in § § 38.255 and 40.20 and the test environment as outlined in § 40.21, FIA recommends that the Commission modify the controls to address the deficiencies noted above and in the responses below.</p>
<p>64</p>	<p>Are there any pre-trade and other risk controls required by § 38.255(b) and (c) that will be ineffective, not already widely provided by DCMs for use by FCMs, or likely to become obsolete?</p>
<p>Response</p>	<p>As noted earlier in response to Question 33, FIA does not believe, as the Commission has proposed, that pre-trade and other risk controls should be duplicated in precisely the same manner across the trade execution chain: (i) market participant; (ii) FCM; and (iii) DCM. In this regard, the Commission’s proposal does not reflect best practices and may result in the implementation of duplicative and sometimes contradictory controls. Pre-trade controls should permit flexibility such that the controls will be appropriate for their location, with varying degrees of sophistication and granularity depending on who is setting the controls.</p> <p>For example, § 38.255(b)(2) provides that the pre-trade risk controls established by the DCMs must enable the clearing member FCM to set the controls at the level of each market participant, product, account number or designation, and one or more identifiers of natural persons associated with an AT Order Message. In practice, however, DCM order size limits are set at the highest level of access and not by market participant or account number. The higher level, which is meant as a last back stop, is set high to prevent unintentionally blocking orders that are already controlled at the market participant or FCM level.</p> <p>DCM price collars are set at a uniform level across products, determined by the</p>

	<p>DCM’s supervision staff based on market conditions and product characteristics. These price collars (or reasonability ranges) are actively managed and routinely reviewed by the DCM, publicized by the DCM, and are not tunable by either the market participant or the FCM. This contrasts with the granular price tolerance controls that may be set by the market participant specific to its style of trading or set by the FCM specific to the FCM’s types of customers and the types of access the FCM provides.</p> <p>DCM message policies are generally well-defined and understood and are designed to protect the infrastructure of the DCM. If a market participant exceeds the known message limit, the market participant is either cut off or warned. The message policies are not designed as an automated message throttle that may be tuned by either the market participant or the FCM, however, since such an automated throttle may cut off legitimate, non-disruptive order flow. Automated message throttles should be implemented at the market participant or FCM level where sufficient understanding of trading or client behavior can be factored in.</p> <p>As discussed above with respect to market participant execution throttles, DCMs should not have a pre-trade throttle to limit executions. If the concern is unintended executions, these can better be prevented by order size limits, price collars, and monitoring of repeated automated orders.</p> <p>DCM mechanisms for canceling and blocking orders (<i>i.e.</i>, kill switches) are generally implemented as a last resort and are set at the firm level and not the account level. Further, such mechanisms are not generally implemented on an automated basis but rather after discussions with the market participant or FCM. DCMs also provide tools (<i>e.g.</i>, CME Firmsoft or ICE’s ACE) for canceling orders outside a trading platform, but such mechanisms are not automated and are under the control of the market participant or the FCM. Both mechanisms are designed to be complementary to the kill switches and order cancellation mechanisms utilized by market participants and FCMs and are not duplicative.</p>
65	<p>Are there additional pre-trade or other risk controls that DCMs should be specifically required to provide to FCMs pursuant to proposed § 38.255(b) and (c)?</p>
Response	<p>As noted in our response to Question 34, the proposed controls, with some adjustments regarding the location and granularity of such controls, provide an adequate baseline to help prevent Algorithmic Trading Events. The Commission, therefore, should not prescribe additional pre-trade or other risk controls. Although the <i>Guide</i> recommends the implementation of other controls at various stages of the trade execution chain, FIA has repeatedly stressed that extreme care should be taken in prescribing specific controls at any particular level. Rather, the <i>Guide</i> provides a flexible framework for risk controls to be used by market participants, FCMs and DCMs, as appropriate.</p>

66	Do you believe that the pre-trade and other risk controls required pursuant to § 38.255(b) sufficiently address the possibility of technological advances in trading? For example, do they appropriately address the potential for the future development of additional effective controls that should be provided by DCMs and implemented by FCMs?
Response	<p>FIA believes that certain of the Commission’s proposed pre-trade and other risk controls for DCMs are overly prescriptive and would result in costly investment in controls that would not be sufficiently flexible to adapt to further market evolution. In particular, the provisions relating to granular order size limits, tunable price collars, message throttles, and automated kill switches may result in the blocking of legitimate orders, unsophisticated duplication of controls at the market participant and FCM level, and potential disruption to the orderly operation of the market.</p> <p>A comparison of FIA’s 2010 and 2015 global surveys of DCM risk management practices³⁴ demonstrates that significant progress has been, and continues to be, made in developing and implementing the proposed as well as other recommended controls. For example, only 40% of surveyed exchanges had order cancellation systems in 2010 compared to 85% in 2015. Implementation of the prescriptive DCM-based controls set out in § 38.255(b) would divert resources from further enhancing controls as technology evolves.</p>
67	The Commission welcomes comment on whether § 38.255(b)’s requirements relating to the design of controls and the levels at which the controls should be set are appropriate and sufficiently granular.
Response	<p>FIA has encouraged the implementation of the proposed controls at various stages of the trade execution chain including market participants, FCMs and DCMs. However, FIA has been very specific in identifying where the controls should be placed. For example, FIA has repeatedly stressed that controls should be more granular at the market participant level and less granular at the DCM level, since a DCM does not have a total view of the creditworthiness, risk tolerance and trading style of the individual market participant or FCM. FIA believes that the proposed order size limits should be able to be set at the product and the market participant level at the DCM. In addition, FIA believes that it would be inappropriate to provide tunable order price controls and message throttles at the DCM level. Rather, DCMs should continue the current practice of providing published price collars and message policies that apply universally to all market participants. Finally, order cancellation mechanisms should not be applied in an automated fashion at the DCM level but should continue to be applied selectively based on DCM discretion and after discussion with the appropriate market participant and FCM.</p>

³⁴ The FIA conducted a survey of the risk management practices of 23 global futures exchanges in 2010 and published the [results](#) in the January 2011 issue of *Futures Industry*. FIA conducted an updated survey of the risk management practices of 33 exchanges in 2015 and will publish the results in 2016.

68	Proposed § 38.255(b) and (c) do not require DCMs to provide to FCMs connectivity monitoring systems such as “system heartbeats” or automatic cancel-on-disconnect functions. Should § 38.255 require such functionality?
Response	Although connectivity monitoring systems and automated cancel-on-disconnect (“COD”) functions are important for market participants, they are not particularly useful to the FCM. FIA agrees that DCMs should make COD functionality available to market participants and DCMs and that COD parameters should be established between the market participant and DCM before the start of trading. Although the DCM should determine the level at which COD functionality should be located, we believe it generally should be at the session level and not the market participant level.
79	The Commission proposes to require DCMs to set pre-trade risk controls at the level of the AT Person, and allows discretion to set controls at a more granular level. Should the Commission eliminate this discretion, and require that the controls be set at a specific, more granular, level? If so, please explain the more appropriate level at which pre-trade risk controls should be set by a DCM.
Response	<p>FIA believes it is inappropriate to consider the controls enumerated in § 40.20 to be pre-trade risk controls. Rather, because DCM-set controls mitigate the overall risk of market disruption or credit events, they should be considered market quality controls. Accordingly, the controls prescribed in proposed § 1.80 for AT Persons are not appropriate for DCMs. FIA recommends that DCMs be required to implement controls that are applied across all orders.</p> <p>Further, FIA recommends that DCMs should implement:</p> <ol style="list-style-type: none"> 1. Maximum order size limits by product at a level that is sufficiently high so as not to contradict limits established by the market participant or the FCM; 2. Message policies that measure message traffic over a period of time before blocking or cutting off an market participant and should not impose pre-trade message throttles on executions; and 3. Product- or spread-specific price controls that are set at its discretion rather than individually tuned order price parameters.
80	The Commission requests public comment on the pre-trade and other risk controls required of DCMs in proposed § 40.20. Are any of the risk controls required in the proposed rules unhelpful to operational or other risk mitigation, or to market stability, when implemented at the DCM level?
Response	DCMs should not implement the risk controls outlined in §§ 1.80 and 1.82 at the same level of granularity that is expected of market participants and FCMs. Rather, DCMs should implement controls that apply across all orders and that protect the overall quality of the market (see the response to Question 79 for specific recommendations).
81	Are there additional pre-trade or other risk controls that should be specifically

	enumerated in proposed § 40.20?
Response	The Commission should not require DCMs to implement any additional risk controls not specifically set out in § 40.20. Rather, the DCMs are in the best position to determine the most appropriate market quality controls to protect their market. DCMs should help ensure that all pre-trade controls are applied consistently across participants and that the rules for how the controls are applied be well understood.
82	The Commission proposes, with respect to its kill switch requirements, to allow DCMs the discretion to design a kill switch that allows a market participant to submit risk-reducing orders. The Commission also does not mandate particular procedures for alerts or notifications concerning kill switch triggers. Does the proposed rule allow for sufficient flexibility in the design of kill switch mechanisms and the policies and procedures concerning their implementation? Should the Commission consider more prescriptive rules in this area?
Response	FIA agrees that kill switch requirements should allow risk reducing orders rather than preventing all order submissions. Further, a kill switch should only be deployed after the DCM has made an attempt to communicate with the market participant or the FCM to determine if such orders it has received are legitimate. Nonetheless, FIA does not believe it is appropriate to consider more prescriptive rules with respect to kill switch requirements. On the contrary, FIA is concerned that the proposed rule is overly prescriptive. In particular, the term “immediately disengage Algorithmic Trading” implies an automated kill switch requirement at the DCM level.
83	Does existing § 38.1051 provide the Commission with adequate authority to require DCMs to adequately test planned changes to their matching engines and other automated systems?
Response	FIA agrees that § 38.1051 provides the Commission with sufficient authority to require DCMs to adequately test planned changes to their matching engines and other automated systems. No additional measures are necessary.
84	Should the test environment provided by DCMs under proposed § 40.21 offer any other functionality or data inputs that will promote the effective design and testing of Algorithmic Trading by AT Persons?
Response	<p>FIA recommends that DCM test environments be designed to reflect the production environment as closely as possible. However, FIA does not believe that a test environment, as prescribed in § 40.21 will be possible within the bounds of reasonable investment. Any costs would far outweigh the purported benefits.</p> <p>DCM test environments generally can only help ensure that an application conforms to the published market data and order entry specifications. They cannot ensure how an application will behave under actual market conditions.</p> <p>Although DCM test environments allow testers to interact with other market participants (or themselves) outside the production environment, this is far from</p>

	<p>actual market conditions. In particular, UAT platforms are far from what anyone would consider “stress” conditions.</p>
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	<p>Although it is possible to include historical data which can be replayed to simulate stress conditions in DCM stress environments, such environments would not be able to interact with the market, so a true simulation is not possible. Requiring this would add costs without producing the intended improvement in the DCM test environment.</p>
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V. Source Code (Books and Records)
§ 1.81(a)(1)(vi)

<p>Response</p>	<p>Regulation AT fails to protect market participants’ critically important and sensitive proprietary information.</p> <p>FIA strongly objects to the CFTC’s proposed requirements regarding the retention of source code and making source code available for inspection upon request by any representative of the CFTC or the DOJ (“DOJ”) without any formal process of law. This relaxed standard of inspection may violate source code owners’ rights under the Fourth Amendment of the United States Constitution. Moreover, this relaxed standard could expose AT Persons to having their most valuable proprietarily developed source code and trade secrets shared with third parties or made more vulnerable to hackers. The CFTC has offered no compelling interest to justify having such broad domain over critically sensitive commercial information or putting this information at increased risk of misappropriation.</p> <p><u>Constitutional Concerns</u></p> <p>Courts have long recognized that administrative inspection schemes of pervasively- or closely-regulated businesses may be conducted without a warrant. But this is only permissible if the inspection is not unreasonable.³⁵ For an inspection not to be unreasonable, it must satisfy a three part test established by the Supreme Court³⁶:</p> <ol style="list-style-type: none">1. there must be a “substantial” government interest that informs the regulatory scheme pursuant to which the inspection is made;2. the warrantless inspection must be “necessary to further [the] regulatory scheme;” and3. “the statute’s inspection program, in terms of certainty and regularity of its application [must] provide a constitutionally adequate substitute for a warrant.”³⁷ <p>Although the CFTC has an interest in enacting regulations to avoid market disruption, § 1.81(a)(vi) is not necessary to further the regulatory scheme contemplated by proposed Regulation AT. Indeed, as explained below, FIA believes that there can be little practical benefit to the CFTC having a broad right to access and retain source code as contemplated under § 1.81(a)(vi) given source code’s inherent complexity and the CFTC’s limited resources.</p>
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³⁵ *New York v. Burger*, 482 U.S. 691, 703 (1987).

³⁶ *Id.* at 702-03.

³⁷ *Id.* (citing *Van v. Dewey*, 452 U.S. 523, 600-02 (1981)).

Conducting a meaningful review of the source code requires that the CFTC employ personnel with sufficiently broad and deep technical, algorithmic, and quantitative expertise. There are numerous programming languages used in the development of Algorithmic Trading systems, and each requires a significant amount of expertise in order to conduct a meaningful review of the relevant source code. Similarly, Algorithmic Trading systems utilize a diverse set of complex algorithmic and mathematical strategies from niche fields. In both cases, market participants employ highly-trained staff, often with advanced technical degrees or other unique experience, to create, implement and manage these systems.

It is FIA's belief that the CFTC would have to hire additional, specially qualified staff to address these needs. Without such internal expertise, we do not see how the CFTC's proposed inspection scheme could be necessary to serve Regulation AT's objectives.

Even more critically, for an inspection to provide a constitutionally adequate substitute for a warrant, it must "advise the owner . . . that the search is being made pursuant to law and has a properly defined scope, and it must limit the discretion of the inspecting officers."³⁸

As drafted, § 1.81(a)(vi) does not have a properly defined scope and does not limit the discretion of any CFTC or DOJ officer to request and retain source code. Although this subsection references "all code used in the production environment," the subsection does not expressly limit the source code to the AT Person's Algorithmic Trading source code. Indeed, § 1.81(a)(ii), which relates to the testing of Algorithmic Trading code, also references the testing of "related systems" and § 1.81(a)(v) refers to Algorithmic Trading "software." As a result, it is not clear under § 1.81(a)(vi) whether the referenced source code refers to Algorithmic Trading code only, or includes the code of "related systems" or separate "software" as well. Moreover, given the potential interaction of multiple independent sets of source code to support a particular Algorithmic Trading system, it is highly unlikely that the CFTC could draft a definition of source code that sufficiently limited the term's scope to provide adequate advanced notice regarding what precisely might be covered by any regulation. At a minimum, to pass constitutional muster, AT Persons must know in advance which source code is subject to inspection under § 1.31 in conjunction with § 1.81(a)(vi).

Finally, as proposed, §§ 1.81(a)(vi) and 1.31 could permit the CFTC or DOJ access to an AT Person's Algorithmic Trading source code (or more as noted above) without limitation. Such unfettered access ignores that proprietarily developed software may be critical to a firm's existence. With the commercial

³⁸ *Id.* at 703.

consequences of disclosure, whether intentional or inadvertent, potentially being catastrophic, governmental access to source code should be appropriately limited.

No Precedent Exists For the Asserted Inspection Authority

FIA has been unable to find any precedent for a government agency to routinely examine a company's trade secrets and/or computer source code without the protections of legal process.³⁹

For example, the SEC does not today have such authority nor does it examine source code regularly.⁴⁰ The SEC only seeks access to source code in the limited context of an investigation, pursuant to a validly-issued subpoena. Even when the SEC issues a subpoena for source code, access to the code normally is limited to portions of code relevant to the investigation and is subject to a protective order.

To the extent a government agency might have access to source code today, it occurs in the narrow context of:

1. Highly regulated industries that have a direct physical impact on safety, such as, nuclear, transportation safety, or pharmaceuticals; or
2. When a party is seeking from the government a grant, license or certification for goods or services that embody trade secrets, such as, a patent application, copyright registration of a computer program, or approval from the Food and Drug Administration for a medical device or pharmaceutical product.

In the instance of highly-regulated industries with a direct impact on physical safety where the government has a right to evaluate an industry participant's compliance with applicable regulations, FIA could not find any examples where a regulatory authority had an unfettered right to review trade secret information. Instead, access to particularly sensitive information typically occurs in the

³⁹ We know of only one instance where a federal entity regularly examines firms' computer systems, but even in this unique instance, the examination is far less intrusive than the proposed Regulation AT with respect to source code. The Federal Financial Institutions Examination Council (FFIEC) has statutory authority to examine (but not retain) certain computer systems used by certain regulated financial institutions. 12 U.S.C. §§ 1464(d)(7), 1867(c)(1). Significantly, though, FFIEC's examinations must comply with very specific guidelines contained in FFIEC's Handbook available on-line. FFIEC, IT Examination HandBook InfoBase: Information Security, *available at* <http://ithandbook.ffiec.gov/it-booklets/information-security.aspx>. There is no indication that FFEIC examines software architecture per se, or that FFIEC ever receives source code. *Id.*

⁴⁰ The SEC's Office of Compliance Inspections and Examinations (OCIE) published a "sample" list of the documents it may request in connection with an examination of an institution's cybersecurity and computer systems' compliance. Notably absent from the list is any mention of software source code. *See* <http://www.sec.gov/ocie/announcement/ocie-2015-cybersecurity-examination-initiative.pdf>.

context of an investigation and requires a subpoena, which is subject to a motion to quash and modifications as to scope.⁴¹ Moreover, trade secrets typically are classified by governmental entities as exempt from public disclosure and accorded special handling.⁴²

Even in the context of a petitioner wanting something from the government, like a copyright registration, trade secrets are accorded heightened protections. For example, the Copyright Office allows for large scale redaction of computer source code prior to submitting a copyright application.⁴³

Trade Secrets Are Not Ordinary Books and Records

Section 1.81(a)(vi) does not reflect that source code for Algorithmic Trading systems is fundamentally different from other types of confidential information obtained by the CFTC pursuant to § 1.31. Typically books and records that must be retained and produced by a regulated entity pursuant to § 1.31 are ordinary records generated by a regulated entity in the course of its business – broadly speaking, these records evidence completed, factual transactions in which no intellectual property rights exist *per se*.

Source code for Algorithmic Trading systems is fundamentally different because it embodies significant trade secrets created through the expenditure of time, money, research, and talent. A trade secret is readily distinguishable from other types of confidential information as it usually meets a minimum standard of novelty and inventiveness⁴⁴ and is commercially valuable.⁴⁵ Because of the intangible nature of a trade secret, the extent of the property right is defined by

⁴¹ See generally Kurt Stichter, *Government Demands for Electronic Evidence, Is Resistance Futile?*, White Collar Crime (2008), available at <http://www.lplegal.com/sites/default/files/pdf/Publications/WCCNI%20Article%202008%20PDF.pdf>. This paper provides an excellent summary of the issues involved in requests for electronic information, such as exposing sensitive and/or privileged information. *Id.* Rule 17(c) of the Federal Rules of Criminal Procedure gives a district court the right, on motion, to quash, or modify a subpoena if compliance would be unreasonable or oppressive. Fed. R. Civ. Pro. 17(c). The government is willing to consider negotiated restrictions, including allowing the respondent to produce summaries in lieu of original or supporting documents in some instances. Handbook on Antitrust Grand Jury Investigations (3rd ed. 2002).

⁴² See generally 21 C.F.R. § 20.61 (Food & Drug Administration); FERC Stats. & Regs. ¶ 31,337, at 31,747 (2012) (Federal Energy Regulatory Commission); FERC Stats & Regs, Fed. Reg., 35,542 (Jan. 6, 2002) (limiting the amount of public information about industry infrastructure after the September 11, 2001 attacks).

⁴³ U.S. Copyright Office, General Copy Requirements (Aug. 27, 2006), available at <http://www.copyright.gov/eco/help-deposit.html>.

⁴⁴ *Kewanee Oil Co. v Bicron Corp.*, 416 U.S. 470, 476 (1974) (“[S]ome novelty will be required, if merely because that which does not possess novelty is usually known; secrecy in the context of trade secrets, thus implies at least minimal novelty.”); see also *Rucklehouse v. Monsanto Co.*, 467 U.S. 986, 1002 (1984) (“Information that is public knowledge or that is generally known in an industry cannot be a trade secret.”).

⁴⁵ Uniform Trade Secrets Act § 1(4).

the extent to which the owner of the secret protects it from disclosure to others.⁴⁶ The corollary of this proposition is that the trade secret status and value of the information is lost if the information is accidentally or intentionally disclosed.⁴⁷ Once exposed, its protected character cannot be retrieved.⁴⁸

Consistent with general books and records, the CFTC currently gathers information that is historic in nature—not predictive information as embodied in source code. An Algorithmic Trading system’s source code embodies actual tools for executing the AT Person’s novel and inventive trading strategies, and it reveals what could occur given certain market conditions and triggers. In most cases, it is the AT Person’s most valuable asset.

Accordingly, significant intellectual property resides in source code, unlike the books and records produced to date pursuant to § 1.31. Proprietary source code is shielded by an array of protections embedded in other areas of the law, such as: trade secret law, criminal fines and imprisonment for theft or misuse,⁴⁹ international treaties,⁵⁰ database rights,⁵¹ restrictive licenses based on the IP, non-disclosure and non-compete agreements, and enhanced security measures, (both physical and electronic), internal monitoring, and governance protections, to name a few. In addition, copyright law prohibits the reproduction, distribution, and display of computer source code, whereas such exclusive rights do not exist in records that merely record facts or standard forms.⁵² These significant safeguards are extended to source code in recognition of its inherent value and importance, whereas the same is not always true of the books and records currently handled by the CFTC.

⁴⁶ *Rucklehaus*, 467 U.S. at 1002.

⁴⁷ Restatement (Third) of Unfair Competition § 39.

⁴⁸ *In re Remington Arms Co.*, 952 F.2d 1029, 1033 (8th Cir. 1991).

⁴⁹ Economic Espionage Act, 18 U.S.C. § 1831, *et. seq.*

⁵⁰ Trade secrets and computer programs for the first time have been recognized by the international community as an actual property right (instead of being a mere construct of tort or unfair competition). *See generally* Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), Art. 39 (enjoining members to protect trade secrets under various circumstances, including “data submitted to governments or governmental agencies” through effective measures). TRIPS also recognizes that: “Computer programs, whether in source or object code, shall be protected as literary works under the Berne Convention (1971).” *Id.* at Art. 10 (1). It further recognizes an explicit database right: “Compilations of data or other material, whether in machine readable or other form, which by reason of the selection or arrangement of their contents constitute intellectual creations shall be protected as such.” *Id.* at Art. 10(2).

⁵¹ *Id.*

⁵² 17 U.S.C. § 102(a) provides that copyright protection subsists in original works of authorship. 17 U.S.C. § 101 explicitly defines computer programs as appropriate subject matter of copyright protection. Case law has clarified that such protection includes source and object code. *See generally Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240 (3d Cir. 1983).

The CFTC’s proposal dramatically lowers the bar for the government to access extremely sensitive trade secrets.⁵³ Easy access to such information is contrary to the Administration’s and intelligence communities’ strategies designed to increase the protections afforded to trade secrets and computer information.⁵⁴

Potential Harm of Cyberbreaches

Regrettably, purposeful and inadvertent security breaches happen. Despite a law that expressly prohibited the Commission to “publish data and information that would separately disclose the business transactions or market positions of any person and trade secrets or names of customers,”⁵⁵ CFTC staff, on at least three occasions, used and provided access to confidential CFTC data to non-CFTC personnel, including trade secrets for the preparation of non-CFTC sponsored publications.⁵⁶ Had the trade secrets been information regarding the source code of an AT Person, such disclosure could have disastrous effects on the AT Person’s business.⁵⁷

Additionally, as the CFTC is well aware, government and private entities are subject to cyberattacks. As the Chairman of the CFTC, has noted when discussing the risk of cyber-attacks on U.S. financial markets:

Cybersecurity is perhaps the single most important new risk to market

⁵³ The current procedure for obtaining source code is through the use of a subpoena. The standard requires demonstrating that the requested information is relevant, admissible, and that the party cannot properly prepare for trial without the requested information, among other requirements. Fed. R. Crim. P. 17(C).

⁵⁴ The Office of the National Counterintelligence Executive (ONCIX), “Foreign Spies Stealing US Economic Secrets In Cyberspace,” Nov. 2011, *available at* http://www.ncix.gov/publications/reports/fecie_all/Foreign_Economic_Collection_2011.pdf (“ONCIX Report”); Administration Strategy on Mitigating the Theft of US Trade Secrets, Feb. 2013, *available at* https://www.whitehouse.gov/sites/default/files/omb/IPEC/admin_strategy_on_mitigating_the_theft_of_u.s._trade_secrets.pdf (“Administration Strategy Report”); Protection of Trade Secrets: Overview of Current Law and Legislation, Congressional Research Service, Sept. 5, 2014 (detailing that in the 113th Congress nine different bills were introduced to increase protections for trade secrets with particular concern towards defending against cyber theft and cyber economic espionage).

⁵⁵ CEA § 8(a)(1).

⁵⁶ See Review of the Commodity Futures Trading Commission’s Response to Allegations Pertaining to the Office of the Chief Economist (Office of the Inspector General of the CFTC, Feb. 21, 2014).

⁵⁷ It would be equally devastating if a government employee who had access to source code illegally provided that source code to a third party at a private company (a friend or relative, for example), or left the government and used the source code at his or her next employer, despite government prohibitions against such conduct. See Press Release, SEC, Former Investment Bank Associate Pleads Guilty In Manhattan Federal Court To Theft Of Confidential Information From The Federal Reserve Bank Of New York (Nov. 5, 2015), <https://www.justice.gov/usao-sdny/pr/former-investment-bank-associate-pleads-guilty-manhattan-federal-court-theft>; Press Release, SEC, Former Employee Of Federal Reserve Bank Of New York Pleads Guilty In Manhattan Federal Court To Theft Of Confidential Information From The Federal Reserve (Nov. 4, 2015), <https://www.justice.gov/usao-sdny/pr/former-employee-federal-reserve-bank-new-york-pleads-guilty-manhattan-federal-court>.

integrity and financial stability. The need to protect our financial markets against cyber-attacks is clear. These attacks threaten privacy, information security, and business continuity, all vital elements of a well-working market.⁵⁸

Furthermore, the Administration warns “there are indications that U.S. companies, law firms, academia, and financial institutions are experiencing cyber intrusion activity against electronic repositories containing trade secret information.”⁵⁹ Indeed, the commodities markets are one of four specific areas of concern highlighted by the Office of the National Counterintelligence Executive, stating, “the values of currencies and commodities, sensitive macroeconomic information held by the U.S. private sector and government agencies is likely to remain a prime collection target for both intelligence services and foreign corporations. . . . Such information also could help boost the performance of sovereign wealth funds controlled by governments like China’s.”⁶⁰

The risk of cyber-attacks and theft of proprietary information is not only a risk for financial markets, but also a risk for every person who provides confidential information to the U.S. government. In all too many circumstances, confidential information provided to U.S. government agencies has been compromised as a result of cyber-attacks. Recent examples include:

1. The U.S. Office of Personnel Management (“OPM”) discovered in 2015 that confidential personal information of current, former and prospective federal employees and contracts had been stolen, including the social security numbers of 21.5 million individuals. The individuals included not only 19.7 million persons who had applied for a background investigation, but also 1.8 million persons who never applied – primarily spouses or co-habitants of applicants. Records also included interviews conducted by background investigations and the fingerprints of 5.6 million persons. This was the second breach of systems at OPM. Earlier in 2015, personnel data of 4.2 million current and former federal government employees was stolen.⁶¹
2. The Internal Revenue Service also reported in 2015 that the tax return information of almost 350,000 U.S. taxpayers was illegally accessed through cyber-attacks.⁶²

⁵⁸ Testimony of Chairman Timothy G. Massad before the U.S. House Committee on Agriculture, Washington, D.C. (Feb. 12, 2015), *available at*, <http://www.cftc.gov/PressRoom/SpeechesTestimony/opamassad-11>.

⁵⁹ Administration Strategy Report, at 1 (citing ONCIX Report, at 5 n.1).

⁶⁰ *Id.*

⁶¹ See Office of Personnel Management, <https://www.opm.gov/cybersecurity/cybersecurity-incidents/>.

⁶² “IRS Says Cyberattacks More Extensive Than Previously Thought,” Reuters (Aug. 17, 2015), *available at*, <http://www.reuters.com/article/us-usa-tax-cybersecurity-idUSKCN0QM1VV20150817>. In February 2016,

If source code provided to the CFTC through an inspection request under § 1.31 was stolen by an unauthorized third party, the consequences could be catastrophic to an AT Person.

Finally, although an AT Person providing source code to the CFTC or DOJ may seek the protections of the Freedom of Information Act, such protections are not absolute. Although requests for access to such information may be denied to competitors or other private persons under protections embedded in applicable law and regulations, such protections may not apply to requests made by Congress, other regulatory agencies, or even foreign countries under a Memoranda of Understanding that potentially requires the sharing of information for commonly regulated persons. Once the CFTC loses control of information regarding an AT Person's source code provided under any request, it loses the ability to keep the source code non-public. This could destroy an AT Person's business.

A warrantless administrative inspection is permissible only when a legitimate government interest outweighs the intrusiveness of the search on the individual's Fourth Amendment interests. Courts consider an individual's expectation of privacy and the governmental interest under the totality of the circumstances.⁶³

In relation to source code, an AT Person's expectation of privacy significantly outweighs the CFTC's interests, especially considering the grave risks posed to an AT Person's livelihood in the event of purposeful or inadvertent disclosure.

Applying §§ 1.81(a)(1)(v)-(vi) to Third-Party Systems Is Not Appropriate

As proposed, § 1.81(a)(1)(v)-(vi) inappropriately applies the same requirements to proprietarily-developed, FCM-provided and third-party systems used by an AT Person. It is not clear how AT Persons, who have not developed and do not own the source code for the systems provided by FCMs or third parties, could comply with the requirements of these provisions. AT Persons typically lack access to that source code, which may be provided under licensing and other agreements with their providers. As such, it would be practically impossible to apply §§ 1.81(a)(1)(v)-(vi) to such third-party source code used by an AT Person.

Possible Alternative Approach

FIA believes that the current ability of both the CFTC and the DOJ to obtain

the IRS reported another cyberattack by identity thieves. See IRS Statement on E-filing PIN, IRS.gov (Feb. 9, 2016, 6:30 PM), <https://www.irs.gov/uac/Newsroom/IRS-Statement-on-Efiling-PIN>.

⁶³ *Anobile v. Pellegrino*, 303 F.3d 107 (2d Cir. 2002).

source code through legal process where an owner of source code has the ultimate right to petition a court for appropriate protection is preferable. That said, we would be willing to work with CFTC staff to craft a more appropriate rule embodying similar protections. Currently, the CFTC or DOJ may either seek a voluntary production of source code from an AT Person subject to agreed restrictions, or require the CFTC or DOJ to request such source code through a validly issued subpoena in connection with a formal investigation. In such latter circumstance, to the extent an AT Person seeks to challenge the subpoena, there is a clear legal route, including an opportunity for an AT Person to apply for a protective order imposing additional confidential obligations on the CFTC or DOJ, greater than what exists currently under statute or regulation. These protections might include, restricting access to source code to one or two stand-alone computers unattached to the internet in a secured room at counsel's office; prohibiting making electronic copies of source code; prohibiting other electronic devices (including laptops and cameras) in a secured room with source code; permitting a source code owner to monitor the activities of those reviewing source code; prohibiting anyone that reviewed source code from working in the field for a period of time; and requiring reviewers of source code to sign and acknowledge confidentiality provisions under penalty of law. At a minimum, these type of protections should be included in any potential new rule like § 1.81(a)(vi).

The Proposed Source Code Repositories Are Impractical

Section 1.81(a)(v)'s requirement for AT Persons to maintain a source code repository in accordance with § 1.31 is impractical and unduly burdensome.

Section 1.31 is broadly equivalent to SEC §§ 17a3 and 17a4.⁶⁴ Although these rules are meant to cover both written and electronic records, they primarily contemplate records of human communication or instruction, including transcripts, emails, ledgers, order records, and other human understandable information. To the extent a person stores required records on electronic storage media, the person must store a duplicate of the record in a location separate from the original and organize and maintain an accurate index of all information maintained on both the original and duplicate storage media.

Although these requirements are burdensome for existing records, they are typically feasible because records of human communication or instruction can be digested, summarized, reformatted and indexed in a time-based serial manner. This is not the case for source code. Electronic source code may contain binary or alphanumeric code, be written in any of multiple programming languages, and/or exist and operate solely on hardware (*e.g.*, on a silicon chip). The wide variety of software development techniques used by AT

⁶⁴ 17 C.F.R. §§ 240.17a-3, 240.17a-4.

Persons is not susceptible to organization or reformatting as contemplated under § 1.31. Moreover, parts of an Algorithmic Trading system’s code often exist and function separately from other parts. These parts may change often and independently of one another (*e.g.*, through human interaction, as a result of code-generation or as a result of run-time adaptations to observed conditions) and are not likely susceptible to indexing as contemplated under § 1.31.⁶⁵ Although it may be a best practice to maintain source code repositories for all software development efforts, it may be nearly impossible to create and index an audit trail of material changes in a manner that satisfies § 1.31 for the aforementioned reasons.

Further, and as noted above, the proposed rule captures Algorithmic Trading source code as well as the source code of “related systems” in its retention and access requirements. “Related systems” is vague and could encompass all, or nearly all, source code utilized by an AT Person. Depending on the interpretation, it could include, but not be limited to, source code associated with back-office, portfolio risk management, monitoring, and user interfaces. Such a broad interpretation would dramatically increase the cost of complying with the proposed rules as well as exacerbate the issues described above. We believe the proposed rule’s intent was to capture only Algorithmic Trading system source code that has the ability to determine how and when to submit or otherwise affect an order on the production environment of a DCM. Any source code retention or access rules should be strictly limited to Algorithmic Trading source code that has the ability to determine how and when to submit or otherwise affect an order on a DCM and not extend to systems used in other capacities within the AT Person or its affiliated companies.

We are also unclear as to how proposed § 1.81(a)(vi) and existing § 1.31 would interact. Specifically, the CFTC should clarify whether an AT Person that maintains a source code repository to manage source code access under § 1.81(a)(vi) must also enter into an arrangement with at least one third-party technical consultant who has the technical and financial capability to perform the undertakings required in § 1.31(b)(4). If yes, this would require an AT Person to grant access to or provide a third party with proprietary code and create another point where misappropriation of its trade secrets could occur. FIA would object to such a requirement for the same reasons it objects to making source code available to CFTC or DOJ staff without a subpoena.

Conclusion

FIA strongly believes that source code should not be made subject to § 1.31,

⁶⁵ Software systems, including Algorithmic Trading systems, are typically comprised of multiple independent discrete units of source code commonly referred to as libraries. These libraries are often developed and changed on a timeframe that is independent of the Algorithmic Trading system in which they are used making a time-based serial index complicated and potentially misleading for the purposes of this rule.

and that, as proposed, the rule raises significant constitutional concerns and unreasonably puts an AT Person's intellectual property at risk of misappropriation.

In our view, it would be far more preferable to maintain the status quo, which enables the CFTC or DOJ to either seek a voluntary production of source code from an AT Person subject to agreed restrictions, or require the CFTC or DOJ to request such source code through a validly issued subpoena in connection with a formal investigation. In such latter circumstance, to the extent an AT Person sought to challenge the subpoena, there would be a clear legal route, including an opportunity for an AT Person to apply for a protective order.

If the CFTC feels it must introduce a new rule regarding access to AT Persons' source code, it would be preferable simply to require each AT Person (or broader universe) that utilizes proprietarily developed software to have policies and procedures that address what source code is relevant to its Algorithmic Trading system's determination of when and how to submit or otherwise automatically affect an order on a DCM in a production environment, and how it take steps to maintain such relevant source code and all amendments thereto in a format that can be audited and reviewed, if required, by knowledgeable staff of the CFTC or DOJ.

Any effort to review source code – even under subpoena – should be subject to appropriate protections.

VI. Software Development, Testing, Deployment and Monitoring
§ 1.81 (other than subsection (a)(1)(vi)) (Questions 41-48)

<p>INTRO</p>	<p>I. Overview of § 1.81</p> <p>As stated previously, FIA supports many of the standards for the development, testing, monitoring and compliance of Algorithmic Trading systems by AT Persons set forth in proposed § 1.81. However, FIA believes that <u>all</u> persons that engage in Algorithmic Trading may potentially disrupt markets and, therefore, should be subject to reasonable principles-based minimum requirements aimed at avoiding market disruptions caused by Algorithmic Trading, whether they are registered with the CFTC in any capacity or not. The proposed § 1.81, however, sets forth requirements that are too prescriptive. FIA is also concerned that many of the proposed requirements related to the testing of Algorithmic Trading systems set forth in § 1.81(a) are not practical. FIA also believes that the rules do not adequately reflect the nature of testing and production environments, and over-anticipate the benefit of testing Algorithmic Trading systems at each DCM.</p> <p><u>Proposed § 1.81 is Too Prescriptive</u></p> <p>In general, FIA believes the rules are too prescriptive and try to apply the same types of requirements for a myriad of Algorithmic Trading strategies that have very different testing requirements (<i>e.g.</i>, back-testing using historical data may not confirm the functioning of an automated order routing system). Rather than articulate specific requirements of what should be included in an AT Person’s policies and procedures, the CFTC should require solely that policies and procedures address the relevant topic in a manner that is appropriate to an AT Person’s circumstances. This would be consistent with the approach recently taken by NFA requiring all of its members to enact elements of an Information Security Program.⁶⁶ Rather than dictate the outcome of specific elements, NFA simply requires members to address each of the enumerated topics.</p> <p><u>Proposed § 1.81 Does Not Account for Market Participants of Differing Sizes and Complexities</u></p> <p>Moreover, the rules contemplate the same types of requirements regarding the development, monitoring and compliance of Algorithmic Trading systems for all AT Persons – whether they are big, small or even a single natural person and no matter how many or few of the elements of Algorithmic Trading they actually rely on. FIA believes the rules should impose reasonable principles-</p>
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⁶⁶ 9070 – NFA Compliance Rules 2-9, 2-36 and 2-49: Information Systems Security Programs (approved Aug. 20, 2015).

based minimum requirements that allow each AT Person “some degree of flexibility”⁶⁷ in determining what type of requirements regarding the development, monitoring and compliance of Algorithmic Trading systems is appropriate for it given the differences in AT Persons’ size and complexity of operations and their potential to disrupt a market. This is particularly the case in connection with the requirement that each AT Person should implement written policies and procedures regarding:

- The development of its Algorithmic Trading systems (§ 1.81(d));
- Real-time monitoring by knowledgeable and qualified staff while an Algorithmic Trading system is engaged in trading (§ 1.81(b));
- Ensuring that each of its Algorithmic Trading systems operates in a manner that complies with the CEA and the rules and regulations thereunder (§ 1.81(c)); and
- The designation and training of each of its staff responsible for Algorithmic Trading (§ 1.81(d)).

Further, the rules also do not adequately differentiate between Algorithmic Trading Systems designed by an AT Person and one designed and licensed by a third party, and imposes the same obligations on AT Persons for both types of systems – which may not be practical. Indeed, these requirements do not adequately contemplate the complexities that arise with complying with the proposed regulation where a market participant utilizes an Algorithmic Trading system developed or provided by a third party. In many cases, due to legally binding licensing agreements or organizational barriers it will be impossible for market participants to satisfy those requirements. Some of these limitations that must be addressed include:

- Section 1.81(a)(1)(ii) – It may be impossible for AT Persons to test a third-party Algorithmic Trading system as contemplated by this requirement as they often do not have access to source code for third-party systems nor are they made aware of every source code change made by the system’s provider. Similarly, AT Persons do not have sufficient transparency into the system’s source code to identify circumstances that may contribute to future Algorithmic Trading Events.

⁶⁷ *Id.* In connection with its interpretive guidance regarding cybersecurity, NFA explicitly recognized that one size does not fit all:

NFA recognizes that, given the differences in the type, size and complexity of operations of Members’ businesses including but not limited to their customers and counterparties, markets and products traded, and the access provided to trading venues and other industry participants, Members must have an appropriate degree of flexibility to determine how best to diligently supervise information security risks.

- Section 1.81(a)(1)(iii) – Similar to the above, it may be impossible for AT Persons to test a third-party Algorithmic Trading system as contemplated by this requirement. In particular, third-party systems may not offer AT Persons the technological capability to consume historical data for testing purposes.
- Section 1.81(a)(1)(iv) – Similar to the above, it may be impossible for AT Persons to test a third-party Algorithmic Trading system as contemplated by this requirement. Typically, the most effective way to stress test an Algorithmic Trading System is to simulate those conditions via historical market data or other contrived conditions. AT Persons may not be provided with the ability to sufficiently simulate those conditions within a third-party system.
- Section 1.81(a)(1)(vi) – It may be impossible for AT Persons to maintain a source code repository for third-party Algorithmic Trading systems as contemplated by this requirement. Third-party system providers typically do not provide AT Persons with source code for such systems due to intellectual property concerns.
- Section 1.81(b)(1)(2) – It may be impossible for AT Persons to implement automated alerts as contemplated by this requirement. In order to reasonably implement such alerts it is often necessary for such monitoring and alerts to have a certain level of programmatic integration with the third-party system. This type of programmatic integration (*e.g.*, via a system API) may not be provided by the third party.
- Section 1.81(c)(2)(i) – It may be impossible for AT Persons to review third-party trading systems as contemplated by this requirement. Staff of AT Persons may not be provided with enough transparency into the system to effectively perform a review to detect potential Algorithmic Trading Compliance Issues. Third-party system providers typically limit such transparency for intellectual property concerns.
- Section 1.81(c)(2)(ii) – It may be impossible for AT Persons to design coordination and communication policies as contemplated by this requirement. In order to meet this requirement it would be necessary for staff of AT Persons to have a level of access and communication with staff of third-party system providers that typically does not exist within the industry. Third-party system providers typically limit such access due to intellectual property concerns. Similarly, they typically limit such communication for operational and cost reasons. Further, it is unreasonable to expect an AT Person to impose any policies or procedures on persons they do not directly employ.
- Section 1.81(d)(1) – It may be impossible for AT Persons to design procedures for designating and training all staff involved in designing and testing third-party trading systems as the staff associated with such

responsibilities are not employed by the AT Person. It is unreasonable to expect an AT Person to impose any policies or procedures on persons they do not directly employ.

FIA believes the requirements to document all relevant policies and procedures and to deem it an Algorithmic Trading Compliance Issue if an AT Person were to violate any such policy or procedure, including their own, will not promote optimal practices by AT Persons. In fact, such requirements may have the contrary effect of encouraging AT Persons to adopt solely the minimum safeguards they deem required by CFTC regulations.

And finally, the requirements of the proposed rules do not recognize the most effective, and evolving nature of, communication protocols.

II. Specific Comments to § 1.81

Our comments on the subsections of § 1.81, below, are meant to help identify some of the specific complexities that further argue for such an approach.

A. 1.81(a)(1)(i)

Although FIA supports the objective of this provision generally, it may not be possible to “adequately isolate” a development environment from a production trading environment in all circumstances. This certainly would be the case where a DCM offers a test product or symbol in the production environment of the DCM. In such case, testing would occur from the AT Person’s production environment and be a potential violation of this rule. Moreover, and in any case, the term “adequately isolate” is simply too vague.

Rather than impose vague and impractical conditions, the CFTC should focus on what is paramount – that users of algorithmic systems test their systems and changes prior to use in production, and that such testing does not adversely impact the production environment at a DCM. Accordingly, FIA believes it would be preferable to require each AT Person to adopt policies and procedures appropriate for its size and complexity designed to reasonably ensure that its testing of software would not cause an Algorithmic Trading Event.

B. § 1.81(a)(1)(ii)

Although FIA supports the objective of this provision generally, FIA is concerned about many individual aspects of this subsection. In particular:

- **“Implementation”**: The term “implementation” is unclear. It appears that the CFTC is trying to require new Algorithmic Trading systems and changes to be adequately tested prior to their first use on a DCM.

The subsection should be amended to state that more clearly.

- **“Related systems”**: The term “related systems” is also unclear. Many systems may be related to an Algorithmic Trading system but have no impact on the Algorithmic Trading system itself (*e.g.*, back-office systems). Such systems are simply irrelevant. The only relevant systems are Algorithmic Trading systems’ source code (or changes) that may have the potential to cause an Algorithmic Trading Event. As such, “related systems” should be clarified to pertain only to those systems that have the ability to determine when and how to send an order or otherwise affect an order on a DCM.
- **“Any changes”**: There is also no threshold regarding the materiality of “any changes” that should be tested. The rule, as drafted, requires testing of all changes, no matter how inconsequential or unlikely to cause an Algorithmic Trading Event. When coupled with the prescriptive testing requirements described below this requirement becomes impractical, and in some cases without merit, to implement.

For example, many Algorithmic Trading systems provide those responsible for their operation with the ability to modify system parameters during production trading. These parameter changes should not require testing as they merely modify how the system acts within predetermined boundaries by utilizing previously tested functionality. Requiring such parameter changes to be tested prior to use would introduce significant risk to an AT Person. Such parameters are typically used by traders to react, in real-time, to changing market conditions and any testing would strictly delay the application of those parameter changes limiting the trader’s ability to react in a timely manner.

We believe “any changes” should be clarified to be limited to any change that directly impacts source code associated with determining when and how to send an order or otherwise impact an order on a DCM. As discussed in more detail below, the AT Person should have the flexibility to determine the best way to test that change.

- **Each DCM**: It may not be beneficial or practical for all Algorithmic Trading code and systems to be tested on each DCM where Algorithmic Trading will occur. First, not all changes to source code are appropriate to test on a DCM. For example, source code may be amended with respect to the manner a production system sends data to a back-office system or some other internal source. There would be no benefit to testing this change on a DCM. Moreover, test environments of DCMs, although becoming more robust, can only be utilized to help ensure that software conforms to published market data and order entry specifications. There is no assurance that a test performed on a DCM test environment will reflect how software might behave under actual

market conditions. In particular, test environments fail to adequately replicate some very important aspects of production environments such as reasonable prices, reasonable market load, and correlated market activity.

Rather than articulate specific requirements of what should be included in an AT Person's policies and procedures, the CFTC should require solely that policies and procedures address testing new or changes to Algorithmic Trading software that might cause an Algorithmic Trading Event prior to first use at a DCM and regularly afterwards in a manner that is appropriate to an AT Person's circumstances (such as its size and complexity).

If however, the CFTC does not accept FIA's above recommendation to require more broadly-identified topics to be addressed in AT Persons' policies and procedures (rather than identify more specific requirements for each topic as it currently proposes), FIA proposes the following alternate language for § 1.81(a)(1)(ii):

Testing of all Algorithmic Trading source code and any changes to such code and systems prior to their use in a production trading environment. Such testing must be conducted both internally within the AT Person and, when deemed necessary by the AT Person, utilize DCM-provided testing facilities, tools or services relevant to any changes to the code or systems.

C. § 1.81(a)(1)(iii)

Although FIA supports the regular testing of all Algorithmic Trading source code, it believes that this provision, which mandates regular back-testing, is too prescriptive. First, back-testing may not be appropriate for all circumstances. Although back-testing may be appropriate to test trading strategies, it is not appropriate to test whether all aspects of a system are functioning properly. Second, there may be circumstances where back-testing is not feasible, *e.g.*, in connection with the testing of a new DCM product prior to its launch.

FIA believes that it would be preferable to require each AT Person to adopt policies and procedures appropriate for its size and complexity with respect to what circumstances and by what method it would test Algorithmic Trading software that might cause an Algorithmic Trading Event prior to its first use at a DCM.

If, however, the CFTC does not accept FIA's recommendation to require more broadly-identified topics to be addressed in AT Persons' policies and procedures (rather than identify more specific requirements for each topic as it currently proposes), FIA proposes the following alternate language for § 1.81(a)(1)(iii):

Regular testing using testing methodologies determined to be appropriate by the persons responsible at the AT Person.

D. § 1.81(a)(1)(iv)

Again, FIA supports the regular testing of all Algorithmic Trading source code. However, FIA believes that the requirements of this provision are better incorporated in a single provision related to testing in general. Accordingly, it is preferable to combine subsections 1.81(a)(iii) and (iv). FIA believes it would be preferable within such a consolidated provision to require each AT Person to adopt policies and procedures appropriate for its size and complexity with respect to what circumstances and by what method it would test Algorithmic Trading software that might cause an Algorithmic Trading Event prior to its first use at a DCM.

If, however, the CFTC does not to accept FIA's recommendations, it should clarify the scope of the vague phrase "under a variety of market conditions." For example, the CFTC could adopt clearer language, such as "under a reasonable number of diverse market conditions."

E. § 1.81(a)(1)(v)

See Source Code discussion at the end of this appendix.

F. § 1.81(a)(2)

FIA agrees that each AT Person should periodically review and test the effectiveness of its policies and procedures related to Algorithmic Trading and take prompt action to remedy any deficiencies. However, because there is no materiality threshold associated with the remediated deficiencies in the proposed rule, we do not support documenting each incident of remediation. Many deficiencies are immaterial and the costs associated with documentation of them will outweigh any marginal benefit, if any, from documenting them. Moreover, the burden imposed by a requirement to document every remediation may prompt more infrequent reviews and testing.

G. § 1.81(b)(1)

FIA supports the requirement that each Algorithmic Trading system should be subject to continuous monitoring by knowledgeable and qualified staff while such Algorithmic Trading system is engaged in trading. However, the proposed rule should be revised to a) eliminate the vague "real time" requirement, b) permit traders to serve as monitoring staff, and c) take into account the size and complexity of an organization, including if the organization consists solely of one natural person, with respect to "staff."

Real Time

FIA is also concerned about the juxtaposition of the words “continuous” and “real time” as all real-time monitoring would be continuous. Because the concept of “real time” may be vague, FIA recommends only using the word “continuous.” This would have the additional benefit of giving organizations of different sizes and complexity some flexibility to monitor each Algorithmic Trading system on a continuous basis in a manner consistent with their capability and risk to the markets.

Traders as Monitoring Staff

Finally, there appears to be an inconsistency between the proposed Rule and language in the NPR that the CFTC should clarify. Although as drafted, the proposed Rule does not suggest or imply that natural persons who continuously monitor Algorithmic Trading systems may not be the same persons engaged in trading, the NPR provides an opposite interpretation. The NPR states that:

The Commission believes that staff persons who are responsible for monitoring the trading of other AT Person staff should typically not be actively engaged in trading at the same time, because it would be difficult to adequately and consistently monitor trading of other AT Person staff while engaged in trading activities.⁶⁸

In fact, it is more often the case than not that the person engaged in trading has the context, in real time, to most appropriately monitor and manage an Algorithmic Trading system. Such trading person will more likely know (1) market conditions; (2) system conditions; (3) system alerts; (4) position and other associated risks; and (5) events that might have preceded an event requiring human intervention and the context of such events. A non-trader monitoring an Algorithmic Trading system may not comprehend in real time the entire context of situations warranting immediate intervention. This may cause a delay in the AT Person’s Response or they might immediately respond in a manner that does not incorporate all relevant information.

Size and Complexity

Even if the CFTC were to determine that it was appropriate for an AT Person to have separate trading and monitoring staff in connection with Algorithmic Trading, this requirement is not appropriate for all organizations depending on their size and complexity. Likewise, as we stated previously, FIA believes the requirements to document all relevant policies and procedures and worse, to

⁶⁸ NPR at 78858.

deem it an “Algorithmic Trading Compliance Issue” if an AT Person’s response were to violate any such policy or procedure, including their own, will not promote optimal practices by AT Persons.

If, however, the CFTC does not accept FIA’s recommendation to require more broadly-identified topics to be addressed in AT Persons’ policies and procedures (rather than identify more specific requirements for each topic as it currently proposes), FIA proposes the following alternate language for § 1.81(b)(1):

Each AT Person shall implement policies and procedures reasonably designed to ensure that each of its Algorithmic Trading systems is subject to continuous monitoring by one or more knowledgeable and qualified persons at the AT Person while such Algorithmic Trading system is engaged in trading. Such policies and procedures shall at a minimum include the following:

H. § 1.81(b)(1)(i)

FIA supports the apparent objectives of this proposed provision. However, as stated previously, FIA believes the juxtaposition of “continuous” and “real time” is confusing as real-time monitoring must be continuous. Also, given the specificity of the term Algorithmic Trading Compliance Issue – even if modified as recommended by FIA – it would be virtually impossible to monitor potential Algorithmic Trading Events in real time (Algorithmic Trading Events, as proposed by the CFTC, include both Algorithmic Trading Compliance Issues and Algorithmic Trading Disruptions). Practically, as CFTC staff is likely to be aware by its own reviews and investigations, reconstructing trading is often a painstaking and tedious process that involves significant analysis and interpretation and may take days, if not longer, after the fact to discover.

If, however, the CFTC does not accept FIA’s recommendation to require more broadly-identified topics to be addressed in AT Persons’ policies and procedures (rather than identify more specific requirements for each topic as it currently proposes), FIA proposes the following possible alternate language for § 1.81(b)(1)(i):

Continuous monitoring of Algorithmic Trading to identify potential Algorithmic Trading Disruptions.

I. § 1.81(b)(1)(ii)

FIA supports the apparent objectives of this proposed provision. However, not all system breaches may warrant automated alerts. Only system breaches that may have a material impact on the trading behavior of an Algorithmic Trading

system benefit from automated alerts. Indeed, if automated alerts are generated for every breach, no matter how immaterial, there is a risk that a human monitor of such alerts might be overwhelmed and not be able immediately to differentiate between material and non-material alerts, and to act promptly on alerts demanding the most immediate attention.

If, however, the CFTC does not accept FIA's recommendation to require more broadly-identified topics to be addressed in AT Persons' policies and procedures (rather than identify more specific requirements for each topic as it currently proposes), FIA proposes the following alternate language for § 1.81(b)(1)(ii):

Automated alerts when an Algorithmic Trading system's behavior breaches AT Order Message design parameters, upon loss of network connectivity or data feeds that materially impact the system's behavior, or when market conditions approach the boundaries within which the Algorithmic Trading system is intended to operate, to the extent applicable.

J. § 1.81(b)(1)(iii)

FIA supports the apparent objectives of this proposed provision. However, the language of this provision provides a good example of why the general requirements of § 1.81 are too prescriptive and are premised on a one-size-fits-all approach. FIA believes this approach is misguided.

First, it is not clear to whom the phrase "monitoring staff" refers. As discussed previously, for different organizations this might be one person.

Second, although the terms "dashboards" and "control panels" are broadly understood, it is unclear why AT persons would need both a dashboard and a control panel to alert them of a system breakdown.

If the CFTC determines to maintain its prescriptive approach under § 1.81, it should, at a minimum, for § 1.81(b)(iii) only mandate that: (1) one or more specifically identifiable persons at an AT Person must have the authority to address system breakdowns that might cause an Algorithmic Trading Disruption; and (2) systems must be in place to help such persons monitor for potential problems and interact with each Algorithmic Trading system.

In addition, the rule contemplates notifying the applicable clearing firm if there is a need to seek information or cancel orders. In fact, the most appropriate entity to contact may be the executing firm that is granting or guaranteeing the AT Person access to the relevant DCM, not necessarily the AT Person's carrying broker FCM.

If, however, the CFTC does not accept FIA's recommendation to require more broadly-identified topics to be addressed in AT Persons' policies and procedures (rather than identify more specific requirements for each topic as it currently proposes), FIA proposes the following alternate language to § 1.81(b)(1)(iii):

One or more individuals at the AT Person shall have the ability and authority to disengage an Algorithmic Trading system and to cancel resting orders when system or market conditions require it, including the ability to contact staff of the applicable designated contract market and the clearing member firm granting or guaranteeing the AT Person's access, as applicable, to seek information and cancel orders. Such person(s) must also have systems in place to monitor and interact with the Algorithmic Trading systems for which they are responsible.

K. § 1.81(b)(1)(iv)

FIA supports the apparent objectives of this proposed provision. However, the phrase "is responsible for an Algorithmic Trading system" is far too broad and vague as it could capture elements not contemplated by the CFTC. Also, as stated previously, the reference to "monitoring staff" should not exclude traders.

If, however, the CFTC does not accept FIA's recommendation to require more broadly-identified topics to be addressed in AT Persons' policies and procedures (rather than identify more specific requirements for each topic as it currently proposes), FIA proposes the following alternate language for § 1.81(b)(1)(iv):

Procedures that will enable AT Persons to identify which person(s) at the AT Person have the ability and authority referenced in § 1.81(b)(1)(iii) during trading hours.

L. § 1.81(b)(2)

FIA agrees that each AT Person should periodically review and test the effectiveness of its policies and procedures related to Algorithmic Trading and take prompt action to remedy any deficiencies. For the reasons stated above, we do not support documenting each incident of remediation.

M. § 1.81(c)(1)

FIA supports the apparent objectives of this proposed provision. However, as we stated previously, FIA believes the requirements to document all relevant policies and procedures and worse, to deem it an "Algorithmic Trading Compliance Issue" if an AT Person were to violate any such policy or

procedure, including their own, will not promote optimal practices by AT Persons.

N. § 1.81(c)(2)(i)

FIA supports the apparent objectives of this proposed provision. However, § 1.81(c)(1)(2)(i)'s requirement for policies and procedures should parallel the requirement in § 1.81(c)(1)(2)(i); namely, the policies and procedures should be "reasonably designed" to achieve the stated objective. Also, consistent with our other recommendations, the obligation of the AT Person should be to have one or more persons who are responsible for fulfilling the stated obligations, not "staff." Finally, the reference to the AT Person's clearing member should be amended to reflect that the relevant party is the clearing member of the relevant DCO that grants or guarantees the AT Person's access to the relevant DCM. This may be either the carrying FCM for the AT Person or the executing FCM.

Again, the definition of Algorithmic Trading Compliance Issue should be modified as previously recommended to make this provision more practical for the reasons also previously stated.

O. § 1.81(c)(2)(ii)

Although FIA supports the apparent objectives of this proposed provision, it has serious concerns about its overly prescriptive nature and the operational obligations it imposes on compliance staff.

As with other provisions, this provision fails to recognize that different organizations are of different sizes and complexity. For example, it would be meaningless for a one-person organization to have "a plan of internal coordination and communication between compliance staff and staff of the AT Person responsible for Algorithmic Trading..."

Moreover, even where an AT Person may have dedicated compliance staff, this provision sets up an unclear expectation of compliance staff. Compliance staff typically will have little or no expertise regarding the technical aspects of Algorithmic Trading systems. As a result, it is unclear what benefits might be derived from mandating the coordination and communication between compliance and non-compliance staff regarding the "design, changes, testing and controls that should be designed to detect and prevent Algorithmic Trading Compliance Issues." Compliance staff can be effective in advising on applicable rules and laws, but they are unlikely to bring meaningful insight on whether the design of an Algorithmic Trading system might lead to an Algorithmic Trading Compliance Issue.

That being said, FIA supports AT Persons implementing and maintaining a

compliance culture that encourages all of its employees and agents to comply with applicable laws and rules and appropriate best practices. We believe language in an equivalent SEC rule – the Market Access Rule⁶⁹ – more effectively will promote the CFTC’s objective in this provision. Paraphrasing that rule:

[Each AT Person] shall establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to manage the financial, regulatory, and other risks of [its Algorithmic Trading].

Again, the definition of Algorithmic Trading Compliance Issue should be modified as previously recommended to make this provision more practical for the reasons also previously stated.

P. § 1.81(c)(3)

Again, FIA agrees that each AT Person should periodically review and test the effectiveness of its policies and procedures related to Algorithmic Trading and take prompt action to remedy any deficiencies. For the reasons stated above, we do not support documenting each incident of remediation.

Q. § 1.81(d)(1)

FIA supports the apparent objectives of this proposed provision. However, as we stated previously, FIA believes the requirements to document all relevant policies and procedures and worse, to deem it an “Algorithmic Trading Compliance Issue” if an AT Person were to violate any such policy or procedure, including their own, will not promote optimal practices by AT Persons.

R. § 1.81(d)(1)(i)

FIA agrees that staff of an AT Person involved in designing, testing and monitoring Algorithmic Trading systems should be trained, and that, in most cases, such training should be documented. Again, however, the very prescriptive nature of this provision is troubling and causes its application to be impractical.

First, this provision presupposes a one-size-fits-all approach to training and fails to recognize that AT Persons may be of different sizes and complexities.

Second, the reference to persons involved in the design of an Algorithmic

⁶⁹ 17 C.F.R. § 240.15e3-5.

Trading system may be inapplicable. Persons captured by the word “designers,” potentially could include high-level academics retained by an AT Person to help AT Person programmers write code that have little to do with the actual purpose of the system, or even help provide theoretical (but not practical) input. The persons who should be captured by this provision are persons who develop, test and monitor the Algorithmic Trading system. There should also be a materiality threshold in capturing such persons.

Third, we do not understand the need to mandate the training of designers and testers of Algorithmic Trading systems regarding procedures for the notification of the applicable DCM when an Algorithmic Trading Event occurs. These persons may never be involved in such notification. Such requirement, however, would be more appropriate for a person who is responsible for monitoring Algorithmic Trading.

Fourth, whereas the training associated with the CEA or other static policies and procedures is typically a discrete event, the training associated with software engineers and other technical staff learning about an Algorithmic Trading system’s design and source code is typically a continuous process. Documenting such training is impractical.

Lastly, we are concerned that this provision establishes a back-door requirement that AT Persons must self-report to a DCM all Algorithmic Trading Compliance Issues, which does not appear to be contemplated in any other provision of Regulation AT. Such an implied requirement is suggested by the obligation to train certain staff regarding the “requirements for notifying staff of the applicable designated contract market when Algorithmic Trading Events” occur. An Algorithmic Trading Event includes an Algorithmic Trading Compliance Issue under proposed § 1.3(vvvv). At a minimum, any training required by this provision should pertain to Algorithmic Trading Disruption events only.

If, however, the CFTC does not accept FIA’s recommendation to require more broadly-identified topics to be addressed in AT Persons’ policies and procedures (rather than identify more specific requirements for each topic as it currently proposes), FIA proposes the following alternate language for § 1.81(d)(1)(i):

Procedures for designating and training all staff involved in developing, testing and monitoring Algorithmic Trading, and documenting training events. Training must, at a minimum, cover development and testing standards, Algorithmic Trading Disruption_communication procedures, and requirements for notifying staff of the applicable DCM when Algorithmic Trading Disruptions occur.

	<p>S. <u>§ 1.81(d)(1)(ii)</u></p> <p>FIA generally supports the apparent objectives of this proposed provision. However, this provision also presupposes a one-size-fits-all approach to training and disregards that an AT person may have a different size and complexity than another.</p> <p>T. <u>§ 1.81(d)(1)(iii)</u></p> <p>FIA generally supports the apparent objectives of this proposed provision. However, this provision, too, presupposes a one-size-fits-all approach to training and fails to recognize that AT Persons may be of different sizes and complexities. In some organizations, it may be appropriate to escalate knowledge to more senior persons within the AT Person as soon as a <u>material</u> Algorithmic Trading Event is identified. Immaterial events are likely not worthy of immediate escalation. Moreover, an AT Person should have the flexibility to have a procedure that, as a priority, first requires the appropriate mitigation by the person monitoring Algorithmic Trading upon the discovery of an Algorithmic Trading Event prior to escalation to senior persons.</p> <p>If, however, the CFTC does not accept FIA’s recommendation to require more broadly-identified topics to be addressed in AT Persons’ policies and procedures (rather than identify more specific requirements for each topic as it currently proposes), FIA proposes the following alternate language for § 1.81(d)(1)(iii):</p> <p style="padding-left: 40px;">Escalation procedures to inform more senior persons at the AT Person as soon as reasonably practical after Algorithmic Trading Disruptions are identified.</p> <p>U. <u>§ 1.81(d)(2)</u></p> <p>Again, FIA agrees that each AT Person should periodically review and test the effectiveness of its policies and procedures related to Algorithmic Trading and take prompt action to remedy any deficiencies. However, for the reasons stated above, we do not support documenting each incident of remediation.</p>
41	<p>The Commission understands that the requirements for developing, testing, and supervising algorithmic systems proposed in § 1.81(a)–(d) are already widely used throughout the industry. Are any specific requirements proposed in this section not widely used by persons that would be designated as AT Persons under Regulation AT, and if not, why not? If any requirements described in § 1.81(a)–(d) are not widely used, please provide an estimate of the cost that would be incurred by an AT Person to implement such requirements.</p>

Response	<p>Extensive narrative style documentation may not currently be in place at each AT Person. The financial industry, as well as many other industries, has evolved towards direct communication and self-documenting technology as more efficient and effective means of information conveyance. Assuming that an organization's information conveyance mechanism is currently non-narrative documentation, the cost of introducing narrative system documentation could be on the order of 10% of each natural person involved in the aforementioned tasks. Additionally, each organization may have to hire some number of natural persons to help ensure all documentation requirements were met. The actual number of people necessary is a function of the size and scope of an AT Person's operations.</p> <p>Testing of every change to an Algorithmic Trading system at every DCM is not current standard practice at AT Persons. This is because some changes are more effectively tested solely leveraging internal systems and, in some cases, DCM environments are incapable of facilitating the test in question. We question any additional cost here as it is widely believed that there is zero benefit to requiring ALL changes be tested on ALL DCMs. Nonetheless, the cost to the DCM to provide reasonable services to meet this requirement would be substantial.</p> <p>Assuming the Commission is referring to the use of historical market and trade data for verifying system functionality, historical back-testing of all changes to source code is not current standard practice at AT Persons. Although back-testing may be appropriate to test trading strategies, it is not appropriate to test whether all aspects of a system are functioning properly, <i>e.g.</i>, is a new order request message well-formed. Second, there may be circumstances where back-testing is not feasible, <i>e.g.</i>, in connection with the testing of a new DCM product prior to its launch.</p> <p>Separation of the trading function and the monitoring function associated with Algorithmic Trading is not currently a standard practice at all organizations contemplated as AT Persons. The cost of introducing independent natural person monitors for Algorithmic Trading operations scales with the size and scope of a firm's operations. It may require the hiring of a new employee. For larger firms, it may be necessary to hire several new employees to perform this function.</p> <p>Documentation of system strategy and design independently of the software responsible for executing the strategy may not exist at all AT Persons due to trade secret concerns. Some firms believe that having a single document that clearly outlines trade secrets presents an unjustifiable risk to the firm. Although the cost to document such things may be manageable, the risk associated with such information becoming disclosed to unauthorized persons represents a profound risk to the firm and the cost associated with ensuring the trade secret is preserved will likely be substantial regardless of firm size.</p>
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<p style="text-align: center;">42</p>	<p>Are there any aspects of § 1.81(a)–(d) that are unnecessary for purposes of reducing the risks from Algorithmic Trading, and should not be mandated by regulation? If so, please explain.</p>
<p style="text-align: center;">Response</p>	<p>There are many aspects of § 1.81(a)-(d) that are unnecessary for the purpose of reducing risks from Algorithmic Trading and therefore should not be mandated.</p> <p><u>Documentation of Policies and Procedures</u></p> <p>FIA believes that extensive documentation of policies and procedures associated with trading system design, development, testing, operations, and compliance does little to reduce any perceived risks associated with Algorithmic Trading. Ultimately, it is the application of sound policies and procedures that has a material impact on reducing risk, not the documentation of those policies and procedures. This must be taken into account when analyzing the costs and benefits associated with extensive documentation.</p> <p>Written documents have widely become antiquated as a means for the conveyance of information. Many industries, including trading, have adopted more effective and efficient methods for conveying necessary information including direct communication and self-documenting technology. Rather than committing significant resources to documentation, an antiquated tool, we believe that firms and the markets are better served by committing resources to market integrity protection efforts such as implementing risk controls.</p> <p><u>Requiring “related systems” to be included in testing requirements</u></p> <p>FIA believes the requirements associated with § 1.81 should be limited to software that is directly responsible for making buy/sell decisions and communicating those decisions with the exchange and should exclude “related systems.” As Algorithmic Trading and technology has evolved so have the systems related to Algorithmic Trading. In addition to the software that makes decisions regarding order sending and management, Algorithmic Trading operations may have software to address certain needs including, but not limited to, monitoring, risk management, market visualization, and integration with operational processes such as back-office. This software may be considered “related” for the purposes of § 1.81. We are concerned that “related” is a very subjective term which, depending on the interpretation, may include and extend beyond systems that have the ability to affect orders in the production trading environment. Rather than introduce this ambiguity we believe any proposed rule regarding testing should be limited to Algorithmic Trading code as it encompasses all systems that have direct ability to affect orders within the market—effectively “Algorithmic Trading” code as defined by the regulation.</p>

Testing of every software change at every DCM

As FIA stated above, depending on the scope of the software change in question it may provide no value to test that change at the DCM (*e.g.*, changes pertaining to a valuation algorithm) or, in some cases, be impossible to test that change at the DCM (*e.g.*, changes that solely effect processes internal to the AT Person). In order to maximize the risk mitigating aspects of testing, such testing should be conducted both internally within the AT Person and, when deemed necessary by the AT Person, utilize DCM-provided testing facilities, tools or services relevant to any changes to the code or systems.

Historical back-testing

Although we agree that testing software changes using historical market data can provide some risk-reducing value, we do not believe it is a panacea that should be specifically singled out by this regulation. As with all testing methodologies, testing using historical data addresses some testing needs, but not all. Rather than specifying a testing requirement using historical data we believe introducing a general testing requirement that affords the AT Person the flexibility to determine the best testing methodologies will maximize the risk mitigating aspects of software testing.

Separation of trading and monitoring

Despite the rule text implying that those responsible for trading activity may also be responsible for monitoring Algorithmic Trading systems, the Commission's commentary indicates that these functions must be performed by two separate people. We do not believe requiring the functions to be performed by two separate people necessarily reduces risk to the marketplace. As a matter of fact, we believe such a requirement may increase risk to the marketplace due to the operational inefficiencies associated with coordinating actions across the two parties when human intervention is necessary in Algorithmic Trading. We believe that AT Persons should be able to determine the natural person or group within their organization that is responsible for monitoring each individual Algorithmic Trading operation – for example, the trader that is utilizing the Algorithmic Trading system or some other qualified designated person at the firm. With this flexibility, firms will be able to determine the person most capable of intervening with the activities of an Algorithmic Trading operation should the need arise. If the Commission wishes to mandate an independent monitor of Algorithmic Trading activities AT Persons should be given the flexibility to determine those monitors with the understanding that they must be able to demonstrate that the monitor is not directly involved in those trading operations.

Documentation of system strategy and design

	As technology has evolved so have the best practices associated with conveying the necessary information associated with software systems—including Algorithmic Trading systems. Many industries have adopted more efficient and effective means for communicating such information including direct communication and self-documenting technology. Written documents have the risk of becoming quickly outdated as well as being assumed to be definitive when, in practice, not all relevant information may be included in the document.
43	Are the procedures described above for the development and testing of Algorithmic Trading sufficient to ensure that algorithmic systems are thoroughly tested before being used in production, and will operate in the manner intended in the production environment?
Response	<p>The procedures described within the proposed regulation are overly prescriptive and, as such, may not suffice to ensure that algorithmic trading systems are effectively tested before being used in production.</p> <p>As we described above, we believe that a principled requirement for testing material changes to a system’s code for determining orders, communicating orders, and managing orders on the DCM is not only sufficient but also necessary to meet the Commission’s goal due to the vast diversity of strategies, systems, and technologies used to trade on DCMs. This provides market participants, undoubtedly those with the necessary and best context, the flexibility to determine the most effective way to test code that may have a material impact on the well-functioning of a DCM. To have a prescriptive set of required tests (<i>e.g.</i>, back-testing and DCM hosted testing) that is limiting in nature is ineffective, insufficient, and in some cases, impractical.</p>
44	Are there any additional procedures for the development and testing of Algorithmic Trading that should be required under Regulation AT?
Response	<p>We believe that rather than prescribing a specific methodology for testing software it is more appropriate to introduce a general testing requirement that provides AT Persons with the ability to utilize a combination of testing methodologies that best meet the needs of their particular systems. Requiring any specific type of testing methodology may become quickly outdated as technology evolves or be ineffective at testing some software changes.</p> <p>FIA has previously done work to enumerate the types of testing that should be considered in any principles-based testing effort.⁷⁰ Depending on the nature of the change, one or more of the following types of testing may be appropriate. For maximum testing effectiveness, the AT Person should be empowered to determine which of these testing methodologies, as well as any not enumerated below, are appropriate for the change being tested:</p>

⁷⁰ 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>.

	<ul style="list-style-type: none"> • Historical back-testing; • Testing in a DCM hosted environment; • Unit Testing; • Functional Testing including integration and regression testing; • Non-functional testing including load, stress, performance; and scalability testing • Acceptance Testing.
45	Are any of the required procedures for the development and testing of Algorithmic Trading likely to become obsolete in the near future as development and testing standards evolve?
Response	<p>Requiring any specific type of testing methodology may become quickly outdated as technology evolves or may be ineffective at testing some software changes. We believe that rather than prescribing a specific methodology for testing software it is more appropriate to introduce a general testing requirement that provides AT Persons with the ability to utilize a combination of testing methodologies that best meet the needs of their particular systems.</p> <p>Also, as technology has evolved so have the best practices associated with conveying the necessary information associated with software systems—including Algorithmic Trading systems. Many industries have adopted more efficient and effective means for communicating such information including direct communication and self-documenting technology. Written documents have the risk of becoming quickly outdated as well as being assumed to be definitive when, in practice, not all relevant information may be included in the document.</p>
46	Are the procedures for designating and training Algorithmic Trading staff of AT Persons sufficient to ensure that such staff will be knowledgeable in the strategy and operation of Algorithmic Trading, and capable of identifying Algorithmic Trading Events and promptly escalating them to appropriate staff members?
Response	<p>Although designating and training Algorithmic Trading staff is sufficient to ensure that such staff will be knowledgeable, FIA cautions against a one-size-fits-all approach. Flexibility must be provided to firms to determine what procedures, training, and documentation is appropriate for their operations.</p> <p>Further, we believe that Algorithmic Trading Events is an unnecessarily broad class of events for mandated escalation procedures. Any mandated escalation procedures should be limited to those events that have a material impact on the production marketplace—these events are defined as Algorithmic Trading Disruptions in the proposed regulation.</p> <p>Also, it should be noted that in the case of an Algorithmic Trading Disruption it is almost always best for the AT Person, as well as the marketplace, for the</p>

	AT Person to take the necessary steps to mitigate further risk and market disruptions prior to escalating such issues to appropriate staff members. Any rule pertaining to the escalation of such issues should allow for risk mitigating steps to be taken prior to escalation.
47	Is it typical that persons responsible for monitoring algorithmic trading do not simultaneously engage in trading activity?
Response	<p>It is not typical for a person responsible for monitoring algorithmic trading to not simultaneously engage in trading activity.</p> <p>Typically, the person engaged in Algorithmic Trading activity is simultaneously responsible for monitoring the activity of the associated trading systems. This is for several reasons:</p> <ul style="list-style-type: none"> • The person engaged in trading has all necessary context, in real time, to actively monitor and manage an Algorithmic Trading system. This includes (1) market conditions, (2) system conditions, (3) system alerts, (4) position and other associated risk, (5) any actions that precede events that require human intervention, and (6) the reasons for such actions prior to such events. • Given that context, they may be better equipped to determine when and how human intervention in Algorithmic Trading systems should occur. • Any persons not actively engaged in trading activity will typically have less situational context than persons engaged in trading activity. This missing situational context may be critical when determining the right course of action when human intervention is necessary. The transferring of such knowledge to a non-trading person responsible for monitoring algorithmic trading will delay any actions that may need to be taken to preserve market integrity due to the time it takes to communicate all necessary contextual information. Additionally, it is possible that this transfer of knowledge is incomplete. This ultimately could be a distraction to the trader. • In addition to the above concerns, it may not be operationally efficient or reasonable cost-wise to hire an activity monitor that is independent of the trader. <p>In § 1.81(c), the Commission requires that compliance personnel be actively involved in monitoring Algorithmic Trading operations. This requirement, implemented on a post-trade basis, would accomplish the goals of an independent monitoring requirement.</p>
48	Proposed §§ 1.80, 1.81, and 1.83 would impose certain requirements on all AT Persons regardless of the size, sophistication, or other attributes of their business. The Commission requests public comment regarding whether these requirements should vary in some manner depending on the AT Person. If commenters believe proposed §§ 1.80, 1.81, and 1.83 should vary, please describe how and according to what criteria.

Response	<p>The application of the regulation should vary based on the size and sophistication of an organization. Without variation built into the regulation, smaller AT Persons will be unable to innovate and grow, and may be forced to cease trading operations due to the magnitude of new costs imposed on them by this regulation.</p> <p>Similarly, the application of the regulation should vary based on the types of technology used by an AT Person. Bespoke technological solutions often require a custom-tailored approach to development, testing and monitoring methodologies. Other solutions constructed with industry available software may only require vanilla development, testing and monitoring methodologies. Finally, commercially available software may require no development or little testing by AT Persons, only configuration and monitoring. In fact, in the case of commercially available software, the AT Person may have limited capability to develop and test the software as such software is often delivered as-is without providing access to the underlying source code.</p>
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VII. Self-Trade Prevention
§ 40.23 (Questions 90-98, 151-157)

<p>INTRO</p>	<p>Regulation AT’s self-trade prevention requirements are unnecessary and could prevent legitimate market activity.</p> <p>Many FIA members have worked with DCMs to develop and implement current DCM systems designed to prevent problematic self-trades.⁷¹ In fact, in the fourth quarter of 2015, more than 85% of all order messages submitted to CME Group contained instructions to avoid self-trades through the CME Globex self-match prevention (“SMP”) functionality. As a result of these DCM SMP tools and a better understanding by DCMs of the source of some self-trades, it is our understanding that incidences of problematic self-trading are statistically insignificant. One metric that illustrates this is the measure of self-trade volume at the individual trader level where the same participant with the same account was on both sides of a trade. In mid-2013, before SMP functionality was introduced, these self-trades represented approximately 1/10th of 1% of average daily volume (0.093%). By mid-2015, these self-trades dropped to approximately 1/100th of 1% of average daily volume (0.012%). In October 2013, prior to the implementation of SMP functionality on ICE Futures U.S. (“IFUS”), the number of self-trades was 0.051%. For all of 2015, the number of self-trades on IFUS represented 0.013% of the total volume.</p> <p>In the NPR, the CFTC estimates that in February 2015, intra-firm self-trades in one futures contract ranged from 10-15% of total activity. CME Group calculated the volume from self-trades at the firm-level during the same time period. They then subtracted from that total the self-trade volume of a small group of firms that have demonstrated to CME Group Market Regulation the independence of trading between teams or accounts and would be likely to seek approval to self-trade pursuant to § 40.23(c). What remained is the proportion of total exchange volume that would have been potentially impermissible under Regulation AT. Those potentially impermissible self-trades equaled 0.2% of CME Group’s daily volume and 0.2% of daily trades. At IFUS, impermissible self-trades represented 0.008% of the volume in February 2015. Accordingly, FIA believes that the self-trading measures contemplated by § 40.23 – particularly making such measures mandatory –not only are unnecessary, but also could have a material adverse impact on the ability of bona fide hedgers to hedge by blocking legitimate trades.</p> <p>One fundamental concern is that, today, DCMs’ SMP technology is geared toward the trader of an account. However, the CFTC’s proposed § 40.23 is generally designed to prevent self-trading between accounts. As a result, a</p>
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⁷¹According to surveys conducted by FIA, in 2010, one of nine U.S. DCMs had self-match prevention tools in place (11%); by 2015, all five U.S. DCMs had self-match prevention tools in place (100%).

technological solution would have to be found to modify existing systems. Although the CFTC contemplates that DCMs potentially may not require the application of SMP tools with respect to specific accounts under common beneficial ownership (*e.g.*, accounts under independent control), the proposed approval process is unwieldy, requiring large firms to potentially submit thousands of approval requests.

In fact, we surveyed FIA Principal Traders Group member firms to determine how many would request approval from DCMs so that self-trade prevention tools would not be applied. We received feedback from 71% of the membership that are active in futures trading. Ninety-four percent of the respondents indicated they would “definitely” submit requests for self-trade approval. Ninety-four percent indicated they would submit 100 or more requests; 71% indicated they could be submitting more than 1,000 such requests depending on how the final rules are written.

Implementation of § 40.23 is unnecessarily complicated by prescribing that the SMP functionality must apply to all orders submitted to the exchange. We understand that one purpose of this requirement is to effect unbiased treatment of order activity. However, it is unnecessarily broad in scope, bringing in order types that are specifically excluded under DCM SMP programs because of the inherent technological complexities involved in such transactions. These include certain option strategies, user-defined spreads, and transactions arising out of implied functionality. No significant amount of self-trade activity has been seen for any of these order types, and applying SMP tools to such orders would risk significant disruption to order matching algorithms at the exchange.

Proposed § 40.23 is overly burdensome and appears to be a costly solution in search of a problem. Although the rule would authorize DCMs to permit self-trades (i) in the case of accounts with common beneficial ownership, when the trades are initiated by independent account controllers or (ii) in the case of accounts that are under common control but different ownership, provided the trades comply with the DCM’s cross-trade minimum exposure requirements or similar rules, such trades would be permitted only for those persons that comply with the proposed rule’s burdensome application and approval process. The proposed rule would require market participants to seek approval to enter into such transactions on an account-by-account basis (and in many instances trader-by-trader) and to amend the request for approval “if any change occurs that would cause the information provided to be no longer accurate or complete.” However, such changes occur frequently and under a multitude of ordinary circumstances, including any time a new trader or product is added or a trader leaves a firm. It is our understanding that DCMs already have processes for authorizing self-trades in the instances described in § 40.23 without the costly process described in the NPR. FIA is concerned that the proposed approval process may cause market participants instead to implement SMP technology that will block trades that would otherwise have been approved self-trades,

	<p>adversely affecting the price discovery process.</p> <p>Given that Congress has expressly prohibited only certain transactions involving self-trading, namely wash sales – which require intentional conduct – we question whether the CFTC should prohibit unintentional self-trades by rule. The potential problems arising from self-trading are not new and are not unique to automated trading.⁷² Specifically, Section 4c(a) of the CEA prohibits entering into a transaction that is, is of the character of, or is commonly known to the trade as a wash sale. The essential and identifying characteristic of a wash sale is the intent to execute a transaction that is not genuine or bona fide (e.g., to intentionally trade with oneself to create a false or misleading appearance of activity or to negate market risk).⁷³ By eliminating the intent requirement and prohibiting all self-trades unless they fall within a specific safe harbor, the CFTC seems to take a position that is not consistent with the intent of Congress, mainly to prohibit only purposeful self-trades (i.e., wash sales). Implementation of the CFTC’s proposed language would create an unreasonable burden for a variety of market participants engaging in legitimate transactions.</p>
90	<p>The Commission seeks to require self-trade prevention tools that screen out unintentional self-trading, while permitting bona-fide self-matched trades that are undertaken for legitimate business purposes. Under the regulations proposed above, DCMs shall implement rules reasonably designed to prevent self-trading (“the matching of orders for accounts that have common beneficial ownership or are under common control”), but DCMs may in their discretion implement rules that permit “the matching of orders for accounts with common beneficial ownership where such orders are initiated by independent decision makers.”</p>
90a	<p>Do these standards accomplish the goal of preventing only unintentional self-trading, or would other standards be more effective in accomplishing this goal? For example, should the Commission consider adopting in any final rules arising from this NPR an alternative requirement modeled on FINRA Rule 5210 and require market participants to implement policies and procedures to review their trading activity for, and a prevent a pattern of, self-trades?</p>

⁷² See, e.g., *Wilson v. CFTC*, 322 F.3d 555 (8th Cir. 2003); *Reddy v. CFTC*, 191 F.3d 109 (2nd Cir. 1999); *In re Collins*, Comm. Fut. L. Rep. (CCH) ¶ 22,986 (CFTC April 4, 1986), *rev’d by Stoller v. CFTC*, 834 F.2d 262 (2nd Cir. 1987); *CFTC v. Savage*, 611 F.2d 270, 274-75 (9th Cir. 1979); *In re Jean Goldwurm*, 7 Agric. Dev. 265, 274 (1948).

⁷³ *Wilson*, 322 F.3d at 559-560; *Reddy*, 191 F.3d at 115; *Stoller*, 834 F.2d at 265; *Savage*, 611 F.2d at 284; *Goldwurm*, 7 Agric. Dev. 265 at 274.

<p>Response</p>	<p>FIA believes that proposed § 40.23 is unnecessary and that no additional regulation is needed to require use of SMP technology. As discussed earlier, the existing SMP technology, coupled with a better understanding by DCMs of the source of some self-trades, has been so successful in decreasing the number of self-trades that such trades are now statistically insignificant. The Commission should continue to defer to the DCMs to establish SMP policies and procedures appropriate for their respective markets.</p> <p>Moreover, proposed § 40.23 is unworkable. Although the rule appropriately would authorize DCMs to permit self-trades (i) in the case of accounts with common beneficial ownership, when the trades are initiated by independent account controllers or (ii) in the case of accounts that are under common control but different ownership, when the trades comply with the DCM’s cross-trade minimum exposure requirements or similar rules, such trades would be permitted only for those persons that comply with the proposed rule’s burdensome application and approval process. The proposed rule would require market participants to seek approval to enter into such transactions on an account-by-account (and in some instances trader-by-trader) basis and to amend the request for approval “if any change occurs that would cause the information provided to be no longer accurate or complete.” This process may cause market participants instead to implement SMP technology that will block trades that would otherwise have been approved self-trades, adversely affecting the price discovery process.</p> <p>The CFTC’s goal of prohibiting unintentional self-trading coupled with an expansive view of common beneficial ownership creates a substantial burden for many market participants. Pension funds that achieve diversity by investing in numerous commodity funds, for example, would be required to obtain prior approval from exchanges to ensure that inadvertent trades between two independent managers are not deemed impermissible self-trades. Continuously assessing whether a pension fund is deemed to be a beneficial owner of a particular investment vehicle is virtually impossible because fund ownership changes on a daily basis as investors affect subscriptions and redemptions.</p>
<p>90b</p>	<p>While the regulations contain exceptions for bona fide self-match trades (described in § 40.23(b)), the regulations are intended to prevent all unintentional self-trading, and do not include a <i>de minimis</i> exception for a certain percentage of unintentional self-trading. Should the regulations permit a certain <i>de minimis</i> amount of unintentional self-trading, and if so, what amount should be permitted (<i>e.g.</i>, as a percentage of monthly trading volume)?</p>

Response	The regulations should permit a <i>de minimis</i> percentage of unintentional self-trades, which would be monitored by the DCM post-trade. We note that a <i>de minimis</i> exemption cannot be automatically applied using current DCM-provided SMP technology. Applying automated thresholds would create significant technological complexities. Every time an order message is submitted, the matching engine would have to perform a historical look-up into another database to determine if a threshold had been breached. This would create unacceptable variance/latency for firms using SMP technology.
90c	The following terms are used in proposed § 40.23(a) and (b): (1) self-trading, (2) common beneficial ownership, (3) independent decision makers, and (4) common control. Do any of these terms require further definition? If so, how should they be defined? Should any alternatives be used and, if so, how should such substitute terms be defined?
Response	We do not believe that the Commission should further define any of the above terms. To the extent that further clarification may be considered appropriate, the industry will work together to agree a definition of these terms that is appropriate for SMP programs and consistent across DCMs.
90d	With respect to “common beneficial ownership,” the Commission requests comment on the minimum degree of ownership in an account that should trigger a determination that such account is under common beneficial ownership. For example, should an account be deemed to be under common beneficial ownership between two unrelated persons if each person directly or indirectly has a 10% or more ownership or equity interest in such account? The Commission refers commenters to the aggregation rules in part 150 of its regulations, including specifically § 150.4, and requests comment on a potential Commission definition of common beneficial ownership that is modeled on § 150.4.
Response	The Commission should not define “common beneficial ownership.” Instead, we believe the proposed rules should authorize DCMs, working with other DCMs and market participants to find a consistent definition across markets, to define, or provide further guidance with respect to, the term “common beneficial ownership” as appropriate for DCMs’ markets and SMP programs.
90e	The Commission also requests comment on whether “common beneficial ownership” should be defined in any final rules arising from this NPR, or whether such definition should be left to each DCM with respect to its program for implementing proposed § 40.23.
Response	Please see FIA’s response to Question 90d.
91	Are there any other types of self-trading that should be permitted in addition to the exceptions permitted in § 40.23(b)(1) and (2)? If so, please describe such other types of acceptable self-trading and explain why they should be permitted.

<p>Response</p>	<p>Self-trades that result from implied order matching outside of the control of the market participant who enters the order should also be permitted. For example, a commercial hedger may have one trader using a spread to manage risk while another trader is entering outright buy and sell orders. The outright buy or sell order may inadvertently match with one leg of the spread.</p>
<p>92</p>	<p>Proposed § 40.23 provides that DCMs may comply with the requirement to apply, or provide and require the use of, self-trade prevention tools by requiring market participants to identify to the DCM which accounts should be prohibited from trading with each other. With respect to this account identification process, the Commission’s principal goal is to prevent unintentional self-trading; the Commission does not have a specific interest in regulating the manner by which market participants identify to DCMs the account that should be prohibited from trading from each other, so long as this goal is met. Should any other identification methods be permitted in § 40.23? For example, please comment on whether the opposite approach is preferable: market participants would identify to DCMs the accounts that should be permitted to trade with each other (as opposed to those accounts that should be prevented from trading with each other).</p>
<p>Response</p>	<p>We believe the proper model to govern self-match prevention at DCMs is negative permission, <i>i.e.</i>, AT Persons should register with DCMs those groups of orders that should be prevented from matching, rather than groups of orders that may match. This negative permission model is already in place at CME Group and IFUS. For example, CME Globex has provided market participants with the ability to register “self-match prevention groups.” These are participant-defined groups of orders that may not match with one another identified by an “SMP ID” that is included on each order. The only rigid aggregation requirement for these groups is that they belong to the same “executing firm.”</p> <p>DCMs should provide AT Persons with flexible levels of aggregation to prevent orders from matching, including but not limited to, account, firm and trader. This flexibility will allow firms to properly manage their operations. AT Persons should have the authority to determine the proper level of aggregation to use.</p> <p>We believe there already is an efficient and effective approach to SMP at DCMs and the industry has developed processes to manage SMP in this manner. A change would introduce significant new and unnecessary costs.</p>

93	<p>The Commission believes that its requirements concerning self-trade prevention tools must strike the appropriate balance between flexibility (allowing market participants with diverse trading operations and strategies the discretion in implementation so as effectively prevent only unintentional self-trades) and simplicity (a variety of design and implementation options may render this control too complex to be effective). Does the Commission allow sufficient discretion to exchanges and market participants in the design and implementation of self-trade prevention tools? Is there any area where the Commission should be more prescriptive? The Commission is particularly interested in whether there is a particular level at which it should require implementation of self-trade prevention tools, <i>i.e.</i>, if the tools must prevent matching of orders from the same trading firm, the same trader, the same trading algorithm, or some other level.</p>
Response	<p>Although the rule provides flexibility to DCMs to determine an appropriate design (cancellation treatment) of its SMP technology, implementation of the rule is unnecessarily complicated by prescribing that the SMP functionality must apply to all orders submitted to the exchange. We understand that one purpose of this requirement is to produce unbiased treatment of order activity. However, it is unnecessarily broad in scope, bringing in order types that are specifically excluded under DCM programs because of the inherent technical complexities involved in such transactions along with their particularly low incidence of self-trades. These include certain option strategies, user-defined spreads, and transactions arising out of implied functionality. No significant amount of self-trade activity has been seen for any of these order types and applying SMP tools to such orders would risk significant disruption to order matching algorithms at the exchange.</p> <p>Further, proposed § 40.23(a) anchors the prohibition of self-trading at the account level, which in certain situations is not indicative of the ownership or control of an order. Frequently, suspense, execution, and omnibus accounts comingle a number of beneficial owners and controllers at the time of execution. To address this conflict, references to account should be removed. “Self-trading” should be defined as the matching of orders that have common beneficial owners or that are under common control which is known at the time the order is submitted to a DCM.</p> <p>The proposed rules should not be more prescriptive. The rules should maintain flexibility and allow market participants discretion in implementation. For example, proposed § 40.23(b)(i) currently permits self-trades resulting from the matching of orders for accounts with common beneficial ownership where such orders are initiated by independent decision makers. This independence may exist at a number of different levels, distinct to each firm, and requiring implementation at a specific level would undermine the ability of prevention tools to address such circumstances.</p>
94	<p>Proposed § 40.23(a) would require DCMs to either apply, or provide and require the use of, self-trade prevention tools. Please comment whether</p>

	<p>§ 40.23(a) should, in addition, permit market participants to use their own self-trade prevention tools to meet the requirements of proposed § 40.23(a), and if so, what additional regulations would ensure that DCMs are able to: ensure that such tools are comparable to DCM-provided tools; monitor the performance of such tools; and otherwise review such tools and ensure that they are sufficiently rigorous to meet the requirements of § 40.23.</p>
Response	<p>We believe that market participants should be free to use their own proprietary, third-party, or DCM-provided SMP tools.</p> <p>Further, additional rules are not necessary to ensure that DCMs are able to monitor SMP tools that are developed independently by market participants. If a market participant's own proprietary or third-party SMP technology is working properly, it will prevent orders that would otherwise self-trade from hitting the exchange gateway entirely. Moreover, DCMs already monitor self-trade activity as part of their surveillance program to detect wash trades.</p>
95	<p>Is it appropriate to require implementation of self-trade prevention tools with respect to all orders? Should such controls be mandatory for only a particular subset of orders, <i>i.e.</i>, orders from AT Persons or orders submitted through DEA?</p>
Response	<p>FIA believes it is not appropriate to require implementation of SMP tools with respect to all orders. Applying SMP tools to certain orders such as certain option strategies, user-defined spreads, and transactions arising out of implied functionality, would risk significant disruption to order matching algorithms at DCMs.</p>
96	<p>Please comment on the requirement that DCMs disclose self-trade statistics. Is the data required to be disclosed appropriate? Is there any other category of self-trade data that DCMs should be required to disclose?</p>
Response	<p>FIA sees no value in publicly displaying the approved self-trade transaction information, nor is the relevance of this information to market participants clear. FIA believes that publication of this data will be misunderstood, implying that all such trades are in some way improper.</p>
97	<p>Should DCMs be required to disclose the amount of unintentional self-trading that occurs each month, alongside the self-trade statistics required to be published under proposed § 40.23(d)?</p>
Response	<p>Please see FIA's response to Question 96.</p>
98	<p>As noted above, the Commission understands that there is some potential for self-trade prevention tools to be used for wrongful activity that may include disruptive trading or other violations of the Act or Commission regulations on DCMs. Are there ways to design self-trade prevention tools so that they do not facilitate disruptive trading (such as spoofing) or other violations of the Act or Commission regulations on DCMs? Are additional regulations warranted to ensure that such tools are not used to facilitate such activities?</p>
Response	<p>FIA does not believe that any additional regulation is necessary to ensure that SMP technology is not used to facilitate disruptive trading or other prohibited activity. Any tool is subject to misuse, whether deliberately or inadvertently.</p>

	However, FIA believes that the Commission’s focus should be on ensuring that it is able to (i) detect and analyze disruptive or manipulative behavior as soon as possible and (ii) take enforcement action when appropriate to discourage such behavior.
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Cost/Benefit Request for Comments

151	Please comment on the cost estimates described above for DCMs and market participants to comply with the requirements of § 40.23. The Commission is interested in commenter opinion on all aspects of its analysis, including its estimate of the number of entities impacted by the proposed regulation and the amount of costs such entities may incur to comply with the regulation.
Response	<p>The proposed registration method will result in potentially thousands of submissions per firm.</p> <ol style="list-style-type: none"> 1. Firms would potentially have to submit a request for every trader on a trading desk that may trade with a trader on another independently operated trading desk at the same firm, on every exchange on which they trade. 2. Every time a trader is hired, changes desks or leaves, requests would have to be resubmitted. 3. Every time a strategy changes or a product is added, requests for approval would need to be filed. <p>We surveyed FIA Principal Traders Group member firms to determine how many would request approval from DCMs so that self-trade prevention tools would not be applied. We received feedback from 71% of the membership that are active in futures trading. Ninety-four percent of the respondents indicated they would “definitely” submit requests for self-trade approval. Ninety-four percent indicated they would submit 100 or more requests; 71% indicated they could be submitting more than 1,000 such requests depending on how the final rules are written.</p> <p>As stated in the introduction to this section, data collected by exchanges indicates that the cost of the proposed registration regime is not proportional to the proposed benefits of the rule and the percentage of self-trades.</p>
152	Please comment on the benefits described above. Do you agree with the Commission’s position that self-trade prevention requirements will result in more accurate indications of the level of market interest on both sides of the market and help ensure arms-length transactions that promote effective price discovery? Are there additional benefits to regulatory self-trade prevention requirements not articulated above?
Response	The industry is committed to preventing self-trades that do not contribute to the price discovery process; however, we do not believe the <i>de minimis</i> number of self-trades remaining since the exchanges have implemented SMP

	technology distorts the level of market interest in any way.
153	Are there any DCMs that neither internalize and apply self-trade prevention tools, nor provide self-trade prevention tools to their market participants? If so, please provide an estimate of the cost to such a DCM to comply with the requirement under § 40.23(a) to apply, or provide and require the use of, self-trade prevention tools.
Response	DCMs are in a better position to respond to this question.
154	Would any DCMs that currently offer self-trade prevention tools need to update their tools to meet the requirements of § 40.23? If so, please provide an estimate of the cost to such a DCM to comply with the requirements of § 40.23.
Response	Please see FIA's response to Question 91.
155	What percentage of market participants do not currently make use of exchange-provided self-trade prevention tools, when active on a DCM that provides, but does not require such tools? Please provide an estimate of the cost to such a market participant to initially calibrate and use exchange-provided self-trade prevention tools, in accordance with § 40.23. Please also comment on any other direct or indirect costs to a market participant that does not currently use self-trade prevention tools arising from the proposed requirement to implement such tools.
Response	In the fourth quarter of 2015, 85% of the orders sent to CME had instructions to avoid self-trading. The other 15% consisted of accounts 1) that are in no danger of self-matching, 2) firms that use their own self-match technology, 3) omnibus accounts, 4) implied self-trades, 5) give-ups, and 6) inter-firm open positions.
156	The Commission estimates above that the number of market participants that will submit the approval requests described by § 40.23(c) is approximately equivalent to the number of AT Persons. Please comment on whether the estimate of the number of market participants submitting such approval requests should be higher or lower. For example, should the estimate be raised to account for proprietary algorithmic traders that will not be AT Persons, because they do not use Direct Electronic Access and therefore will not be required to register as floor traders?
Response	Please see FIA's response to Question 151.
157	Proposed § 40.23 provides that DCMs may comply with the requirement to apply, or provide and require the use of, self-trade prevention tools by requiring market participants to identify to the DCM which accounts should be prohibited from trading with each other. With respect to this account identification process, the Commission's principal goal is to prevent unintentional self-trading; the Commission does not have a specific interest in regulating the manner by which market participants identify to DCMs the account that should be prohibited from trading from each other, so long as this goal is met. Should any other identification methods be permitted in § 40.23? For example, please comment on whether the opposite approach is preferable: market participants would identify to DCMs the accounts that should be permitted to trade with each other (as opposed to those accounts that should be

	prevented from trading with each other). In particular, please comment on whether this approach or other identification methods would reduce costs for market participants or be easier for both market participants and DCMs to administer.
Response	Current SMP technology requires market participants to register traders that should not be allowed to trade with each other; the proposed rule requires a separate process for registering accounts that should be able to trade with each other. In some cases this will result in market participants registering each and every trader.

VIII. Annual Reports
§§ 1.83, 40.22 (Questions 57-63 and 85-89)

INTRO	<p>The requirement to prepare and file annual reports should be replaced by a certification process for AT Persons and eliminated for clearing FCMs.⁷⁴</p> <p>The reliance of Regulation AT on a system of annual reports to be prepared by AT Persons and clearing member FCMs appears unnecessary and, for FCMs and swap dealers, redundant of the CCO Annual Report that they already are required to prepare and file annually.⁷⁵ Worse, for AT Persons, it will cause DCMs to receive and review a wide variety of policies and procedures related to the development and compliance of Algorithmic Trading Systems, as well as numerous snapshots of quantitative risk parameter settings that will be difficult for a DCM to assess in any meaningful way. This is because this information will be so particularized for each AT Person as to provide little basis for a DCM to evaluate without substantial additional information about each AT Person’s operations. FIA believes that the objectives of § 1.83 can be met less onerously and more practically by requiring affected parties solely to certify that they materially comply with the requirements of § 1.80(a) and § 1.81(a) and (c) of Regulation AT and make such certifications available to a DCM or the CFTC upon request.⁷⁶</p>
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⁷⁴ FIA notes that the burden and lack of usefulness of the proposed annual report increases exponentially should the CFTC seek to expand the scope of parties subject to the requirement beyond those already proposed.

⁷⁵ CFTC §3.3(e). The Annual Report of the Chief Compliance Officer pursuant to CFTC § 3.3(e) (“CCO Annual Report”) is required to:

- (1) Contain a description of the written policies and procedures, including the code of ethics and conflicts of interest policies, of the futures commission merchant, swap dealer, or major swap participant;
- (2) Review each applicable requirement under the Act and Commission regulations, and with respect to each:
 - (i) Identify the policies and procedures that are reasonably designed to ensure compliance with the requirement under the Act and Commission regulations;
 - (ii) Provide an assessment as to the effectiveness of these policies and procedures; and
 - (iii) Discuss areas for improvement, and recommend potential or prospective changes or improvements to its compliance program and resources devoted to compliance;
- (3) List any material changes to compliance policies and procedures during the coverage period for the report;
- (4) Describe the financial, managerial, operational, and staffing resources set aside for compliance with respect to the Act and Commission regulations, including any material deficiencies in such resources; and
- (5) Describe any material non-compliance issues identified, and the corresponding action taken.

The CCO Annual Report must be submitted to the Commission within 90 days of the FCM’s fiscal year-end.

⁷⁶ This would be consistent with SEC requirements under Rule 15c3-5. This rule requires, among other things, that a broker-dealer, on at least an annual basis, review its business activity in connection with its market access to assure the overall effectiveness of its risk management controls and supervisory procedures. The broker-dealer’s Chief

FIA does not see sufficient merit in requiring AT Persons or clearing member FCMs to prepare annual reports as contemplated under these provisions to justify any additional costs that would be incurred in order to prepare such reports.

First, to the extent Regulation AT may apply to AT Persons of different sizes and complexities, the burden of preparing and filing an annual report may be extensive. IBs, CTAs, CPOs, the proposed new Floor Trader registrants, who often may be small entities or individuals, may be disproportionately adversely impacted.

Second, DCMs will be flooded by hundreds, if not thousands, of annual reports, which will have little practical use or benefit to them. For AT Persons⁷⁷ these reports will potentially contain tens of thousands of snapshots of quantitative risk parameter settings at moments in time, as well as policies and procedures related to the development and compliance of Algorithmic Trading Systems that will be difficult for a DCM to assess in any meaningful way. This is because DCMs are likely not to know the trading strategies or risk tolerances of any particular AT Person and thus are unable to assess the adequacy of their development and testing protocols, their procedures to help detect Algorithmic Trading Compliance Issues, or their pre-trade risk and other controls.

Third, by the proposed time DCMs receive the reports of AT Persons and clearing FCMs required under proposed § 1.83 (*i.e.*, filing by June 30 of each year), the information set forth in the reports will be outdated. For example, a discussion of pre-trade risk controls in place during the prior year, is not meaningful to how an AT Person is addressing risks today. Moreover, by the date a DCM can practically review an annual report (if at all), the information contained in the report will even be less meaningful.

Fourth, by requiring all AT Persons to file certain policies and procedures with DCMs, the CFTC is exposing such persons to additional sources of potential confidentiality breaches that could hurt their businesses.⁷⁸ This should be avoided particularly when to the extent the CFTC desires to review any AT Person's policy and procedure regarding certain standards for the development, testing, monitoring and compliance of Algorithmic Trading systems, it may request it under its § 1.31 authority.

Executive Officer, or equivalent officer, must on an annual basis certify that the broker-dealer's controls and procedures comply with the requirements of Rule 15c3-5. 17 C.F.R. § 240.15e3-5.

⁷⁷ FIA conducted a survey of its members as to the estimated number of parameters and quantitative settings that would be required under the proposed annual report. Respondents provided estimates per firm a) for the number of parameters ranging from 200 to 60,000 and b) for the number of quantitative settings ranging from in excess of 50,000 to 2 million.

⁷⁸ Please see FIA's detailed discussion with respect to Source Code.

	<p>Finally, FCMs are already required to prepare CCO Annual Reports under § 3.3 and subject to risk management requirements under §§ 1.11 and 1.73. To the extent that they grant or guarantee access to customers to DCMs, they already are under the oversight of such DCMs and subject to inspection. There is no marginal benefit in requiring FCMs to produce an additional annual report to justify the additional cost, which FIA expects would be substantially higher than the Commission’s estimates.</p> <p>To the extent that the CFTC seeks to have assurance that AT Persons are following Regulation AT, it can simply require each AT Person to prepare an annual certification that it complied with § 1.80(a) and § 1.81(a) and (c) of Regulation AT that were applicable to it from May 1 of the prior year to April 30 of the present year, and provide the certification upon request. This is the approach followed by the SEC in connection with its Risk Management Controls for Brokers or Dealers with Market Access rule⁷⁹ and by ESMA’s 2015 Final Draft Regulatory Standards.⁸⁰</p>
57	The Commission welcomes comment on the type of information that should be included in the reports required by proposed § 1.83. Should different or additional descriptions be included in the reports, which will be evaluated by DCMs under proposed § 40.22?
Response	<p>As discussed in detail above, there should be no annual report requirement.</p> <p>Other than the AT Person certification proposed by FIA, we have been unable to identify any content of an annual report that would be helpful to the DCMs.</p>
58	How often should the reports required by proposed § 1.83 be submitted to the relevant DCMs? Should the report be submitted more or less frequently than annually?
Response	<p>As discussed above, there should be no report requirement.</p> <p>If the CFTC moves forward with a report requirement, FIA has serious concerns that the proposed annual frequency would be far too burdensome to both reporting participants (AT Persons and clearing FCMs) as well as DCMs.</p>

⁷⁹ 17 C.F.R. § 240.15c3-5(e)(2) states:

The Chief Executive Officer (or equivalent officer) of the broker or dealer shall, on an annual basis, certify that such risk management controls and supervisory procedures comply with paragraphs (b) and (c) of this section, and that the broker or dealer conducted such review, and such certifications shall be preserved by the broker or dealer as part of its [required] books and records

⁸⁰ ESMA’s 2015 Final Draft Regulatory Standards require an annual self- assessment and validation process in which investment firms must review their Algorithmic Trading systems and trading algorithms, and overall compliance with Article 17 of Directive 2014/65/EU (MiFID II’s requirements on firms that engage in Algorithmic Trading).

59	When should the reports required by proposed § 1.83 be submitted to the relevant DCMs? Should the reports be submitted on a date other than June 30 of each year?
Response	As discussed above, there should be no report requirement. Otherwise, FIA has no comment on the proposed date.
60	Should a representative of the AT Person or clearing member FCM other than the chief executive officer or the chief compliance officer be responsible for certifying the reports required by proposed § 1.83? Should only the chief executive officer be permitted to certify the report? Alternatively, should only the chief compliance officer be permitted to certify the report?
Response	As discussed above, there should be no report requirement. FIA proposes a certification in lieu of an annual report for AT Persons. FIA proposes that such certification could be signed by the CEO, CCO, or the senior most person in charge of oversight of a particular business (<i>e.g.</i> , senior trader). Certification by a senior trader (or equivalent) may be more appropriate for certain firm structures. ⁸¹
61	Are there any aspects of proposed § 1.83(b) that pose an undue burden for clearing member FCMs and are unnecessary for purposes of reducing the risks associated with Algorithmic Trading? If so, please explain (1) the burden; (2) why it is not necessary to reduce the risks associated with Algorithmic Trading, particularly in the case of DEA. What alternatives are available consistent with the purposes of Regulation AT, including in particular Regulation AT's intent that § 1.83 reports benefit from the third-party SRO review performed by DCMs with respect to such reports?
Response	As discussed above, there should be no report requirement. As discussed above, annual reports are particularly burdensome, with no added benefit, for clearing FCMs because of already existing: a) CCO Compliance Reports, b) risk reviews by DCMs, and c) risk management requirements under §§ 1.11 and 1.73.
62	Should the reports required by proposed § 1.83 be sent to any entity other than each DCM on which the AT Person operates, such as the Commission or an RFA? For example, should the Commission require that AT Persons that are members of a RFA send compliance reports to RFA upon NFA's request?
Response	As discussed above, there should be no report requirement. Adding additional recipients of such a report increases the likelihood of

⁸¹ Take the example of an airline company that has a division that hedges fuel prices through futures trading that falls within the definition of Algorithmic Trading, making the company an AT Person. A certification by the supervisor or senior trader of the division responsible for the trading would be able to provide a more meaningful certification than the CEO of the airline company.

	<p>duplicative and possibly conflicting oversight and regulation, not to mention exposing the content to additional potential confidentiality breaches without adding any discernable benefit.</p>
63	<p>Proposed § 1.83(c) includes recordkeeping requirements imposed on AT Persons, and proposed § 1.83(d) includes recordkeeping requirements imposed on clearing member FCMs. Should the recordkeeping requirements of § 1.83(c) be distributed throughout the sections of the Commission’s regulations that contain recordkeeping requirements for various categories of Commission registrants that will be classified as AT Persons? Should § 1.83(d) be transferred to § 1.35 of the Commission’s regulations, which contains recordkeeping requirements for clearing member FCMs?</p>
Response	<p>Proposed §§ 1.83(c) and (d) would be unnecessarily duplicative of existing rules. DCMs already have rules that require that exchange members, as well as market participants, provide books and records to them upon their request with respect to trading on their markets. Moreover, § 38.151 requires DCMs to adopt rules giving them jurisdiction over market participants trading on their exchanges (not just over exchange members), thus empowering DCMs to enforce their requests for books and records from non-members.</p> <p>Moreover, FIA notes that it is against the idea of incorporating § 1.83(d) into existing § 1.35. FIA believes that incorporation of § 1.83(d) into § 1.35 would only exacerbate existing problems within § 1.35, which is in need of updating and revision.</p>
85	<p>In lieu of a DCM’s affirmative obligation in proposed § 40.22 to review AT Person and clearing member FCM compliance reports, should DCMs instead be permitted to rely on the CEO or CCO representations required by proposed § 1.83(a)(2)? If so, what events in the Algorithmic Trading of an AT Person should trigger review obligations by the DCM?</p>
Response	<p>As discussed above, FIA proposes there should be no report requirement, and to the extent the Commission wants assurance that AT Persons are following § 1.80(a) and § 1.81(a) and (c) of Regulation AT, this can be accomplished by an annual certification.</p> <p>DCMs already have surveillance infrastructures to trigger inquiries and requests for information with respect to trading on their markets. There is no indication that existing DCM programs are lacking such that they would require the imposition by the CFTC of specific triggers for a DCM’s review with respect to Regulation AT.</p>

86	Should § 40.22(c) provide more specific requirements regarding a DCM's establishment of a program for effective periodic review and evaluation of AT Person and clearing member FCM reports? For example, § 40.22(c) could require review at specific intervals (<i>e.g.</i> , once every two years). Alternatively, § 40.22(c) could provide greater discretion to DCMs in establishing their programs for the review of reports. Please comment on the appropriateness of these alternative approaches.
Response	As discussed above, there should be no report requirement. DCMs already have surveillance infrastructures to trigger inquiries and requests for information with respect to trading on their markets. There is no indication that existing DCM programs are lacking such that they would require the imposition by the CFTC of specific triggers for DCMs' reviews with respect to Regulation AT.
87	Should § 40.22(e) provide more specific requirements regarding the triggers for a DCM to review and evaluate the books and records of AT Persons and clearing member FCMs required to be kept pursuant to § 40.22(d)? For example, § 40.22(e) could require review at specific intervals (<i>e.g.</i> , once every two years), or it could require review in response to specific events related to the Algorithmic Trading of AT Persons. Please comment on the appropriateness of these alternative approaches.
Response	DCMs already have surveillance infrastructures to trigger inquiries and requests for information with respect to trading on their markets. There is no indication that existing DCM programs are lacking such that they would require the imposition by the CFTC of specific triggers for DCMs' reviews with respect to Regulation AT.
88	Does § 40.22 leave enough discretion to the DCM in determining how to design and implement an effective compliance review program regarding Algorithmic Trading? Alternatively, is there any aspect of this regulation that should be more specific or prescriptive?
Response	DCMs already have surveillance infrastructures to trigger inquiries and requests for information with respect to trading on their markets. There is no indication that existing DCM programs are lacking such that they would require the imposition by the CFTC of specific triggers for DCMs' reviews with respect to Regulation AT.
89	Should § 40.22 specifically authorize a DCM to establish further standards for the organization, method of submission, or other attributes of the reports described in § 40.22(a)?
Response	As discussed above, there should be no report requirement.

**IX. National Futures Association
§ 170.19 (Questions 28-32)**

<p>INTRO</p>	<p>Any rules applicable to Registered Futures Associations should not result in duplicative rules, or rules that are not principles-based.</p> <p>Although FIA appreciates the desire of the CFTC to involve registered futures associations (“RFAs”) in establishing and maintaining a program for the “prevention of fraudulent and manipulative acts and practices, the protection of the public interest, and perfecting the mechanisms of trading on designated contracts markets,” FIA is concerned that the adoption of any requirements by the NFA – the only current RFA – not impose duplicative regulation and oversight. Moreover, any requirements adopted by NFA should mirror the association’s long-established practice of promulgating principles-based obligations.</p> <p>As discussed throughout this comment Letter, FIA believes that the primary responsibility for developing, implementing and enforcing standards with respect to Algorithmic Trading, including pre-trade risk controls, standards for the testing and monitoring of Algorithmic Trading systems, and other risk management controls rests with each DCM, as appropriate for each DCM’s respective markets. In particular, we believe that the proposed amendments to Part 38 and Part 40 properly vest primary responsibility with respect to examination and enforcement in the DCMs.</p> <p>Proposed § 170.19 appears to require the NFA to adopt rules that are duplicative of, and may well conflict with, the obligations that DCMs will be required to undertake in the proposed amendments to Part 38 and Part 40. In light of the more prescriptive obligations imposed on DCMs, we believe that the NFA’s role should be limited to adopting principles-based rules that reflect industry best practices. This is the role that NFA has traditionally played with great success.</p>
<p>28</p>	<p>The Commission requests comment on the scope of responsibilities assigned to RFAs under proposed § 170.19. Should RFAs be responsible for fewer or additional areas regarding AT Persons, ATs, and algorithmic trading than specified in proposed § 170.19, prongs (1), (2), (3), and (4)? Regulation 170.19 requires RFAs to consider the need for rules in the areas listed in prongs (1)-(4) (§ 170.19(a)-(a)(4)). Should RFAs be responsible for considering whether to adopt rules in fewer or additional areas?</p>
<p>Response</p>	<p>As discussed throughout this Letter, FIA believes that the primary responsibility for developing, implementing and enforcing standards with respect to Algorithmic Trading, including pre-trade risk controls, testing and risk management controls, rests with each DCM, as appropriate for each DCM’s respective markets. Proposed § 170.19 appears to require NFA to adopt rules that are duplicative of, and may well conflict with, the obligations that DCMs will be required to undertake in the proposed amendments to Part 38 and Part</p>

	<p>40.</p> <p>In light of the more prescriptive obligations imposed on DCMs, we believe that NFA's role should be limited to adopting principles-based rules that reflect industry best practices. This is the role that NFA has traditionally played with great success.</p>
29	The Commission requests comment on the latitude afforded to RFAs in proposed § 170.19. Should RFAs have more or less latitude to issue rules than specified in proposed § 170.19?
Response	Please see FIA's response to Question 28.
30	The Commission requests comment on RFAs' obligation in proposed § 170.19 to establish and maintain a program for the prevention of fraud and manipulation, protection of the public interest, and perfecting the mechanisms of trading, including through rules it may determine to adopt pursuant to § 170.19. The proposed rules anticipate that an RFA's program will include examination and enforcement components. Is this the appropriate approach?
Response	Please see FIA's response to Question 28. In particular, we believe that the proposed amendments to Part 38 and Part 40 properly vest primary responsibility with respect to examination and enforcement in the DCMs. NFA and DCMs have a long history of coordinating examination and enforcement responsibilities. NFA and DCMs should closely coordinate examination and enforcement responsibilities relating to AT Persons and clearing FCM Members for Algorithmic Trading requirements to avoid duplication of effort and to conserve regulatory resources. Given the fact that trading data is readily available to DCMs, DCMs should have primary responsibility for investigating possible trade practice violations relating to Algorithmic Trading.
31	The Commission requests comment on whether proposed § 170.19 may result in duplicative obligations on AT Persons or any other market participant. In particular, please comment on potential duplication, if any, between algorithmic trading requirements that an RFA may impose upon its members pursuant to § 170.19, and similar requirements that may be imposed by a DCM in its role as a self-regulatory organization. What amendments would be appropriate in any final rules arising from this NPR to clarify that unintended overlap between the role of an RFA and a DCM in this context?

Response	Please see FIA’s response to Question 28. In particular, we believe that the proposed amendments to Part 38 and Part 40 properly vest primary responsibility with respect to examination and enforcement in the DCMs. NFA and DCMs have a long history of coordinating examination and enforcement responsibilities. NFA and DCMs should closely coordinate examination and enforcement responsibilities relating to AT Persons and clearing FCM Members for Algorithmic Trading requirements to avoid duplication of effort and to conserve regulatory resources. Given the fact that trading data is readily available to DCMs, DCMs should have primary responsibility for investigating possible trade practice violations relating to Algorithmic Trading.
32	The Commission requests comment on whether the regulatory framework established by Regulation AT would require all AT Persons to be members of an RFA in order to be effective. Alternatively, could the goals of Regulation AT be realized without requiring all AT Persons to be members of an RFA?
Response	Should the Commission choose to move forward with Regulation AT as proposed, including the definition of AT Person, FIA does not believe that all AT Persons need to be members of an RFA in order for Regulation AT to be effective. Specifically, we believe that there is no palpable benefit for Floor Traders who might be required to register with the CFTC because of the amendment to the definition under § 1.3(x)(3) (and thus be deemed AT Persons under § 1.3(xxxx)) to become members of the NFA. Today, persons likely to be newly required to be registered as Floor Traders under Regulation AT are already directly or indirectly subject to requirements of each DCM where they trade regarding matters related to their trading and access. This is because such persons are members of such DCMs or because the application of DCM trading and access rules apply to non-members. Even after any potential adoption of Regulation AT, this will continue to be the case as DCMs will continue to have the principal interest among self-regulatory organizations in the integrity of their own markets. On the other hand, NFA’s rules are primarily focused on customer protection and disclosure, and historically, NFA has not regulated members who solely engage in proprietary trading. Moreover, the CFTC has not previously required floor brokers or floor traders to become members of NFA. In addition, requiring Floor Traders to now become NFA members would potentially impose additional costs upon them for oversight in the form of annual membership fees and per-trade fees that, at best, would be duplicative of the oversight provided by each DCM where they trade. The goals of Regulation AT could be realized by continuing to defer to the oversight of DCMs over their own members and trading activities on their own facilities. Membership in an RFA would impose additional operational costs to Floor Traders, but not augment their effective oversight.

X. DCM Market Maker Transparency
§§ 40.25, 40.26, 40.27, 40.28 (Questions 99-107)

<p>INTRO</p>	<p>Requirements related to market maker and trading incentive programs should be equally applied across all trading venues.</p> <p>FIA generally supports making the additional proposed information about market maker and trading incentive programs public, provided that all DCMs and any other CFTC-regulated trading venues are subject to the identical requirements.</p> <p>With one exception, FIA generally supports the proposed rules relating to market maker and trading incentive programs. We oppose § 40.27(a), which would require each DCM to adopt policies and procedures reasonably designed to prevent the payment of market maker or trading incentive program benefits, including but not limited to payments, discounts, or other considerations, for trades between accounts that are: (i) identified to such designated contract market as under common beneficial ownership pursuant to the approval process described in § 40.23(c); or (ii) otherwise known to the designated contract market as under common ownership. As we explained in our comments on self-trades, proposed § 40.23(c) is unworkable. Whether specific trades are entitled to incentive payments should be left to the discretion of each DCM, as determined in accordance with such DCM’s policies and procedures.</p>
<p>99</p>	<p>To what extent do market participants currently trade in ways designed primarily to collect market maker or trading incentive program benefits, rather than for risk management purposes?</p>
<p>Response</p>	<p>Market makers serve an important role in the market, providing liquidity for all market participants. This question appears to be based on a false premise, <i>i.e.</i>, that market participants trade either (i) for the purpose of risk management or (ii) to collect market maker or incentive program benefits. FIA disagrees that it has to be one or the other. In practice, market makers and other participants take many details into account when determining the prices at which they submit orders including the cost of execution which is affected by incentive program benefits.</p>
<p>100</p>	<p>To what extent do market maker and trading incentive programs currently provide benefits for self-trades? To what extent do market participants collect such benefits for self-trades?</p>
<p>Response</p>	<p>FIA does not have access to the information necessary to respond to this question.</p>
<p>101</p>	<p>The Commission requests comment regarding whether the information proposed to be collected in § 40.25 would be sufficient for it to determine whether a DCM’s market-maker or trading incentive program complies with the impartial access requirements of § 38.151(b). If additional or different information would be helpful, please identify such information.</p>
<p>Response</p>	<p>Proposed § 40.25 simply makes public information that a DCM is already</p>

	required to provide to the Commission under Part 40. Therefore, the information provided should be sufficient to determine compliance with the applicable impartial access requirements.
102	The Commission requests comment regarding whether DCMs should be required to maintain on their public websites the information required by proposed §§ 40.25(a) and 40.25(b) for an additional period beyond the end of the market maker or trading incentive program. The Commission may determine to include in any final rules arising from this NPR a requirement that such information remain publicly available pursuant to proposed § 40.25(b) for an additional period up to six months following the end of a market maker or trading incentive program.
Response	FIA takes no view with respect to this question.
103	The Commission requests comment regarding whether the text of proposed § 40.27(a) identifies with sufficient particularity the types of trades that are not eligible for payments or benefits pursuant to a DCM market-maker or trading incentive program. What amendments, if any, are necessary to clearly identify trades that are not eligible?
Response	FIA opposes § 40.27(a) as proposed. As we explained in our comments on self-trades, proposed § 40.23(c) is unworkable. Whether specific trades are entitled to incentive payments should be left to the discretion of each DCM, as determined in accordance with such DCM's policies and procedures.
104	Section 40.27(a) provides that DCMs shall implement policies and procedures that are reasonably designed to prevent the payment of market-maker or trading incentive program benefits for trades between accounts under common ownership. Are there any other types of trades or circumstances under which the Commission should also prohibit or limit DCM market-maker or trading incentive program benefits?
Response	Please see FIA's response to Question 103.
105	The Commission is proposing in § 40.27(a) certain requirements regarding DCM payments associated with market maker and trading incentive programs. Please address whether the proposed rules will diminish DCMs' ability to compete or build liquidity by using market maker or trading incentive programs. Does any DCM consider it appropriate to provide market maker or trading incentive program benefits for trades between accounts known to be under common beneficial ownership?
Response	Please see FIA's response to Question 103.
106	In any final rules arising from this NPR, should the Commission also prohibit DCMs from providing trading incentive program benefits where such benefits on a per-trade basis are greater than the fees charged per trade by such DCMs and its affiliated DCO (if applicable)? The Commission also specifically requests comment on the extent, if any, to which one or more DCMs engage in this practice.
Response	FIA does not support limiting the benefits of market maker or incentive programs to amounts equal to or less than the related per transaction fees. The costs of providing liquidity, especially in new products, can be quite high and

	warrant sufficient compensation for market participants willing to provide reliable, consistent liquidity. Notwithstanding the foregoing, if the Commission believes it is appropriate to limit market maker or incentive program compensation in some way, the Commission should propose specific rules in this regard rather than make ad hoc determinations in connection with individual DCM rule filings.
107	Proposed § 40.25(b) imposes certain transparency requirements with respect to both market maker and trading incentive programs. The Commission requests public comment regarding: (i) the most appropriate place or manner for a DCM to disclose the information required by proposed § 40.25(b); (ii) the benefits or any harm that may result from such transparency, including any anti-competitive effect or pro-competitive effect among DCMs or market participants; (iii) whether transparency as proposed in § 40.25(b) is equally appropriate for both market maker programs and trading incentive programs, or are the proposed requirements more or less appropriate for one type of program over the other; and (iv) whether any of the enumerated items required to be posted on a DCM's public website pursuant to proposed § 40.25(b) could reasonably be considered confidential information that should not be available to the public, and if so, what process should be available for a DCM to request from the Commission an exemption from the requirements of proposed §40.25(b) for that specific enumerated item.
Response	<p>In response to the above items, FIA believes that:</p> <ol style="list-style-type: none"> 1. The most appropriate place or manner for a DCM to disclose the information required by proposed § 40.25(b) is on the DCM's public website; 2. Provided all DCMs are subject to the same disclosure requirements, such disclosure should not cause any harm; 3. Transparency is equally appropriate for both market maker and incentive programs; and 4. Although certain of the information regarding such programs is considered confidential, FIA would not object to its public disclosure, provided all DCMs and any other CFTC-regulated trading venues are subject to the same disclosure requirements.