UNITED STATES OF AMERICA COMMODITY FUTURES TRADING COMMISSION

OPEN MEETING OF THE COMMISSION

Washington, D.C.

Tuesday, November 24, 2015

1	PARTICIPANTS:
2	Commissioners:
3	CHAIRMAN TIMOTHY G. MASSAD
4	COMMISSIONER SHARON Y. BOWEN
5	COMMISSIONER J. CHRISTOPHER GIANCARLO
6	CFTC Staff:
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12	JOSEPH OTCHIN Division of Market Oversight
13	JOHN DUNFEE Office of General Counsel
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15	CHRISTOPHER KIRKPATRICK Secretary of the Commission
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1	PROCEEDINGS
2	(9:00 a.m.)
3	CHAIRMAN MASSAD: Good morning. The
4	meeting will come to order. This is a public
5	meeting of the Commodity Futures Trading
6	Commission. I'd like to welcome members of the
7	public, market participants, and members of the
8	media, as well as those taking part on the phone
9	or via webcast.
10	Today we are considering a proposal that
11	addresses the increased use of automated trading
12	in our markets. In the futures markets, today
13	almost all trading is electronic in some form.
14	And over the last few years, more than 70 percent
15	of all trading has become automated.
16	Automated trading has brought many
17	benefits to market participants. These include
18	more efficient execution, lower spreads, and
19	greater transparency. But its extensive use also
20	raises important policy and supervisory questions
21	and concerns. The Commission has already taken a
2.2	number of steps to respond to the development of

- 1 automated trading in our markets.
- 2 Following the 2010 flash crash, the CFTC
- 3 worked with the SEC to establish certain controls
- 4 to minimize the risk of market disruptions. The
- 5 Commission has also required clearing members to
- 6 implement policies and procedures governing the
- 7 use of automated trading programs. And we've
- 8 required automatic screening of orders for
- 9 compliance with risk limits if they are
- 10 automatically executed. But as markets continue
- 11 to evolve it is important to continue looking at
- 12 this issue.
- And, therefore, in September 2013, the
- 14 Commission issued a Concept Release that requested
- 15 public comment on the necessity and operation of a
- 16 variety of risk controls and measures. The
- 17 Commission received many written comments and also
- 18 held a meeting of its Technology Advisory
- 19 Committee to discuss the issues raised. The
- 20 Concept Release served as a very useful way to
- 21 understand existing industry practices and discuss
- 22 what further actions might make sense.

The proposal we are considering today

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       addresses several areas discussed in the Concept
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       Release and incorporates much of the public input.
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       It focuses on minimizing the potential for
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       disruptions and other operational problems that
       may arise from the automation of order
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       origination, transmission, or execution. This may
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       come about due to malfunctioning algorithms,
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       inadequate testing of algorithms, errors, and
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       similar problems.
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                 Now, no set of rules can prevent all
       such problems, but that doesn't discharge us from
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       our duty to take reasonable measures to minimize
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       these risks. It is our responsibility as
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       regulators to create a framework that promotes the
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       integrity of these markets and I believe the
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       proposal we are considering today helps do just
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       that.
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                 In a moment, we will hear presentations
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       from the staff to outline the proposal. And I
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want to note that this proposal is the product of

a lot of hard work by the CFTC staff over a

- 1 significant period of time. And I want to thank
- all of them for that effort. The work to draft
- 3 the Concept Release began in early 2013 and, in
- 4 particular, I'd like to thank our staff members
- from the Division of Market Oversight who led this
- 6 effort; the staff from the Office of the Chief
- 7 Economist and the Office of the General Counsel,
- 8 who made major contributions; and staff from other
- 9 divisions who have helped, as well.
- 10 With that, I would like to recognize my
- 11 fellow Commissioners for their opening statements
- and I will turn first to Commissioner Bowen.
- 13 COMMISSIONER BOWEN: Thank you. It's a
- 14 pleasure to be here this morning to vote on the
- proposed rule on automated trading. I want to
- 16 thank the Commission staff for the time they
- 17 devoted on this proposal.
- 18 As I have previously said, our markets
- 19 have seen immense technological change in the last
- 20 15 years. In particular, algorithmic trading has
- 21 substantially increased. Sadly, we still do not
- have comprehensive, precise data on the percentage

- of trades created or entered by algorithms in many
- of our product classes. Clearly, further research
- 3 and work remains for all stakeholders, from
- 4 regulators to industry participants, to academics
- 5 and advocates of financial reform.
- 6 Yet I do not believe that this lack of
- 7 information requires that regulators passively
- 8 wait for information to emerge. As I said earlier
- 9 this fall, even though the amount of algorithmic
- 10 trading and definitions of various terms are not
- 11 crystal clear, what is clear is that trades
- 12 involving algorithms make up a substantial portion
- of our markets and algorithms can and do
- 14 malfunction at times with negative effects on the
- 15 markets. As a result, I believe we are obligated
- 16 to consider if it is prudent to establish some
- 17 regulations on algorithmic trading in our markets.
- Today, we begin this process of
- 19 potentially establishing those regulations. I
- 20 believe the proposed regulation meets the
- 21 standards of establishing a reasonable regulation
- on this technology, and it does so in a way that

1 allows for innovation and continued development of

- 2 this nascent technology.
- 3 Having said what I think lies at the
- 4 core of this regulation, let me also be clear
- 5 about what this regulation is not. The rule
- 6 before us today should not substantially change
- 7 how many firms use algorithms. In effect, this
- 8 rulemaking largely formalizes and mandates firms
- 9 involved in algorithmic trading to engage in a
- 10 variety of practices that they should already be
- doing for their own protection.
- 12 I expect that some observers will have
- issues with this regulation for not doing more to
- 14 constrain growth and use of algo-trading. And I
- 15 expect that there will be further debate. I do
- not regard this regulation as the final word on
- 17 the regulation of algo-trading. If there is clear
- 18 evidence that more precise regulations are needed
- on this technology to protect investors or to ward
- off systemic risk, I would support further
- 21 regulatory action. And I'm sure that given the
- 22 ferocious rate of change of this technology we

- will need to update this regulation regularly to
- 2 account for those changes.
- In many ways this regulation is merely
- 4 the first step in a process. It's a starter home
- 5 rather than a two-story. But we have to start
- 6 somewhere and starting with something that
- 7 formalizes best practices and increases disclosure
- 8 is an excellent place to start. I've said
- 9 numerous times that I support smart regulation,
- 10 regulation that works.
- 11 That goal is especially critical when it
- 12 comes to regulation to such a new, significant,
- and widespread technology as algo-trading. I,
- therefore, hope we'll get comments on this
- proposal from a wide swath of stakeholders, from
- industry participants to end users being affected
- 17 by this technology, to even ordinary citizens and
- investors about the potential effects of
- 19 algo-trading on commodity prices.
- I do not expect that everyone will have
- 21 the same views on the subject. Even though I've
- 22 only been in Washington about a year and a half,

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1 I've experienced enough to know that people have
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- 2 different opinions on high-visibility issues such
- 3 as this one. However, I do encourage people to
- 4 comment so that we can get a full and fair read on
- 5 popular opinion. And if people have concrete
- 6 evidence that algo-trading is distorting markets
- 7 and needs to be curtailed, please submit it with
- 8 your comments.
- 9 In closing, let me stress again that I
- want this rule to be both effective and workable.
- 11 No one benefits from rules that work in the
- abstract, but are confusing, impossible to
- implement as written, or are full of gaps that
- 14 prompt widespread regulatory arbitrage. I believe
- this proposal is a commonsense effort to
- 16 establishing reasonable regulation of this
- 17 automated trading. But if there are flaws with
- it, if it goes too far or not far enough, I want
- 19 to know about that now before it is finalized.
- Thank you and I want to wish you all a
- 21 safe and happy Thanksgiving holiday.
- 22 CHAIRMAN MASSAD: Thank you,

- 1 Commissioner Bowen. Commissioner Giancarlo.
- 2 COMMISSIONER GIANCARLO: Thank you. The
- 3 electronification of trading over the past 30 to
- 4 40 years and the advent of exponential digital
- 5 technologies have transformed financial
- 6 businesses, markets and entire economies. In U.S.
- 7 Futures markets we see this change most presently
- 8 in the area of automated trading that can lower
- 9 transaction costs while increasing trader
- 10 productivity through greater transaction speed,
- 11 precision and sophistication. For many markets,
- 12 automated trading brings trading liquidity,
- 13 broader market access, enhanced transparency and
- 14 greater competition.
- 15 At the same time, automated trading
- 16 presents new challenges. They include increased
- 17 risk of sudden spikes in market volatility and
- 18 phantom liquidity arising from the sheer speed of
- 19 execution. They also include the risk of data
- 20 misinterpretation by computerized analysis and
- 21 mathematical models that increasingly replace
- 22 human thought and deliberation.

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                 Legal scholars raise important questions
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       about the viability of traditional regulatory
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       methods and concepts in automated trading markets.
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       How markets and regulators adjust to this change
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       from human to automated trading will be extremely
       important. It requires delicate balancing. To
       ensure vibrant, accessible and durable markets, we
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 8
       must embrace effective safeguards without harming
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       innovation and promising market development.
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                 In turning to Reg AT, my staff and I
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       brought dozens of issues and concerns to the
       Division of Market Oversight. While they were
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       responsive to a few topics, many other issues
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       require much further attention and consideration
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       that I have summarized at length in my written
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       statement released this morning.
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                 Still, after reading through the almost
       500 pages of the proposal I'm left with one major
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       question: Does this proposal sufficiently benefit
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       the safety and soundness of America's futures
       markets to outweigh its additional cost and
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       burdens? I wish the answer was more clear.
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                 I have three main concerns with
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       Regulation AT. First, some of the requirements of
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       the rule appear to be window dressing. That is
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       especially the case in its requirement for
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       development and implementation of risk controls
       and related testing standards that the industry
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 7
       has already widely adopted.
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                 Second, I'm concerned about the high
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       cost and burdens of the proposal, especially on
       smaller market participants. And I'm especially
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11
       concerned about its requirement that registrants
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       hold their proprietary source code in data
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       repositories available for inspection at any time,
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       for any reason, to any representative of the CFTC
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       or the U.S. Department of Justice.
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                 Third, I question the regulatory
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       inconsistencies regarding the market participants
       who must comply with this rulemaking.
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                 A year ago, I set forth six principles
       that I would follow as I evaluate financial market
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regulations at the CFTC. Those principles were

compiled into a mnemonic that I call SMART REG,

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- 1 and it stands for: Solve real problems, not
- 2 anecdotes of bad behavior; measure success through
- 3 sound cost-benefit analysis; advance innovation
- 4 and competition through flexible rules; represent
- 5 the best approach amongst alternatives; take into
- 6 account evidence, not assumptions; realistically
- 7 set compliance deadlines; encourage employment of
- 8 U.S. workers; and be grounded in law. These are
- 9 the measuring rods that I will apply to Reg AT.
- 10 I look forward to hearing
- 11 well-considered views of market participants on
- 12 whether this proposal passes muster. I will
- 13 release a longer statement that will be included
- in the proposal and I encourage the public to
- weigh in on the numerous questions I pose that
- should be considered during the comment period.
- 17 Thank you.
- 18 CHAIRMAN MASSAD: Thank you. The staff
- 19 will now make a presentation to the Commission on
- 20 the proposed rule. After each presentation, the
- 21 floor will be open for questions and comments from
- 22 each of the Commissioners. Following the close of

- discussion, the Commission expects to vote on the
- 2 staff recommendation as presented. The final vote
- 3 conducted in this public meeting shall be
- 4 recorded. The results of a vote approving the
- 5 issuance of a rulemaking document will be included
- 6 with that document in the Federal Register.
- 7 At this point I ask unanimous consent to
- 8 allow staff to make technical corrections to the
- 9 document voted on today prior to sending it to the
- 10 Federal Register.
- 11 COMMISSIONER GIANCARLO: No objection.
- 12 CHAIRMAN MASSAD: Without objection, it
- is so ordered. And at this time, I would like to
- 14 welcome Vince McGonagle, Sebastian Pujol, Marilee
- Dahlman, Joseph Otchin, all from the Division of
- Market Oversight, and John Dunfee, from the Office
- 17 of General Counsel, for their presentations on the
- 18 proposal. Thank you.
- 19 MR. PUJOL: Good morning, Mr. Chairman
- 20 and Commissioners, and thank you. I'd like to
- 21 begin today by thanking my fellow team members for
- 22 their hard work in preparing the proposals that we

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1 are about to present. Dedicated staff from across
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- 2 the offices and divisions of the Commission were
- 3 essential to completing the materials before you
- 4 this morning.
- 5 I would particularly like to acknowledge
- 6 Mike Penick, Richard Haynes, Meghan Tente, Adam
- 7 Kezsbom, John Dunfee, Andrew Ridenour, Joe Otchin,
- 8 and especially Marilee Dahlman and Mark Schlegel
- 9 as members of the rulemaking team.
- 10 Today, staff is recommending that the
- 11 Commission approve a Notice of Proposed Rulemaking
- regarding automated trading on U.S. designated
- 13 contract markets. The proposed rules, known as
- 14 "Regulation Automated Trading," or Reg AT, reflect
- a comprehensive approach to reducing risk and
- 16 increasing transparency in both algorithmic order
- origination and electronic trade execution.
- The proposed rules would enhance the
- 19 Commission's regulatory regime to keep pace with
- 20 evolving markets and technologies, and would
- 21 promote the continued safety and soundness of
- 22 trading on U.S. derivatives markets. As a

- 1 threshold matter, Reg AT takes a multilayered
- 2 approach to pre-trade and other risk controls with
- 3 key entities in the life of an order each
- 4 implementing controls that are similar in nature,
- 5 but calibrated to their individual needs.
- 6 Relevant entities and risk control
- 7 layers for purposes of Reg AT include trading
- 8 firms generating algorithmic orders; clearing
- 9 FCMs, who are responsible for risk-filtering such
- 10 orders; and DCMs. In each case, the proposed
- 11 rules provide for flexibility in the
- implementation of required risk controls while
- simultaneously helping to ensure a uniform
- 14 regulatory baseline for all relevant market
- 15 participants.
- The basic structure of Reg AT includes
- 17 four elements. First, it proposes to require the
- registration of persons engaged in proprietary
- 19 algorithmic trading on a DCM via direct electronic
- 20 access, or DEA. Such persons would be required to
- 21 register under an amended definition of "floor
- trader," and would be subject to all relevant

- 1 requirements of the proposed rules. Through
- 2 registration, Reg AT would help address a
- 3 population of entities with a significant impact
- 4 on Commission-regulated markets, but who are not
- 5 currently subject to direct oversight by the CFTC.
- 6 Second, Reg AT proposes to codify "AT
- 7 Person" as a defined term in the Commission's
- 8 rules. AT Persons would include the new floor
- 9 traders described previously, as well as FCMs,
- 10 floor brokers, swap dealers, major swap
- 11 participants, commodity pool operators, commodity
- trading advisors, and introducing brokers engaged
- in algorithmic trading. In this regard, staff
- 14 notes that "AT Person" is an important
- organizational concept in the proposed rules as it
- identifies those entities that would be subject to
- 17 key requirements in Reg AT.
- 18 With respect to AT Persons, the proposed
- 19 rules include a range of pre-trade risk controls
- 20 and related measures designed to reduce potential
- 21 risks in algorithmic trading. Such measures
- include, for example, controls for maximum order

of the proposed rules applicable to AT Persons

include order cancellation capabilities; standards

for the development, testing, and supervision of

algorithmic trading systems, or ATSs; and

frequency and maximum order size. Other elements

- 5 algorithmic trading systems, or ATSs; and
- 7 certain compliance reports regarding their pre-

requirements that AT Persons provide DCMs with

8 trade risk controls.

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- 9 A third element of Reg AT includes
 10 pre-trade risk control requirements for both DCMs
 11 and clearing member FCMs with respect to their
 12 customers engaged in algorithmic trading. Such
 13 pre-trade risk controls would be similar to those
 14 required for AT Persons, including, for example,
 15 maximum order frequencies and maximum order sizes.
 - Reg AT would also require basic compliance reports from clearing FCMs and would require that DCMs review compliance reports submitted to them.
- 20 Finally, in addition to pre-trade risk
 21 controls, Reg AT is intended to accomplish a
 22 number of goals focused more closely on DCMs.

- 1 These include greater transparency around DCMs'
- 2 electronic trade matching platforms, promoting the
- 3 use of self-trade prevention tools, and greater
- 4 transparency in DCM market maker and trading
- 5 incentive programs. Each of these provisions will
- 6 be described in greater detail over the course of
- 7 this presentation.
- 8 The proposals in Reg AT build on
- 9 numerous efforts by entities in recent years to
- 10 promote best practices and regulatory standards
- for automated trading, including standards for
- 12 ATSs and for electronic trade matching. In
- preparing Reg AT, staff considered comments
- received in response to the Commission's 2013
- 15 Concept Release. Staff also evaluated initiatives
- 16 by fellow regulators, industry participants, and
- others to develop regulatory standards and best
- 18 practices. Particularly in the area of pre-trade
- 19 risk controls, the proposed rules leverage
- 20 existing industry practices and seek to create an
- 21 agreed-upon baseline for the mitigation of risks
- in automated trading.

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                 Mr. Chairman and members of the
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       Commission, with that overview in place, I'll turn
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       to my colleague, Marilee Dahlman, for more
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       detailed information on the pre-trade risk
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       controls and related measures applicable to AT
       Persons, DCMs, and clearing FCMs under the
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 7
       proposed rules.
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                 MS. DAHLMAN: A fundamental element of
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       Reg AT is a new Regulation 1.80, which requires
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       that AT Persons implement certain risk controls.
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       Regulation 1.80 would require AT Persons to
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       implement pre-trade risk controls, order
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       cancellation systems, and other measures
14
       reasonably designed to prevent a market disruption
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       caused by an algorithmic trading malfunction.
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                 The required pre-trade risk controls
            Maximum order message frequency and maximum
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       are:
       execution frequency per unit time, order price
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19
       parameters, and maximum order size limits. The
20
       regulation would also require order cancellation
       systems with an ability to immediately disengage
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algorithmic trading and prevent the submission of

- 1 new orders.
- 2 Consistent with comments received in
- 3 response to the Concept Release, proposed 1.80
- 4 provides market participants latitude in the
- 5 design of required controls and, in fact, requires
- 6 only a small number of specific controls that the
- 7 Commission understands are already widely
- 8 implemented by likely AT Persons. The proposed
- 9 regulation does not mandate specific limits,
- 10 calibrations, or even vendor technologies that AT
- 11 Persons must use in implementing the required
- 12 controls.
- 13 With respect to clearing member FCMs,
- Reg AT proposes a new Regulation 1.82 to require
- 15 clearing FCMs to implement pre-trade risk and
- other controls with respect to their AT Person
- 17 customers. Proposed 1.82 requires that clearing
- 18 FCMs implement the same types of pre-trade and
- other risk controls described above with respect
- 20 to AT Persons.
- 21 The location of the pre-trade and other
- 22 risk controls that would be required of clearing

- 1 FCMs varies according to whether orders from an AT
- 2 Person customer are placed through DEA or
- 3 intermediated by the clearing FCM. In the case of
- 4 algorithmic trading orders submitted through DEA,
- 5 the pre-trade and other risk controls would be
- 6 established by and located at the DCM, but be
- 7 controlled or calibrated by the clearing FCM. For
- 8 non-DEA algorithmic trading orders, the controls
- 9 would not reside at the DCM. Instead, the
- 10 clearing FCM itself would establish the pre-trade
- 11 risk and other controls with respect to such
- 12 orders.
- 13 Finally, as to risk control requirements
- on DCMs, Reg AT includes a new Regulation 40.20
- that would require DCMs to establish pre-trade and
- 16 other risk controls designed to address the risks
- 17 that may arise from algorithmic trading on the
- 18 DCM. The controls required of DCMs in Regulation
- 19 40.20 are similar to those required of AT Persons
- in proposed 1.80 and of clearing member FCMs in
- 21 1.82. Regulation 40.20 also would require
- 22 pre-trade risk controls and order cancellation

1 capabilities for orders that do not originate from

- 2 algorithmic trading.
- Reg AT would also address the
- 4 development, monitoring, and compliance of ATSs.
- 5 Proposed Regulation 1.81 requires AT Persons to
- 6 adopt written policies for developing, testing,
- 7 and monitoring their ATSs. Taken together, the
- 8 goal of these requirements is to standardize a set
- 9 of principles in order to reduce the operational
- 10 risk of ATSs.
- To provide two examples of these
- 12 procedures, Regulation 1.81 would require AT
- 13 Persons to implement written policies and
- 14 procedures for the development and testing of
- 15 ATSs, so as to better identify coding errors and
- other problems that could arise in live trading.
- 17 Regulation 1.81 would also require each AT Person
- to implement written policies and procedures to
- 19 designate and train its staff responsible for
- 20 algorithmic trading.
- 21 MR. PUJOL: In addition to the
- 22 provisions described by Marilee regarding

pre-trade and other risk controls, Reg AT also 2. includes several important initiatives addressing 3 transparency, market maker and trading incentive 4 programs, and self-trading on DCMs. Each of these 5 has come into greater focus through the increased automation of markets and market participants. 6 7 With respect to transparency, Reg AT would codify two important requirements. First, 8 9 the proposed rules would amend existing Commission 10 regulations to enhance transparency around the 11 design and operation of DCMs' electronic matching 12 platforms. Existing Commission Regulation 38.401 requires DCMs to disclose to both the Commission 13 14 and the public information regarding the rules and specifications of their electronic matching 15 16 platforms. The proposed amendments to 38.401 would clarify that a DCM's obligations include 17 disclosure of any known attributes of a platform 18 19 that materially impact market participant orders. 20 This could include, for example, attributes that impact the time or the priority of an order or 21 22 attributes that impact the dissemination of market

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data or confirmations to market participants.

Second, Reg AT would require DCMs to
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- 3 provide the Commission and the public with
- 4 additional information regarding their market
- 5 maker and trading incentive programs. Again,
- 6 building on existing Commission requirements,
- 7 proposed Regulation 40.25 would require DCMs to
- 8 provide information regarding eligibility
- 9 criteria, program payments or benefits, and market
- 10 participants' obligations pursuant to a market
- 11 maker or trading incentive program. The proposed
- rules would also require DCMs to implement
- 13 policies and procedures reasonably designed to
- 14 prevent the payment of program benefits for trades
- 15 between accounts that are known to the DCM as
- 16 being under common ownership.
- 17 With respect to self-trading, Reg AT
- 18 focuses on both transparency and prevention. The
- 19 proposed rules would require a new Regulation
- 20 40.23 that DCMs provide or apply tools reasonably
- 21 designed to prevent self-trading. The proposed
- 22 rules define self-trading as the matching of

- orders for accounts that have common beneficial
- 2 ownership or are under common control as known by
- 3 the DCM or identified to it by market
- 4 participants.
- 5 In response to public comments on the
- 6 Concept Release, the proposed rules would allow
- 7 DCMs to exercise discretion in the design and
- 8 implementation of their self-trade prevention
- 9 tools. For example, DCMs would have latitude to
- 10 permit self-trades between accounts under common
- ownership if such trades were originated by
- independent decision makers. While allowing for
- such permitted self-trades, the rules would
- require DCMs to publish quarterly statistics
- regarding the amount of permitted self-trading
- 16 occurring on their markets.
- 17 Finally, to help ensure that Reg AT
- 18 remains current as markets and trading
- 19 technologies evolve, the proposed rules would
- leverage the role of registered futures
- 21 associations, such as the NFA, in the Commission's
- oversight regime. Reg AT would require a new

- 1 Regulation 170.18 that all AT Persons become
- 2 members of an RFA. The proposed rules would
- 3 further require RFAs to consider membership rules
- 4 addressing algorithmic trading for each category
- of member in the RFA. Taken together, these
- 6 provisions would allow RFAs to supplement elements
- 7 of Reg AT in the future in response to industry
- 8 developments.
- 9 Mr. Chairman and members of the
- 10 Commission, this concludes staff's presentation of
- 11 Regulation Automated Trading. We note that the
- Notice of Proposed Rulemaking includes over 160
- 13 questions on almost every aspect of the proposal.
- 14 Reg AT would be open for a 90-day comment period,
- and all comments and responses are highly welcome.
- 16 Thank you very much for your time and
- for your attention. And we would be happy to
- 18 answer any questions that you may have for us.
- 19 CHAIRMAN MASSAD: Thank you, Sebastian,
- 20 Marilee, and everyone on the team for those very
- 21 informative presentations.
- To begin the Commission's discussion and

- 1 consideration of this rulemaking I will now
- 2 entertain a motion to adopt the proposed rule as
- 3 presented by the staff.
- 4 COMMISSIONER BOWEN: So moved.
- 5 CHAIRMAN MASSAD: Is there a second?
- 6 COMMISSIONER GIANCARLO: Second.
- 7 CHAIRMAN MASSAD: Let me begin then.
- 8 We'll each have time for questions or further
- 9 statements. I don't have any questions. I will
- 10 make a few comments. I will be issuing a written
- 11 statement in support of the rule -- or the
- 12 proposal.
- 13 Let me just say I strongly support the
- 14 proposal. I think it contains a number of
- 15 commonsense risk controls that I believe recognize
- the benefits that automated trading has brought to
- 17 our markets while also seeking to protect against
- 18 the possibility of breakdowns and disruptions that
- 19 can come with it.
- I think the multilevel approach, of
- 21 having controls at the exchange, the clearing
- 22 member, and the trading firm level is the right

- 1 one.
- 2 And I also believe the proposal does a
- 3 good job of reflecting industry-based best
- 4 practices and devising standards that are
- 5 principles-based and not overly prescriptive. And
- 6 in this regard, I will just note the release we
- 7 are issuing today is close to 500 pages. The rule
- 8 itself is 19 pages.
- 9 The 465 pages, of course, include the
- 10 preamble, 150 questions which I think appear
- 11 twice, the cost-benefit considerations, the
- 12 Paperwork Reduction Act analysis, the Regulatory
- 13 Flexibility analysis -- all very important
- 14 elements. The rule itself is 19 pages.
- I commend the staff for their hard work
- 16 and diligence, particularly in incorporating
- 17 feedback from market participants on the Concept
- 18 Release. The proposal will be subject to public
- 19 comment for 90 days and I look forward to hearing
- from market participants and members of the
- 21 public.
- I want to just highlight a couple of

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1 features of the rule. The first, of course, is
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- 2 the registration requirement for proprietary
- 3 traders who access the market directly and who
- 4 engage in algorithmic trading on regulated
- 5 exchanges. This would ensure that all those with
- 6 direct electronic access to our markets are
- 7 complying with pre-trade risk controls, testing,
- 8 and other requirements. And it would enhance the
- 9 Commission's ability to carry out its oversight
- 10 responsibilities.
- 11 I look forward to public comment on this
- 12 requirement. Among the questions we have asked
- are whether there are additional characteristics
- of algorithmic trading firms that should be taken
- into consideration for registration purposes. And
- 16 alternatively, should all firms trading through
- direct electronic access be required to register,
- even if they are not using algorithmic trading?
- Many of the requirements we are
- 20 proposing, as the staff noted, for trading firms
- 21 represent the best practices already followed by
- 22 many firms, including larger firms. We know,

- 1 however, that a faulty algorithm at a single firm,
- 2 regardless of size, can potentially cause a
- 3 significant problem. And as a result, we have
- 4 proposed standards that are applicable regardless
- of size or similar attributes of a trading firm.
- 6 We are cognizant of the importance of
- 7 establishing effective standards without creating
- 8 barriers to entry for small firms. And,
- 9 therefore, I look forward to public comment on
- 10 whether the requirements we are proposing for
- 11 trading firms should vary in any way, depending on
- 12 size or activity level.
- We've also proposed certain risk
- 14 controls at the clearing member Futures Commission
- 15 Merchant level with respect to their customers
- 16 engaged in algorithmic trading. FCMs play a
- 17 critical role in overall risk management, and I
- 18 support the requirements we are proposing today to
- 19 help achieve an effective multilayered approach.
- 20 But I look forward to public comment on whether
- 21 there are any aspects of those required controls
- that may pose an undue burden on clearing member

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1 FCMs or that are unnecessary for reducing the
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- 2 risks associated with algorithmic trading. We've
- 3 also asked about what technological development
- 4 would be required by clearing members to comply
- 5 with some requirements of this proposal.
- 6 I've said often that it's very important
- 7 that we have a robust clearing member industry and
- 8 that all customers, particularly smaller ones, are
- 9 able to access the markets effectively and
- 10 efficiently. And so we want to make sure this
- 11 proposal is consistent with achieving that
- 12 objective. It's important that we achieve a
- 13 proper balance between controls and measures at
- the exchange, clearing member, and trading firm
- 15 level. And so we will seek efficiency and avoid
- 16 conflicting or unnecessary requirements among
- those controls. On this and many other issues,
- 18 public comment will be very helpful.
- 19 So let me just conclude by saying that I
- 20 support the proposal as an important step to
- 21 ensure that we are meeting our responsibility to
- 22 put forth commonsense regulation that will

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1 minimize the potential for problems that may arise
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- from automated trading. And I again wish to thank
- 3 the staff for their excellent work.
- I would now like to open the floor to
- 5 allow the Commissioners to ask any questions or
- 6 make any further statements that they have. And I
- 7 will turn first to Commissioner Bowen.
- 8 COMMISSIONER BOWEN: Yes, thank you. I,
- 9 too, have submitted a statement for your review,
- 10 but I want to highlight a concern that I have that
- 11 we may not be asking enough of our registrants,
- 12 particularly for them to submit information in
- their annual reports pursuant to Section 1.83(a).
- 14 We've all read accounts about firms
- 15 going to Silicon Valley and colleges to recruit
- 16 quants. So I think it would be helpful for us to
- ask a little bit more about the adequacy of the
- 18 training of these employees. And so I would hope
- 19 that with the final regulation that we would
- 20 expand the scope of some of the questions that we
- 21 would be asking these firms to certify on an
- 22 annual basis.

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1 CHAIRMAN MASSAD: Commissioner
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- 2 Giancarlo.
- 3 COMMISSIONER GIANCARLO: Thank you,
- 4 Chairman. I'd like to ask a few questions
- 5 perhaps, Sebastian, of you, if I may.
- 6 My understanding is that currently the
- 7 Commission or the Justice Department may only
- 8 obtain source code from a market participant
- 9 pursuant to a subpoena or consent of that party.
- 10 Is that correct?
- MR. McGONAGLE: Yes. Good morning,
- 12 Commissioner. So to the extent that the records
- are maintained by the certain category of
- registrants under 1.31, the Commission has
- authorization potentially under the Commodity
- 16 Exchange Act Section 4g, as well as under
- 17 Regulation 1.31 for inspection of records. There
- is a difference between CFTC's staff investigative
- 19 rights and ability to obtain copies of
- information, if necessary. And, of course, that's
- 21 going to be in furtherance of staff's
- 22 responsibilities to evaluate compliance with the

- 1 Commodity Exchange Act and the regulations.
- Separately, the Department of Justice,
- 3 to the extent that records are available for
- 4 inspection, under 1.31 the Department of Justice
- 5 can otherwise inspect certain records as set forth
- 6 in the regulations. And then --
- 7 COMMISSIONER GIANCARLO: Vince. Excuse
- 8 me.
- 9 MR. McGONAGLE: Yes.
- 10 COMMISSIONER GIANCARLO: Records I
- 11 understand. Records are records of past
- 12 activities. But source code, intellectual
- 13 property of market participants, would that
- 14 require a subpoena or can that be obtained
- similarly in the way you're describing?
- MR. McGONAGLE: So I think during the
- 17 course of the comment period there will be some
- 18 articulation and questions, comments raised about
- 19 the nature and scope of 1.31 and how far into
- 20 transactions or records you would be otherwise
- 21 entitled to reach as part of a regular inspection
- 22 authority. Certainly, if there is a subpoena

- that's involved, then that would be pursuant to
- 2 whatever authorization issues in connection with
- 3 the subpoena.
- 4 COMMISSIONER GIANCARLO: Sure, but, you
- 5 know, neither of us are technologists, but I think
- 6 basic technology would say that a software
- 7 algorithm is different than a record. One is an
- 8 operating system, a protocol, another one is a
- 9 record of historic or current events. I think
- there's a distinction when you're asking for
- information that concerns positions of a market
- participant, but then that's different than an
- 13 algorithm that would show in the event of certain
- 14 future events what that market participant would
- do, what positions they would take in the event of
- 16 certain events in the future.
- 17 Are you saying that's subject to
- interpretation, however?
- 19 MR. McGONAGLE: So I certainly
- 20 appreciate the comment and the question about what
- is the scope of the recordkeeping responsibility
- 22 and whether a record is actually an electronic

- file. And then if so, does that reach to the
- 2 source code?
- 3 And so I think that further analysis
- 4 under 1.31 would tease out the applicability of
- 5 the books and records requirements. There is a
- 6 provision in connection with Reg AT that would
- 7 treat the source code as a books-and-record
- 8 pursuant to 1.31. So I do think that that
- 9 potentially calls in the right to inspection.
- 10 COMMISSIONER GIANCARLO: Do you know
- 11 whether the SEC has the right to obtain source
- code or algorithms from their registrants?
- MR. PUJOL: We have looked at some of
- 14 the measures that the SEC has done that are in
- parallel to Reg AT. I'm not aware of measures
- 16 within that particular sort of channel, but I
- don't know whether SEC authorities more broadly
- 18 would allow them to treat this as a book and
- 19 record.
- 20 COMMISSIONER GIANCARLO: Certainly the
- 21 law of either intellectual property or accountancy
- 22 would treat algorithm software as intellectual

- 1 property and not as books and records. Do you
- 2 know of any other federal agency that has the
- 3 right to obtain intellectual property of
- 4 registrants without a subpoena? Does the Food and
- 5 Drug Administration, for example, have the right
- 6 to obtain, say, Coca-Cola's special formula
- 7 without a subpoena?
- 8 MR. McGONAGLE: So I appreciate that
- 9 question and I would say that I'm not an expert in
- 10 that area of the law, so I'm not able to address
- 11 that. But for systems safeguards, for example, an
- 12 expectation is that the Commission oversight
- 13 responsibility, that we would have the ability to,
- again, ensure that there is compliance with the
- 15 Commodity Exchange Act and the regulations
- 16 recognize that there are significant issues with
- 17 respect to proprietary information and the need to
- 18 maintain confidentiality and the balance for
- 19 regulatory responsibilities.
- 20 And so I think, you know, as we propose
- 21 an NPRM, we are looking for comment with respect
- 22 to access to, and utilization of, this information

- in furtherance of our responsibilities.
- 2 COMMISSIONER GIANCARLO: So let's say
- 3 that this proposal goes forward as you would
- 4 interpret it and we have this right to obtain
- 5 intellectual property, algorithms, source code
- 6 without a subpoena, I guess pursuant to a special
- 7 call process. Do we have the capabilities here at
- 8 the Commission to actually do anything with that
- 9 source code? Can we interpret it? Do we know how
- 10 to read it? What would we do with it?
- MR. McGONAGLE: So the ability to pull
- in the information, you know, on an as-needed
- 13 basis, so that would have to be evaluated as
- 14 needed. What is, you know, the nature of the
- 15 request? Does the coding methodology -- is it
- 16 consistent? Is it generating trading activity
- 17 that is in violation of the Act and the regs. And
- so I would be in close coordination with the
- 19 Division of Enforcement, for example, to the
- 20 extent that they undertook an inquiry, that they
- 21 have the relevant expertise to evaluate, cabin,
- 22 and ensure the security of information.

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                 You know, we discussed the fact of
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       inspection, so inspection doesn't mean transfer.
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       It doesn't need to mean transfer, so the ability
       to go to the facility and get further information
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       about how that code is being utilized is one of
       the aspects of Regulation 1.31. So I would say
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       that we don't -- in all instances would require
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       that source code be transferred over.
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                 And also, as I mentioned earlier, in
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       looking at oversight from the CFTC perspective,
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       it's in furtherance of our obligations under the
       Act and the regs, so whether there would be some
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13
       -- you know, the nature and scope of the review of
14
       that source code would have to be determined
       through the Division of Market Oversight, with
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16
       interaction, with the other divisions to the
       extent that they thought it was important with
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18
       respect to their regulatory responsibilities.
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                 COMMISSIONER GIANCARLO: As I read the
       rule, though, Vince, I do understand we have the
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       right not only to inspect, but to obtain the
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source code.

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1 MR. McGONAGLE: Exactly. That's exactly
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- 2 correct, Commissioner.
- 3 COMMISSIONER GIANCARLO: So if we were
- 4 to obtain the source code, it's unfortunate, but I
- 5 don't think the federal government or its
- 6 regulatory agencies have a great deal of
- 7 credibility with the American public in terms of
- 8 their ability to maintain the confidentiality of
- 9 intellectual property and data. How comfortable
- or how -- what assurances can we give the public
- if we do obtain source code from market
- 12 participants that that source code will remain
- safe and out of the hands of not just their
- 14 competitors, but cyber threats to the marketplace.
- MR. McGONAGLE: Commissioner, I
- 16 certainly appreciate the Commission's
- 17 responsibility to be ever-vigilant with respect to
- 18 the obligations that it seeks to discharge. We
- 19 routinely receive confidential information as part
- of the regular business practices of this
- 21 organization and we would need to be ever vigilant
- 22 with respect to those responsibilities.

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1 COMMISSIONER GIANCARLO: Thank you.
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- 2 Thanks. Let me close by thanking the team for
- 3 their hard work on this. I've gone into this
- 4 issue because I do think it is probably one of the
- 5 more critical elements of this proposal. I think
- 6 it's something that merits thoughtful
- 7 consideration by the public. It's certainly an
- 8 area where I will be looking carefully.
- 9 We did a little bit of research in the
- 10 small amount of time we had. We can't find any
- other precedent for federal agencies obtaining
- 12 such sensitive intellectual property of market
- participants, so I'll be interested for the
- 14 public's comment on that and certainly in the
- 15 weeks and months to come, to educate ourselves
- 16 better on that. Thank you.
- 17 CHAIRMAN MASSAD: Okay. Did you have
- 18 anything else?
- 19 COMMISSIONER BOWEN: No.
- 20 CHAIRMAN MASSAD: Just to follow up.
- 21 Certainly, the confidentiality of information is
- 22 always a key requirement of the law, as well as a

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thing we always must keep our eyes on. There's
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- 2 plenty of commercially sensitive information, I
- 3 think, that we get in the course of our oversight
- 4 activity and our supervision activity. And I'm
- 5 certainly happy to look further at the rules'
- 6 implications with respect to source code, but I
- 7 think it's -- I'm not sure that I see that there's
- 8 a difference in -- qualitatively, if you will,
- 9 given that we are constantly receiving all sorts
- of confidential and highly commercially sensitive
- 11 information.
- 12 As to our ability to analyze an
- 13 algorithm, I've said repeatedly that we need to
- invest more in IT to enhance our systems generally
- 15 given the electronification and increasing
- 16 automation of the markets. But I think given the
- 17 outstanding work of our Enforcement Division, in
- 18 looking at matters involving spoofing and so
- 19 forth, I would expect that they've done plenty of
- analysis of algorithms and deconstruction of
- 21 algorithms in their cases.
- 22 If there are no other questions, I would

- 1 again like to thank the staff for their work and
- 2 presentations today. And having concluded the
- 3 discussion would any Commissioner like to make any
- 4 further statements before we proceed to a vote?
- 5 All right. If the Commissioners are
- 6 prepared to vote, if so, Mr. Kirkpatrick will you
- 7 call the roll?
- 8 MR. KIRKPATRICK: The motion now before
- 9 the Commission is on the adoption of the Notice of
- 10 Proposed Rulemaking on Regulation Automated
- 11 Trading.
- 12 Commissioner Giancarlo?
- 13 COMMISSIONER GIANCARLO: Aye.
- 14 MR. KIRKPATRICK: Commissioner
- 15 Giancarlo, aye. Commissioner Bowen?
- 16 COMMISSIONER BOWEN: Aye.
- 17 MR. KIRKPATRICK: Commissioner Bowen,
- 18 aye. Chairman Massad?
- 19 CHAIRMAN MASSAD: Aye.
- 20 MR. KIRKPATRICK: Chairman Massad, aye.
- 21 Mr. Chairman, on this matter, the ayes have three,
- the no's have zero.

1	CHAIRMAN MASSAD: Thank you. The ayes
2	have it, and the motion to adopt the proposed rule
3	is approved.
4	Is there any other Commission business?
5	There being no further business, I would entertain
6	a motion to adjourn the meeting.
7	COMMISSIONER BOWEN: So moved.
8	CHAIRMAN MASSAD: All in favor?
9	COMMISSIONER GIANCARLO: Second.
10	GROUP: Aye.
11	CHAIRMAN MASSAD: The motion is
12	approved. The meeting is adjourned. And again,
13	thank you all very much.
14	(Whereupon, at 9:49 a.m., the
15	PROCEEDINGS were adjourned.)
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1	CERTIFICATE OF NOTARY PUBLIC
2	DISTRICT OF COLUMBIA
3	I, Mark Mahoney, notary public in and
4	for the District of Columbia, do hereby certify
5	that the forgoing PROCEEDING was duly recorded and
6	thereafter reduced to print under my direction;
7	that said transcript is a true record of the
8	testimony given by witnesses; that I am neither
9	counsel for, related to, nor employed by any of
10	the parties to the action in which this proceeding
11	was called; and, furthermore, that I am not a
12	relative or employee of any attorney or counsel
13	employed by the parties hereto, nor financially or
14	otherwise interested in the outcome of this
15	action.
16	(Signature and Seal on File)
17	
18	Notary Public, in and for the District of Columbia
19	My Commission Expires: March 14, 2018
20	
21	
22	