UNITED STATES OF AMERICA COMMODITY FUTURES TRADING COMMISSION

TECHNOLOGY ADVISORY COMMITTEE MEETING

Washington, D.C.

Tuesday, April 30, 2013

- 1 PARTICIPANTS:
- 2 CFTC
- 3 COMMISSIONER SCOTT D. O'MALIA
- 4 COMMISSIONER GARY GENSLER
- 5 COMMISSIONER JILL SOMMERS
- 6 COMMISSIONER BART CHILTON
- 7 High Frequency Trading Subcommittee Members:
- 8 CHRIS ISSACSON
- 9 CHRIS LORENZSEN
- 10 PAUL KEPES
- 11 CHRISTOPHER CONCANNON
- 12 COLIN CLARK
- 13 DEAN PAYTON
- 14 SEAN CASTETTE
- 15 ED DASSO
- 16 GREGORY WOOD
- 17 IRENE ALDRIDGE
- 18 JIM NORTHEY
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- 20 JOEL HASBROUK
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- 4 MARK WASSERSUG
- 5 MICHAEL MENDELSON
- 6 PETER BUCKLEY
- 7 PETER REISS
- 8 ROBERT HEGARTY
- 9 TERRENCE HENDERSHOTT
- 10 TIM SARGENT
- 11 Technology Advisory Committee "2.0" Members:
- 12 JOHN BATES
- 13 GARRY DEWAAL
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- 16 MICHAEL GORHAM
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- 13 WILLIAM NICHOLS
- 14 BRIAN OKUPSKI
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1	PROCEEDINGS
2	(10:00 a.m.)
3	COMMISSIONER O'MALIA: We will bring the
4	TAC meeting to order. I'd like to welcome our TAC
5	members. We have also included the Data
6	Subcommittee members and some of the High
7	Frequency Trading Subcommittee members are here as
8	well, so I appreciate everybody's participation,
9	and I certainly appreciate the participation of
10	our witnesses as we have six panels today and
11	we'll have a lot of people coming through.
12	We have several topics today. When we
13	started formatting this meeting agenda it was
14	about data and so the main topic today will be
15	focusing on swap data reporting, and much like
16	Thomas Edison's sentiment, he said the value of
17	the idea lies in the using of it, and the value of
18	data lies in the using of it. In other words,
19	it's one thing for the swap data reporting to be
20	mandated by Dodd-Frank and regulations, and it's
21	quite another for it to be formed properly to
22	reporting entities to the SERs and then ultimately

to the Commission itself for access and use in 1 2 surveilling our markets. I want to thank the TAC 3 for working at the Data Subcommittee level and make recommendations to the TAC and ultimately to 5 the Commission a year ago. We're going to come back and revisit some of those recommendations that you had then and say we should have paid 7 8 attention to this a little more closely when 9 developing our rules. 10 The first data panel today we will hear from market participants, all walks of life in the 11 12 market, to give their perspective on the 13 compliance challenges that they've had in meeting 14 the data requirements of the Commission and interacting with the SDRs. The second data panel 15 will consist of the SDRs themselves and we will 16 17 attempt to frame that debate with our Office of Market Oversight and Data and Technology. They 18 19 have a presentation that they're going to make so 20 we can begin to figure out these issues and how we are going to make data reporting an effective 21

enterprise for this Commission. Then the third

1 panel will be related to data and will hear from 2 Tradeworx, an organization that the SEC has hired 3 to help them sort out their data issues. I think this will give us a good opportunity to look at 5 the possibilities of using data by the SEC, the CFTC and figure out what the possible will be in dealing with big data challenges. 7 8 As we go through these panels I want to 9 think of various tools that we need and that we 10 can harness in order to address the challenges of 11 swap data reporting. For example, I've called on 12 a cross-divisional data unit to be created within our Commission of staff dedicated full time to 13 14 organizing and examining the data for completeness and accuracy, and we also need to work on 15 16 interpreting and analyzing that data and 17 developing the necessary analytical tools to identify market risk. Another potential tool will 18 19 be the development of a written guidebook to 20 articulate specific instructions to the market participants and SDRs in order to make the data 21

reporting process more efficient and consistent.

1 Here I have at the desk Part 20 rules, large 2 trader reporting, quite a handful of rules. This 3 is the how-to book to make those rules work. We publish the rules and then we had to publish the 5 quidebook. You can see the difference. This was quite simple. This is 226 pages and 24 pages here 7 of rules telling you what to report and this is 8 how to report. Our SDR reporting is going to be 9 much more complicated than that and I suspect our 10 guidebook, if you will, for SDRs with fields well 11 over the 40 or so in large trader will be much 12 more complicated and much more extensive so that 13 the paper is going to continue to flow around 14 here. I'd be very interested to understand the best way to address things like this the same way 15 16 we introduced the Part 20 guidebook on large 17 traders. 18 The thing we need to focus on is the end 19 result and the process and we need to have 20 interaction with the market participants which is why we're here today and to make sure that we are 21

asking and demanding of them the things that can

- 1 be easily done and efficiently done to give us the
- 2 best data into the market. I fully expect the TAC
- 3 to focus on the SDR issues to continue well beyond
- 4 today's meeting. We will continue to refine our
- 5 proprieties for reporting in order to reach the
- 6 most effective and efficient ways to collect,
- 7 manage and utilize data to best effect. These are
- 8 big challenges and I will continue to commit the
- 9 TAC's attention and resources to help solve them
- 10 and make sure the job is done.
- 11 We also have some other topics on here
- 12 to follow- up on previous meetings. Before we get
- 13 to the data reporting panels, we have updates on
- 14 two topics we have discussed in previous meetings.
- 15 First we will hear from CME and NFA, the two SROs
- 16 that are addressing the status of customer
- 17 protection and technology and a solution to verify
- 18 and reconcile account balances claimed by future
- 19 Commission merchants and their custodian banks.
- 20 As you will recall, these measures were initiated
- 21 at our emergency TAC meeting last July in response
- 22 to the Peregrine Financial Group debacle and MF

- 1 Global, and we also held a discussion at our
- October 30 meeting in Chicago. Since then the
- 3 technology solution has been launched and much
- 4 progress has been made, so we look forward to
- 5 follow-up with that group and understand what the
- 6 status of that is, and we'll also hear from the
- 7 technology entity AlfaMetrix who has worked to
- 8 implement that solution.
- 9 After that we'll hear an update from FIA
- on the status of compliance of Rules 1.73 and 1.74
- 11 relating to the timely acceptance and rejection of
- 12 clearing. Last but not least, I've added a
- session to the agenda to focus on last week's
- 14 Twitter hack and the market's reaction to the
- 15 event. It's something that needs to be discussed
- and what better place to do it when you have a
- 17 room filled with technology experts? Rather than
- applying a shoot-first, aim-later strategy, I'm
- 19 going to have an open discussion with all the TAC
- 20 members including the exchanges where the market
- 21 reaction took place to understand the
- 22 implications, concerns and possible solutions.

- 1 The social media genie is out of the bottle and
- 2 rather than attempt the impossible of trying to
- 3 put it back in the bottle, we need to figure out a
- 4 way for our markets and the regulators to respond
- 5 to these new market forces. Again I am grateful
- for everybody's attendance and participation here
- 7 today and am thankful for our panelists. Let me
- 8 turn to the Chairman for any remarks he might
- 9 have.
- 10 CHAIRMAN GENSLER: Thank you, Scott, for
- 11 your leadership in bringing this committee
- 12 together. It's been a great effort of yours, but
- you've done an excellent job throughout the years
- and this couldn't come at a more timely moment.
- 15 The TAC Advisory Committee, I want to thank you as
- 16 well. Why is it such a timely moment? For two
- 17 reasons. One, we've had a very real change since
- 18 your earlier meetings. We've had a paradigm shift
- 19 that now the swaps market is moving into
- 20 implementation of Dodd-Frank reforms. This means
- 21 that we for the first time have real-time
- reporting, we have 75 swap dealers registered, we

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1 have clearing, it's being phased in between March
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- 2 and September of this year and we have reporting
- 3 to the swap data repositories already underway.
- 4 Secondly, as Scott so said and so much has been
- 5 reported in the press, we live in a time that
- 6 technology is constantly changing and this is
- 7 generally a good thing. Innovation in our society
- 8 whether it's in the markets, whether it's in
- 9 health care, whether it's in our day-to-day life,
- 10 all one has to do is look in the kitchen and see
- 11 how wonderful technology is and how much easier
- things are even today than 40 years ago. There's
- 13 a paradigm shift in the swaps market as it's come
- to more transparency and central clearing, but
- there's also a continual shift, one might say a
- paradigm shift as well, with technology. We
- 17 always need to adapt and adjust our rules to make
- sure that the market ultimately benefits from
- 19 transparency but also has a sense that there is
- 20 some oversight of these markets.
- 21 Regarding data, in the panels we'll see
- on data, there is and has been a full commitment

- from the G-20, that's the 20 leading nations
- 2 around the globe and jurisdictions, Europe is in
- 3 there as well, and it's been there since 2009 to
- 4 gather data into trade repositories so that
- 5 regulators, central bankers and finance ministers
- 6 around the globe can get a sense of these
- 7 important markets, the \$600 trillion marketplace
- 8 we call the swaps marketplace. Here in the U.S.
- 9 and a number of other countries we now have data
- 10 repositories registered and reporting that
- information. But I think it's natural that we
- have some growing pains, and I'm glad that we're
- going to have not one, but I guess two panels to
- 14 discuss this today. For me, I think that it's
- 15 clear what the regulators and the finance
- 16 ministers around the globe were saying. They want
- a place where they can go and sort and search
- 18 data. I say sort and search data, and it's
- 19 accessible. Congress put into the statute that
- 20 it's directly electronically accessible for the
- 21 regulators. That means it's not a report, it's
- 22 not necessarily a summary, but a regulator can go

- in and see trade by trade. We can aggregate it by
- 2 counter-party, by reference rate, by trade date
- 3 and use modern technology to do that. We're not
- 4 there yet. This is natural growing pains, but I
- 5 think today's process will help is get along the
- 6 way and maybe a guidebook hopefully a little
- 7 shorter than this one, but maybe a guidebook
- 8 similar to this will help as well.
- 9 We are also going to hear further about
- 10 customer protection and we have put out rules
- working with the self- regulatory organizations
- 12 like CME and the NFA about direct electronic
- access to bank account and custodial statements,
- so I look forward to hearing from you today on how
- that's working so far. Our rules haven't been
- finalized, but you've started with the
- 17 self-regulatory organizations to do that, and post
- 18 the events of last year particularly at Peregrine
- 19 this is a critical issue.
- Then of course I'm glad that Scott has
- 21 put a small panel at the end and maybe that's why
- 22 we have the cameras here today with regard to last

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1 week's events. As technology changes our
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- 2 financial system, the rules in place need to be
- 3 resilient. As sure as there were bad actors
- 4 putting our false information 100 years into the
- 5 marketplaces, and all we need to do is read about
- 6 the late-19th century and the wonderful but
- 7 sometimes heart-wrenching stories about false
- 8 information and runs that were created in the
- 9 markets of that era, it's sure to be the case that
- 10 100 years for now that people will try to put out
- 11 false information into markets. They'll use new
- 12 technology, things that will make Twitter and
- 13 Facebook look old style 100 years from now, but I
- think as regulators we need to be resilient as
- 15 well and continue to update what we do to promote
- 16 transparency and protect the markets and sure that
- false information is not put out in the markets.
- 18 That's one of the things we're even doing with
- 19 regard to LIBOR and Euribor, that false
- information is not put out into the market.
- I think that we do need to finalize a
- 22 concept release that we've been working on for

- 1 many moons here at the CFTC. My hope is that we
- 2 could put out a concept release which is about
- 3 risk controls and system safeguards for automatic
- 4 trading environments. We've talked about it and
- 5 sometimes I reference it as testing and
- 6 supervision, but last week's events reminds me
- 7 once again, and I've been chatting with fellow
- 8 Commissioners, I think we will do that in the next
- 9 month to 2 months and put that out and get the
- 10 benefit of the public comments on it. I think
- also we need to finalize something that's in the
- weeds, but it's called ownership and control
- 13 reporting which we proposed and it's now in front
- of my fellow Commissioners and I think the staff
- 15 has done an excellent job so that we can know the
- 16 actual owners and controllers of futures accounts
- in a similar way to what's in the swap data
- 18 repositories for swaps. Yes, as a final note we
- do need more resources here at the CFTC. If we
- don't have the technology resources to keep up,
- 21 then all the data in the data repositories, all
- 22 that's being done out there in the marketplaces,

- 1 it's going to be hard for us to be nimble and be
- 2 aware of what's going on. I thank you and I thank
- 3 Scott for putting this together.
- 4 COMMISSIONER O'MALIA: Thank you very
- 5 much. With regard to the testing and supervision,
- 6 we're really ready to use this Commission once we
- 7 get it out and we have the benefit of getting
- 8 public comment, I think we will schedule another
- 9 TAC meeting to address that specifically. So
- 10 maybe this summer at our next meeting we can
- 11 address high- frequency trading and market
- 12 controls directly.
- 13 CHAIRMAN GENSLER: That would be
- 14 terrific. I know that we've all worked very
- 15 closely particularly I want to applaud your work
- and Commissioner Chilton's work for getting this
- 17 document through.
- 18 COMMISSIONER O'MALIA: Happy to do it.
- 19 Commissioner Sommers?
- 20 COMMISSIONER SOMMERS: Thank you. Good
- 21 morning, and thank you all for being here today,
- and especially thanks to Commissioner O'Malia for

2 lead on this advisory committee that had sort of 3 been dormant for a few years, I think none of us really realized how important the role of this 5 advisory committee would be in helping us to resolve some of the challenges that we're having in implementing the rules surrounding Dodd-Frank. 7 8 I think as we review some of the issues that are 9 on the agenda today, it's important for us to 10 continue to review the costs and benefits of the requirements that the Commission has put into 11 12 place and the benefits to our regulatory goals in 13 making sure that those are level with the costs to 14 the industry. I think that we need to continue to make sure that these requirements are reasonable 15 16 and make sense, and although we may have a long way to go in resolving some of these growing pains 17

chairing his advisory committee. When he took the

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22 advisory committee. Thank you for holding this

here and the panelists and members of this

as we implement Dodd-Frank, the topics that we're

talking about today are extremely important for us

to review and to listen to you as participants

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1 meeting.
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- 2 COMMISSIONER O'MALIA: Commissioner
- 3 Chilton?
- 4 COMMISSIONER CHILTON: Thanks, and
- 5 thanks, Commissioner O'Malia, for really just
- 6 incredible work on this and on the concept release
- 7 too. The amount of time you've spent on this is a
- 8 whole lot more than the rest of us. I know Jill
- 9 has spent a lot of time traveling so I can't say I
- 10 guess more time than traveling, but the time that
- 11 you spend on it every day is really invaluable.
- We're not supposed to talk about where things are
- 13 like this concept release so I won't talk about it
- 14 specifically, but there are a lot of really good
- things in there and thank you for that.
- It seems like every time we meet there's
- another meltdown moment taking place, whether or
- 18 not it's Knight Capital or the Facebook IPO or the
- 19 hack attack last week. For me what it raised was
- there's a confluence of the social networks and
- 21 the markets that we hadn't really noticed before.
- Obviously things that are out there impact the

- 1 markets, but it really wasn't the social network
- 2 to the extent that we saw it last week. So that
- 3 comes on the heels of the SEC allowing for
- 4 registrants to go ahead and put forth information
- 5 about earnings, et cetera, in Twitter, Facebook or
- 6 other social media. I think that a lot firms have
- 7 over the years looked at social media as more of a
- 8 marketing tool as opposed to something that can be
- 9 interrelated with their trading computer programs.
- 10 It raises a question and we can get to it later as
- 11 to whether or not there's anything that needs to
- be done, and I'm not suggesting that something
- should. Maybe everybody will just supersize their
- 14 cyber security regime out of the goodness of their
- 15 heart or because they think it's in their business
- interest, but I think it's something that we need
- to consider and as Commissioner O'Malia said,
- maybe we'll think about including something like
- 19 that in this document that I hope we can review
- later. I'm pleased that we're having the meeting.
- I thank everybody for coming. I know it's a big
- deal and there's lots of folks and it takes a lot

of time to travel, but we really do appreciate it.

- 2 Thank you.
- 3 CHAIRMAN GENSLER: I wanted to add one
- 4 more thing because I think what we're all chatting
- 5 about toward the end of today with regard to
- 6 Twitter and I noticed Commissioner O'Malia handed
- 7 me a Journal article as well, was also highlighted
- 8 by the Financial Stability Oversight Council last
- 9 week in its annual report. It was organized
- 10 around seven themes. One of the themes that this
- 11 council of regulators that includes the Federal
- 12 Reserve and Treasury and the SEC and ourselves was
- operational risk, just that we as a council all
- 14 recognize that with enhanced technology we also
- end up with whether it's the events that we've
- looked at in the last year around Knight Capital
- or CBOE and so forth. It's these operational
- risks that are also part of a theme that the
- 19 council picked up.
- 20 COMMISSIONER CHILTON: Maybe you could
- 21 get me invited to one of those meetings.
- 22 COMMISSIONER O'MALIA: Let's start with

- our first panel. We're going to talk about the
- customer protection technology solution that's
- 3 been initiated by our SROs, NFA, CME and really
- 4 provided us a great solution going forward that
- 5 will enable us to check, that does enable us.
- 6 It's no longer a vision. It's actual reality,
- 7 that does enable us to check customer funds and
- 8 where they are at all times. We get these on a
- 9 T+1 basis and no longer can somebody dip into
- 10 customer funds over a 20-year period and get away
- 11 with it. We're going to know immediately. I
- don't know who wants to go first. Chris, you're
- going to go first. Chris, Bryan and then Al.
- 14 MR. HEHMEYER: Thank you, Commissioner
- 15 O'Malia. I'm going to start and then Bryan, and
- 16 I'm going to be brief and then Bryan is going to
- 17 talk about their experience from the CME and then
- we're going to hear from Aleks Kins from
- 19 AlphaMetrix. I too would like to chime in and
- 20 thank you for your leadership for the Technology
- 21 Advisory Committee and to the Commission for
- 22 having us all here because I get to tell a good

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1 story amongst all of the challenges and dead ends
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- 2 that the industry faces these days, this is a
- 3 story that's a good one. It came out of this
- 4 committee. It was in July after the Peregrine
- 5 thing and we were using at NFA and I think also at
- 6 CME to some degree econfirmation.com which was a
- 7 manual basis of going in and checking bank
- 8 balances and it was NFA's insistence that Russ
- 9 Wassendorf had to give his authorization to
- 10 confirm the bank balances which uncovered the
- 11 fraud.
- 12 I think it was in July at this
- 13 committee, Commissioner O'Malia was pressing me to
- 14 ask if there wasn't a way that the industry could
- 15 come up with a technology solution to be able to
- 16 check these bank balances on line. Honestly I
- 17 came on behalf of NFA and its board and talked
- about the vision of something like that and a
- 19 little bit winging it because we weren't exactly
- 20 sure what that would take and what that would
- 21 cost. It was soon after that when I got back to
- 22 Chicago and my friends at AlphaMetrix, Aleks Kins

- and Dennis Zar said you guys know, Chris, that we
- 2 have a technology that could probably do what it
- 3 is that you all at NFA and CME are looking for.
- 4 That led to lunch outside at Seres with Dennis Zar
- 5 and David Young and Ken Haas from NAF and myself
- 6 where we explored this. Then that led of course
- 7 to a high-level discussion with CME who I think
- 8 was also talking to AlphaMetrix already on their
- 9 own at that point. Quickly things led to things.
- 10 And then of course the due diligence that's
- involved in looking into AlphaMetrix if the two
- 12 regulatory organizations are going to trust this
- 13 technology. As we all know, sometimes the
- 14 technology needs of one organization may be close
- 15 to what another organization has built, but it's
- 16 not always perfect. So over the course of the
- fall we had to pass our rules and get them in
- 18 place at NFA which went into effect February 13 of
- 19 this year. Then the two organizations came to
- 20 conclude that the AlphaMetrix solution as a good
- one. I'd like to make a couple of quick points
- 22 and that is that the system is being implemented

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1 in phases and the first phase covers bank
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- depositories. As you all know, SEG locations are
- 3 also brokerage firms and other places, but we
- 4 began with the bank depositories which is the
- 5 majority of course of the funds and certainly
- 6 would have prevented the Peregrine problem. Both
- 7 of the organizations, NFA and CME, are using this
- 8 third party AlphaMetrix 360 to collect the cash
- 9 and securities balances on a daily basis. NFA's
- 10 FCMs have a total of 172 SEG accounts at 15 banks,
- while CME has almost 2,100 accounts at 40 banks so
- 12 their task is a lot bigger than NFA's.
- 13 Again the two organizations worked
- 14 closely and worked well together in trying to
- implement the solution. It's very important to
- note that the third party's role is to collect the
- 17 data from the banks and to send it to NFA and CME
- and AlphaMetrix doesn't play a role in analyzing
- 19 the data or reconciling the data which is
- 20 important to keep in mind. They're providing the
- 21 technology. CME and NFA have developed automated
- 22 systems which alert the staff to material

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differences in these comparisons so they can
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- 2 follow through with analysis and perform
- 3 reconciliations and the amount in the beginning
- 4 was 5 percent and we've quickly been shrinking
- 5 that as we've gotten some experience with it.
- 6 Most of the exceptions are issues of reporting or
- 7 issues of some out trade or something like that,
- 8 but they can quickly detect it and then be in
- 9 touch with the FCM as to what the nature of that
- is or what the nature of the discrepancy is.
- 11 With the banks essentially complete, NFA
- and CME are going to be moving on to phase two of
- 13 the project which will cover as I mentioned the
- 14 balances between the clearing brokers and the
- 15 clearinghouses. NFA and CME are going to split
- 16 this effort for this phasing with NFA establishing
- 17 the requirements for the clearing broker balances
- and CME handling the clearinghouses. Beginning
- 19 this month NFA started to meet with clearing FCMs
- 20 to discuss their capabilities for providing this
- 21 data and that's why the two organizations are
- going to split this effort. NFA is doing some

initial research which is something that I would 1 2 really like to see in confirming of assets held in 3 pools. This is complex and a large technology challenge because there are so many pools. There 5 are many more pools than there are FCMs. The pool frauds typically get the sort of press that the 7 FCM frauds get. They're usually much smaller, but 8 there are more of them. Somebody making off with 9 somebody's money in a pool to me while it may not 10 get the press of what happens in a fraud like 11 Wassendorf's at Peregrine and it may not be as 12 large an amount of money as \$200 million, but the 13 person that's got money in that pool has been 14 harmed just as much by their money being stolen by a criminal pool operator and it would be great if 15 16 NFA could get to balance these reported balances 17 in these pools but that's going to take some time 18 to try to deploy this technology but it looks like 19 this technology is one that can do that for the 20 pools. Most importantly me and the board from my chair at NFA is that this was a very good example 21 22 of the way a technology that was developed on

- 1 behalf of the investors by private enterprise on
- 2 behalf of investors was something that we were
- 3 able to use on the regulatory side and get us to
- 4 market quickly. The amount of time that it took
- for us to get to market for due diligence,
- 6 exploring the technology and deploying it in a
- 7 manner of months, in comparison to having to try
- 8 to build that, pay for it and then all of the
- 9 issues that go along with the testing of building
- 10 something and having it be cutting edge, all of
- 11 those issues, I shudder in fear how long that
- would have taken. We needed a solution to get to
- 13 market fast to check these balances and this was a
- 14 very good example of the way the regulators worked
- 15 together with the private enterprise to bring a
- 16 solution that will work, I don't know for how
- 17 long, but for certainly the foreseeable future or
- 18 a couple of years at least, maybe longer, that
- 19 this technology has worked very well. With that I
- 20 think you'll probably want to hear also from Bryan
- and then from Aleks, and then of course I'm
- 22 available for any questions particularly from my

- 1 chair at NFA.
- 2 MR. DURKIN: Thank you, Commissioner
- 3 O'Malia. On behalf of the CME Group's work with
- 4 the NFA, first of all, Chris has done a very
- 5 detailed overview of where we're at with the
- 6 implementation of this mechanism. We are pleased
- 7 to report to the Commission today that from the
- 8 CME's perspective we currently received bank
- 9 depository information from 2,082 accounts which
- 10 represents all material bank depository balances.
- 11 This covers all 46 FCMs that maintain customer
- 12 balances. As of current date, the cash balances
- 13 that have been received from AM 360 represents
- over 99 percent of all cash balances that are held
- 15 at CME DSRO FCMs.
- In taking that information in, since we
- 17 effectuated this in the middle of March and the
- NFA in the middle of February, both regulators
- 19 have done reconciliations utilizing their
- 20 analytics that they built internally. At CME we
- 21 performed automated comparisons of 2,914
- 22 segregated balances since we went live with our

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1 system and I believe the NFA did some over 2,000
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- 2 themselves. As a part of this we look for any
- 3 materiality events. Where those triggers as Chris
- 4 has alluded to did unveil themselves, for the most
- 5 part those were reporting issues between the
- firms, AlphaMetrix and the depositories that were
- 7 able to be validated and reconciled. As we move
- 8 toward phase two, we think that given what's been
- 9 achieved to date so far, we've learned a lot in
- 10 the context of what can be done in a fairly
- 11 accelerated path when you have two major
- 12 regulators coming together and trying to find a
- 13 solution that has worked very well for our
- 14 regulatory means. It's our goal as part of phase
- 15 two to be able to onboard accounts at
- 16 clearinghouses and carrying brokers internally by
- 17 the end of this year.
- 18 COMMISSIONER O'MALIA: How many carrying
- 19 brokers are there out there? Do you have a sense
- of what that number is?
- 21 MR. HEHMEYER: Carrying brokers? I'm
- 22 not sure. That's not a number that I'm armed

- 1 with.
- 2 COMMISSIONER O'MALIA: Is there anything
- 3 else?
- 4 MR. DURKIN: No, that's it.
- 5 COMMISSIONER O'MALIA: Aleks, you're up.
- 6 MR. KINS: Good morning. My name is
- 7 Aleks Kins. I'm the CEO of AlphaMetrix and I want
- 8 to start off by thanking the CFTC and Commissioner
- 9 O'Malia for inviting AlphaMetrix in to speak today
- 10 as well as the NFA and CME for having me
- 11 participate on their update.
- 12 What is AlphaMetrix? AlphaMetrix is a
- 13 company that has built a business based on
- investor demand for transparency. I myself have
- been in the hedge fund and managed futures
- industry for nearly 20 years. For about a decade
- 17 I was a fund of funds and as I managed my fund of
- 18 funds I felt that it was quite ironic that as an
- 19 institutional investor allocating hundreds of
- 20 millions of dollars there were no tools out there
- 21 to help me with not just daily but our intraday or
- daily, but anything less than a monthly in terms

- of seeing the performance and status of the funds.
- 2 Lo and behold, as a fund of funds in the 1990s I
- 3 built some technology that stated a process very
- 4 simply. Some of the managed accounts I started
- 5 receiving from various managed futures managers
- 6 and it was a case of be careful what you wish for
- 7 because I started getting the transparency I
- 8 remembered getting a stack of papers about an inch
- 9 thick on my desk in the morning and that was my
- 10 transparency. I remember lamenting that I wanted
- 11 to know if I was long on the S&P 500 which would
- 12 have taken us a month to figure out. As I
- searched for a way to aggregate, there was nothing
- 14 readily available and I found it ironic that in
- the retail let's say equity trading market
- investors had already by the mid-1990s to
- 17 late-1990s at their fingertips streaming
- information and there I was as an institutional
- 19 allocator and there was nothing of the sort.
- 20 Further, I found once I started building it as we
- 21 had investors come in to do due diligence on us
- 22 and review what we were doing, I found I lost

- 1 their attention quite frequently because as I was
- 2 explaining our investment methodology and
- 3 procedures we had screens on our walls much like
- 4 these screens around the room and it had moving,
- 5 real-time profit and loss and risk information.
- 6 They would tell me one after another, Aleks, this
- 7 is very interesting, your guidelines and the way
- 8 you do due diligence, but how do I get some of
- 9 that? How do I see my funds moving like that in
- 10 my P&L? So I only had to hear that a few hundred
- 11 times to think maybe there's a business idea. In
- 12 2005 we started AlphaMetrix with a handful of fund
- 13 to funds as our initial clients and I began a
- 14 process of building technology which we found that
- even in 2005 there were quite a few large
- 16 institutions that were very interested in the
- 17 concept of seeing their own portfolios. Obviously
- 18 that goes without saying that with the advance of
- 19 2008 it was quite the catalyst for bringing us to
- the forefront in the investors' minds as our
- 21 product in essence is transparency. That helped
- 22 propel us to being one of the fastest growing

- 1 companies in Chicago and so forth, all driven by
- 2 investors who were willing to pay for data
- 3 aggregation.
- In short, the way we looked at it is we
- 5 believe in free-market principles for driving
- 6 transparency problems and solutions to those
- 7 problems. Again in 2005 we would from time to
- 8 time find pension fund investors, sovereign
- 9 wealth, you name it, that would say do I really
- need my data on a daily basis? Do I really need
- 11 to see the granular level? We found post-2008 we
- really don't ever get asked that question anymore.
- 13 What is in our DNA? How do we do this? Why is
- this different than any other group that we know
- of? It started out for me as I said as a
- 16 portfolio manager what I thought was a simple
- 17 problem. I just want to get my trades aggregated,
- 18 I want to see what my P&L is and see my profit and
- 19 loss and see what my risk is. That's where I
- 20 started discovering that data within the financial
- 21 system exists in silos. There are many, many,
- 22 many silos and our technology doesn't

- 1 differentiate between the silos, but some of those
- 2 silos are banks, some of them are exchanges, some
- 3 of them are hedge funds themselves and what we
- 4 found is that as we started streaming managed
- 5 futures and hedge fund funds throughout the day,
- 6 creating a price and risk information that we one
- 7 by one had to in essence map out nearly the entire
- 8 financial system, that we might now aggregate data
- 9 from about 4,000 hedge funds and managed futures
- 10 funds, we are connected to approximately 300 FCMs,
- 11 prime brokers, custodians, banks, you name it.
- 12 These are all data sources for us so that a new
- 13 hedge fund or a new bank is basically how we built
- our technology and it's just a form of mapping.
- We estimate that we have spent in aggregate
- 16 several thousand man years developing -- if you
- look at how the sausage is made, it's the meat
- 18 grinder that takes the data and turns it into
- 19 something that's usable for investors or
- 20 regulators or even hedge funds themselves. We
- 21 estimate that there's been as much as \$100 million
- 22 put into the technology to build this. It is

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1 complex because there is no real standardization
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- of data across the financial system. The other
- 3 thing we found is that obviously the common
- 4 denominator to all financial instruments is cash.
- 5 You could reduce an instrument down to cash flow.
- 6 You can then aggregate it any which way.
- 7 Obviously with certain derivatives or
- 8 over-the-counter instruments, it's a challenge to
- 9 reduce it to a common denominator, but that's what
- 10 this system does. As Chris Hehmeyer mentioned,
- 11 when the NFA and the CME were looking for a
- 12 solution, we connected with them and said in
- 13 essence we've spent years already building
- 14 something that could potentially be of use and we
- are already processing for a large number of
- institutional investors aggregating information on
- 17 their own portfolios. That said, the slide I have
- here shows that 84 days from sitting down and
- 19 meeting to delivering the phase one which is
- 20 complete. We've got 71 different FCMs already
- 21 being processed and I think 95 percent with the
- 22 CME and that's already 99 percent, so it's

- 1 basically complete. But why were we able to do
- 2 this in this type of speed? The reason why I'm
- 3 presenting this is because the only thing that had
- 4 to be adapted was the final let's say 1 percent of
- 5 the project, the core again, the meat grinder I
- 6 mentioned, was already completely developed. We
- 7 were able to process not just bank account cash
- 8 information, but also financial instruments. We
- 9 are already processing on average about 7,500
- 10 instruments, Treasuries, you name it, in these FCM
- 11 accounts right now and that's not even as large as
- 12 the volume within 200 hedge funds that we process
- 13 all sorts of esoteric instruments. The machine is
- 14 created and now it's a question of looking at it
- and maybe turning it upside down and seeing are
- there other uses for it. Are there other types
- 17 aggregation that can be mapped out and aggregated?
- 18 That leads us to as I think was already mentioned
- 19 the phase two where we're expanding from FCMs with
- 20 the banking holdings to clearing brokers and
- 21 carrying brokers and clearing firms and so forth.
- Once again AlphaMetrix thanks the CFTC, NFA and

- 1 CME. Thank you.
- 2 COMMISSIONER O'MALIA: The Chairman
- 3 mentioned that our customer protection rule has a
- 4 proposal that would require each bank to give
- 5 login access for each individual account to the
- 6 Commission and the relevant password. In light of
- 7 hacking and cyber issues that we're going to
- 8 discuss later, we had a discussion in July about
- 9 the issues of pushing out the data versus pulling
- 10 the data and trying to understand was there an
- 11 exposure issue, do we create additional liability
- or holes in the cyber security network if we have
- this login ability as opposed to collecting the
- 14 data. I'm trying to understand the advantages of
- one over the other or is it redundant what we're
- 16 asking for in terms of being able to login at will
- using the password, and then who updates the
- 18 password and how do we keep all of that straight?
- 19 It seems from our standpoint to be monumentally
- 20 difficult if we have staffing issues how we're
- going to login. You mentioned over 2,000
- accounts, Bryan. We've got over 2,000 accounts

- that we'd have to login to and I guess it's a
- 2 lottery which one we login to every day. I'm
- 3 trying to understand the tradeoff here. Haven't
- 4 we solved this problem with this solution you've
- 5 put forward?
- 6 MR. HEHMEYER: One thing I will say is
- 7 through the miracles of modern technology there
- 8 are about 70 carrying brokers, 50 of which are
- 9 clearing members. I got that out there because
- 10 your question is more complex once you get the
- 11 carrying brokers on there. Then which carrying
- brokers can you login to? It's a push technology.
- 13 The banks push the information to AlphaMetrix and
- then the organizations then do the comparisons.
- 15 Am I right, Bryan? I don't know if that answers
- 16 your question.
- 17 COMMISSIONER O'MALIA: Aleks, you can
- address the issue of how you're going to protect
- 19 this data.
- MR. KINS: Sure. For us, a push or pull
- 21 technology, we've designed it to work other way,
- 22 that different institutions have set up files and

- file transfers differently. There is no physical
- 2 logging in to a website and pulling. It's all
- 3 automated machinery. One of the challenges why we
- 4 weren't able to go to 100 percent right away on
- 5 day one is we'd already expected to have completed
- a way to communicate with some of the largest
- 7 institutions, but there are a lot of much smaller
- 8 banks and groups that didn't have push technology
- 9 which is probably easier to work with so we had to
- 10 work with them to implement a way to receive data
- but in a process that was unattended and
- 12 automated. Then further I think the question was
- 13 security of data. That is always our top, top
- 14 concern. You hear people talk about the cloud
- versus server and so forth and we don't think
- 16 there is one perfect solution for one versus the
- 17 other. We'll use the internet and the cloud where
- we think it's appropriate to aggregate and pull
- data but all data is stored not connected to the
- internet on servers and very encrypted and so
- forth. We have that all in a separate group
- 22 within AlphaMetrix, a separate company called

- 1 AlphaMetrix 360, which is a subsidiary. We've
- gone through SAS 70 compliance, Sarbanes-Oxley and
- 3 so forth to putting controls in place. But the
- idea is to remove and storage of data from harm's
- 5 way on the internet, to only have bits and pieces
- 6 out there at any given time and then be
- 7 transferring a daily file to the CME and the NFA.
- 8 I was trying not to get too technical there, but I
- 9 hope that answered what you were looking for.
- MR. HEHMEYER: One other thing,
- 11 Commissioner. Security of course is always an
- issue that has to be 24 by 27 under your wings
- every day kind of thing, but the logging in thing
- 14 at NFA, we've come to find that there are
- thousands of passwords and this is a much more
- 16 efficient way to monitor these balances, certainly
- 17 the daily seg balances.
- 18 COMMISSIONER O'MALIA: I think you had
- 19 contemplated a daily logging in strategy.
- 20 MR. HEHMEYER: I think we had used one
- 21 before too. This is much more efficient if what
- 22 we found. We have all those passwords floating

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around, the one can be prone to being hacked.
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- 2 COMMISSIONER O'MALIA: You guys are all
- 3 Technology Advisory Committee members. Anybody
- 4 who wants to raise something, put your card up and
- 5 jump in, it does not matter and ask any questions
- 6 you want. I don't know if any of my fellow
- 7 Commissions have a question on this front. Do you
- 8 have a timeframe on the next set of the carrying
- 9 brokers and the clearing members?
- 10 MR. DURKIN: Our goal is to have that
- 11 account pushed by the end of the year. We should
- be in a position, Chris, to be able to report our
- 13 progress at the next TAC.
- MR. HEHMEYER: The pools issue is more
- 15 complex. The pool rules the way I understand them
- 16 without quoting them allow for pools to invest in
- 17 a variety of different instruments. That gets
- 18 more complicated in trying to balance it, in
- 19 trying to confirm them. That's going to take
- 20 longer. But the phase two, as Bryan said, by the
- 21 next TAC.
- 22 COMMISSIONER O'MALIA: Is there anything

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we can do to help you with the pool issue?
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- 2 MR. HEHMEYER: I can't tell you off the
- 3 top of my head what that might be, but if I need
- 4 some help, I'm going to ask you.
- 5 COMMISSIONER O'MALIA: Thanks. So I
- 6 assume that they're not held in necessarily bank
- 7 accounts, that it's not all cash, it's not all
- 8 securities.
- 9 MR. HEHMEYER: Correct.
- 10 COMMISSIONER O'MALIA: It would be
- 11 metal?
- MR. HEHMEYER: My feeling is if they're
- 13 not current assets, how much of it is not in
- 14 current assets, but it's going to take us a little
- 15 while. The board and the senior management at NFA
- organizational and with AlphaMetrix is a bigger
- project and it's much more hours than this one
- 18 with CME. The first thing is phase two.
- 19 COMMISSIONER O'MALIA: Supurna?
- MS. VEDBRAT: As the data sets are being
- 21 designed, is it taking into account that
- 22 ultimately there may be a requirement to allow

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1 either if it's an asset manager, the end user to
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- 2 also be able to view this data? I ask this
- 3 question because we've recently experienced in
- 4 another data exercise where the SDR was not able
- 5 to identify which asset manager may have been the
- 6 owner of the transaction underlying. The question
- 7 is on the data set that's being currently
- 8 developed, is it taking account that ultimately
- 9 either the asset manager or the end user may also
- 10 be one of the viewable bodies?
- MR. HEHMEYER: There hasn't been any
- discussion along the lines of that at the NFA. I
- don't have any interest in AlphaMetrix, but
- 14 Aleks's description of going to different
- 15 exchanges and different asset classes with his
- 16 technology is one that might provide something
- 17 like that for the industry, but that's more of a
- 18 CFTC thing. So there hasn't been any discussion
- 19 at NFA along those lines.
- 20 MR. DURKIN: The same for us at this
- 21 point, but we can certainly take it under
- 22 consideration with the Commission.

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MS. FUHRER: First of all, thank you for
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       your presentation. It was very, very interesting.
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       One of the questions that I was thinking about as
       you were talking, and I know you touched upon
 5
       cyber threats and so on, I was wondering what
       consideration was given to customer privacy and
       all the privacy considerations as you collect and
 7
 8
       aggregate data and also as you disseminate the
 9
       data. What are your thoughts about privacy?
10
                 MR. KINS: That's a very, very good
11
       question. Security and privacy are at the upmost
12
       of what we do. If we didn't respect security and
13
      privacy, we wouldn't have a business because
14
       outside of this relationship how we built the
      business is getting voluntary contribution of
15
16
       information so we've had to go a long way to
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       demonstrate that we put in a lot of security as
       well as privacy measures. Just for an example,
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19
      here with the NFA-CME relationship, we pull this
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       data but we do not process it or show it to
       anybody. It's pushed right to the NFA and CME. I
21
22
       don't have access to that in aggregate. It's
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1 really locked down. But separately on the rest of
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- 2 our business, data sharing is in essence a private
- 3 contract between the hedge fund and the investor,
- 4 that the investor can request it and then the
- 5 managed futures fund or hedge fund can agree to
- 6 share it. It's a system like we're running
- 7 through our technology so in the end, each entity
- 8 is in control of their own data and if they choose
- 9 to share it, they're able to. We're built that
- 10 technology, the bridge that allows them to do it
- 11 efficiently, so they don't have to send files or
- do back office work. That's really the principle
- that drives and that's why we also call it our
- 14 marketplace because the marketplace of information
- and data that they're sharing back and forth and
- that's really what drives the sort of free-market
- 17 private sector element of it.
- MS. FUHRER: Thank you.
- 19 COMMISSIONER O'MALIA: Chris and Bryan,
- 20 one thing that occurred to me is we haven't talked
- 21 about what the interaction after he pulls it and
- gives it to you for evaluation and look for any

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1 anomalies to make sure you've got all the data and
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- 2 all the money in the right spot at the right time
- 3 with the right banks, what interface do you have
- 4 with the Commission? Are we linked up to this
- 5 system? Are we receiving reports?
- 6 MR. DUNKIN: For any issues where we're
- 7 finding materiality concerns in the normal course
- 8 of conducting our reviews and exams, we will be in
- 9 communication with our counterparts at the
- 10 Commission. We look at this in the context of
- 11 performing our due diligent in terms of our
- 12 overall financial monitoring of our firms.
- MR. HEHMEYER: I think it's probably
- 14 similar at NFA from the board level, I'm sure
- about the answer to that, but I would assume it's
- 16 very similar. We are posting as you know at NFA
- 17 this FCM data twice a month on the website.
- 18 CHAIRMAN GENSLER: May I ask this
- 19 question of Bryan and Chris? Given what you're
- 20 doing already in the direct electronic access to
- 21 accounts, do you think at Peregrine that somebody
- would do that again today, April 30?

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1 MR. HEHMEYER: Much harder. It would
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- 2 take hacking and it would take real computer
- 3 technology sophistication. It's like saying could
- 4 anybody hack the defense system? It's possible,
- 5 but this is a significant advancement and much
- 6 more difficult.
- 7 CHAIRMAN GENSLER: For listeners are
- 8 home, we do broadcast this, why is that in your
- 9 own words? Why is that which an operator at
- 10 Peregrine can forge and fraudulently doctor bank
- 11 statements, why isn't that possible in this
- 12 system?
- MR. HEHMEYER: In some ways it's almost
- 14 generational. The generation that learned how to
- 15 doctor documents, that age group has been rendered
- 16 irrelevant. They can't do that anymore. So is it
- 17 possible down the road?
- 18 CHAIRMAN GENSLER: Why is that not
- 19 possible?
- MR. HEHMEYER: The secure pushing of the
- 21 data that comes from the bank.
- 22 CHAIRMAN GENSLER: Directly from the

- 1 bank.
- 2 MR. HEHMEYER: Directly from the bank
- 3 into the AlphaMetrix 360 technology into NFA and
- 4 CME where we compare it with the FCM tells us, the
- 5 200 million that was missing from Peregrine would
- 6 have been found the first day it was \$7,000 and
- 7 Russ had taken the check out.
- 8 MR. DURKIN: I would agree in the
- 9 totality of the steps that we've taken in terms of
- 10 customer protections. This is one major one that
- there's been a number of steps that we have taken
- to lock up the ability for a firm to be able to
- 13 take advantage of the data or the information that
- 14 we saw in Peregrine. So it's the independent
- 15 reporting that's coming and being pushed to us
- 16 from the banks, the electronic reporting from the
- 17 FCMs doing those reconcilements on a near
- 18 real-time basis to identify whether or not there
- 19 are any anomalies and being able to act on them.
- 20 CHAIRMAN GENSLER: All you're saying,
- 21 Chris, is, yes, it's addressed that Peregrine
- forged or doctored documents, but a new generation

- 1 maybe yet to be born, whether they can go into the
- 2 computer system, sorry about this, Aleks, but into
- 3 Aleks's computer system and doctor something.
- 4 MR. HEHMEYER: Right and hack a bank.
- 5 CHAIRMAN GENSLER: Hack a bank or hack
- 6 Aleks. That brings is to the topics of later
- 7 today about cyber security and so forth.
- 8 MR. HEHMEYER: Correct.
- 9 CHAIRMAN GENSLER: Thank you.
- 10 COMMISSIONER O'MALIA: What about the
- issue of MF Global, the thresholds with moving
- 12 funds and excess funds and when does it go into
- 13 customer funds versus excess funds and we're
- trying to understand that? How will that be
- 15 solved?
- MR. DURKIN: Again to my earlier
- 17 comments, there are a number of steps that we've
- 18 taken that require the CEO or the CFO of a firm to
- 19 sign off and authorize any disbursements of funds
- 20 in excess of a certain limit. So there are a
- 21 number of protocols that we've put in place since
- 22 MF Global to be able to readily identify and

- transfers in addition to watching the customer
- 2 balance.
- 3 CHAIRMAN GENSLER: I think that these
- 4 steps which have been taken in coordination with
- 5 the CFTC and that have been taken by the
- 6 self-regulatory organizations and many futures
- 7 commission merchants, we should finalize in some
- 8 federal rules and that's what was out for notice
- 9 and comment along with other rules. I think there
- 10 are positive steps addressing some of the known
- 11 problems that came out of the last 18 months.
- MR. HEHMEYER: I agree. If I could, it
- was the result of this committee.
- 14 CHAIRMAN GENSLER: Plenty of credit to
- the committee and Scott O'Malia's leadership.
- MR. HEHMEYER: The industry and the
- 17 Commission can collaborate on issues and we can
- 18 raise awareness to certain things where somebody
- 19 could step forward with a technology solution.
- 20 Hopefully today as you all talk about various
- 21 topics, there will be people who might step
- forward with a solution that could work between

- 1 the private and the public.
- 2 COMMISSIONER O'MALIA: Jim?
- 3 MR. ROWEN: Just a quick question. As I
- 4 understand it, the information is aggregated and
- 5 then pushed out to you folks. The question is, do
- 6 you now have two aggregation units? You have one,
- 7 AlphaMetrix, one at the NFA and CME because that
- 8 may create an issue of reconciliation if you're
- 9 both collecting data versus just pulling it as you
- 10 need it.
- 11 MR. DURKIN: We conduct an aggregation
- 12 across all of the FCMs as we're receiving that
- information so that we can reconcile what's been
- 14 provided by AlphaMetrix compared to what the FCMs
- have individually reported to us. We have a
- 16 system that does that reconcilement.
- 17 MR. ROWEN: But does that reconciliation
- go on continuously? Because as you build more and
- more data every day, the question is do you go
- looking back to the very beginning and reconcile
- 21 or is it just as the data comes in you assume the
- set that was done previously is accurate?

- 1 MR. DURKIN: I don't have the answer to
- 2 that question.
- 3 MR. ROWEN: Because that could become an
- 4 overwhelming task at the end if you have data at
- 5 AlphaMetrix as well as what's on site that has to
- 6 be reconciled.
- 7 MR. DURKIN: I'd have to follow-up on
- 8 that one.
- 9 COMMISSIONER O'MALIA: John?
- 10 MR. LOTHIAN: There have been some
- incidents where FCMs have had money in accounts
- 12 that were not properly named. They didn't have
- 13 customer-segregated funds. There have been some
- 14 fines by the Commission as a result of that with
- some fairly high-profile cases. Does your system
- verify those accounts as being customer-segregated
- 17 accounts, and how does it account for anomalies
- 18 like we've seen where these fines have been
- 19 created?
- 20 MR. DURKIN: I don't know the answer to
- 21 that.
- MR. KINS: A sort of broader answer to

- 1 that is that the general premise that we've built
- 2 the whole system is a trust but verify system and
- 3 it's under the premise that multiple unrelated
- 4 entities won't corroborate information that's not
- 5 true. What our system does is try to find sources
- of data and then to reconcile. To answer the
- 7 earlier question, the way we're doing the
- 8 reconciliation is we can see when something
- 9 changes and then we will go back and we'll look at
- 10 if there is a change. If there is no change, we
- leave the data alone. But in terms of how do you
- 12 look at let's say customer-seg accounts, generally
- even the large banks and institutions are holding
- 14 money at other institutions and so forth and that
- goes back to as we started with hedge funds, a
- 16 medium to larger size hedge fund, might have 10 or
- 20 prime brokers, FCM, custodial relationships so
- there are pieces of data at all of them, we're
- 19 putting it together and then we test it against
- something. Generally if it's a hedge fund there's
- a net asset value that you look at and so forth
- and then nothing can be completely automated, if

- 1 there is an error or mismatch then there are
- 2 people that look at it. We from our side are
- 3 looking at it, the NFA and CME are looking at the
- data on their side, but in general that's the
- 5 concept of how this works. It is corroborating
- 6 information across the system.
- 7 CHAIRMAN GENSLER: John, one piece that
- 8 we put in that proposed customer protection, I
- 9 don't know that it would be implemented yet,
- 10 relates to acknowledgement letters and direct
- 11 access to the acknowledgement letters and so forth
- would add a little bit more to what you're saying.
- MR. DURKIN: I would add on to that that
- 14 this information would also be incorporated as
- 15 part of our exams of the firms, so we do a deeper
- analysis into what is actually reported under
- 17 their segregated funds.
- 18 MR. LOTHIAN: It would seem that if
- 19 there were a qualification check for the name to
- 20 make sure that it says customer seg account, that
- 21 you could catch that much sooner as opposed to
- 22 having something like that go on for months.

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                 COMMISSIONER O'MALIA: I think you'll
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       find in some of our later discussion today garbage
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       in is garbage out and if we can't get the basics
       handled in terms of what is or is not customer
 5
       funds, we're going to have a hard time figuring
       some of these larger data questions. So it's a
 7
       great point and it really starts with the quality
 8
       of the information going in. Does anybody else
 9
      have any questions on this panel? We're going to
10
       go right to the next panel. Aleks, thank you very
11
      much. We have Walt Lukken to update us on Rules
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       1.73 and 1.74. These are a couple of rules that
13
       are not Dodd-Frank related. The Commission has
14
       leapt into required some extensive technology
       requirements on the industry some of which are
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16
       available, some of which are not available. This
       is a topic that we attempted to get to in October
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       at the FIA meeting in Chicago, but due to the
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19
       storm we couldn't get the right participants at
20
      the meeting due to travel plans with the hurricane
       so we're kind of picking up where we left off
21
22
       there. Walt, thank you very much for your
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- 1 participation.
- 2 MR. LUKKEN: Thank you, Chairman
- 3 O'Malia, and I'll try to catch us up a bit here.
- 4 I've been tasked with the exciting and riveting
- 5 task of talking about 1.73 and 1.74 which are
- 6 correlation rules. 1.73 deals with risk limits
- 7 that clearing FCMs have to put on any type of
- 8 transactions coming through the clearing firm. On
- 9 the flip side, 1.74 deals with straight-through
- 10 processing. Once the cleared trade comes into the
- 11 system, then it's cleared within a certain period
- 12 of time.
- I wanted to first tackle 1.73. As you
- 14 recall, 1.73 as Scott mentioned was briefly talked
- 15 about last October at the TAC meeting in Chicago,
- but 1.73 requires clearing FCMs of a registered
- 17 DCO to establish risk limits and to screen for
- 18 compliance with those risk limits. This rule was
- scheduled to go into effect last October 1.
- 20 Because of the varied way that execution happens
- in the futures industry, clearing FCMs found it
- 22 very difficult to come into compliance with this

- 1 requirement. In particular, FIA raised last
- 2 summer two issues that were really challenging for
- 3 clearing FCMs, one dealing with give-ups in which
- 4 an executing broker has to give up a trade to a
- 5 clearing firm because the clearing firm doesn't
- 6 have a relationship with the customer. It's
- 7 difficult in that situation for the clearing firm
- 8 to actually screen for orders. And the second is
- 9 bunched orders in which an asset management firm
- or an account manager pools customer funds and
- 11 gives it to an initial clearinghouse which is
- 12 allocated at the end of the day to some ultimately
- 13 clearing firms for clearing. Again because of the
- 14 network effect, the externalities of those types
- of trading situations, it was very difficult for
- 16 risk limits to be put onto those types of
- 17 execution matters and also to be screened. As a
- 18 result of that, the CFTC last September 26
- 19 provided some relief to the FCM community in
- 20 regards to give-up transactions and bunched orders
- 21 through June 1 of this year. The date is
- 22 approaching so we wanted to give the committee an

- 1 update on where things stand.
- 2 After the relief was given last fall, we
- 3 sat down with many of the clearing FCMs in New
- 4 York and had what we called a vendor showcase.
- 5 Greg was part of that group, but all day in a very
- 6 large conference room with coffee and donuts for
- 7 the guests we brought in vendor after vendor after
- 8 vendor to see if there was an outside technology
- 9 solution to help us with this problem. I think
- 10 what we quickly learned because of the network
- 11 effect of the problem is that one vendor although
- 12 could solve pieces of the problem, couldn't solve
- for the entirety of the problem. So we had to go
- 14 back to the drawing board and come up with an
- 15 independent solution that FIA has helped to craft
- and I think after working with the CFTC and Rick
- and some of his team and the Ananda's shop, we
- 18 found out that the best and straightforward way to
- do this was to enter into a simple screening
- 20 agreement between the executing firm and the
- 21 clearing firm. This would be very simple. Again
- 22 that would agree to a limit based on these

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screening agreements. These screening agreements
2
     could be housed within FIA's EGUS system. EGUS is
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3 a give-up repository that FIA runs. These

- screening agreements could be housed there as well
- 5 and automated through the EGUS system. That
- allows people to update limits over time. IF the
- creditworthiness of a counterparty changes, they 7
- 8 can go into EGUS and change those limits and
- 9 notification and the approval system is all
- 10 automated so that EGUS makes sure that all the
- 11 right people are approving that and it's all in a
- 12 repository for those parties to see. So far there
- 13 has been good take-up of this solution with the
- 14 industry. To date we have nearly 800 screening
- agreements in processing in our EGUS systems with 15
- 16 nearly 50 executed fully already, so with roughly
- 17 a month to go before the June 1 deadline, we feel
- we're well on our way to being in compliance on 18
- 19 the give-up side of this 1.73 problem and
- hopefully can report closer to the June 1 deadline 20
- when we'll be fully in compliance. 21
- 22 Dealing with bunched orders, there's a

1 similar problem with bunched orders. We took the 2 solution on give- ups and tried to apply it to 3 bunched orders. Remember, bunched orders are the situation in which an account manager bunches or 5 pools orders on behalf of clients, gives it to an initial clearing firm and then it's allocated at the end of the day to several clearing firms. 7 8 thought again could we use a simple screening 9 agreement between the account manager and the 10 ultimate clearing firm in order to end up with 11 again a similar screening agreement where the 12 account manager agrees to screen for some simple 13 limits and that that could be either housed with 14 EGUS if possible or just independently not housed, just executed between the account managers and the 15 16 ultimate clearing firms. The challenge with 17 bunched orders versus give-ups is, one, we're 18 dealing with a community outside the FCM community 19 so it involves account managers and buy-side firms 20 so that the challenge of getting everybody on board with a standardized screening agreement is 21 22 difficult, and also just sheer numbers. Unlike

- 1 give-ups in which we're dealing in the hundreds of
- 2 give-up screening agreements we have to execute,
- 3 we're probably talking in the thousands for
- bunched orders. That has made it a challenge to
- 5 get into compliance by the June 1 deadline. I
- 6 think we have been in discussions with the CFTC as
- 7 well as the buy-side about ways to bulk, get
- 8 consent and get some of these agreements into
- 9 place in what I would call an absent objection,
- 10 meaning that the consent agreement goes out and if
- firms would object to it, unless they object to
- it, account managers would agree to screen for
- certain limits communicated to them. This would
- 14 be a way for the FCMs and the account managers to
- 15 get into compliance by the June 1 deadline and to
- 16 get many of these agreements into place at the
- 17 same time. If that is not an acceptable solution
- to the community, we would have to enter into
- 19 individual negotiations with thousands of these
- 20 agreements which would certainly get us past our
- 21 June 1 deadline and not into compliance. We have
- 22 been in discussions with trade associations, with

MG, with MFA, with ICI, and we're talking to other 1 2 influential members on the buy-side to talk to 3 them about this concept and to try to see if we can get agreement with again a very simple 5 screening agreement to get us into compliance by the June 1 deadline, so those are both the give-up 7 arrangements and the bunched order arrangements. I do want to touch on 1.74 and then 9 we'll answer questions after that as well. 1.74 10 as I mentioned requires clearing FCMs to accept or reject a trade within 60 seconds of its submission 11 12 to the clearing FCM. A similar 60-second 13 requirement is in place on CCPs after an FCM 14 submits a trade for clearing. Last October when this rule was to take effect, FCMs individually 15 16 offered alternative compliance matters under 1.75 17 to meet this rule, then the CFTC granted relief through the end of the year. An additional 18 19 extension of relief was granted through February 1 20 of this year to find an alternative method for compliance with this 6-second requirement. FCMs' 21

concerns were in order to get to straight-through

processing they also recognized that there may be 2 exceptions and that there will be times when they 3 couldn't get 60 seconds. It could be operational issues as we're moving into mandatory clearing. 5 It could be complex trades in which there are several legs to a swap trade that may not be coming into the clearing FCM at the same time. Or 7 8 it could be simply a large notional amount coming 9 in that the clearing FCM has to guarantee that 10 they may want to do additional credit checks. We had during this relief period of time tried to 11 12 submit an alternative compliance regime having 13 worked with this buy-side firms on this in which 14 there would be a ratcheting up over time, an allowance for exceptions and a ratcheting up over 15 16 time of the 60-second requirement so that there 17 could be exceptions and also reporting of those 18 exceptions so the CFTC could gather data, they 19 could see where the trends were, where the out-trades were and to make further refinements to 20 21 this rule as time went on. Unfortunately that 22 alternative compliance regime was not accepted by

the CFTC. The March 11 mandatory category one

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questions.

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       deadline came into being. Anecdotally we have
 3
      heard from firms that there have been rejections
       of trades during this period of time. I think
 5
      people are also looking to the category two June
       deadline and ratcheting up of clearing that may
       cause additional rejections. The CFTC in talking
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 8
       to the Division of Clearing and Risk have asked
 9
       for some data from the clearing firms in order to
10
       understand trends in this area. It's our hope at
       FIA that we'd want to work with the Commission as
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12
      they get more data, they see whether rejections
13
      are occurring and whether there are trends, that
14
      we can develop an exceptions process if that's
15
       appropriate and work with people as we go through
16
      this transition of mandatory clearing so that we
17
       can get to straight-through processing which is
       something that FIA supports. I will cease fire
18
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21 COMMISSIONER O'MALIA: Thank you very
22 much. This is an area where our rules are just

there and then it over to the Chairman for

- 1 goofy. We've tried to come up with a solution and
- 2 put it on the industry and we could talk about
- 3 cost-benefit analysis whether we got that right or
- 4 not and what it took to get to this papering and
- 5 re-papering the industry and trying to get all the
- 6 account managers to sign up for this, and maybe
- 7 Supurna can chime in as to what her thoughts might
- 8 be on bunched and give-up orders. These were
- 9 massive amounts of agreements in addition to all
- 10 the other agreements we're requiring you to
- 11 repaper through external business conduct
- 12 standards, et cetera. So while our heart is in
- 13 the right place, I do know that we're missed the
- 14 technology boat in trying to figure out how to do
- this. Congratulations on solving the bunched
- orders because it was a well-defined community.
- 17 The give- ups you got right. As for the bunched
- orders, we're still kind of searching for. Then
- on 1.74 it confounds me. You sent a letter in
- 20 asking under our rules for an alternative
- 21 compliance program back in January, January 29, I
- 22 believe. You received no official answer back on

- 1 that. The rule says if you don't get an answer
- 2 it's deemed to be in place within 30 days. You've
- 3 probably contemplated that and said we won't
- 4 assume anything in this one and didn't move
- 5 forward on that. Now apparently we're sent a
- 6 letter to the entire FCM clearing broker space and
- 7 said tell us how many trades you've made or have
- 8 not made or you've cancelled that have exceeded
- 9 the 60-second requirement that we set under 1.74.
- 10 We didn't set it under 1.74. We sent it in an
- 11 email subsequently. I'm trying to understand how
- we've been completely transparent on this. Now
- we're asking for all the same data that you
- offered to send us back in January in this new
- 15 April letter. Is that your understanding of all
- of this?
- 17 MR. LUKKEN: I think our clearing FCMs
- 18 want to be in compliance. Certainly that is our
- goal and we are trying to because of the
- 20 difficulty of not knowing if a trade is rejected
- or if the trade goes over 60 seconds what is our
- obligation involved in that. We've tried to

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1
       develop I think a process in which we would agree
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       that if there are exceptions that we would be the
 3
       first to tell you in weekly reports here are the
       exceptions, here is why they ran over 60 seconds
 5
       and certainly work with feedback with the CFTC to
       find-tune this over time. I think because of the
       letters that went out we're getting to the same
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 8
       place that we had offered in January, but we want
 9
       to work with the Commission. If there is not a
10
       problem here, we'll be the first say there's not a
11
       problem here, but we were trying to anticipate
12
       during this transitional time that again it's
13
       transitional, that we hoped within a year to be at
14
       100 percent compliance within 60 seconds, but
       there is going to be during these very difficult
15
16
       uncertain times during operational times, there
       may be exceptions to this process and we wanted to
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18
       recognize that up front.
                 COMMISSIONER O'MALIA: I guess I forgot
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20
       to mention one other step, that we did provide LCH
       which has the same 60-second requirement
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22
       additional relief for I think until -- John, how
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- long did we give LCH relief?
- 2 MR. LAWTON: May 17.
- 3 COMMISSIONER O'MALIA: May?
- 4 MR. LAWTON: Yes.
- 5 COMMISSIONER O'MALIA: The FCMs, no
- 6 relief, LCH some relief or second relief. WE do
- 7 have John Lawton here. Do you want to share any
- 8 thoughts from the Office of DCR?
- 9 MR. LAWTON: As Walt mentioned, there
- were a couple of extensions granted. I think the
- thinking was that the rule originally went into
- 12 effect was approved in April with an effective
- date of October and then there was an extension
- 14 granted in October and a second granted in
- December, a third request in January and I think
- the decision was there wasn't a need for a third
- 17 extension so the rule went into effect. The
- 18 reporting that Walk was talking about was in
- 19 connection with the third request for extension.
- 20 Subsequently there were some press reports about
- 21 there wasn't compliance. Our informal view of it
- is there's been very good compliance and we've

- 1 talked to firms and we've talked to
- 2 clearinghouses. We think there is very good
- 3 compliance, but we saw these press reports so
- 4 therefore a letter went out to all the firms
- 5 saying please give us some data about the actual
- 6 extent of our compliance since the effective date
- 7 which was March 1 and then the shortened timeframe
- 8 as of February 1 and then March 11 which was the
- 9 opening of the clearing mandate. The current
- 10 letter that's out there is asking for reports from
- 11 the firm about compliance since the effective date
- of the rule. We expect to be getting those
- 13 reports shortly and we will be reviewing them and
- 14 we will be in consultation with FIA and the firms
- to talk about the data that we get to see what
- 16 kind of results we get from the reporting and if
- 17 there are anomalies what the situation is. Again
- informally it looks like there is probably very
- 19 good compliance out there right now.
- 20 MR. LUKKEN: I would add to that that we
- 21 appreciate John's efforts to get more data here,
- 22 but the truth is we can be compliance if we set

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things to auto reject and so at 60 seconds we can
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- 2 auto reject and be in compliance with this rule.
- 3 I think that the alternative costs to this is that
- 4 had we had a bit more time either to do credit
- 5 checks or if there are maybe operational issues we
- 6 might have had to auto reject, and maybe Supurna
- 7 can even talk to the problems when the rejection
- 8 occurs that that creates uncertainty with
- 9 resubmissions of swaps. That was the only issue.
- 10 It's not an issue of getting into compliance for
- 11 our folks. Our folks can do that through auto
- 12 reject. But the question is what the alternatives
- 13 could have been had we had more time.
- 14 COMMISSIONER O'MALIA: John, why is it
- 15 that the January 29 letter, the alternative
- 16 compliance that was going to provide reports on
- any exceptions to the trade, why wasn't that
- adopted or accepted or even responded to?
- 19 MR. LAWTON: I think the view was that
- 20 there had been plenty of notice and that it was
- 21 appropriate particularly to give some lead time
- 22 before the clearing mandate started to have the

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1 straight-through processing rule in place.
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- 2 COMMISSIONER O'MALIA: But they weren't
- 3 asking for relief to the rule. They were saying
- 4 that if they had thresholds over 90 percent that
- 5 they wouldn't have to auto reject and they could
- 6 send you what exceeded that -- they were going to
- 7 be in compliance. You were giving the
- 8 straight-through.
- 9 MR. LAWTON: They were asking for a
- 10 later effective date, essentially saying we'll
- 11 give you reports and you can review the reports
- 12 and we expect to be largely in compliance but
- we're asking for the effective date to be later.
- 14 COMMISSIONER O'MALIA: Supurna, do you
- have any thoughts on either one of these rules?
- MS. VEDBRAT: How long do I have?
- 17 COMMISSIONER O'MALIA: I know
- 18 Commissioner Sommers wanted to ask some questions,
- 19 so you have until she gets back.
- 20 MS. VEDBRAT: I think that it's
- 21 important to understand that from a futures
- 22 perspective the system has been working. If we

- 1 were given enough time that the solution that
- 2 being developed for swaps as far as credit limit
- 3 checking goes, if that was allowed to materialize
- 4 it could be extended to futures. And I think that
- 5 that would be at least from a BlackRock
- 6 perspective a much more optimal solution that
- 7 putting in place an assessment letter which if you
- 8 can elaborate a little bit about what that means
- 9 it would help us. That's on the futures side
- something that we would like the Commission to
- 11 explore to give an extension. As far as the
- 12 rejections of trades taking place, it's important
- 13 to understand that in this new world of cleared
- swaps a trade floor will interact with six
- different entities, a bilateral trade, that's
- 16 between two parties. And the interoperability of
- 17 the six entities is critical to straight-through
- 18 processing. The industry infrastructure is not
- 19 ready to allow for a rejected trade to be
- 20 resubmitted in a timely manner at this state. I
- 21 think given a couple of months the providers will
- 22 have the solution that if a trade rejected the

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buy-side or the client leg of the trade, or
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 2
       actually it could even be the executing dealer,
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       would be able to efficiently resubmit the trade
       which would ultimately lead to the trade clearing
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       versus a trade break and that's very important.
                 The other piece that I think hasn't been
       mentioned here that I want to draw some attention
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 8
       to is as this rule is being implemented, auto
 9
       rejection may be put in place in some FCMs that
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       put that in place. The liability of a trade
11
       rejection and a trade break has been passed on to
12
       the end user and that's not trivial. It's been
13
       passed on through documentation if an FCM has not
14
       been able to comply with the 60-second rule or
15
       there's a carve out, that if there is a trade
16
       rejection because of this the FCM wants
17
       indemnification of any market loss or any trade
18
       loss associated with that. The buy-side whether
19
       it's an asset manager or it's the end users, we're
20
       really not in a position to fight this. At least
       I'd like to let the Commission know that this is
21
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part of the documentation and given that the

- 1 mandate for clearing, March 11 has already gone by
- 2 and June 10 is around the corner, there is really
- 3 no room for negotiation from the buy-side. If
- 4 possible do consider all of these as extensions
- 5 that are required or requested as well as
- 6 understanding that in the swap world we will have
- 7 a solution that ultimately can be applied to
- 8 futures.
- 9 MR. LAWTON: Can you describe who the
- 10 six entities are?
- MS. VEDBRAT: The executing dealer, the
- 12 client, ultimately there will be a SEF and the
- will go to an affirmation platform. The
- affirmation platform will send the trade to CCP,
- the CCP will send it to an FCM, vice versa and
- there will be an SDR. John, I can send you the
- 17 layout because we've got a layout that shows the
- 18 entities. All I'm saying is that ultimately I
- think we're going to have an SDP process that's
- 20 going to work efficiently, but just allow time
- 21 that these pieces of interoperability are allowed
- to be developed in the optimal way and lack of

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time doesn't make us end up with a solution that
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- is suboptimal because it's not easy to rectify it.
- 3 COMMISSIONER O'MALIA: Do you want to
- 4 touch on the allocation issue under 1.73? Do you
- 5 have any perspective on how difficult it will be
- for FIA to organize a repapering to do a risk
- 7 check?
- 8 MS. VEDBRAT: The risk check for the
- 9 futures component of it is going to be a very
- onerous task because today what we have is we have
- 11 agreements in place with executing counterparties
- and FCMs that are essentially tri- party agreement
- that essentially allow for the transfer of risk
- 14 once a futures trade is executed to the clearing
- 15 member. These are done on an umbrella basis and
- 16 third-party agreements. In order for us to be
- 17 able to repaper that for futures where there is a
- 18 credit limit given at the account level by the
- 19 clearing member and then the executing dealer
- 20 having access to that will require almost the same
- 21 paperwork that we have in place today that we have
- 22 to do for swaps. The proposal was if we had a

credit hub in the middle and the credit hub were

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       to receive limits from every FCM at the account
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       level, at the allocation level or subaccount level
       and then that hub were to be used to do any type
 5
       of limit checking when an executing dealer was
       going to trade and the account manager were to do
       a subscreen screening on a pretrade basis. That
 7
 8
      would allow for a lot less paperwork or repapering
 9
      but the right screening that that should satisfy
10
       the rule. From a risk perspective, at least in
11
       futures we don't necessarily think we are solving
12
       for anything.
13
                 COMMISSIONER O'MALIA:
                                        Greq?
14
                 MR. WOOD: In response to that, I worked
       with Walt extensively on the futures side of 1.73
15
16
      particularly with regard to give-ups. As Walt
17
       alluded to, we did have a vendor showcase where we
18
      had several people come in to discuss their
19
      proposals for compliance around the give-up
20
       component of 1.73 for futures. One of the
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participants we had there was talking very much

about a central credit check model which their

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       proposal was to integrate that into the matching
 2
       engine for the exchange. One of the things that
 3
       we were concerned about and it certainly became
       clear when we've had discussions with the various
 5
       solution providers who were trying to come up with
       approaches for credit checking in futures is it
 7
       would be a radical change to the way the futures
 8
       trading environment has worked on several levels.
 9
       Firstly, it would require either the introduction
10
       of credit checking at the venue or a separate
       credit hub that would be called either by the
11
12
       venue or by the execution systems that people are
13
       using. That would certainly take probably years
14
       rather than months to implement into the futures
       environment which is why we went for the solution
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16
       that meets the requirements of the rule with
17
       regard to the screening agreements based on the
18
       fact that we actually do pretty adequate credit
       checks on a near trade basis at most of the FCMs.
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20
                 MS. VEDBRAT: I think that's why this
       assessment letter that was discussed is important
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       to understand what does that entail.
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                 MR. WOOD: Do you want to speak to that
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       with regard to what the actual screening agreement
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       is?
                 MR. LUKKEN: It very closely follows the
 5
       actual rule. It requires that the ultimate
       clearing firm and the account manager enter into
 7
       an agreement on risk limits and those risk limits
 8
       as John and his division have talked about are
 9
       very flexible and what those could be, they could
10
       be max order sizes, they could be vet finger
       limits, they could be a variety of different ways
11
12
       of measuring risk. Once that agreement is in
13
       place then the account manager would be required
       to screen for that with the ultimate customer.
14
       It's a page and a half. I apologize, Supurna, we
15
16
       are socializing this real time now with the
17
       buy-side community and started last week with the
18
       associations, but this is something where we're
19
       faced with a dilemma of either negotiating
20
       thousands of agreements with account managers or
       trying to in bulk discuss this and come to a
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standardized form that people could agree to.

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we're socializing that right now and we'd
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- 2 certainly welcome the feedback of BlackRock and
- 3 others.
- 4 MS. VEDBRAT: In the assessment letter
- 5 if the credit limit agreement is between the asset
- 6 manager and the clearing member and those limits
- 7 now become the responsibility of the asset manager
- 8 to be able to screen, the asset manager needs a
- 9 solution of how they do that. The other thing is
- if I were to use swaps as an example because
- 11 currently we are working with seven FCMs to get
- the unit of measure and to get an easy for us to
- 13 be able to check credit limits, if I were to just
- 14 use that as an example of how difficult it is to
- 15 get some form of standardization across the
- industry, that it's not really fair to assume that
- 17 the asset manager community or the buy side will
- be able to comply with that letter by June 1.
- 19 MR. LUKKEN: I agree. I'm just stating
- 20 what the rule states. The rule states that the
- 21 clearing FCM enters into an agreement and the
- 22 account manager has to screen. That's what the

- 1 rule says. So we're just following what the rule
- 2 states. I agree that difficulty levels are high
- 3 here, but we're trying to stick to as close to the
- 4 rule. This is not something that we're imposing.
- 5 It's something the rule is imposing.
- 6 MR. WOOD: And from the perspective of
- 7 the FCM community, we're trying to be compliant
- 8 with the rule, the qualitative aspects of risk
- 9 management between an asset manager such as
- 10 yourselves and us as a clearing broker is still
- 11 something that we're not trying to sidetrack.
- 12 That is something that is very much part of the
- discussion between you and your clearing brokers
- and it's something that the screening agreement
- 15 that we put in particularly around 1.73 and then
- 16 the negative consent on bunched orders, these
- don't override the conversations that you would
- 18 have with the risk managers at your clearing
- 19 brokers because we very actively have risk
- 20 management in place for your futures trading in
- 21 your accounts. The word and the approach that's
- been agreed with on give-ups and bunched orders

- 1 allow us more flexibility around how we implement
- 2 them, but we definitely implement them in
- 3 discussion with yourselves.
- MS. VEDBRAT: The other thing as to my
- 5 concern about some of these solutions that are
- 6 being proposed, today from a best ex perspective
- 7 we can execute with a number of executing dealers
- 8 and then we are able to give up those trades on an
- 9 individual account level to the primary clearing
- 10 member for that fund. As these rules break down,
- one concern I have is that are we being put into a
- 12 state that we can only execute with the executing
- dealer that is linked or affiliated with the
- 14 clearing member to that fund because from a
- pricing perspective, a best ex perspective, that
- 16 would not be an area that we would want to end up
- 17 in.
- 18 COMMISSIONER O'MALIA: John, any words
- 19 of advice or wisdom?
- 20 MR. LAWTON: Certainly not wisdom. I
- 21 don't think the problem that you just identified
- 22 would be a problem. I think the rule contemplates

- 1 that the firms decide they want to execute through
- 2 firm A, they want to clear through firm B or maybe
- 3 the client wants to clear through firm B, so there
- 4 is no limitation on separating out who ultimately
- 5 clears from who you execute through.
- 6 MR. TERRY: I work for a small credit
- fund in the city and an issue that we've recently
- 8 run into is we spend an inordinate amount of time
- 9 negotiating our prime brokers and ISDA documents
- and there's a timely fashion by which we go
- 11 through it and we've now started to negotiate
- 12 these execution agreements and the underlying
- 13 clearing agreements and it's become a very, long
- drawn out process and from both a fiduciary
- perspective as well as an expense perspective
- we're in a tough position because for reasons I
- 17 now better understand, a lot of the clearing
- 18 entities we're talking to are refusing to deal
- 19 with the issue of what happens if there's a trade
- 20 that's kicked back. We bear all of the risk. As
- 21 the CEO of my firm I need to determine with our
- traders can we live with this risk? These are

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1 risks that we've clearly negotiated around in all
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- 2 the other trading agreements and now we're focused
- 3 to deal with these. I don't know how to quantify
- 4 that risk. From a fiduciary perspective I don't
- 5 know how to quantify that risk and then from a
- 6 best execution perspective it puts us in a very
- 7 tough position. It has been an interesting 3
- 8 weeks to 4 weeks that we've been doing this
- 9 because it's forced us into a situation that we
- 10 have not been in before which is we cannot get any
- 11 reasonable discussion around the negotiation. You
- 12 guys are multiples and multiples bigger than we
- are, but I would argue that my situation is very
- 14 similar to those folks who are coming through June
- 2 and it's a significant problem. I thought that
- 16 that was worth mentioning.
- MS. VEDBRAT: I was highlighting that
- 18 more from the perspective of buy side in general.
- 19 It's a risk that is not necessarily brought to
- 20 light through the regulation, but it's done
- 21 through the documentation. It's important to note
- that a lot of these risks are being passed on to

- 1 the end user.
- 2 COMMISSIONER O'MALIA: I was just told
- 3 that Commissioner Sommers is coming down and she
- 4 wants to ask a few questions on this topic. John,
- 5 if you'll share with Ananda and everyone else over
- in your division the challenges we've heard here
- 7 today and if you could articulate specifically
- 8 what it is you want and by when and how you
- 9 recommend they get there, I think they would find
- 10 that very useful.
- 11 MR. LAWTON: We'll do that.
- 12 COMMISSIONER O'MALIA: Have you
- 13 submitted any relief requests on timing at this
- 14 point? I know you're working through it.
- MR. LUKKEN: I think like I mentioned,
- in John's shop they've been very open to
- 17 discussions on this and Ananda, so we're waiting
- 18 to get more data through these letters. Again if
- 19 it's showing trends that we anticipate, then we
- 20 would love to offer our help in how to develop an
- 21 exceptions process to avoid these types of what I
- 22 would call unnecessary rejections.

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MS. VEDBRAT: If we have another minute,
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       I would like us to be able to discuss the numbers
 3
       that we're seeing as far as rejections go today,
       obviously there is very little voluntary clearing
 5
       taking place relative to mandatory clearing and
       also like the March -- active funds, most of the
       buy side is going to start to clear by June 10.
 7
 8
       One concern that we have is if there was a market
 9
       event in which case we would fully expect clearing
10
       members and everyone to start tightening the
11
       limits that they're distributed to us, the level
12
       of the percentage of rejections will go up a lot
13
       more than business as usual and has the Commission
14
       contemplated what would be the state of the market
       if our rejection rate went from 1 percent to 5
15
16
       percent in a day because we will have a lot of
17
       outstanding market risk at that point not knowing
       really who is going to be the bearer of the loss.
18
19
       Then the other piece that I'd like the Commission
20
       to also take into account, this rule will make the
       buy side lean more toward a handful of SCMs
21
22
       because we're going to want to limit any type of
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- 1 operational loss or market loss that we have. Is
- 2 it in the best interest of the market to have a
- 3 concentration of clearing members for swap
- 4 clearing or to allow for a little bit more of a
- 5 distributed model?
- 6 COMMISSIONER O'MALIA: Let me do a
- 7 little bit of housekeeping here. We're over. We
- 8 started late. We're going to blow through this
- 9 break. Those of you who don't know where the
- 10 restrooms are, they're down that way. There is
- 11 food that way. We're going to try to get back on
- 12 schedule. After Commissioner Chilton comes in
- we're going to rotate in the next panel and begin
- 14 asking those questions right away. Obviously want
- you to hear the testimony and the input, but we
- are going to go through this break and try to get
- 17 back on schedule so we can get to lunch. Maybe if
- 18 we can have the next panel get set up and we can
- 19 go from there. This is our third panel. This is
- the panel where we're going to hear from the
- 21 market participants. This is the time to get into
- 22 the big data question. Part of the challenge is

1 making sure everybody submits all of the data 2 correctly in the same manner and it's harmonized 3 and it's well understood so when the SDR receives it, it can easily match it, compare it, analyze it 5 and give the Commission that same ability once we get ahold of the data. We've heard from a number of people in implementing Part 43 which is 7 8 real-time reporting, Part 45 which is the 9 regulatory reporting and a much more thorough, 10 complete set of data and Part 46 which is the 11 historical reporting of swaps. There have been 12 lawsuits threatened. There have been extensive 13 discussions about who has to report to whom in the 14 SDR community, all of which has been going on while everybody has been trying to report and 15 16 trying to understand the rules and the form and 17 the format that they have to report to the SDRs. 18 In the third panel I want to have the opportunity 19 to hear from the market participants. I think 20 we've got a good representation of different end users, buy side, sell side, et cetera, who can 21

speak to some of these issues and the challenges

- that they've dealt with in complying with our
- 2 rules and the timetables we've given them. If
- 3 nobody has any objection, I think we're going to
- 4 start on my left, your right, and just walk down
- 5 the line unless you guys have already drawn straws
- 6 and you have a different format.
- 7 MS. SMITH: Dana Smith. I'm speaking on
- 8 behalf of the working group of commercial energy
- 9 firms. My comments are not by any means on behalf
- 10 of NextEra individually or any specific working
- group. Some of the issues that we've been facing
- 12 have been with the rules and where the rules
- 13 require some dataset and then when you go to
- implement with the SDR, the SDRs have an
- additional dataset that they're requiring. It
- just makes things a little difficult to
- 17 communicate back and forth.
- 18 COMMISSIONER O'MALIA: Do you want to
- 19 elaborate on that? We have what the rule says.
- Is it you're complying with what you read in the
- 21 rule and then when you submit to the SDR, they're
- saying we interpret the rule in a different way?

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1
                MS. SMITH: They also have those same
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       requirements, but they have their own requirements
 3
       because they're trying to utilize existing
      platforms that they already have, whereas we have
 5
      been communicating with those SDRs previously on
       those existing platforms, it was only a small
 7
       dataset that we were communicating. There are
 8
       issues with that, and then with the fact that each
 9
       of our ETRM systems are highly configured. They
10
       were initially out of the box, but over the years
11
       the systems have been changed to meet each
12
       company's needs and also as products evolve over
13
       time, you're not trading the same products you
14
       were 10 years ago and every year a new product
15
       comes out and everybody specializes and changes
16
      their systems in their own way. So now that we're
17
       all having to try and move everything together and
18
       standardize, whereas there is no MISMO standard
19
       right now for energy. So it's been a longer
20
      process and a more difficult process than
      initially anticipated.
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COMMISSIONER O'MALIA: Are you in

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1 compliance, do you believe? What's the status of
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- 2 this?
- 3 MS. SMITH: I believe everyone has done
- 4 the best they possibly can to be in compliance
- 5 when the April 10 was the deadline. I think the
- 6 relief was much needed and appreciated to give us
- 7 more time to ensure that the data that we are
- 8 reporting is accurate when we're reporting stuff,
- 9 it's just are we reporting what you want?
- 10 COMMISSIONER O'MALIA: Have you received
- 11 any feedback from us?
- MS. SMITH: Not recently.
- 13 COMMISSIONER O'MALIA: How recently?
- MS. SMITH: I said not recently.
- 15 COMMISSIONER O'MALIA: Since reporting?
- MS. SMITH: No.
- 17 COMMISSIONER O'MALIA: Can you give us
- an example of in terms of harmonizing it? Is it
- 19 the way they want it reported? Is it what's in
- 20 the fields that they want reported? And it's not
- 21 what they want, it's what we want and the way
- they're complying and demanding of you to comply.

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1 MS. SMITH: I think the end users read
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- 2 the rule and the feedback that they've gotten has
- 3 been one thing, in the way SDRs have read the rule
- 4 and what they're required to do is something else.
- 5 And then I think the way the CFTC meant the rule
- 6 to be is probably something completely different.
- 7 You have to make assumptions and document and then
- 8 move forward and hope that you're doing your best.
- 9 COMMISSIONER O'MALIA: Would a guidebook
- 10 similar to what we did with large trader reporting
- 11 at this level be helpful to you?
- 12 MS. SMITH: I'm sure it would be
- 13 helpful, although it would take some time to get
- 14 through it, but, yes.
- 15 COMMISSIONER O'MALIA: This was smaller
- than that and then it grew, but that's one of the
- 17 elements that we started with. Is there anything
- 18 else to add on that point?
- MS. SMITH: No. Thank you.
- 20 COMMISSIONER O'MALIA: Raymond?
- MR. HANSON: Thank you very much.
- 22 Raymond Hanson from Credit Suisse. I think I

- 1 would highlight our challenges with where we are
- 2 today and the areas we've either done well or can
- 3 improve on in three major areas. The first is
- 4 extraterritoriality. There remain a lot of
- 5 challenges around the clarity of the rules. Just
- 6 a check with the team the other day, we have
- 7 approximately 140 use cases as a non-U.S. swap
- 8 dealer that we have to ensure we comply with.
- 9 That's a significant amount of complexity in our
- 10 system and that's being done without the final
- 11 quidance on paper which we'll then have to
- 12 revisit. That's a real challenge for us in terms
- of implementing a solution we can be confident in,
- but also having the dependency on that final set
- of rules to review that. Our preference would
- 16 certainly that we can make those rules as
- 17 normalized across the global jurisdictions as
- 18 consistent as possible so that we don't have one
- 19 engine to meet all our obligations in the U.S. and
- 20 another one for the European regulations and
- 21 another one for each one of the Asian regulators
- 22 because ultimately my understanding is the goal

- 1 would be to have one set of data consistently
- 2 represented that any regulator who needs that when
- 3 appropriate can see it. I think that's the first
- 4 concern for us.
- 5 I think also that because the rules have
- 6 stated single-side reporting which is we report
- 7 one side of the transaction reports, it's
- 8 determined who the reporting parties are to
- 9 report, whereas when you look at the European
- 10 regulations and some of the other regulations, you
- 11 look at how TRACE operates, it's two-side
- 12 reporting. That introduces a dependency on both
- 13 sides having a consistent understanding of their
- status as a U.S. person. Whereas if both sides
- are reporting, where those disagreements, where
- 16 those misunderstandings or lack of clarity exists,
- 17 at least both sides can meet their obligations
- from their perspective without worrying about
- whether or not the entire industry, literally
- 20 every dealer and every firm, is in synch. I think
- 21 although it would be difficult at this point to
- 22 ratchet back the single-side reporting, that is

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1 something to keep in mind is a challenge for us.
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- 2 I think the other I would highlight
- 3 would be operational issues. I think while the
- 4 aspiration of having a U.S. eye on all
- 5 transactions through the entire trade flow is
- 6 certainly a good one in terms of providing clarity
- 7 and traceability. What we've seen is it has
- 8 introduced a lot of operational issues because we
- 9 now have to think about reporting which was
- 10 historically a separate logical function. You now
- 11 have to think about any issue in reporting, will
- that have a knock-on impact in the confirmation
- 13 process. We've been working through that making
- sure those issues are identified and they're
- addressed, but that's certainly been a challenge
- for us as a firm to make sure we're one step ahead
- of that and ultimately we're not creating
- 18 additional operational risk while being compliant
- 19 with reporting.
- The third one I would talk about really
- 21 be around the focusing in the sequence. I know,
- 22 Commissioner, you've in many of your speeches

- 1 talked about big data and the challenges there.
- 2 The fact that we are trying to address issues
- 3 across five major asset classes and across all the
- 4 products in the asset class makes it very
- 5 difficult for us to get single products or single
- 6 asset classes to what I believe is the level of
- 7 detail and level of consistency, something as
- 8 simple is it 3M Lib, 3M LIBOR, is it 3M space
- 9 LIBOR, something that simple which to me is what
- 10 really drives the usability of the data, to me
- focusing on that and understanding the
- 12 Commission's preference in terms of where we focus
- our efforts in the short term rather than a broad-
- brush approach which we have today where we have
- food-faith compliance expiring in July and
- therefore our focus has to be on all the issues
- and all the product types and all the asset
- 18 classes. Any quidance we can receive in terms of
- 19 where to focus our efforts as an industry I think
- 20 would help allow us to get some of those key
- 21 product sets in a healthier state and the data in
- 22 a more usable state.

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1 CHAIRMAN O'MALIA: You want to touch on
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- the USI issue? I don't understand that as well.
- 3 So can you explain what the challenge --
- 4 MR. HANSON: So the challenge with the
- 5 USI is that there's a requirement that the USI is,
- first of all, generated based on the determination
- 7 of who is the reporting party. So in single side
- 8 reporting, two sides of the trade, one -- you
- 9 know, that decision then is used to drive the name
- 10 space of the USI. And that name space ties then
- 11 back to the U.S. jurisdictions, so we have a
- dependency on, first of all, it being a U.S.
- 13 counterparty involved in the trade, and then you
- 14 generate the USI.
- You need to place that USI on things
- like the confirmations, for example. By doing
- that, what you're doing is introducing a
- 18 dependency on successfully reporting the trade or
- 19 you're reporting system being operational. For
- 20 non-swap dealers, you know, the SDR is responsible
- 21 for creating the USI, so you now have an
- 22 operational challenge of not only ensuring that

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the trade was successfully processed internally,
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- 2 but that the round trip to the SDR was successful.
- 3 They return back the USI that they generated.
- 4 You then need to apply that on the
- 5 confirmation, which operationally means
- 6 essentially you have to ensure that your systems
- 7 can handle that state, management that state or
- 8 handle the ability to wait for a successful USI
- 9 before processing the trade further downstream,
- 10 you know. So it's something we're working
- through, but it's certainly something that may
- 12 have been either an unintended consequence or just
- a challenge in terms of making sure that meeting
- 14 reporting obligations does not impact our ability
- 15 to issue a confirmation t clients and ultimately
- move the money at the end of the day.
- 17 CHAIRMAN O'MALIA: On the issue related
- 18 to 3M LIBOR, just the harmonization of data is
- 19 something that Dana talked about as well. Do you
- 20 have any recommendations? What can we do to help
- 21 you on that?
- MR. HANSON: So I think the challenge

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that I speak first, but certainly I would assume
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- 2 across industry, is the number of products. We
- 3 have five asset classes, and the number of
- 4 products, there is a limitation in terms of how
- 5 many experts you can actually throw at this and
- 6 solve the problems collectively in industry in a
- 7 relatively short period of time.
- 8 So I would think that having a focus on
- 9 a certain set of products where we're really
- 10 looking to get that data consistent, get the
- industry mobilized to focus on those knowing that
- that's where you want to see the energy spent
- 13 rather than working on good faith compliance all
- 14 the way out to wind down businesses and other, you
- 15 know, trades that, you know, you may print a trade
- once or twice a week. The value of that in the
- 17 real time tape is most likely much less than
- 18 getting consistent data on those trades that are
- 19 printed in high volume.
- 20 So helping us to understand your focus
- 21 areas and where you'd like us as industry to focus
- over the next six to 12 months.

1	CHAIRMAN O'MALIA: John?
2	MR. LIFTIN: I'm John Liftin. I'm
3	General Counsel and Managing Director of the DE
4	Shaw Group. I appreciate the chance to be here
5	and give our perspective on some of these SDR
6	reporting issues.
7	Just by way of background, we are a buy
8	side firm. We serve predominantly institutional
9	investors. We have over 1,000 employees. We're
10	based in New York. We have offices across the
11	globe, and we have a significant presence in the
12	world's capital markets.
13	We have been a strong advocate of many
14	of the Dodd-Frank reforms, including central
15	clearing of liquid and standardized swaps, and
16	reporting to the CFTC and the SEC. We believe
17	that this will advance Dodd-Frank's objectives of
18	promoting market integrity, increasing
19	transparency, and fostering competition. And we
20	invested many months in and many person hours in
21	getting ourselves ready for swap clearing and

reporting, and we've already cleared at this point

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1 several hundred interest rate and credit swaps
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- 2 since the mandatory clearing requirement has been
- 3 put in place.
- 4 And I would just observe that the
- 5 burdens that we've been subjected to do this have
- 6 been far in excess of the estimates that the
- 7 Commission put forth for people like us, non-swap
- 8 dealer, non-major swap participants.
- 9 And in addition to what I just said,
- we're also voluntarily clearing more swap products
- than are currently required by your clearing
- 12 mandate. We consistently support reasonable
- 13 reporting requirements because we think it's
- important that regulators have meaningful data on
- which to base policy decisions. I know that's
- something you've been addressing. And also firms
- 17 like us want to have better information to manage
- 18 our investors' portfolios.
- As we've e moved into the implementation
- stage, though, it hasn't been without challenges,
- and we wanted to give a few observations based on
- our experience that we hope will help you in your

- 1 oversight and supervision of these forums.
- 2 A key element to ensuring market
- 3 confidence in these systems is to ensure that all
- 4 the parties involved in overseeing swap trades --
- 5 I'm talking about DCOs, and SDRs, SROs -- that
- 6 they have robust systems and processes for the
- 7 protection of confidential data in place prior to
- 8 --
- 9 CHAIRMAN O'MALIA: John, can you pull
- 10 your microphone a little closer?
- MR. LIFTIN: Sure, be glad to. Sorry --
- prior to commencing the clearing and reporting of
- swaps.
- Now by way of example, and you may know
- 15 this, we and a number of other firms recently had
- 16 certain sensitive swap data exposed when a systems
- 17 error at one of the SDRs inadvertently allowed
- 18 some market participants to access data related to
- 19 certain cleared swaps.
- Now, I don't mean to overstate this. It
- 21 was not a Twitter attack. It was, we believe, an
- isolated instance, but it certainly got our

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1 attention. I know it got the attention of the
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- 2 SDR. And we just think it's an example of what
- 3 can go wrong as we begin to try out these new
- 4 processes.
- 5 Another example of the challenges, we
- 6 experienced certain difficulties in trying to
- 7 prepare our own systems for reporting on April
- 8 10th, and, in particular, we weren't really able
- 9 to have an opportunity perform sufficient testing
- of the swap reporting system in a timely fashion.
- Now, we appreciate that the Commission's just in
- 12 time extension of the deadline for historical
- 13 reporting, and we hope that that additional time
- will be used by the SDRs to allow for greater
- 15 testing of swap reporting functionality and
- 16 provide them time to test for confidentiality,
- security, and the readiness of the systems in
- 18 general.
- I'm sure you know this, but I just want
- to emphasize that these trade details are very
- 21 sensitive market data. They require the
- 22 investment of significant research, time, and

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1 resources on our part to create. And we consider
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- 2 this proprietary information highly valuable
- 3 because if a third party were to get access to it,
- 4 they could reverse engineer it and emulate our
- 5 trading strategies, or with knowledge of our
- 6 positions, use it to trade against us, or both.
- 7 And our intellectual property is
- 8 absolutely critical to our franchise. It's the
- 9 principle reason that investors entrust us with
- 10 their money. So that's why I'm here to make this
- 11 point.
- 12 What we would ask of you is that you
- work closely with the new SDRs to ensure that they
- 14 strengthen their systems and confidentiality
- protection of the trade data that's reported to
- them. I would respectfully suggest that these
- 17 procedures could include ongoing surveillance and
- monitoring of the SDRs, user access, routine
- 19 testing of the systems, rigorous supervisory
- 20 procedures and obligations, third party validation
- of their information, security, and privacy
- 22 controls, and timely self-reporting obligations in

- 1 the event of information security breaches or
- 2 leaks. We believe that strong confidentiality
- 3 protections like these will foster an atmosphere
- 4 of stability and trust among the regulators and
- 5 market participants.
- 6 I would just also note that a side issue
- 7 that relates to this is with the reporting forums,
- 8 like PF, CPO, PQR, and other forums regulators,
- 9 such as yourselves, as well as the SEC, the FSOC,
- 10 and the SROs, are receiving a tremendous amount of
- 11 systemic risk information from market
- 12 participants. We believe that privacy, data
- protection has to extend to regulators and SROs as
- 14 well, and we hope that that will be a key focus
- for all of the regulators. I'm aware that the
- 16 Managed Funds Association is planning to submit a
- 17 letter very shortly that raises these issues and
- 18 provides specific recommendations along these
- 19 lines.
- So to conclude, we want to see swap
- 21 reporting and clearing implemented successfully as
- does the Commission, and the DCOs, and the SDRs.

- 1 As implementation unfolds, we do expect there will
- 2 be hiccups. We realize not all of them can be
- 3 prevented. However, we think with careful
- 4 oversight and further rulemaking by the CFTC, many
- of these potential pitfalls can be avoided in the
- 6 future.
- 7 And we think a seamlessly functioning
- 8 national system of swap reporting and clearing
- 9 will encourage other market participants to clear
- 10 and report swaps. And this will in turn result in
- increased market stability and benefit all market
- 12 participants.
- So thank you very much for the chance to
- 14 address these issues.
- 15 CHAIRMAN O'MALIA: Thank you very much.
- I think those are, in light of what we're going to
- 17 be talking about later today, very important as
- well to maintain the privacy at the SDR and in
- 19 this building as well. So thank you very much for
- those comments.
- 21 Tara?
- MS. KRUSE: Hi. Good afternoon. I'm

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1 Tara Kruse. I work at Morgan Stanley, and I'm
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- 2 here today on behalf of the International Swaps
- 3 and Derivatives Association.
- I think in terms of the issue of further
- 5 data standardization and SDRs, to me the largest
- 6 challenge that we have faced and will face in
- 7 further standardization is really coordinating a
- 8 large number and array of market participants,
- 9 right? We've got large and small swap dealers.
- 10 We have end users, financial and non-financial
- 11 parties, middleware providers, CCPs, execution
- 12 platforms, a myriad of industry participants who,
- frankly, have different technological levels of
- 14 sophistication and capacity. They frankly have
- different views and interpretations on what the
- 16 rules mean and how they should be complying with
- 17 them.
- 18 And unfortunately we all are very much
- 19 integrated. It's a complex web. Every trade may
- 20 involve several market participants, and unless
- they agree on exactly what's supposed to happen
- 22 with respect to that trade, it is difficult to get

- 1 to further data standardization. To the extent
- 2 that any of those parties take a different
- 3 interpretation, it makes it very difficult to
- 4 comply with the rules.
- 5 And as we each into more global
- 6 regulation and other regulators are looking to
- 7 fulfill their G20 requirements, it becomes a
- 8 situation where you have multi-jurisdictional
- 9 reporting across the board. So that web of
- 10 complexity continues to increase. We have more
- 11 participants from more jurisdictions who are all
- 12 looking to have sort of a singular solution.
- 13 And I think as we look to improve data
- 14 standardization, we have to take into
- 15 consideration multi- jurisdictional reporting. We
- 16 can't have a different data standard for CFTC
- 17 reporting versus other global regulators. We need
- 18 some global coordination on this.
- 19 I would also emphasize that time to
- 20 market in terms of additional changes is very
- 21 important. We are now live. We're in production.
- We have a very complicated and integrated system

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1 that is helping us comply with our current
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- 2 reporting requirements. And to the extent we seek
- 3 to make changes to improve that that are necessary
- 4 and appropriate, we have to make sure those are
- 5 implemented in a reasonable time frame that takes
- 6 into consideration that complexity, the fact that
- 7 it's serving multiple jurisdictions.
- 8 And then we don't want to risk impacting
- 9 what we've already built and impact our abilities
- 10 to deliver what we're currently delivering to you.
- 11 So I think proper change order management really
- has to be considered so that we phase in
- 13 additional changes for standardization over time.
- 14 CHAIRMAN O'MALIA: Now, in your capacity
- 15 at ISDA, this is not organizing the industries not
- 16 foreign to you all. So what opportunities can you
- take to help organize either standardization, some
- of these phasing requirements, common language
- issues. What's being done on that front to help
- things go on?
- 21 MS. KRUSE: Well, I think trade
- 22 organizations, trade associations like ISDA have

- 1 been really key so far, right, and will continue
- 2 to be important. They are the means by which we
- 3 bring together different market participants to
- 4 try to solve these issues and come to agreement.
- 5 But frankly, there's different organizations that
- 6 represent different market participants.
- 7 Not all participants come to the table.
- 8 And frankly, despite our efforts to always get
- 9 folks to agree, you don't always come to
- 10 agreement. People have a different view. And in
- 11 the end, it does require some further
- 12 clarification and assistance from yourselves in
- order to get us all on the same page and ensure we
- 14 are all complying with what your expectations are.
- 15 CHAIRMAN O'MALIA: Is there an
- 16 expectation that you could help us with a
- 17 quidebook?
- MS. KRUSE: You know, I think guidebooks
- 19 are great frankly. I mean, I know it's a lot of
- 20 work. It's something that has been brought up in
- 21 conversation with some of your staff along the way
- that because there are many different

- 1 interpretations and many nuances to reporting,
- 2 that having a guidebook would be useful.
- 3 And we understand that because of all of
- 4 you've had on your plate, it wasn't something you
- 5 were able to produce previously. But I think it
- 6 is something as an industry we would welcome, and
- 7 we would welcome your encouragement of all market
- 8 participants to comply with what those guidelines
- 9 are.
- 10 I would also suggest that we make sure
- 11 that to the extent that guidebook indicates
- 12 changes to what we currently have in place, that
- we have a phased-in approach that works for all
- 14 market participants. You know, it's one thing for
- a swap dealer to implement a change perhaps in,
- 16 you know, a few months' time frame, but a smaller
- 17 market participant may not have the same capacity.
- 18 So we have to take into consideration time to
- 19 market for all participants.
- 20 CHAIRMAN O'MALIA: Ed?
- 21 MR. PROSSER: Good afternoon. Thanks
- for the opportunity to participate here today. My

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1 name is Ed Prosser. I'm the Vice President of
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- 2 Back Trading for Gavilon. I'm here on today on
- 3 behalf of Gavilon and also on behalf of the
- 4 Commodity Markets Council of which we are a
- 5 member.
- 6 CMC is a trade association that brings
- 7 together exchanges in their industry counterparts.
- 8 The activities of CMC members include the complete
- 9 spectrum of commercial end users of all futures
- 10 markets, including energy and ag. Our comments
- 11 represent the collective view of CMC members.
- 12 Gavilon is a supply chain management
- company that manages risk across the commodity
- 14 spectrum. We are constantly in the market trying
- to find the optimal hedge. Most often, we find
- 16 that in the organized futures exchanges.
- 17 Infrequently, the best hedge is a swap, and more
- 18 often than not, a cleared swap. But we do find at
- 19 times that non- cleared swaps are counterparties
- or entities that we tend not to be swap dealers or
- 21 major swap participants.
- 22 Dodd-Frank established a reporting

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1 regimen for swaps, which the CFTC has begun to
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- 2 implement. Reporting structure is complicated and
- 3 confusing, particularly in regards to swaps
- 4 between end users, something that is very common
- 5 in physical commodity swaps.
- I don't think the Commission has an
- 7 appreciation for the diversity of swap terms. If
- 8 they could be standardized, they would be
- 9 futurized. I know that part of the unspoken
- 10 thought regarding swaps is that many are
- 11 standardized, which may be true, especially in
- some of the financial products. But in the
- agricultural world, as was true in 2000 when CFMA
- was passed, there are still swaps being executed
- with customized terms on a daily basis by
- 16 companies like Gavilon.
- 17 While we fully support transparent and
- access to market data by regulators for robust
- 19 market oversight, we question the value to the
- 20 Commission of the vast expansion of data
- 21 collection we've seen. Trying to turn the data
- that we report into information that is accurate

- 1 scares us. A bushel of corn is 56 pounds. A
- 2 bushel of beans is 60 pounds. A bushel of oats is
- 3 32 pounds. A ton here is 2,000 pounds. A ton in
- 4 England is 2,200 pounds. A ton in the rest of the
- 5 world is 2,204.6 pounds.
- 6 The idea that we try to get all of that
- 7 data pushed through and somebody makes
- 8 conclusions, I don't know if we can even get the
- 9 quantities of these swaps to standard. And the
- 10 idea that we report that information, and there
- 11 are some conclusions made about that information
- 12 that might not be accurate, concerns us.
- 13 Two examples of Dodd-Frank related
- initiatives come to mind that are very troubling
- to Gavilon, the CMC and the entire commercial
- 16 place. The first issue appeared in the position
- 17 limit's final rule that was ultimately struck down
- 18 by the courts. The rule required the reporting of
- daily physical positions to justify hedge
- 20 exemptions, which under the rule were only
- 21 available to commercial market participants rather
- than the historical requirement of monthly

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1 physical position reporting. The change would be
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- virtually impossible for a global commodities firm
- 3 to comply with.
- 4 The industry viewed the change as
- 5 necessary and overly burdensome, given that the
- 6 Commission has always had the ability to ask for
- 7 data to justify a hedge exemption. Does the
- 8 Commission really have the resources, given all
- 9 the new market oversight responsibility, to
- 10 analyze 30 times the data? Was there an issue
- 11 with the monthly reporting regimen that would be
- 12 resolved by daily positions being reported? We
- implore the CFTC to retain the historical
- 14 requirement to report monthly positions in the new
- 15 position limits proposal.
- The second significant expansion of
- 17 current data requirements beyond the scope of
- 18 Dodd-Frank is related to record keeping
- 19 requirements in part one of Commission
- 20 regulations. In accordance with Dodd-Frank, the
- 21 CFTC expanded the record keeping requirements that
- 22 existed for certain market participants in futures

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1 to swaps. However, they also significantly
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- 2 expanded the written requirements and created a
- 3 new requirement to report oral conversations.
- 4 Compliance costs have already been
- 5 incredibly substantial now that compliance with
- 6 the written requirements is mandatory, and will
- 7 only increase once compliance with the oral
- 8 recording requirements become mandatory later this
- 9 year. Again, the market is searching for a reason
- 10 all of this new information must be maintained and
- 11 archived.
- 12 In addition, the rule is vague as to
- which communication must be retained. So in an
- 14 abundance of caution, market participants are
- 15 effectively saving everything.
- 16 Requests for clarification have not yet
- 17 been answered. The CMC will be submitting a
- written request soon in a continuing effort to
- 19 clarify and hopefully narrow the scope of what may
- 20 be retained and, therefore, reduce compliance
- 21 costs. I hope the Commission will consider the
- 22 idea of how many transactions, how much contact

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1 between counterparties goes in to make all of
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- 2 these swaps come together, and define further what
- 3 leads to the execution of a transaction.
- 4 The development systems, in order to
- 5 comply, would be extremely burdensome and costly
- on non-swap dealers and end users. To Gavilon, it
- 7 matters not that less than one percent of our
- 8 transactions would be subject to the new reporting
- 9 requirements. We would have to change our IT
- 10 systems to handle all the required information,
- 11 whether it is for one swap or 1,000. I suspect
- that our situation is similar to other companies
- in the same market position as us. The days of
- submitting a handwritten note on exceptions are
- 15 behind us.
- 16 When you think about the cost of
- 17 compliance when spread over such few transactions,
- you can appreciate the cost of our compliance.
- 19 The economics of compliance coupled with the
- 20 complexity of reporting is sending a strong signal
- 21 to simply use futures. When you add on the
- 22 unknown potential risk associated with

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1 non-compliance around swap reporting, the message
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- 2 to us to use only futures is amplified. Reporting
- 3 will force an increase in transaction costs, and
- 4 ultimately that cost will be passed onto
- 5 consumers.
- In closing, we fully support the CFTC's
- 7 effort to implement Dodd-Frank, bring the OTC
- 8 markets into a regulated environment, and generate
- 9 transparency in opaque markets. However, we
- 10 implore the Commission to do so in a realistic
- 11 manner that considers the regulatory benefits
- versus the market cost, and not to overly burden
- the end users these markets were created for.
- 14 Thank you.
- 15 CHAIRMAN O'MALIA: Thank you very much.
- 16 Greg Wood will --
- MR. WOOD: Thank you very much,
- 18 Commissioner O'Malia. Just for the record, I'm
- 19 here representing the FIA in my capacity as
- 20 President of the IT Division, and also as the
- 21 Co-Chair of the FIXX Protocol organization's
- 22 Global Derivatives Committee.

to just come and give a little sort of view on

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I was asked by various people at the FIA

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       this topic, not specifically from the view of swap
       data repositories, but also -- but more from the
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       issue of reporting requirements and data
       requirements.
                 So looking ahead, you know, well,
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       looking behind, we have large trader reporting
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       where we have a guidebook that is very thick. You
10
       know, we have conversations about swap data
11
       repositories and the quality of data that is going
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       into those repositories and its usability. In the
13
       future we also have OCR coming, ownership,
14
       control, and reporting. So these are very big
       requirements for many participants in the markets,
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And the thing that we would like to ask
or emphasize is we need to look at this in some
sort of holistic manner. There's a lot of

touch every participant in the market place.

not just for swaps, but also for the FCMs, for the

buy side as well, you know. These requirements

22 information here that actually overlaps, and there

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1 are certain parts that are specific to particular
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- 2 requirements with regards to swaps and the
- 3 challenges around representing swaps and wherever
- 4 they can normalized, or, you know, or they remain
- 5 bespoke. But there are also there's a lot of
- 6 details around who the participants are,
- 7 particularly details around transactions.
- 8 These are things that can -- if we were
- 9 standardize approaches around particular discrete
- 10 elements of our reporting requirements, we can
- 11 actually reduce the cost of being compliant quite
- 12 considerably across the firms. And I think that
- is something that everyone in this room is
- 14 probably looking towards. We have ever-increasing
- budgets with regards to our regulatory
- 16 requirements. And whatever we can utilize in most
- 17 places is definitely of benefit to all of the
- 18 participants in this room.
- 19 So how do we do that? That's really
- where we're asking the question here. We don't
- 21 expect someone, for example, like John Rogers to
- 22 provide us with a spec to say this is the data

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1 that I require. I mean, some guidelines would
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- definitely be very useful. But then it comes up
- 3 to the industry associations wherever it is, where
- 4 it's fixed protocol, whether it's even FIA working
- 5 as a coordination across the FCMs to then actually
- 6 meet those data requirements.
- 7 And I'm sure, you know, we can work
- 8 together. I mean, often there is not going to be
- 9 agreement, as Tara highlighted, but I think in
- 10 general if we have guidance and we have a goal to
- 11 what we can do, we can certainly work together to
- 12 actually meet the requirements, and hopefully then
- present something that is usable and not just a
- massive overhead in terms of time and expense.
- 15 So really, that's the gist of where I'm
- 16 trying to come to here is, you know. There are a
- 17 lot of overlapping parts. There are discrete
- 18 components that I think we can easily work on
- 19 together to identify participants, to identify
- 20 transactions. And then there's instrument
- 21 details, there's economic details, there may be
- 22 more bespoke to certain types of data. But then

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1 we can work within the certain organizations that
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- look after those particular areas, and then we can
- 3 fit into whatever framework that you can use.
- 4 CHAIRMAN O'MALIA: Thank you very much.
- 5 In trying to keep us on time, we're butting up
- 6 against lunch, but I just want to kind of
- 7 summarize some of these things, and I hope you all
- 8 stay for the next panel, which will be after lunch
- 9 where the SDRs will be in place to help. And John
- 10 Rogers and Rick Shilts are going to be here to
- 11 kind of frame the debate about the challenges
- we're facing.
- We've heard from you about your
- challenges, and let me just tick off the themes
- 15 that I heard: Harmonization, operational
- 16 challenges, privacy, kind of the complexity of all
- 17 of this. There's a time and phase in that we need
- 18 to recognize, as well as size. I think somebody
- 19 has mentioned the size of the entity is going to
- 20 matter in how we mandate this.
- 21 Multi-jurisdictional, I think that's an
- issue that probably we need to get our house in

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order, but understanding where other jurisdictions
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- are in this debate and how we're going to meet up
- 3 with them. The Chairman has talked about the
- 4 multi-jurisdictional goal that he wants to solve.
- 5 That's great, but maybe we can touch on that a
- 6 little later on. But I think our problem is right
- 7 in front of us just dealing with our own rules.
- 8 And then the standardization and cost
- 9 that you all solved and the best way to solve
- 10 this. I mean, who's going to be in the room to
- 11 sit down, identify what it is we want, and hen
- 12 what is it is you can provide, and if everybody
- agrees on the term and terminology on that.
- Before we leave, let's just keep that in
- mind, and we'll talk to our SDR panels. If
- 16 anybody wants to make a comment about anything
- they've heard today about this or anything else,
- 18 go ahead and do it now. Otherwise, we're going to
- 19 talk about it. Adam?
- MR. LITKE: Yeah, just a question. When
- 21 we were working on the guidelines for the swap
- 22 data repository reporting in the Data

- 1 Standardization Subcommittee, one of the things
- 2 that was very clear was that it was intended that
- 3 the SDRs should be setting the standard for what
- 4 was reported to them to be able to answer the
- 5 questions that the CFTC was going to ask of the
- 6 SDRs.
- 7 Yet I'd say approximately half of the
- 8 members of this panel have said they were
- 9 confused. Their interpretation of the rules was
- 10 different than the SDR. And it was my impression
- 11 that there was no room for the reporting parties
- 12 to have any interpretation whatsoever of the
- 13 rules, and that was supposed to be done -- the SDR
- was supposed to say this is what you're going to
- 15 report to us if we're going to be the SDR. That
- has nothing to do with the timing or who reports.
- 17 I fully understand the questions.
- 18 And then there was supposed to be a
- 19 negotiation between the SDRs and the Commission
- 20 over what data could be reported when to the
- 21 Commission for usefulness. And the rule was sort
- of written that way because the SDR -- each SDR is

- 1 allowed to set its own standards.
- Now I'm hearing that people are confused
- 3 as to what they should report to the SDR, and I'm
- 4 wondering why people are feeling that confusion if
- 5 the SDR is supposed to be saying this is my
- 6 standard.
- 7 CHAIRMAN O'MALIA: Supurna?
- 8 MS. VEDBRAT: Yeah, I'd just like, you
- 9 know, add to the cost and standardization, if
- 10 accessibility of the data could also be included,
- 11 you know, because market participants may have
- 12 requirements to be able to reconcile the data.
- And, you know, being a user of the SDRs, it hasn't
- 14 actually been easy or, I should say, successful to
- 15 be able to get the data, which would be the first
- step for us to be able to reconcile what's -- you
- 17 know, what the SDRs have.
- 18 CHAIRMAN O'MALIA: That's a great point.
- 19 We've heard anecdotally that some people have
- 20 submitted data, getting access to their data, what
- 21 they submitted is incomplete or not there. Has
- 22 anybody else had that problem?

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MS. VEDBRAT: It's not easy to identify
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       the data, where it came from, you know. One of
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       the issues that we've experienced, you know. Then
       the other piece of it is, you know, it's unclear
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       if the SDR -- you know, your own data, if that
       should be available free of cost or not. And what
       type of agreements are you required to sign, and
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 8
       is there, like, indemnification from privacy
 9
      breaches and things like that that are in those
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       agreements, you know, which become problematic
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       again.
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                 MR. HANSON: If I could address more to
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       the first question -- I've had less interaction
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       with the SDRs in pulling back out data. I think
       there's really two issues. One issue is as a firm
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16
       we have historic, I'll call them mappings, and
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       information the way we structure trades is
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      different, as Tara mentioned, and pretty much
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       every other firm has a unique way somewhere in the
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       systems across the breadth of the products. So
       there are areas where we as a firm need to
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identify where things are not mapped the way the

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1 SDR would have them reported and resolve those.
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- 2 The challenge really for us is doing
- 3 that across every asset class, every product out
- 4 to the most bespoke in very, very short time
- frames as opposed to being able to focus.
- I think on the flip side, you then also
- 7 have the challenge for the -- I agree in principle
- 8 that, you know, the SDRs have access to CFTC.
- 9 They can clarify. But you do have issues around
- 10 multi-jurisdiction where a flag may be mandatory
- for one jurisdiction, optional for another. So
- we've had, you know, many dialogues with the DCC,
- for example, trying to understand what's the
- 14 appropriate flag to set. Is it required? Is it
- 15 not required? As well as information where we may
- 16 be providing a piece of information that from a
- 17 purely technical perspective, it's difficult for
- them out of, call them potentially hundreds of
- 19 trade attributes on a single trade, whether or not
- 20 we provided "the appropriate value," you know, in
- 21 terms of, you know, for their systems to actually
- 22 validate them.

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                 So I think at a broad level it works,
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      but at a very technical implementation level, it
 3
       is a challenge, you know, too, because clearly not
       every field we're passing is being validated for
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       every -- you know, for every jurisdiction. That
       would be an extremely complex ask, especially as
       you get out beyond the more vanilla products.
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                 MS. KRUSE: Yeah. I think I would add
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       on that, too. I mean, it's definitely been a
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       collaborative process between market participants
       and some of the SDRs in terms of determining how
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12
       data is reported. But at the end of the day, the
13
       SDRs, one, have administrative pieces they're
14
       working at around validation of certain fields.
       So, for instance, they may need to make a certain
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16
       field optional just because it doesn't apply to
17
       all transactions. But from my perspective, I'm
       always going to turn back to my rules to say, oh,
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19
       for this particular type of transaction, I'm
20
       required to report it.
                 So I can't always rely on them to tell
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me what makes me compliant. At the end of the day

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I think I think as firms, we always feel like it's
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- 2 going to come back to us. I can't point to the
- 3 SDR and say, well, they didn't make report this,
- 4 you know, so it's their fault I'm not compliant.
- 5 Rather we take the responsibility on ourselves and
- 6 work together with them to make sure that the
- 7 availability is there to report everything we
- 8 believe we need to report, and then we take it on
- 9 ourselves to analyze the rules and understand what
- 10 we believe will make us compliant in case we need
- 11 to speak to what we have done.
- 12 CHAIRMAN O'MALIA: Anybody else? We're
- pretty close to on schedule, believe it or not.
- 14 Housekeeping. All the panelists and all
- the TAC members are invited upstairs for lunch.
- And we will see you all at 1:30. Thank you.
- 17 (Recess)
- 18 CHAIRMAN O'MALIA: I don't have the
- 19 chairman here to shush you, so please sit down. I
- 20 refuse to shush.
- Okay, 1:30, panel four, SDR Data Issues
- 22 and Perspective of the SDRs. We're going to start

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1 with John Rogers, who many of you know is our --
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- 2 head of our Office of Data and Technology, and has
- 3 been leading kind of our technology effort to make
- 4 our rules work, and to ensure compliance, and make
- 5 your job easier to comply with our objectives. So
- 6 John is going to frame the debate. We had the
- 7 markup participants kind of identify their broad
- 8 challenges in complying with our rules, and they
- 9 were correct.
- I don't know -- I think it was Adam
- 11 mentioned that I thought it was the SDR's
- responsibility to tell us what to do. Well, you
- 13 know, they maybe a little confused about what our
- 14 rules require as well. So based on the data we
- 15 received and the efforts put in so far, John is
- going to help frame the debate a little bit, and
- 17 I'll turn it over to him. Then we will go to the
- 18 SDR panels. I don't know if you have guys have an
- order. I'll just start at one end and work my way
- down, if that's okay. John?
- 21 MR. ROGERS: Okay, thank you very much.
- Yeah, so hopefully this presentation will answer

- some of the earlier questions from the preceding
- 2 panel, too. Maybe not all of them, but some of
- 3 them.
- What we're going to do here is I'm going
- 5 to speak for a while, then turn it over to the
- 6 SDRs. I'll go through my slides here. But before
- 7 I start, I want to mention that, you know, for
- 8 those that are provisionally registered that I
- 9 appreciate all of the hard work and collaboration
- 10 that we've been doing together. That would be,
- 11 you know, us from the IT perspective and certainly
- from the business divisions at the Commission with
- 13 each SDR. So it's been very collaborative and
- 14 cooperative.
- 15 Clearly there's a lot of work to -- that
- 16 remains to be done, and we are in the midst -- at
- the very beginning stages of a very long-term
- 18 process. The way that I look at it is we are
- 19 actually standing up a new system. We might be
- leveraging existing technologies, but we're
- standing up a new system for how we perform this
- 22 regulatory function and, you know, how the markets

1 work and whatnot. And standing them up will take

- 2 some time.
- 3 So I've divided the conversation into
- 4 four themes: Data quality, data harmonization,
- 5 accessibility, and analytics. And I'll go into
- 6 each one in turn. The focus that I would like to
- 7 have from an SDR perspective is to have people
- 8 focus on what they're doing around each one of
- 9 these themes, what their future plans are, and
- 10 then we can have questions. And I'm going to end
- it with a little about the process going forward.
- So in terms of quality, we're talking
- about the validation and normalization of data.
- 14 The themes actually begin with the notion of data
- 15 coming into the SDR and then how data is used
- 16 within the SDR and potentially across SDRs for our
- purposes. That's where we get into harmonization.
- 18 We actually need to aggregate across SDRs, and so
- we're talking about harmonization.
- The next thing would be accessibility,
- 21 how could we go out to the SDRs? As Chairman
- 22 Gensler mentioned earlier on, having direct

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1 electronic access to the SDRs, including sorting,
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- filtering, and aggregating by party, counterparty,
- 3 product, underlying. And being able to search
- 4 based on time is a primary objective of what we're
- 5 trying to achieve here. So accessibility is a
- 6 very important portion of this.
- 7 And then ending the themes with the
- 8 notion of analytics. We are in the mode of
- 9 analyzing data both from an operational
- 10 perspective and from a market perspective, and so
- 11 we'll be talking a little bit about those
- 12 capabilities.
- One of the things that's important for
- us is not to focus on how the SDRs handle
- something, but what we need from them. I know
- that each SDR has a different method or is
- 17 leveraging existing technology to become
- operational. We understand that and appreciate
- 19 that. But we really have been focusing our
- 20 dialogue and will continue to focus our dialogue
- 21 on the -- what we need from a regulatory
- 22 perspective.

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1 So let's go into validation. Okay, it's
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- 2 up there. So we talked about quality and include
- 3 validation in that. The ideal scenario for us is
- 4 to get good standardized data from the source.
- 5 Someone had mentioned earlier, you know, the whole
- 6 principle of garbage in, garbage out. I think to
- 7 some extent, some of the information that we
- 8 received could be erroneous certainly, but I also
- 9 think that it's not necessarily always erroneous.
- 10 It may be based on the multi-jurisdictional
- issues that were raised in the previous panel or
- things like that, or just maybe that it's coming
- from an existing system and having to flow into
- 14 the SDR. But it's important to get the best
- 15 standardized data from the source.
- To that end, we've sent an initial set
- of fields that we will be focusing on to review
- and analyze to make sure that we are getting --
- 19 that we are seeing good quality data. There are,
- in some cases, thousands of fields that we have to
- 21 sift through. We can't really tackle all fields
- 22 all at once, so we're focusing on particular ones

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1 that we need to focus on to support the notion of
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- 2 the ability to aggregate information.
- 3 An important thing for us in terms of
- 4 ensuring that the level of quality goes up is that
- 5 we track data quality issues, that the SDRs have a
- 6 sense of what issues they're encountering and that
- 7 we can see it as well so that we can work together
- 8 to make sure that the quality rises. And that
- 9 begins with the SDRs reaching out to the
- 10 submitters and ensuring that the quality is
- increasing, but also us getting involved where
- 12 necessary.
- One of the things that we've noticed,
- one of the things that's a challenge is that there
- 15 are different requirements for the acceptance and
- 16 rejection of records, and there are different
- schools of thought on that. So, for example, if
- there's greater acceptance of data, then there's
- 19 more visibility into it. But on the flip side,
- 20 that raises a question of the integrity of the
- 21 data, what can you trust and not trust as opposed
- 22 to rejecting data and having it be the only things

- 1 flowing into the repository are that which are
- 2 clean and not necessarily seeing as much of it,
- 3 but knowing that the quality is -- the bar is
- 4 high. And so having talked with each of the SDRs,
- 5 I know that there are different rationales for
- 6 that, so it would be very interesting to hear what
- 7 people think about those notions.
- 8 In terms of the kinds of data that we
- 9 get, there are -- or not get, but have a view
- into, there are four categories that we've talked
- about so far. There are messages. That's what we
- 12 consider to be the raw data received by the SDRs.
- 13 There are events, open swaps, and exposure. Those
- last three elements are things that really are
- 15 normalized versions of the original message data.
- So in our -- from our vantage point, it
- 17 would be taking those messages and creating some
- sort of set of data that we can look at and make
- 19 use of that will be based on those events. So
- events turn out to be things like confirms, or
- 21 terminations, or new trades, and to that extent.
- 22 An open swap would be the aggregated data for swap

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1 at the end of each day, and the exposure would be
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- 2 the ability to roll up swaps to really what we
- 3 would consider a position level in the futures
- 4 space, but we called it exposure for the sake of
- 5 this conversation.
- 6 So let me give you some examples of
- 7 validation. This is not meant to be in any way,
- 8 shape, or form an exhaustive list of things, but
- 9 just to give you a flavor of some of the things
- 10 that we're looking at, and what we will look at as
- 11 we look at these 22 fields that we recently sent
- 12 out.
- So we've spent a lot of time and effort,
- many people, working on a CICI utility to create
- an LEI, and there are multiple instances in each
- SDR where an LEI is called for. We need that LEI
- 17 to be validated against the CICI utility to make
- 18 sure that it's a valid LEI. In some cases, there
- 19 has been, you know, up until recently no action
- 20 relief that has meant that some people didn't have
- 21 LEIs necessarily to report. We recognize that
- that could be the cause of these issues.

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                 But when we look at something like
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       validating what the legal entity is that's engaged
 3
       in a swap, we would expect to see the rate of
       valid LEIs going up, and we want to make sure that
 5
       we're taking action to ensure that that happens.
                 Others that are simple are on the list,
 7
       but if there are particular enumerated values that
 8
       need to be validated to ensure that we're getting
 9
       the same data, we need to be checking on that. We
10
       need to verify that USIs are properly constructed,
11
       that dates and times are represented in the
12
       appropriate way, that required fields are always
13
       present. Even if someone has a challenge, a
14
       multi- jurisdictional challenge, we still need to
15
       make sure that the data that we require is
16
       provided.
17
                 Another example that I came up with that
       we've been working through in some instances is
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19
       the notion of duplication. Are there duplicate
       records out there? And this kind of fits in with
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       the whole rejection-acceptance paradigm. And it
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22
       could also relate to the notion of us working more
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- 1 closely with HSDR and understanding the portal and
- 2 understanding the data structures, but there are
- 3 instances where we see duplication, and we want to
- 4 resolve those.
- 5 From my vantage point, one of the big
- 6 things that we have to address is the notion of
- 7 product identification because if you think about
- 8 how we then want to aggregate, product would be an
- 9 important ingredient to that. So we've talked --
- 10 I know that there's been lots of discussion in
- 11 previous TAC meetings, and there's been discussion
- 12 elsewhere about the unique product identifier, and
- 13 that effort needs to pick up so that we can
- 14 aggregate across products. And, of course, the
- 15 challenge is different for different asset
- 16 classes. We need to establish that.
- 17 So moving on to -- oh, so one other
- 18 thing I wanted to say about validation, you notice
- 19 I didn't mention anything about a particular
- 20 standard. I didn't mention anything about FPML or
- 21 FIX ML. That was by design because while those
- things have a lot of value in them, I think that

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we're really looking at the underlying content and
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- the ways that we're ensuring, and the processes
- 3 that we're using to ensure integrity of data and
- 4 whatnot, and that's why we're not focusing on that
- 5 at this point.
- In terms of harmonization, one of the
- 7 keys here is that we need to harmonize the data
- 8 across SDR, so there are three provisional SDRs
- 9 right now. Each one has, just by way of example,
- 10 you know, has responsibility for the credit asset
- 11 class. We're going to need to look at and come up
- 12 with aggregated information about the credit
- space, and the only way that we're going to be
- able to do that is if we're going to -- if we can
- see similar things across each one.
- So following on to the Chairman's
- 17 previous, you know, comments, you know, we need to
- 18 aggregate to show the size of the markets overall.
- 19 We need to see it by party and counterparty, and
- 20 by party, counterparty, and product.
- 21 Some of the challenges that we face in
- that is that there's different types of content

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1 flowing into the different SDRs, different
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- 2 messages, different sizes and shapes of fields and
- 3 whatnot, and so making sense of it is one of the
- 4 things we have to work through. We need to,
- 5 again, aggregate across different types of fields.
- 6 Overall we've noticed that the volume of
- 7 transactions is not as significant as what we're
- 8 seeing in the future space, but the future space
- 9 is far more standardized, and there's far less
- 10 complexity in the data, so that creates a
- 11 challenge from that perspective.
- 12 So some of the examples of principles
- 13 are listed on the next slide, and it comes back to
- 14 cross checking fields. One of the ones that's
- really important that I've seen in some of our
- 16 conversations is that from a data management
- 17 perspective, fields should never be used for more
- 18 than one purpose. If fields -- if one field has
- 19 two meanings, then it becomes really difficult to
- 20 manage because what happens is you have to manage
- 21 it in your software. You have to figure out how
- 22 to deduce the meaning of that, and we don't want

- 1 to be looking to software. So I think that as we
- 2 analyze the data more and more, we're going to be
- 3 making sure that fields only serve a single
- 4 purpose.
- 5 So moving on. The major elements in
- 6 terms of what we're standardizing and harmonizing
- 7 on are the types of messages we receive. I know
- 8 that the different SDRs know these types of
- 9 messages. There's the PET real time confirmation
- 10 continuation data, which is referred to as
- 11 snapshots. I know that in some instances, some
- 12 SDRs are accepting snapshots. Some are not. But
- there's valuation records, and then there's
- 14 combinations of all of the above. There are
- 15 records that are coming in with PET and real time
- data all in one place, and that's all fine. It's
- 17 useful to see the raw data, but making sense of it
- and getting it harmonized is the key. And that's
- 19 why we came up with the concept of events, open
- swaps, and exposures.
- 21 So we've already talked about the notion
- 22 that we've got these 22 fields that we're going to

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1 be looking at. One of the things that -- the
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- 2 reasons that we focused on these particular 22
- 3 fields is because they're pretty consistent across
- 4 asset classes. And one of the things we want to
- 5 harmonize on is data across asset classes first,
- 6 and then we have data that will be focusing on,
- you know, more specifically within an asset class.
- 8 So just like LEI is something that would
- 9 apply to all asset classes, or USI, or UPI, there
- 10 are a number of fields that fit into that mold,
- and we're focusing on those first to allow us to
- 12 perform the functions that we want to perform or
- 13 need to perform.
- In terms of accessibility, one of the
- 15 key ingredients for Dodd-Frank is, as I've always
- 16 come to know it, is the data must be directly
- 17 available at the SDR. That means all of the
- 18 messages are up there, and then these
- 19 transformative things that I've been describing
- 20 earlier need to be up at the SDR. They need to be
- 21 available within minutes of coming in, not at the
- 22 end of the day or something like that. It's

- 1 important that we have a view into the data as it
- 2 flows into the SDR.
- We understand that certain data will
- 4 need to be derived -- actually in some respects we
- 5 probably will have more of a requirement for data
- 6 to be derived and presented to us if the data is
- 7 not flowing in -- you know, in a standardized way.
- 8 So the ability to reduce the ask of actually
- 9 having to transform data is directly related in
- some respects to the quality, and the consistency,
- and the standardization that's coming into us.
- 12 I've already -- we've already touched on
- 13 the notion of searching and sorting by a variety
- of fields: Party, counterparty, product, data,
- 15 and time. The portal needs to have -- each portal
- needs to have that capability. We need to be able
- 17 to search by some combination or all combinations.
- 18 That's an essential ingredient to this process.
- 19 The other thing is even though we want
- 20 to look at data, there's no doubt that we will
- 21 want to bring data back to the Commission for use.
- 22 And some of those kinds of things will be done on

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an ad hoc basis, so each portal needs to have an
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- 2 ad hoc query capability to bring data back to the
- 3 Commission.
- 4 Another ingredient will be the fact that
- 5 we need to have -- we need to see reports existing
- 6 on the portal, which is not necessarily what I
- 7 would consider to be the grid filter sort and
- 8 search capability, but rather snapshots in time of
- 9 how things looked. So, for example, at the end of
- 10 the day, for example. What are the open swaps at
- 11 the end of the day, or was it a position, what is
- 12 an exposure at the end of the day kind of thing?
- 13 Those will need to be out there. Operational
- 14 status reports, documentation, all of those things
- 15 need to be on the portal.
- One of our challenges in coming up to
- speed on using them is each individual SDR has a
- different portal, and that's okay. But it means
- 19 that we have to learn how to use those things.
- One of the benefits of seeing things differently
- is that we're actually shooting for the highest
- 22 common denominator. We're going to look for

- things in one that we really like and ask others
- 2 to replicate that kind of capability, again, not
- 3 focusing on the how we want things to be done, but
- 4 what it is that we need to be effective in our
- 5 role. And so that will require lots of
- 6 interaction between us.
- 7 Ultimately, though, we're going to be
- 8 asking for a regular feed of information to the
- 9 CFTC, and actually, in fact, more than one. To
- 10 give you an example of something like that, we are
- 11 preparing a swaps report that will be published, I
- 12 would expect, in the May time frame, that will be
- initially off of credit and rates. The work that
- we've had to do to analyze the data across the
- swaps repositories was very specific because the
- data repositories were different.
- 17 We were able to figure it out and how to
- 18 come up with like data from each swaps data
- 19 repository. But ultimately, we want the SDRs to
- 20 be producing that output and feeding us that
- 21 aggregate of information so that we can then, in a
- 22 more -- in an easier manner, put that information

- 1 together and make use of it.
- We will also want to see the underlying
- 3 data obviously to understand how those numbers
- 4 were derived, but that would be an example of
- 5 actually what I would think would be a relatively
- 6 straightforward feed of information. But we will
- 7 also need to have some form of transactional data
- 8 flowing into CFTC so that we can do that analysis,
- 9 because there are certain types of analysis that
- 10 we recognize that we can't do just by looking at a
- 11 single SDR.
- So in cases where we can identify a need
- 13 to be pulling data for analysis across SDRs or to
- 14 relate that data to futures, we'll need to bring
- data down for that purpose. The goal is not to
- 16 replicate what an SDR can already do, but rather
- 17 to go beyond that capability, and that's why we'll
- 18 be asking for standardized data feeds. We're not
- there yet, but that's where we're heading.
- 20 And then the last thing -- the last
- theme I wanted to talk about was analytics. So
- we've gone over the notion of operational reports

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1 that we are asking each SDR to produce, and each
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- 2 SDR thankfully is giving us something every week
- 3 that talks about the flow of data, the amount of
- 4 rejections and acceptances. There's going to be
- 5 some refinements we're going to need to make to
- 6 that. Operational issues that come up, you know,
- 7 out of an SDR and how we're working through those
- 8 kinds of issues. But there are also other kinds
- 9 of metrics that I would say are more on the
- 10 business side from my perspective, so things like,
- 11 you know, top notional amounts outstanding by a
- variety of categories, CDS types, and currency and
- 13 customer type, or types in region, types in asset
- 14 class, so on and so forth, or trade volumes, and
- 15 that sort of thing.
- So we'll be continuing to ask for
- analytics along those lines. We have to define
- our requirements and give them to each SDR and
- work through the process of how we're going to get
- those things delivered to us so that we can make
- 21 use of the information.
- 22 So that takes me to the process going

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1 forward. The processes going forward is very much
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- 2 the process that we already have, which is to
- 3 continue regularly recurring conversations with
- 4 each SDR about what our needs are. Sometimes
- 5 those will be in depth conversations. Like, I
- 6 know with each of you we've had day-long meetings.
- 7 We've been following that up with calls and
- 8 whatnot. I expect that pattern to continue. I
- 9 would also expect that at some point in time we'll
- 10 want to bring the SDRs together and talk about
- 11 harmonization so that we can be in the same room
- 12 and hear things.
- But the bottom line is we all must work
- together to harmonize data, reports, and portal
- 15 capabilities to facilitate regulatory oversight.
- And, you know, I'm happy to say that we've got a
- 17 lot of people that are dedicated, and focused, and
- 18 working hard on this. But as Commissioner O'Malia
- said to me at one point when we were talking about
- 20 TAC, it's really an all hands on deck issue that
- 21 we need to work through to get us to the point
- 22 where we want to be.

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1 Thank you.
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- 2 CHAIRMAN O'MALIA: Thank you very much,
- 3 John. I have a number of questions kind of
- 4 regarding, you know, starting -- well, if you go
- 5 to slide four, John, if you can get your magic
- 6 clicker out there and go back.
- 7 MR. ROGERS: Oh, sure. We're on four.
- 8 CHAIRMAN O'MALIA: Okay. So "Establish
- 9 a process with submitters, track data using data
- 10 quality issues to ensure systemic errors are
- 11 addressed, provide information to the Commission
- on data quality." And it says, the top line is,
- 13 "We must set the course of action for consistency
- in data quality."
- 15 Have we told everybody what our
- 16 standards are and what we want from them, or are
- 17 we having these one-on-one conversations? What's
- 18 the process for informing the market, and how soon
- 19 will that be done, and what's the timeline for all
- 20 of this?
- 21 MR. ROGERS: I think it's an ongoing
- 22 process, so we have been -- we've just begun, I

- 1 think, with the issuance of these 22 fields to
- 2 articulate what it is that we're requiring to
- 3 ensure quality. So things like LEIs or USIs and
- 4 things that we need to ensure those things, or
- 5 date fields, for example. Some of the fields are
- 6 execution time.
- 7 Those are actually relatively easy to
- 8 articulate. We've articulated those to the SDRs.
- 9 Now it's -- I think the next step is for people to
- 10 come back and say this is how long we can take to
- implement the validation rules. Those I don't
- 12 think would take an inordinate amount of time, but
- 13 then there are some that are going to be a lot
- 14 more complex. Taking something like UPI and
- 15 figuring out what the standard is.
- I actually envision this -- that there
- will be a degree of harmonization that would need
- 18 to occur in a global context, going back to that
- 19 multi-jurisdictional issue that was raised in an
- 20 earlier panel. So I would say that that kind of
- 21 an issue is at least a year out.
- 22 And there are different nuances by asset

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1 class, so there isn't one specific answer, but I
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- 2 think that the 22 fields that we selected were
- 3 fields that we felt like we could make significant
- 4 progress in the short term, looking for, you know,
- 5 feedback from the SDRs on what they can do to
- 6 ensure that we are checking this data to make sure
- 7 that it is clean. And, of course, that does
- 8 involve the front end of the process, the people
- 9 that are submitting the data. There's going to
- 10 have to be some interaction on that end to ensure
- 11 that there's quality information flowing in. It
- 12 also --
- 13 CHAIRMAN O'MALIA: We use the SDRs to
- 14 communicate to that to the market. We're not
- 15 sending out -- we have not sent out further
- 16 guidance on the 22 fields --
- MR. ROGERS: We have not, and I would
- 18 expect that the SDRs would perform the initial
- 19 reach out to the industry on compliance with
- 20 those.
- 21 CHAIRMAN O'MALIA: Okay. I think what I
- 22 want to do is you've kind of heard John's

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1 presentation. Let's hear from the SDRs, and then
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- 2 we'll get into it and ask the questions about
- 3 whether John is right, or the SDRs are right, or
- 4 how they're going to work together.
- 5 The point of this at the end of the day
- 6 is that we're all comfortable with the path
- 7 forward, that whatever John is dictating to the
- 8 SDRs will filter into the market, and we can ask
- 9 them to submit and comply with all of the
- 10 expectations we have to make kind of the
- 11 presentation John identified and make it
- 12 successful.
- 13 If at the end of the day we are not
- 14 confident that there is a road map forward and a
- 15 process that you are comfortable with, please let
- 16 me know because we haven't succeeded. And so at
- 17 the end of this, I want to make sure that whether
- it's DMO or ODT, the guys that wrote the rules,
- and the guys who are implementing the rules, and
- 20 then you all are trying to figure out how this is
- 21 going to be completed. It has to succeed. And if
- 22 we leave here and we still have questions, then

- 1 shame on us. This is the perfect opportunity to
- 2 solve them. We've got the two guys and we've got
- 3 staff back here that are part of it. And, of
- 4 course, we've got Commissioner Chilton here, and
- 5 he can help.
- So we're going to start with Bloomberg.
- 7 Greg and Nathan are going to testify, and then
- 8 we'll just go down the line.
- 9 MR. DUMARK: Thank you, Commissioner.
- 10 My name is Greg Dumark. I'm the Senior Compliance
- 11 Officer with Bloomberg's Fixed Income Electronic
- 12 Trading Business in New York. Nathan Jenner is
- 13 with me. He's the Fixed Income Electronic Trading
- 14 COO.
- 15 CHAIRMAN O'MALIA: Greg, can you pull
- that a little closer so we can hear?
- 17 MR. DUMARK: I'm saying Nathan Jenner is
- 18 with me. He's the COO of our Fixed Income
- 19 Electronic Trading Business. We'd like to thank
- 20 the Commission for giving us the opportunity to be
- 21 here today and talk about data issues relative to
- the SDR.

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In case you didn't know, our
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       wholly-owned subsidiary, BSDR, filed an
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       application for provisional registration on March
       10th of this year with the Commission. So in
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       short, we hope to be the fourth provisionally
       registered SDR. We feel pretty confident that we
 7
       could fulfill our mandate, our duties to be an SDR
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       in the sense that we'll allow participants to
 9
       fulfill their reporting obligations across all
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       derivative asset classes.
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                 The regulatory reporting of swap
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       transaction is a critical component to mitigating
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       systemic risk, promoting standardization and
14
       increased transparency in the swap markets. We
       are, meaning BSDRs, committed to providing the
15
       highest level of service as an SDR consistent with
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17
       the importance of price transparency. Our BSDR is
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       built on proven systems processes that draw on our
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       experience as a leader in delivering financial
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       data and pricing of the markets. In particular,
       BSDR will make use of our widely- accepted
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       technology platform and experience as an industry
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1 partner to provide a secure, reliable SDR
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- 2 database.
- We appreciate the Commission's concern
- 4 about reporting inconsistencies, technical
- 5 challenges, and the validation and normalization
- of SDR data. In the end, the value of the swap
- 7 data reported, as you noted, Commissioner, to the
- 8 SDRs rests on the ability to standardize data,
- 9 process and retrieve large amounts of data that
- 10 allows for the aggregation and risk analysis that
- 11 needs to be done on this data.
- 12 When we got this list of items, the
- issue that we're going to discuss today, I sat
- down with our Chief Technology Officer for the SDR
- and I said, let's go over this and see what's
- 16 doable. And many of the items from our
- perspective are ones that we absolutely can commit
- 18 to working with the Commission and a lot of them
- 19 are doable. So we can help work with our fellow
- 20 SDRs to standardize this data and have consistent
- 21 fields to push out data to you to be able to look
- 22 into our database and do the analysis that you

- 1 want.
- 2 One of the interesting questions came
- 3 up, though, which was it would be helpful to know
- from the Commission what their objectives are in
- 5 doing surveillance. So in essence, you telling us
- 6 what you want to do with the data, and I think
- 7 that would be part of the discussion today. We
- 8 certainly can work to normalize, standardize these
- 9 data fields, but it's also very important from our
- 10 perspective to know prospectively what you want
- 11 out of the data. So I think it works both ways.
- 12 And so I think that's an important component of
- 13 this discussion.
- 14 As I said, we look forward to working
- 15 with the Commission and our fellow SDRs to
- 16 harmonize the data, the reports, the portal
- 17 capabilities necessary to facilitate your
- 18 regulatory oversight. Again, we thank the
- 19 Commission for the opportunity to be here today,
- and we're happy to answer any questions that you
- 21 have.
- 22 CHAIRMAN O'MALIA: Thank you.

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               MR. JENNER: Great.
                                   Thanks, Greg.
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- Nathan Jenner from Bloomberg. I'm aware that I'm
- 3 also from Bloomberg, so I don't want to double my
- -- double our floor time. But I'll just add to a
- 5 couple of points that Greg made.
- So although we are here in the capacity 6
- 7 of us being an SDR, it's worth sort of
- 8 understanding where Bloomberg as a parent company
- 9 comes from. Essentially, Bloomberg is all about
- 10 taking in data from a varying set of sources
- around different markets, around different 11
- 12 regions, and essentially turning that into usable
- 13 information, whether that's standardizing data,
- 14 whether that's turning it into risk reports, or
- whether that's even producing downstream feeds for 15
- our customers. So, you know, that's the sort of 16
- 17 background for Bloomberg as a company.
- 18 And if you look, a good example of it as
- 19 it relates to this discussion, you know, there's
- 20 already a function on the terminal called SDR Go,
- imaginatively named. But that is a function that 21
- 22 exists today, which takes in data from other SDRs

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outside of Bloomberg. And, you know, already on
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       that function, there's already some examples of
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       some of the themes that you're talking about, you
       know, the ability to search, the ability to sort
 5
       data, even the ability to take some of those
       trades and turn those into risk reports, whether
       they're Delta ladders, or whether they're, you
 7
 8
       know, they're some sort of FX exposure, or credit
 9
       exposure. Some of that is already available, and
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       those are things that, you know, even outside of
11
       the Commission, I think the general market is
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       looking to digest that information as well.
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                 So, you know, the point in there is some
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       of those things that you're asking for, I think,
       are already happening. And that leads me into
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       just the sort of final point echoing what Greg was
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       sort of saying towards the end of his piece, is
       that, you know, I think one of the things that you
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19
       will consider as you move through this process is,
       you know, do you want to focus more on the
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21
       questions that you want answered, or do you want
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to focus more on sort of the prescriptions around

- 1 the data the SDRs collect.
- 2 You know, arguably, you know, both
- 3 courses might get you to a similar place, but from
- 4 our perspective, you know, with us as an SDR, if
- 5 the Commission is clear on these are the questions
- 6 we want answered, i.e., what is the transaction
- 7 volume going through the market today? What is
- 8 the exposure of certain counterparties? Is there
- 9 a spike in a certain instrument? I think it's
- 10 very easy for us to then take that question and
- figure out this is the data, this is the set of
- data we'll need, and we'll turn that data into
- information for you. That's the way we'll work
- 14 quite well.
- I think if you, you know, if you focus
- more on a prescription on, you know, data should
- 17 be collected in this format with this particular
- set of fields, I think that's definitely helpful
- 19 to a certain point. But I think if you
- 20 crystallize the questions that you need answered,
- 21 the rest of it will become a lot easier.
- Thanks.

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CHAIRMAN O'MALIA: I think that's a
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 2
       great point, and I think to John -- John mentioned
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      it earlier. We want reports now, but I think we
       want to be able to do it all on our own at some
 5
      point in the future. And I think to the point
       about surveillance, what do you want in terms of
 7
       surveillance. We want to be able to do any
 8
       surveillance on any entity on any asset. And that
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       requires us to look at and manipulate the data in
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       the manner we see fit and to kind of serve our
11
      purposes. And I didn't mean manipulate, but "use"
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       I think is the term I was searching for,
       "utilize," "access."
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                 So I think we're of kind of a split
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       right now. We want both what you have to offer
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      today, but we also want the ability to do it on
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      our own in the future. And I think we know we
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       can't -- we don't have it all put together yet,
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      but we need to be putting it together.
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                 And I think the point about, you know,
       are you going to ask us questions or are you going
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to prescribe what you want. And I think we need

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1 to be much more prescriptive about what we want so
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- you can provide it to us, because clearly you're
- 3 that tool that we're going to face the market and
- 4 we're going to make you do all the work, and make
- 5 demands of you, et cetera.
- 6 So to answer that brief question, unless
- 7 you have --
- 8 MR. ROGERS: Yeah, I want to add to
- 9 that. Yeah, I agree, and it's very interesting.
- I think that at one level we'll come up with
- 11 specific questions, but we don't necessarily want
- to go down the road of asking a specific question,
- 13 getting that question answered. If we have the
- same question again, ask the question again, get
- that answer. It's really around developing
- 16 capabilities so that we can looking to NSDR or
- 17 look at data across an SDR to answer the question
- on our own, which really gets back to more what
- 19 was just said. It really becomes a method of
- 20 empowerment so that we can search on our own.
- 21 From the standpoint -- I mean, I really
- look at this from two different perspectives. I

- 1 represent the IT side, so when I look at things,
- 2 I'm looking at it from the perspective of data
- 3 management, IT functionality, and that sort of
- 4 thing. So we'll be looking at how do we get data
- 5 in a place where the business can make use of it.
- 6 In terms of the kinds of questions of risk
- 7 analyses or whatnot, those are going to come from
- 8 the business side.
- 9 I think that you will find that you will
- 10 get both of those things. I'm not trying to be
- 11 overly prescriptive certainly, but it's important
- that when we take these concepts, we turn them
- into empowering tools for us to use at the CFTC
- for a myriad of purposes. And that even extends
- to the notion of something like just validating an
- 16 LEI. It doesn't really solve a problem in terms
- of risk. It enables things, but when we talk
- about let's validate CICIs against every place
- 19 where a CICI is used, we should have to mention
- 20 that once and have it universally applied so that
- 21 we can move those kinds of issues and move into
- 22 more complex issues. And that's the way I think

- 1 the evolution of this process is going to be.
- 2 Right now, we want to understand things
- 3 around size of markets both from a notional value
- 4 perspective/transaction perspective, you know. We
- 5 want to know who's opposite whom from a
- 6 party/counterparty perspective. But I think that
- 7 the requirements are going to continually evolve
- 8 and get more complex, and we need you to be
- 9 building the capabilities that enable us to do the
- 10 analysis that we need to do.
- 11 CHAIRMAN O'MALIA: Okay. We're going to
- 12 go to Chris. Thank you.
- 13 MR. CHILDS: Thank you, Commissioner,
- 14 and thank you for the Commission for giving us the
- opportunity to come here and talk to you today.
- My name is Chris Childs. I'm the CEO of
- 17 DTC Data Repository, also known as DDR. I've
- prepared a PET, which is is all on your -- in
- 19 front of you. You'll be pleased to hear I'm not
- 20 going through bullet by bullet. I'll assume that
- 21 you can kind of read when you've got an evening of
- 22 nothing to do.

So I just wanted to put into perspective

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            We currently have about eight million open
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       swaps in our repositories across five asset
       classes. This is on page 3, by the way. That
 5
       portfolio size drives around 40 to 50 million data
       submissions per week, which we in turn then feed
 7
       down to John's group. We receive and publish
 8
       about 85,000 real time price messages every week.
 9
       In addition to the USSDRs, we also operate a
10
       regulatory repository in Japan, and we also have
       repository in the UK for helping market
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12
      participants with their voluntary reporting.
13
                 And I think one of things that we picked
14
       up earlier from some of the comments was the
       global nature of reporting. And just to highlight
15
       a couple of things, we have two repositories that
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17
       are actually live now, one for Japan, one to
18
       support U.S. reporting. One is single sided, one
19
       side reports, the other, both sides report. One
20
      we have real time PET confirm snapshots, as John
       was talking about. The other one we have end of
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22
       day snapshots on a T plus two basis. One we have
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- 1 counterparties identified by LEI. The other we
- 2 have counterparties with BIC.
- 3 So those are the types of things that
- 4 we're seeing already with two repositories live.
- 5 We know the European rules, they're different
- 6 again.
- So I do think that when we talk about
- 8 standards and has been pointed out by the FSB as
- 9 well, it's important that for those market
- 10 participants that are global in nature that we
- 11 think about these standards in the global context.
- Just turning to page 4. I think, you
- 13 know, we are now four months into receiving data
- from swap dealers, which, in the long scheme of
- 15 things, is not a huge amount of time. And we have
- 16 collected a hell of a lot of data, and now the
- 17 challenge for the industry to is turn that data
- into information. And I think the next stage
- 19 along that continuum path is what we're talking
- about here, which is to standardize and make sure
- 21 that the data is sufficient quality that we can
- 22 actually aggregate that.

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1
                 And to the point my friends were making
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       from Bloomberg here, given the fact that there are
 3
       multiple repositories, you can only aggregate that
       data and do true market analytics on top of that
 5
       when you've taken data in a standard format for
       multiple repositories so that you can then
       aggregate that data. And again, I think that if
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 8
       you're looking at it from central banks'
 9
       perspective, it's important to understand that is
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       going to have to be done potentially on a global
       basis as well.
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12
                 Just turning to the next page and I'm
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       picking out on some of the points here. Again,
14
       standards are typically driven by business needs,
       so we've seen that over the last few years when,
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16
       you know, e-confirm platforms come in, e-
       affirmation systems come in. And because you're
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       then trying to compare data from two different
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19
       sources, you have to create the standards to be
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       able to make that comparison. And I think that
       the regulatory need for good data is the next
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22
       catalyst. And already we're seeing new language
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1 appear in the industry, whether it's USIs, LEIs,
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- 2 UPIs, and so on. I think, again, when we're
- 3 talking about standards, again, it's important to
- 4 think about this on a global basis.
- 5 So if you turn to page 6, just a couple
- of things that we've already kicked off at DDR
- 7 based on the conversations that we've had with
- 8 John and his team at the Commission. We are or
- 9 have already started to do reviews of Part 43 and
- 10 Part 45 data starting with credit and rates as
- 11 they were the first asset classes to kick off.
- 12 And, you know, the good news is that we are seeing
- 13 standardization, more than people would perhaps
- 14 would give credit for.
- Typically, where the data is coming from
- in e- confirm platform or some market
- 17 infrastructure, standards are being applied. The
- trouble is I think that that population of data
- 19 that complies with those standards is getting
- 20 muddied with the stuff that isn't complying with
- 21 those standards.
- 22 And so I think, you know, as this

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1 evolves, I think you're going to see that, you
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- 2 know, especially for credit and rates, there are
- 3 actually through ISDA and through other kind of
- 4 middleware providers and data providers, there are
- 5 already standards. I think what we need to focus
- on is which standards are we going to embrace and
- 7 the move forward with those standards across all
- 8 of the swap data repositories.
- 9 And John mentioned the face that he has
- 10 recently provided the 22 fields to us. We are now
- incorporating that into our reviews of data. The
- 12 reviews that we're doing now we're feeding back to
- our industry market participants to get their
- observations around the level of standardization
- and talk to them about the next steps.
- 16 As it relates to accessibility and
- analytics on page 7, I think we're in a kind of
- infancy here. We have just recently provided
- John's staff with portal access. That was
- 20 actually yesterday. So we look forward to working
- 21 with the Commission on improving the -- you know,
- 22 the functionality of that portal, providing the

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1 Commission with all of the attributes that they
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- 2 need, search criteria improvements, and timeliness
- 3 of data improvements. And obviously
- 4 standardization is also the key to making the
- 5 portal more effective and more usable for the
- 6 folks at the Commission.
- 7 One point I do want to pick up that
- 8 Bloomberg had made is that ultimately after we've
- 9 looked at the size of the market and we've
- 10 captured some of that stuff, we are going to want
- 11 to reply as an industry, and I'm sure the
- 12 regulators are thinking about this market level
- analytics. Where are exposures? Can we put this
- 14 data through stress tests? Can we identify market
- participants that under certain scenarios may be
- 16 facing issues? And that analytics and how we can
- 17 work with the Commission and the rest of the swap
- 18 depositories to provide that level of analytics is
- 19 something that I think will become key over a
- 20 period of time.
- So in summing up and on the last page,
- 22 what can we do to help the Commission? I think we

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1 need to -- you know, we need to embrace standards.
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- 2 We need to work with the Commission and the other
- 3 swap data repositories and the industry on what
- 4 those standards should be. We need to monitor
- 5 progress against those standards, and over time
- 6 increase our validation so that the data that's
- 7 coming through to the Commission already meets the
- 8 standards that have been set.
- 9 We need to provide consistent output in
- 10 a standard format so that the Commission can
- 11 actually take the data from multiple repositories,
- irrespective of how the data comes into us in a
- 13 standard format so that they can then amalgamate
- 14 the data. And we need to obviously cooperate with
- each other as SDRs to make sure that we move
- 16 forward at the same pace and that we, you know,
- 17 provide the data that you need and when you need
- it. It's not going to be -- it's a lot easier to
- 19 say than it is to do.
- 20 And I do want to pick up something that
- 21 Raymond had said on the prior panel. I actually
- think the prioritization is key. We're not going

- 1 to be able to do all of this across all five asset
- 2 classes overnight. I think we need to focus on
- 3 where we can make the biggest headway, focus on
- 4 that, and move forward with the industry, with the
- 5 Commission, and with the rest of the swap data
- 6 repositories.
- 7 So once again, thank you, and I look
- 8 forward to the dialogue.
- 9 CHAIRMAN O'MALIA: Thank you very much,
- 10 Chris. Bruce?
- MR. TUPPER: My name is Bruce Tupper.
- 12 I'm President of ICE's Repository Services, ICE
- 13 Trade Vault. During June of last year, ICE Trade
- 14 Vault became the first provisionally registered
- 15 SDR by the Commission. The service is operational
- in the CDS, in commodities asset classes. My
- 17 remarks are maybe a little more focused on
- 18 commodities and end users.
- 19 So in the commodities asset class, we
- 20 have over 600 participants enrolled, and we've
- 21 received over 16 million trades. Many of those
- 22 those are historical trades. As an SDR, we are

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1 committed to supporting all of our participants
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- 2 from the most advanced swap dealers to the end
- 3 users. Obviously in the commodity asset class,
- 4 the end user group makes up a large percentage of
- 5 that market.
- 6 In order to support this group we've
- 7 sort of taken the role of a pseudo consultant.
- 8 There's a lot of assistance that the end users
- 9 need in regards to interpretation of the rules and
- 10 how to implement into their systems. So to that
- 11 effort, we've, for the past 10 months, held twice
- weekly calls with the end users and swap dealers
- 13 to review how we offer our service, how to
- integrate, how our validation works, our data
- 15 standards.
- 16 It was mentioned earlier by Commissioner
- 17 O'Malia the guidebook. We've in absence of that
- developed very robust guides for our service.
- 19 It's kind of comprised of three separate guides,
- 20 but we have more of a user guide that describes a
- 21 functionality to our customers. It's about 200
- 22 pages. A technical guide which really speaks to

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1 how we define our class, our products, and all the
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- 2 way down to what's an acceptable value for a
- 3 particular field.
- 4 We worked very closely with the staff
- 5 during the drafting of Part 45 rules, particularly
- 6 the commodities annex to make sure that those
- 7 fields properly represented the trade types in the
- 8 commodities asset class. In addition, we also
- 9 maintain an ongoing list of questions or Q&A list
- 10 that -- it's gone over 600 commonly asked
- 11 questions that just over the time of operating
- these calls, we've found that our customers find a
- 13 lot of benefit to how to interpret how to -- in
- 14 regards to the different markets within
- 15 commodities, how they should connect their
- 16 systems.
- 17 I'd say one of the biggest challenges
- 18 for us, particularly with end users, is you're
- 19 working with older systems that were never meant
- 20 to connect to an SDR. So we've spent a lot of
- 21 time on our end building functionality that, one,
- 22 allows data translation so at the end of the day

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when we report to John the 16 million trades we
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- 2 have today that we report to John's group, it's
- 3 all in one format. So to be specific, if someone
- 4 were to send us a representation of a WTI swap
- from 12 different customers, we take all that
- 6 data, we validate it. If it doesn't make our
- 7 validation, we reject the trade. So we hold a
- 8 very high standard in regards to submissions to
- 9 our SDR.
- 10 Once that data is accepted, we then
- 11 translate all those fields to standard values. So
- 12 at the end of the day, when John and his team are
- 13 reviewing the data, they see one representation
- for that transaction for all reporting parties. I
- 15 think it's a very important to note because we've
- 16 chosen up front to do the hard work, which is
- 17 validate the data and publish standards that over
- 18 the past nine months, all of our customers have
- 19 reported to.
- It's been difficult at times, but we've
- 21 found that there are ways to help facilitate that.
- 22 For example, we work closely with the major trade

- 1 capture vendors in the commodities space. We work
- with them to build an out of the box SDR module
- 3 that could be sold to end users that would connect
- 4 to their systems that would help bridge the gap
- 5 between what's required of Part 43 and 45, and the
- 6 46 historical reporting, which has been
- 7 challenging, and then be able to make this level
- 8 of validation.
- 9 With regards to -- let me just catch up.
- 10 With regards to supporting staff, we built a very
- 11 robust regulator component to our system. We felt
- 12 that it was important in order to support the
- 13 Commission to build a separate component that
- 14 could be developed independent of the -- of all
- 15 the parts of the application.
- So that component is comprised of kind
- 17 of two main sections. One is more of a
- 18 transactional view of the market, which allows the
- 19 staff to pull down trade by trade the transactions
- as we receive them, so it's real time. And ten
- 21 another component -- section to that component,
- 22 which is more of a position driven report. We

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1 moved a number of our developers from our
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- 2 clearinghouse to work with us so that we could
- 3 generate a position.
- 4 So when you look at our system or the
- 5 functionality, it looks a lot like our clearing
- 6 infrastructure, but without the banking. So when
- 7 we reviewed early on about a year the rules, we
- 8 really reviewed and determined that an SDR really
- 9 -- when you look at it from a system perspective,
- 10 it really is much like a clearinghouse, but
- obviously no movement of funds. Taking in
- 12 transactions, compression, netting, calculation,
- position. And that's what our SDR does.
- 14 Finally, I would like to just make one
- 15 note to the Commission and this is more of a maybe
- 16 a note or a plea. Provisional registration. As I
- said, we've been under the provisional
- 18 registration. It'll be about a year in June. We
- 19 really hope that final requirements can be
- 20 published in regards to have full registration.
- 21 From our perspective, we view the
- implementation -- we're in the implementation

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1 phase now, so we're working very closely with
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- 2 John's group and other departments at the
- 3 Commission to support them in using the system.
- 4 We're hopeful that we can receive final guidance
- 5 in regards to the registration requirements and
- 6 those will be issued so we can move out of the
- 7 provisional registration.
- I appreciate the Commission's time and
- 9 look forward to any questions.
- 10 CHAIRMAN O'MALIA: Jonathan?
- 11 MR. THURSBY:: Hello, and thank you to
- the Commission for having me join today's SDR
- panel. My name is Jonathan Thursby, and I serve
- as the Chief Operating Officer of CME's Global
- Repository Service, so we're in the U.S. CME
- operates registered -- CFTC registered swap dealer
- 17 repository for the rates, credit, FX, and other
- 18 commodities assets classes. We are operational
- 19 and accepting SDR reports in all four of our asset
- 20 classes. CME's SDR is designed to provide our
- 21 customers with the most efficient option of
- 22 reporting, particularly for trades cleared at CME,

- 1 straight through processing. CME offers our
- 2 customers the lowest operational and lowest
- 3 burdens for complying with their regulatory
- 4 reporting.
- 5 In leveraging our long tradition of
- 6 regulatory reporting systems and widely-installed
- 7 infrastructure with our customers and third party
- 8 vendors, CME is able to be a low cost provider and
- 9 simplifier of SDR services. CME is further in the
- 10 process of registering trade repositories globally
- 11 to assist our customers and the market with multi-
- 12 jurisdictional reporting obligations.
- Today we gather after an intense period
- of drafting, finalizing, and implementing rules,
- and we're just a handful of months into reporting,
- 16 as Chris commented on. And it's appropriate that
- 17 we do, in fact, take stock of where we're at and
- work to levels and expectations. As with any
- 19 entirely new ecosystem comprised of software, and
- 20 networking, and intricate processes, it should be
- 21 expected that we go through a period of tuning and
- 22 dialing in. And really after we experience what

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1 all our hard work is doing, put into a real world
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- 2 setting.
- 3 This reporting ecosystem is exceedingly
- 4 complex and comprehensive, and we should be
- 5 careful to keep sight of the primary purpose of
- 6 mandatory swap dealer priority. It should result
- 7 in the collection of useful regulatory data that
- 8 provides access to swap positions for the purpose
- 9 of assessing systemic risk.
- 10 Implementation of such a large
- 11 technology project should proceed deliberately.
- 12 Market participants need to have clarity on
- 13 requirements and sufficient lead times. They've
- been working very hard to understand our
- obligations and meet them, and clients look to
- 16 CME, and I'm sure the other SDRs as well, looking
- for answers, but unfortunately many times we just
- 18 don't have them. And given that, we need to pass
- 19 through the threshold of having all of the
- 20 foundational reporting mechanisms in place prior
- 21 to going on a path of deep scrutiny on measuring
- 22 against the end goal that we're all working

- 1 towards.
- 2 For example, if there are not widely
- 3 accepted standard, product code, IDs, the ability
- 4 of regulators to aggregate will be compromised.
- 5 UPI is a long-term project, and I would urge
- 6 against attempts to harmonize product in advance
- of a UPI system, effectively doubling the work.
- 8 And there's other instances where that would be
- 9 true as well.
- 10 At the same time, there are clearly
- 11 challenges working to aggregate product where
- 12 product descriptions can vary greatly for the same
- instrument. And I think this is an area where we
- can look at markets, such as credit, where some
- 15 standardization already substantially exists, and
- 16 the lift would not be too great to assemble a
- 17 cohesive pitcher. For this and other prioritized
- areas of focus, we'd be best served as an SDR
- 19 working group coming together at the direction of
- 20 the Commission to identify the greatest needs and
- 21 solve for them collectively.
- I was pleased to see last week's draft

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of the key reporting fields, and we, too, have
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- 2 taken those under advisement and are looking to
- 3 see where we can work to try to accommodate those
- 4 fields. And I think the fact that they've been
- 5 identified as critical to the work that we're all
- 6 doing. It's this type of focus and prioritization
- 7 that I think will serve us well in the goal of
- 8 monitoring systemic risk.
- 9 And it's understandable to have the
- 10 desire for good analysis quickly following the
- implementation. And CME, and I'm sure the other
- 12 SDR operators, are fully committed to doing
- everything reasonably possible to aid in all
- 14 aspects of reporting and delivering good
- 15 monitoring. Given the expansiveness, however, I,
- again, urge prioritization, along with identifying
- more controlled aspects as critical to our
- 18 success.
- One important area that has more control
- is the interface between the SDRs and the CFTC.
- 21 Purely on numbers, it's a far easier effort
- 22 initially to work on our few entities than the

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1 entirety of the marketplace to solve for how data
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- is exchanged. And it's also worth remembering
- 3 that in major events on the near horizon, that
- 4 would change the landscape of reporting in a
- 5 major. With the onset of SEFs, we'll see a
- 6 significant consolidation of reporting entities
- 7 for the vast majority of the swaps market. And
- given the projections of approximately 20 SEFs,
- 9 the outlook should be promising that SDRs can work
- 10 closely with this smaller audience to fully and
- 11 more accurately represent the data. And working
- in this far more manageable context, I think we'll
- 13 build benefits sooner.
- 14 And as a side note, I would urge that as
- many of the end user reporting obligations that
- still remain to be linked with SEF rules timing.
- 17 I think doing so would bring a clear transition to
- 18 the market and prevent building solutions for
- 19 short-term gap periods.
- In addition to harmonizing data into
- 21 SDRs and then SDRs into CFTC, it will be important
- 22 to achieve a level of harmonization across

- 1 jurisdictions to ensure data collected is usable
- 2 for regulatory purposes. As the purpose of
- 3 mandatory regimes is to monitor systemic risk, it
- 4 will be necessary to review positions on market
- 5 participants who engage in trading across
- 6 jurisdictional lines. And establishing global
- 7 best practices on representing data is essential
- 8 to having readily available and meaningful data
- 9 feed for a cross the board review.
- In addition, there are potential
- 11 challenges around duplicate reporting. For
- 12 example, as currently contemplated in the MIR and
- 13 the Dodd-Frank cleared swaps would be both
- 14 reportable to a U.S. SDR as well as an European
- 15 TR. It will be burdensome to market participants
- and the service providers to have to make multiple
- 17 reports on the same data under different
- 18 representations and key rules. It's better to
- 19 waive reporting where a substantially similar
- 20 regime exists, and CME supports a collaborative
- 21 regulator sharing model.
- 22 The regional trace repositories could

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1 serve as intermediate and aggregation points to
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- 2 the local regulator who is in the best position to
- 3 coordinate with their global peers on data
- 4 sharing. And to ease that effort, work should
- 5 start first with end of day data. We obviously
- 6 have much to do and much has been accomplished
- 7 already. We look forward to the open discussion
- 8 that will start today on how we collectively solve
- 9 for our outstanding issues.
- 10 CHAIRMAN O'MALIA: Well, I'm not going
- 11 to -- this is where you all have to go to work
- now, figure out whether -- what John's request is,
- and these guys are going to deliver, and how you
- all fit into this. So don't hesitate to jump in.
- 15 But let me -- John's slide is still up
- there, so what I'm a little confused about is the
- 17 process you have all talked about, establishing a
- 18 process, tracking data quality issues, provide
- 19 information. ISDA mentioned it, FIA mentioned,
- 20 but I don't see the process by which all of this
- 21 gets done. Is it -- do you wait for John to
- 22 dictate what he thinks is right? What's the best

- 1 to get everybody on board and solve this as
- 2 quickly as possible? I'm confused as to what the
- 3 process is, so maybe -- how are we going to get
- 4 there? I'm open to ideas.
- 5 MR. ROGERS: Because, I mean, certainly
- 6 we will dictate the process. I mean, I think that
- 7 ultimately it would be outstanding if, you know,
- from an industry group perspective, people were,
- 9 you know, coming at us with solutions to solve the
- 10 problem. But certainly we will be working with
- 11 each SDR separately and together to continually
- improve the data quality, you know, issues and to
- 13 continue to make use of the portals, including
- 14 adding functionality to it. Each SDR has a portal
- 15 that's up and running.
- 16 Each one has particular things we would
- 17 like to see in it. We will be in on an ongoing
- 18 basis working towards improving that. So I think
- 19 we have to step back and go back through each of
- 20 the different themes.
- I think from a harmonization
- 22 perspective, there needs to be collective dialogue

- with us and with the SDRs on what we can
- 2 harmonize.
- 3 CHAIRMAN O'MALIA: I like the collective
- 4 dialogue, but when and where does that happen?
- 5 MR. ROGERS: It's been happening. It's
- 6 actually happening, in some cases just begun, but
- 7 in other cases been going on for a little bit
- 8 longer. But it's been going on probably for the
- 9 last month or two.
- 10 CHAIRMAN O'MALIA: Is that a bilateral
- 11 dialogue with each of the SEFs?
- MR. ROGERS: So far --
- 13 CHAIRMAN O'MALIA: I'm sorry, with the
- 14 SDRs.
- 15 MR. ROGERS: -- it's with the SDRs. So
- 16 far it's been a bilateral dialogue. I think that
- we need to do is add to that a dialogue that
- occurs with each of the SDRs. But that's only one
- 19 facet of the challenge. I think that in terms of
- 20 something like a UPI, it transcends. A
- 21 conversation that we have with an SDR involves a
- 22 broader community, and certainly this group has

- 1 talked about UPI and where it fits.
- 2 There have been -- there's been global
- 3 outreach in that regard. So I think it depends
- 4 upon which category of data you're talking about.
- 5 CHAIRMAN O'MALIA: All right. You've
- 6 heard -- sorry, Chris.
- 7 MR. CHILDS: Yeah. Could I just make a
- 8 point on that?
- 9 CHAIRMAN O'MALIA: Well then, we're
- 10 going to go Steve, Pierre, and then the Chairman
- 11 apparently wants to talk.
- MR. CHILDS: One of the things that
- we've noticed, and, again, the focus for us is, to
- 14 start off with as being on credit rates, is there
- is actually a lot of standards already in there
- 16 where trades are coming through. DS Match, for
- 17 example, as a confirm platform standard exist. So
- 18 I think what's not clear to me, however, is where
- other SDRs in the same space are collecting the
- 20 same standards. And I think that that's something
- 21 that we need to work on.
- 22 But one of the things that will come out

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of the analysis that each of the SDRs is working
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- 2 on at the moment is how bad is bad. And I think
- 3 that what we're going to find is there's a quiet,
- 4 broad population actually in those two asset
- 5 classes that we can standardize. We can put it to
- 6 bed. We can actually increase our validation on
- 7 those trades almost immediately so that we
- 8 actually reject anything within those -- coming
- 9 through those channels that don't meet those
- 10 standards. And then that will leave the rest.
- And then we need to have a look at the
- 12 rest and we need to see whether or not standards
- 13 can be applied. You know, in some instances on
- 14 the very, very bespoke trades, and I'm sure Pierre
- will have a view on this, that's going to be
- 16 harder.
- 17 But we can start working on that
- 18 population, which is not as big as people may
- 19 think in rates and credit at this moment in time
- 20 where standards don't exist. And we can make sure
- 21 that those standards are then shared with -- put
- 22 together in conjunction with the industry,

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1 increase our monitoring and validation against
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- those, and then hopefully apply to all SDRs. So I
- 3 think a GAP analysis and a relatively quick gap
- 4 analysis is where we should be starting across
- 5 those asset classes.
- 6 MR. JOACHIM: Sure, thank you. At
- 7 FINRA, we've had 11 years' experience operating in
- 8 the over the counter market with trace, and a
- 9 couple of principles I think that we've dealt with
- 10 and we've listened to a lot of the issues that
- 11 have been here. And we've actually been working
- from the simple side from the more complex world.
- 13 And what we call "complex" is not nearly as
- 14 complex as what you're dealing with here, so I'll
- make that statement first.
- And we've been both in the exchange
- 17 world and in the over the counter world, and there
- 18 are very big differences between with exchange
- data where you can control and tightly define
- definitions and ensure consistency very easily.
- 21 The over the counter marketplace is far more
- 22 complex and difficult because every counterparty

- 1 becomes a decision point when they're completing
- 2 their information that gets submitted to
- 3 intermediaries who ultimately will pass on that
- 4 information to the Commission.
- 5 I'm going to echo some of the things at
- 6 least from the lessons we've learned that are very
- 7 important I think that have been said today, and
- 8 some things maybe I'll say a little differently
- 9 that may be a little heretical for some of the
- 10 group here.
- 11 And first is that -- I'm going to
- 12 reiterate that I think that it's critical that the
- 13 Commission start with a good idea, a very good
- idea of what they're going to do with the data.
- 15 The temptation is to try to boil the ocean and say
- 16 I'm going to collect this data for any way
- 17 possible. The problem is when you do that, when
- 18 you really get down to needing the data, you won't
- 19 be able to use it the way you think because it'll
- 20 be -- different questions have different answers.
- 21 When you ask a question a different way, you'll
- define fields differently.

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                 So I think some of the things you'll
 2
       find out is when clearing -- and, you know, Chris
 3
       just talked about clearing businesses, the
       definitions you might use for clearing might be
 5
       very different than what you use for regulatory
       purposes. And you may want to define fields
 7
       differently when you think about how you might use
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       that data. It doesn't mean for clearing purposes
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       the standard is not good. It's just that it's
10
       good for clearing purposes. It may not be good
11
       for regulatory purposes. And you have to resolve
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       those key definitional issues as early as
13
       possible.
                 I would say that in the more complex
14
       worlds, the one thing we discovered very early on
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16
       in the process has been critical that we act
17
       together with the industry, that we listen
       carefully, but ultimately the regulator has to be
18
       the arbiter of what the ultimate call is as to
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       what the definition is, that we can't just allow
       the consensus to define that because the consensus
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       will come out with something that may not be the
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1 right answer for regulatory purposes, and
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- 2 ultimately the regulator needs to make the hard
- 3 call as to how things have to be defined.
- 4 I think they have to do that with
- 5 sensitivity to the issues with doing things and
- 6 whether they're doable or not, but need to be very
- 7 close to that decision process, intimately
- 8 involved, and I don't mean with intermediaries. I
- 9 mean with the counterparties who are going to have
- 10 to complete this information who will start the
- 11 process, because you need to understand the
- 12 complexity that they're dealing with to make it
- work right.
- 14 I'm going to try not to filibuster
- 15 today. I have a couple of things because as
- people talked, it brings up a lot of the history
- 17 that we've been through over the last 11 years. I
- think the one thing I listened to here is I don't
- 19 know who is accountable for the integrity of the
- 20 data. The integrity of the data is the most
- 21 important thing you're going to have when you're a
- 22 regulatory -- regulator. You need to know who to

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1 hold accountable when you get the inevitable
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- 2 information that isn't accurate. And it's not
- 3 clear to me who you define as the accountable
- 4 party.
- 5 At FINRA, we've always defined the
- 6 accountable party as the counterparties. They
- 7 were responsible for getting us the most accurate
- 8 data. If the data is not accurate, they're
- 9 accountable for it. There may be intermediaries
- 10 that handle that data in between, but it clearly
- 11 has to be in the hands of the counterparty. That
- may not be the right answer here, but that's been
- 13 the right answer for us, and it's worked for us on
- a repeated basis when we found people who didn't
- report the data, or didn't report it accurately,
- even when they thought they reported accurately,
- sometimes they didn't or interpreted it
- 18 differently. Very important for us to define that
- 19 accountability structure so we can have that.
- In addition, as every party that touched
- 21 that transaction from the time it's created to the
- time it's used by you, you need an audit trail.

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1 Every change, every modification, every process
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- 2 needs to be recorded so that -- you know, and
- 3 who's touched that so you know who to hold
- 4 accountable for it during that process to ensure
- 5 you have that integrity. When you use it, it's
- 6 got to be done. It's got to be clean, and it's
- 7 got to be in a way that you can make good
- 8 decisions.
- 9 The more macro the questions are you ask
- 10 yourself, the less concerned you've got for
- 11 precision in the data. So when you're asking for
- 12 volumes and other kinds of things like that, you
- 13 know, close is good enough. One percent, two
- 14 percent off, you don't worry about that. But if
- you're looking at surveillance issues and you're
- down to the individual transactions, you need to
- 17 have precision in all of that information, or it
- 18 really is garbage in and garbage out. And you're
- 19 going to find that when you need it the most, that
- 20 that integrity will be elusive for you. And that
- 21 goes right down to the customer set.
- 22 So just some of the thoughts that I've

- 1 got. I've probably gone for another half hour,
- but I'll stop here.
- 3 CHAIRMAN O'MALIA: Pierre?
- 4 MR. LAMY: Yeah, I agree with what Steve
- 5 said. What I would like to add is I think that
- 6 the expression that we have today is you have,
- 7 especially for the population of bilateral trends,
- 8 is you have different reporting counterparties
- 9 have been reporting the data without necessarily
- 10 always a good understanding of the way they should
- 11 report the data. And it's as to why we end up in
- that situation so we could debate for a long time,
- 13 but definitely that is the situation.
- And I think on the other side, to some
- extent, probably there was a desire to get the
- data here, to make sure that people were able to
- 17 comply with the reporting obligation.
- I think what we need to do now is to
- 19 (inaudible) themselves into letting the
- 20 counterparty reporting party know when they do not
- 21 abide to the standard because each of the
- 22 respective SDRs have defined their own grammar in

- 1 which they want to see the data. So the grammar
- 2 exists, the protocol exists, the standard exists
- 3 for each of those SDRs.
- 4 What I would suggest in the initial
- 5 stage is they let each and every participant know
- 6 when each and every thread do not abide do not
- 7 abide to the standard is not compliant with the
- 8 protocol and then for a period of time of X number
- 9 of months. After that period of time, then the
- 10 thread will be rejected.
- 11 But I think the discussion that we have
- 12 today is -- and we heard that in some of the
- 13 testimony before, is some of the SDRs may not
- 14 necessarily know when they do not comply with the
- 15 requirement that is being requested. So that
- definitely is the other side, is just letting the
- party know when they do not respect the protocol.
- 18 On the CFTC side, it has been said quite
- 19 a few times, is just to define the way you want to
- see the data and what do you want to use that data
- 21 as a ball and thread, because definitely you will
- 22 end up with data that will be specific to issues

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1 here that may not have the same way to express
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- 2 itself, so you will have to define the common
- denominator in which you want to express the data.
- In that respect, what I would suggest is
- 5 don't develop a CFTC specific way to express the
- data, but think about global correction down the
- 7 road, and you want probably to leverage what
- 8 exists at the industry level what exists among the
- 9 SDRs. And you say the highest common denominator
- 10 is the potential (inaudible). But leverage what
- 11 exists already and do not engage yourself in
- developing your own guidebook because that would
- 13 be a very long effort, and could position you in a
- 14 CFTC specific solution that would not be scalable.
- 15 MR. JENNER: Commissioner, may I make a
- point just in response to some of those?
- 17 So I think just to echo what Steven and
- 18 Pierre were saying about the Commission defining
- 19 the data that's needed. I think another reason
- 20 why that's important is perhaps something that we
- 21 haven't considered yet so far in this discussion,
- and that is that with multiple SDRs, you are very

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1 likely to get to a situation where not only is
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- 2 some of the market fragmented so you have a
- 3 quarter of the rate to market in SDR one, another
- 4 half in SDR two, and so on. But even beyond that,
- 5 you'll have another layer of fragmentation, and it
- is very likely that PET data, real time data, will
- 7 go one to SDR, and very possible, in fact, likely
- 8 the continuation data will go to a different SDR.
- 9 So, you know, in a punitive example, you
- 10 could trade on a SEF that would report to perhaps
- 11 the DTCC, SDR, and then you could clear that at
- 12 CME whereby the continuation data would end up the
- 13 CME SDR. And if you haven't defined the framework
- of data that you expect, you know, you're going to
- be lost in a sea of information where it's tough
- 16 to even trace one trade through a life cycle.
- 17 CHAIRMAN GENSLER: In listening to the
- last conversation, I find it interesting because
- 19 normally we're led to believe that it would be
- 20 better if some of our rules were less
- 21 prescriptive, less detailed, and leave more to the
- 22 markets, and here we're kind of getting some of

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1 the reverse. We were fairly detailed in the rules
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- for data reporting, rules in Part 45 and rules in
- 3 Part 43, but we left some flexibility to the
- 4 markets. And I think -- am I right? We're
- 5 hearing -- well, you might want a little bit more,
- 6 and then I have something further. But is that
- 7 what I'm hearing, at least from some of you?
- 8 MR. JOACHIM: Yeah, from me are. I
- 9 mean, I think from a data perspective, when you
- 10 use data, it has to be consistent, and, therefore,
- 11 you have to be prescriptive to make sure it's
- 12 accurate and consistent. And I also say that
- 13 because you have all these counterparties making
- decisions, they're all investing in their
- environments today to get you their precise
- 16 information you want, so they need to know the
- first time they do it or as close to the first
- 18 time they do it, it's the right way.
- 19 CHAIRMAN GENSLER: Right. Even though,
- I mean, we did have -- I can't remember -- these
- 21 are the 120 fields, and it has to have legal
- 22 identifier, and it has to have a unique swap

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1 identifier. I mean, we're not without detail, but
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- 2 you're saying, at least for you, it would be
- 3 further.
- 4 MR. CHILDS: I guess the question is,
- 5 you know, and I think John is coming to this now,
- 6 that there are probably key fields that you need
- 7 to be able to amalgamate across all SDRs and all
- 8 reporting. And so, thereby -- and, therefore,
- 9 they need standards. So the question is, do you
- go to that point, and you say we need standards
- 11 here, and then let the industry work on what
- 12 standards to apply, or do you actually define the
- 13 standard, which would arguably reinvent something
- that's already in place?
- 15 CHAIRMAN GENSLER: Can I just add one
- thing before -- Scott's earlier question and so
- forth in timing. I look at this in several areas.
- One is what you all are talking about
- 19 standardization, or maybe I would just say
- 20 reconciling data, or in a lay term, cleaning up
- 21 the data. We have 75 swap dealers that are
- 22 reporting data to three registered data

- 1 repositories. We may soon have a fourth or fifth
- 2 data repository.
- 3 So there's some uniformity, but it's not
- 4 always uniform, and that's this discussion of
- 5 standardization. We even have some dealers that
- 6 might inadvertently be reporting the same trade
- 7 twice or three times. I mean, we're still in a
- 8 growing area here. I don't know that I personally
- 9 have much to contribute there other than I know we
- 10 need to clean up the data and make it usable and
- 11 reconciled.
- But there's a second area is access to
- the data, which John laid out on his page 8. And
- I think he did it very well, so that's why I'm
- 15 turning back. When he says the portal allows for
- data filtering, searching, sorting, and
- aggregation, those are the types of things that
- 18 whether it's this regulatory body, or the bank
- 19 regulators, or international regulators, when I'm
- in meeting with regulators or when we're just in
- 21 our Friday surveillance meetings -- this
- 22 Commission has had Friday surveillance meetings

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for 30 plus years, and really talented staff come

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       in and talk about -- they talk about something
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       that they've in the futures market play sorted by
       this party or counterparty is doing this by this
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       product on this day. These things that John
      picked here are very much in the bloodstream of
       regulators to be able to sort, filter transaction
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       data by these types of things. That's what we
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       anticipate and hope for, but also, I think, our
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       rules require, rather than a stale portal or just
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       a report, that our chief economist or our
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       surveillance people can go swim in the data and
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aggregate and filter by these fields. So I

wouldn't want to lose that. That's a really

important one.

And then lastly on aggregation, just

because I've been in enough of these international

meetings, there is a very real desire on the part

of the international regulatory community to see

some way to aggregate across data repositories,

not just that in the U.S. we have three and may

have four or five, but also that there may be data

- 1 repositories in certain countries. Maybe certain
- 2 countries will dictate that they need them in that
- 3 country.
- 4 And so I think should anticipate that
- 5 the international community will be keenly looking
- 6 and studying about how to aggregate across data
- 7 repositories and whether there needs to be a data
- 8 -- an aggregation of all data repositories. And
- 9 that might be more out of the Financial Stability
- 10 Board and other organizations, and we might
- 11 participate in those studies. But I think that
- that's a reality that the international community
- is looking at, how to aggregate across data
- 14 repositories, either within jurisdictions or
- 15 across jurisdictions.
- 16 CHAIRMAN O'MALIA: Supurna?
- MS. VEDBRAT: I just wanted to add a
- 18 little bit to the conversation that took place
- 19 regarding the continuation data and the real time
- 20 data, because one concern is, you know, like it
- 21 was mentioned, we can -- you know, you can do to a
- 22 block trade and its reported to the SEF SDR, and

- 1 then the end of day clearing takes place, you
- 2 know, either at CME, ICE, or LCH. And then your
- 3 end of day reporting goes to another SDR. So you
- 4 have, you know, right there a fragmentation of the
- 5 same trade flow.
- 6 So, you know, if the market participants
- 7 have the optionality that they could tell the SDR
- 8 report my data to this other SDR, we would be able
- 9 to help to keep at least the information of the
- 10 same trade intact.
- 11 And then, you know, the other piece of
- it is, you know, I would encourage, you know, the
- 13 CFTC or the Commission to use the market to also
- 14 help with, you know, some of the cleansing of the
- data because if the data is allowed to flow back
- or is accessible, you know, to the end users, you
- know, we will be doing our own reconciliation.
- 18 And through that process, a lot of, at least, you
- 19 know, the high level issues, you know, will get
- 20 results, you know.
- 21 So if, you know, John, the 22 fields
- 22 that you mentioned, making that available to the

market, you know, may help to make sure that the

interpretation as it flows through, you know, for

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       SDRs in the U.S., it's consistently interpreted.
                 CHAIRMAN O'MALIA: Can we focus on that
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       issue for a second? And what is the right level
       of coordination among John telling the SDR what he
       wants, the SDR working with end users to
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 8
       contribute because there's kind of this feedback
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       loop between the CFTC and the SDR in this, talking
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       about taxonomy and all of the different potential
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      ways to report it. But at the same time, we've
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      heard from the end users, many of which do not
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      have a dealer currently doing the reporting for
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       them. So they're struggling a little bit to
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rules actually are to a whole area of end users

that are currently uncomfortable with what's going

on, haven't been following it very closely, and

understand what it is the rules are. That goes to

information source in terms of explaining what the

Bruce's point about, you know, serving as their

21 don't have a dealer to report in their trade.

So we've heard it mentioned here, both

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1 -- Pierre mentioned it, industry leverage and
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- 2 prioritization, and Steven mentioned it in
- 3 coordination among the entities. So what is the
- 4 right relationship?
- 5 And we've already established the SDRs
- 6 -- we're doing this on a bilateral, so
- 7 coordination among the SDRs is kind of first order
- 8 critical, and then what is the role for industry
- 9 participating in that relationship? Can we just
- 10 focus on that? Cliff, you had your card up, and
- then we'll go to Marshall.
- MR. LEWIS: Just an extension of this
- 13 plan. I think it's particularly apt given recent
- 14 events with the quality of commonly used pricing
- 15 standards and indexes and benchmarks. And the
- analogy to the FINRA experience with trace I think
- is very apt. That really was a -- pardon me if
- 18 I'm simplifying this too much -- really was the
- 19 equivalent of the equity ticker. The idea was in
- 20 a market that had no transparency whatsoever, buy
- 21 sides fundamentally were really at the mercy of
- 22 the sell side as to whether they were getting a

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decent fill. And there was no way to do
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- 2 transaction cost analysis or any kind of best
- 3 execution analysis. You know, some cynics would
- 4 argue that was the reason CDS was invented indeed
- 5 because of trace, but I wouldn't be that cynical.
- 6 The reality is, however, I think the
- 7 Commission should be thinking more broadly than
- 8 just what is good for the Commission's purposes as
- 9 a regulator, and basically view this as an
- 10 integral part of the, if you will, the
- 11 transformation of the market by introducing
- transparency, you know, a very fundamental
- principle. So you going to permit buy sides and
- 14 new market participants on the market making side
- 15 to operate differently.
- 16 Getting them involved, I think, arguably
- is a much better force multiplier for you, the
- 18 Commission, to figure out what's really important
- 19 because what you've created is a hugely valuable
- 20 data source, and it's the people that are going to
- 21 be consuming the data, I suspect, even more so
- than your own internal statisticians that'll

- decide how to make this really useful.
- 2 There's no shortage of data or analytics
- 3 companies, and those guys are going to be viewing
- 4 this as a commercial opportunity. Obviously
- 5 you're not going to give counterparty information
- 6 out. But the reality is you should be thinking, I
- 7 think, very much in terms of this being the
- 8 equivalent of what trace did to fixed income, to
- 9 the credit space, in basically providing a
- 10 non-manipulatable benchmark that people can
- 11 measure their transaction activities against. And
- that's a pretty fundamental part of the overall
- 13 reform agenda that you guys are leading the charge
- 14 on.
- 15 I think more emphasis on the way people
- use this for transparency purposes, I think that's
- a hell of a lot more important than some of the
- 18 more, you know, nitty gritty points. And I think
- 19 you can get a lot of help on that, too, because
- there are going to be a lot of people that are
- 21 going to be thinking they can make money out of
- 22 using this kind of data. So I think you guys

- 1 basically can enlist the help of a lot of people.
- 2 It's pretty clear that our friends at Bloomberg
- 3 see this as a major value add for their commercial
- 4 product. They're not doing it because they want
- 5 to help the CFTC, I suspect. They're doing it
- 6 because they, believe it or not, want to help
- 7 Bloomberg, and that's a pretty good motive to
- 8 have.
- 9 And, as I say, the trace experience is
- 10 really an interesting one, which I think you guys
- should get your head around fundamentally that
- this is about pricing transparency in a market
- 13 that's today very opaque. And I think you should
- 14 get your head around how you're going to help --
- 15 how this is going to help solve some of the other
- problems, page 19-901, stuff that you're up to
- 17 your, you know, your eyeballs on.
- 18 CHAIRMAN GENSLER: I think it's a major
- 19 part of what Congress and the President came to do
- 20 in Dodd-Frank is to bring public market
- 21 transparency after the trade, and that real time
- 22 reporting was very much, when Secretary Geithner

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1 put it in a letter to Congress in May of 2009, was
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- very much focused on that similar, not identical,
- 3 to a trace. And I think this is what we'd now
- 4 call Part 43. So I agree with you there.
- 5 And that the problems with benchmarks,
- 6 like LIBOR and your EURIBOR, are now well known,
- 7 that the challenge is there that there may not be.
- 8 In fact, it looks like there isn't an underlying
- 9 market underlying those critical indexes makes
- 10 them susceptible to misconduct, that people can do
- 11 a lot of mischief when it's not tied an anchored
- 12 to real transactions, whereas putting this
- information out there on interest rates, and
- 14 credit swaps, and energy swaps on a real time
- 15 basis helps end users -- tremendous help to end
- users, but also it anchors stuff in reality. So I
- 17 agree.
- 18 MR. TERRY: So I just wanted to just to
- 19 add, again, anecdotally, I mean, this is an issue
- 20 I thought that in a large part -- Chris, you had
- 21 mentioned it -- had been solved to some degree
- 22 maybe two or three years ago when this issue was

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finally picked up by the New York fed. Prior to
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- 2 that, there was a bunch of buy side folks, myself
- 3 being one of them, who were driving the standards
- 4 initiative for purposes of -- for various
- 5 purposes. And only after the fed came in was
- 6 worried about the exposure to derivatives when
- 7 they forced buy side, sell side, and I think it is
- 8 to play the key role in this. And they hired an
- 9 outside consultant to help avoid the monkey
- 10 chasing its tail scenario where everybody was
- 11 trying to build something and they didn't really
- 12 know what it was until they took a deep breath and
- 13 those folks came into a room and put a road map
- 14 together, an outline, and really started to figure
- 15 out what it was they were trying to build towards
- so they can get to an end result.
- 17 But it's surprising because a lot of
- 18 these issues I thought would've been resolved, you
- 19 know, when we did the data standards that came out
- in the fed -- you know, the New York fed when they
- 21 were looking at this issue trying to reconcile and
- 22 what have you. There's teams out there, like Try

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1 Resolve, that have certainly benchmarked the 10 to
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- 2 15 trade attributes who need to figure out whether
- 3 you have the trade, the market to market, so on
- 4 and so forth. And a small shop like myself, I
- 5 look at that report every day. I can scan it very
- 6 quickly and kind of figure out where my exposures
- 7 are, where are the outliers. So it sounds like
- 8 we're reinventing the wheel here quite a bit.
- 9 So, I mean, to your point, Scott,
- 10 specifically, like, where do you look to, I would
- look to perhaps Karel from ISDA or whoever,
- because they have solved this problem to a great
- deal, and there's a road map that I think,
- 14 although maybe not 100 percent in line with what
- you're trying to accomplish, is probably 80
- 16 percent. Just from past experience.
- MR. ROGERS: I think that you're right
- 18 to some extent in the sense that, I mean, I don't
- 19 think that -- I don't want to convey that we're
- 20 starting from zero. I think, you know, to
- 21 Pierre's point, there are a lot of things that are
- 22 already in existence that can continue to be

- 1 leveraged. And to several people's point, part of
- 2 what the challenge is how do we want to make use
- 3 of the data, because when you take something that
- 4 is already standardized, you bump against -- you
- 5 bump that against what your requirements are for
- 6 the use of the data.
- 7 MR. TERRY: Yeah, I totally get that
- 8 point, but it sounds like then it's for you as the
- 9 driver to tell the folks -- what I'm hearing over
- 10 her is we have the data, we can do that. But they
- don't seem to have the exact -- like, what's the
- output, the end product going to look like? I
- 13 know you're going to still try and do all these
- 14 things, but like --
- MR. ROGERS: Right. There's multiple
- 16 facets to it. The other part of that -- I think
- 17 you're right. As we evolve through this process,
- 18 there will be more and more detailed requirements
- 19 that people will be able to react to. I think
- that at the beginning, we're talking about being
- 21 able to aggregate on certain data, like laid out
- 22 in the slides. But I think those requirements

- will continue to evolve and become more specific
- 2 and more complex, and there will be different
- 3 asks.
- 4 The other side of this, though, is also
- 5 the -- just the implementation of it. You can
- 6 have a standard, but then if you have multiple
- 7 people implementing that standard, you can get
- 8 very different results across each one. So having
- 9 the standard in and of itself is insufficient.
- 10 It's the application of it. And then it's
- 11 understanding of the party that's utilizing that
- 12 particular implementation that raises
- 13 complexities. So it's a multi-faceted problem, as
- 14 I'm sure you understand.
- But I think the main point is, yes, we
- should leverage what exists and bump it up against
- 17 what the particular need is.
- 18 MR. TERRY: I totally get that, and this
- 19 will be my last comment. But then I guess I'm
- 20 really confused as to where is the issue if it's
- 21 not the standardization of the data. Is it
- 22 because these folks aren't getting enough

- directive to say, hey, this is what we're going to
- 2 do with the data? Like, I don't mean to be
- 3 political.
- 4 CHAIRMAN GENSLER: We probably, if I had
- 5 to guess, are more prescriptive and more detailed
- 6 than anything the New York fed did, right?
- 7 MR. TERRY: Probably.
- 8 CHAIRMAN GENSLER: And at the time we
- 9 did it, we were probably a little bit weary that
- 10 we were getting too prescriptive.
- I think what's happened is now it's a
- 12 year and a half since we finalized those reporting
- 13 rules, and people have gotten -- you know, they're
- 14 actually doing a good faith effort, 75 swap
- dealers are reporting, non-swap dealers are
- 16 reporting now as well. It's human nature. Some
- 17 are just reporting slightly different, and so then
- 18 it comes to the data repositories to make heads of
- 19 the tails of the slight differences.
- 20 And so what I'm hearing from at least a
- 21 number of people around the table is we need to
- 22 maybe with the market wade back into this and see

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1 where do we help standardize even more than we --
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- 2 So I suspect we probably are far more
- 3 detailed than where there New York fed once was,
- 4 but that's because the markets now have a legal
- 5 requirement, and that was a voluntary requirement.
- And we've moved four or five years on from it.
- John has identified 22 fields, which are
- 8 the first fields to work on. They're not the only
- 9 fields long term. And it's really trying to work
- 10 through. I wonder, John, to Supurna's question,
- 11 whether you can let others know what those 22
- 12 fields are. That's up to you and the SDRs, you
- 13 know, some way to let others know.
- MR. ROGERS: Yeah, I think that's
- something that we should actually take up and
- 16 figure out, I mean, because really what we're
- 17 striving for is to improve quality. So sharing --
- 18 the information we can share speaks to the
- 19 transparency initiative and helps us get there
- 20 faster. So I would agree with that.
- 21 MS. VEDBRAT: And I think you know then
- just also making it mandatory that SDRs are

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1 allowed the optionality of what -- where you want
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- 2 the data to be reported will help with the data
- 3 integrity. So just as an example, if we traded on
- 4 Bloomberg and they reported a real time trade, you
- 5 know, to their SDR, you know, but we said that
- 6 this is going to clear out CME, please report it
- 7 to the CME. SDR, you have your data contained.
- 8 There is data integrity over there. We're able to
- 9 validate that the whole trade flow, you know, is
- 10 either good or bad.
- 11 You know, that's just going to help your
- process when you're aggregating the information.
- Just that one forced linkage will force
- 14 standardization among all the SDRs because
- otherwise the market will not trade on those SEFs
- or participate with those SDRs if they can't cross
- 17 -- send the data.
- 18 CHAIRMAN O'MALIA: SDRs want to take
- 19 that?
- MR. THURSBY:: Yeah, I'll go ahead and
- 21 start. I think that with respect to what Supurna
- 22 was talking, many of you probably don't have the

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1 benefit to see this, but John and staff do and the
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- 2 portal that we provide, which we feel it's very
- 3 state of the art in the way that it operates. And
- 4 one of the nice features is the traceability to
- 5 see back in linkage between the initial SDR, the
- 6 original pre-cleared and then the post-cleared.
- 7 And so actually there's a full audit history and
- 8 linkage that's available. In fact, it's available
- 9 to Black Rock and whomever.
- 10 And I think the value in doing that is
- 11 that you do get that full traceability and audit
- 12 function. Perhaps maybe that's a function of, you
- 13 know, the organic nature of where we're going
- 14 where that type of view needs to ripple elsewhere
- 15 across, you know, other places where data is
- 16 housed. But it certainly is very possible to do
- 17 that. I think that brings back and ties back and
- 18 brings that consolidated view to that.
- 19 And I would also add, getting back to
- discussions of standards, you know, I think we
- 21 should be careful not to oversimplify and just
- 22 say, you know, standardization. John had kind of

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1 teased up our discussion talking about
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- 2 harmonization. And I think what we really could
- 3 benefit from is direction where the Commission has
- 4 seen the differences in what's being reported to
- 5 them. Everybody kind of worked in their own
- 6 little burrow and built out their solution.
- 7 Reporters did, SDRs did, and now we're seeing what
- 8 couldn't have really been fully contemplated,
- 9 which was the blending and merging of the data
- 10 back together again. And I think that's the daily
- 11 sessions we've been having ongoing, to start
- 12 saying, well, I'm seeing this over here, I'm
- seeing it from over here. And that's the
- 14 harmonization I think we're talking about, being
- able to put together what language is everybody
- 16 speaking and doing that.
- And in doing that process, we're
- learning about ourselves, and I'm sure the other
- 19 SDRs are as well. And then it ripples back. We
- 20 make changes, and those go on back down to our
- 21 standards that we have we're reporting in, our
- 22 client services team, with our customers. And

- 1 it's this very organic process, I believe, that
- 2 happens. And I just feel that we're at the very
- 3 early stages of it, and I know that we're working
- 4 on a day-by-day basis right now, but I believe
- 5 it'll resume. If we just continue and support
- 6 that process, I believe that's one that we'll get
- 7 good results out of.
- 8 MR. TUPPER: I'd just like to add on
- 9 Jonathan's point, I think as far as benefit, each
- of us as SDRs, the provision registered SDRs did
- 11 meet with John's team for day sessions to review
- 12 our portals, our standards.
- I think what his team is realizing is
- that each of us, we all collect data, but we do it
- in a different manner. And if I can make an
- analogy, the analogy I make is, you know,
- 17 validation to SDRs, like margins or a
- 18 clearinghouse, okay? So if we have very little
- validation and we'll just take anything in, which,
- you know, is happening in certain asset classes,
- 21 that at the end, the end result is it's very
- 22 difficult for John and his team to make sense of

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1 that data. So, yes, we filled in these boxes. We
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- 2 filled in these fields. But did we do it in a
- 3 high quality manner? Did we really validate that
- 4 those values that were submitted by that customer
- 5 are actual -- you know, they make sense for that
- 6 particular field?
- 7 So this whole level of what is
- 8 validation in the quality of data really is
- 9 different. You know, particularly even for us on
- 10 the CDS side, you know, if you can clear a trade,
- 11 then obviously it should be of high quality for an
- 12 SDR. It's been cleared. You know, and I made my
- point earlier when you're dealing with end users,
- 14 particularly in the commodity asset class -- the
- 15 reporting hierarchy works well in fixed income
- 16 markets. It does not in commodities. The largest
- 17 group of trading is amongst end users. So there's
- 18 a lot of challenges we're dealing with who should
- 19 be the reporting entity, what is the definition of
- 20 a swap particularly when you look at the trade
- 21 options. So there's a lot of confusion there.
- I think by and large, the common trade

- 1 types are fairly easy, and those trades are coming
- in. Now that we've -- we're close to getting live
- 3 and then were delayed, people have postponed
- 4 dealing with reporting the hard trade set.
- 5 CHAIRMAN O'MALIA: Greg, did you want to
- 6 make a comment?
- 7 MR. DUMARK: Yeah, two comments. Yeah,
- 8 two comments. One is I know the issue of
- 9 consolidation of the data post-novation, I think
- 10 Supurna may have said, which is the choice to send
- 11 a trade to the clearing house that is also
- 12 operating an SDR. And I can see some of the logic
- 13 behind that, but I also -- I think it belies some
- of the policy concerns and the Commissioner's
- directives on this point, which is that the SEF
- does have discretion to report to an SDR of
- 17 choice. But also I think the underlying concept
- is that you would have multiple SDRs out there
- 19 competing in this field, presumably to offer
- 20 premium services, and you wouldn't get into the
- 21 scenario of having things consolidated within a
- 22 limited number of entities. So that's first.

The second, I wanted to revisit

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       something Commissioner O'Malia started with
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       several minutes ago, which is as a SEF or, pardon
       me, as an SDR that's hopefully coming to market
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       soon, as I sit here from a practical standpoint,
       there are a lot of ways to get to the
 7
       standardization issue. But I would love to get
 8
       some coordination feedback from the Commission as
 9
       I go back and work with our chief technology
10
       officer to put together these fields as a very,
11
       very practical matter of wanting to get this
12
       right.
13
                 So I know in certain instances on your,
       I think it's Attachment A to the Part 43 with the
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       fields, there are some suggestions. So for date
15
       and time, I think it's the UTC standard that we
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17
       can take the lead on, and it's a well- recognized
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       standard, so we know how to do that. If there are
19
       other examples, which it sounds like we're
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       trending towards getting those examples or
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guidance to do that, we very much appreciate that.

In other words, I think we can dialogue. Again,

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1 we're not in the provisional status yet, but we
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- 2 hope to be there, but we can dialogue with our
- 3 fellow SDRs how to get there.
- 4 But I think having this triangulation
- 5 with the Commission is essential because, you
- 6 know, you can get astray here, and if there's --
- 7 you know, and I understand there's been some
- 8 bilateral ad hoc conversations. We're not yet an
- 9 SDR. But I think you lose something when you have
- 10 these conversations separately, individually, and
- 11 understanding it's working through the process.
- 12 But we need sort of this collective guidance or
- judgment and expectations from you as we,
- 14 particularly us, come to market with our SDR. And
- 15 I think having that sort of level of specificity
- is going to be critical for us.
- 17 CHAIRMAN O'MALIA: Okay. I asked John
- to pull up slide four again to go back to these
- 19 original questions. It says, "CFTC must set the
- 20 course of action for consistency in data." So let
- 21 me ask the SDRs, of the four of you, do you feel
- that you have a uniform process among yourselves

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1 consistent with the CFTC to establish a process
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- 2 with submitters to ensure the quality of data
- 3 flows in? Do you believe you have all the
- 4 direction you need on that?
- 5 MR. CHILDS: I can take that first if
- 6 you'd like. I think that the dialogue that we've
- 7 been having with the Commission over the last
- 8 couple of months has been very, very useful. You
- 9 know, we'd heard obviously comments around the
- 10 fact that the data cannot be used, and it's poor
- 11 quality data. So we really asked for some focus
- 12 and prioritization. The 22 fields are going to
- 13 help.
- I do think we need to do a gap analysis.
- I don't think we actually know how big or small
- the problem is at the moment, and I think it's
- important for each of the SDRs to actually do that
- 18 analysis, first of all. How much of the buy asset
- 19 class, how much of the data already has standards
- 20 that are being complied with, and then what's the
- 21 population that doesn't. For the population that
- doesn't, these standards exist already, in which

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1 case, we can start ratcheting up monitoring and
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- 2 working with the industry on the usage of that --
- 3 of those standards. Where they do not exist, we
- 4 need to then work with the industry on creating
- 5 those standards, and then going through the
- 6 monitoring and validation process.
- 7 So, you know, to answer your question, I
- 8 think we've got more guidance now. I think we
- 9 need more cooperation, not just bilaterally --
- 10 CHAIRMAN O'MALIA: Specifically with
- 11 who?
- MR. CHILDS: Sorry?
- 13 CHAIRMAN O'MALIA: Specifically with
- whom do you need this cooperation?
- MR. CHILDS: Amongst the SDRs. And I
- think to understand where I've got standards and
- whether or not everybody is using the same
- 18 standards would be extremely useful. That, by the
- 19 way, doesn't mean that we all have to. It just
- 20 means that if we've got different standards we
- 21 need to be able to map that.
- 22 So I think that, you know, the next

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1 stage on this, right, is to do some, you know,
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- 2 kind of deep -- the devil is always in the detail
- 3 on this stuff, so I think it's important that we
- 4 do some -- we take a step back and so some
- 5 analysis on the 22 fields and the level to which
- 6 standards already exist. And then address a
- 7 course of -- you know, or come up with a course of
- 8 action based on that analysis. And to be quite
- 9 honest, it shouldn't take us too long to do that
- in some of the asset classes.
- 11 CHAIRMAN O'MALIA: Can I ask the SDRs
- whether they agree with Chris' evaluation of
- 13 bubble number one up there? We'll get to the
- 14 other two next.
- 15 MR. JENNER: You know, I broadly agree.
- 16 So I think we have some level of guidance that
- 17 we're comfortable with in terms of collecting data
- 18 from reporting parties. I think where there may
- 19 be some guidance left to be given is once we have
- that data, I think we're comfortable collecting
- 21 that data, aside from some sort of exotic kind of
- swaps, which we'll just put aside for a second.

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1 So I think we're comfortable getting
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- 2 that data, but then once we have that data, how do
- 3 you want to see it, specifically the Commission.
- I think we're comfortable, you know, from an SDR
- 5 perspective making that data available to the
- 6 public, perhaps giving them tools to shop and
- 7 analyze that data.
- But, you know, I heard the first segment
- 9 of this discussion being the Commission quite
- 10 rightly figuring out how they should interact with
- an SDR, what kind of data they want, what kind of
- 12 questions they want answered. And that's where I
- feel at the moment you're doing the investigation
- as opposed to making the prescriptions. But I
- 15 think that's where there's probably some clarity
- 16 required.
- 17 CHAIRMAN O'MALIA: Jonathan, a comment
- 18 on it?
- 19 MR. THURSBY:: Yeah, a brief one. I
- 20 think that we've taken the approach over a recent
- 21 period thinking that the data we produce is of
- good quality and is appropriate. And I think it's

only when we get into a dialogue coming back from

people who have taken a real good look at the

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       data, who have a broader perspective are we now
       just learning that, in fact, there's things that
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       maybe we could do differently or just different
       orientations of looking at it. And that's the
       dialogue that John indicated has just started.
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 8
                 And I think it's still a fledgling
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       exercise. I think more needs to go into it. I do
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       think that a more formalized approach would help.
       Whether that's a combination of all SDRs getting
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12
       together under the guidance of the Commission on a
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Whether that's a combination of all SDRs getting together under the guidance of the Commission on a regular occurrence meeting, identifying key areas that we can all focus on. We've talked a lot already just about these 22 points, but I think there's more to it than people aren't appreciating that really what these points are aren't just get the day time stamp correct. They're really more at a higher level validation that we're talking about, and that doesn't just come because you have

a quick conversation. You're going to check

reference data sets. There's actual

- 1 appropriateness to determinations you're going to
- 2 make. And that only comes -- it's an organic
- 3 process. It has to happen.
- I think what's missing and what's not
- 5 clear to us yet is what cadence is that going to
- 6 take and who's participating in that, and what's
- 7 -- when does a final determination get made for
- 8 that that we've reached the end stop point, and
- 9 not that it's an ongoing discussion for each area,
- 10 that we come to final determinations, call it
- done, and then move on to others.
- 12 CHAIRMAN O'MALIA: All right. I think
- those are all great comments to solving number
- one, fledgling market, who makes the decision, who
- 15 else is going to be involved, do the gap analysis.
- 16 I think there -- maybe if Greg
- 17 representing FIA and Carl with ISDA thoughts about
- 18 what your respective organizations can do on this.
- 19 We'll come back to you in a minute, but give you
- 20 some thoughts.
- Now, the second bubble is "Track data
- 22 quality issues." Do you believe that we have

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1 given you all the direction you need and you are
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- 2 of a similar mind on all of this and to track
- data, kick out errors? I don't remember who
- 4 mentioned the process. I think it was Steve?
- 5 Yeah, you had mentioned kind of -- no, Pierre
- 6 mentioned a kick out after -- work with the
- 7 industry for six months, and after that then start
- 8 rejecting.
- 9 MR. LAMY: The initial period of time
- 10 has led the participant to know that is sending it
- 11 the right way, and then kick it back.
- 12 CHAIRMAN O'MALIA: Yes. So is everybody
- 13 -- have we been clear about what we expect for
- tracking data issues and validation with the SDRs?
- MR. TUPPER: I think these recent
- 16 meetings have been very helpful. To us, maybe we
- 17 had the benefit, you know, of operating an
- 18 exchange in compliance, so when we built out our
- 19 SDR, we felt we pretty early on what the
- 20 Commission wanted to with that data. And I think
- 21 after meeting with John's team, and the end result
- is that an SDR, you have an obligation to take in

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data that will allow the Commission, one, to track
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- 2 transaction level data in an aggregate manner, and
- 3 then, two, to be able to generate positions. And
- 4 if you're receiving data that you can't do that
- 5 with, then you haven't fulfilled your obligation.
- So I think the end result is once we
- 7 have to start building to these reports, that will
- 8 really come to light as to who good data quality
- 9 and validation.
- 10 CHAIRMAN O'MALIA: Do you have a sense
- 11 -- each of you have kind of a screening process in
- which you can reject bad data coming into your
- 13 SDR?
- MR. LAMY: Yes, we do.
- 15 CHAIRMAN O'MALIA: CME does?
- MR. THURSBY:: We do.
- 17 CHAIRMAN O'MALIA: DTCC?
- 18 MR. CHILDS: We do. I would suspect
- 19 that the standards are different, but we do.
- 20 CHAIRMAN O'MALIA: Okay.
- 21 MR. DURKIN: Absolutely we would expect
- 22 we would have that.

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1 CHAIRMAN O'MALIA: Okay.
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- 2 MR. DURKIN: And it's within our
- 3 environment today for a lot of other reasons that
- 4 we would have those risk tolerances and quality
- 5 assurances around the data.
- 6 CHAIRMAN O'MALIA: John, do you have a
- 7 sense of whether they're uniform?
- 8 MR. ROGERS: I have a sense that they're
- 9 not.
- 10 CHAIRMAN O'MALIA: Okay.
- MR. RIEDEL: I'm not saying anything
- about which one is, you know, better or anything.
- 13 CHAIRMAN O'MALIA: So the last one is
- 14 prove information to the Commission on data
- 15 quality trends by submitter. Is that some of the
- 16 bilateral discussions? Have you been -- have we
- been having some of these things that we -- we're
- having a better sense, and I guess why we've honed
- down to 22 points?
- John, do you have a time frame when --
- 21 it says "The CFTC must set the course of action
- for consistency in data." So what is our course

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of action, and what is our time frame on this?
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- 2 MR. ROGERS: I think that we're on our
- 3 way right now, so, I mean, I think if it comes
- down to the question -- I mean, it's difficult to
- 5 answer the question, you know, when is all the
- 6 data good enough kind of a thing. So, I mean, I
- 7 think it is a continual process, and what we've
- 8 been working towards is the notion of how can we
- 9 track what is coming in that is acceptable and
- 10 what is rejected, not again making a value
- 11 judgment as to, you know, which regime is the
- 12 better of the bunch.
- But we've implemented operational
- 14 reporting to give us a sense of that. We've had
- 15 conversations with the SDRs about reaching back to
- 16 the submitters to work through data issues. And I
- think that's going to be an ongoing process. So I
- 18 would say that it is already underway, but I think
- 19 the proof is going to be as we get these reports,
- 20 we should be able to see a trend of issues going
- down.
- 22 And right now I still think we have work

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1 to do to get the reporting where we want to see it
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- 2 by submitter. And I would think that that should
- 3 not -- I mean, I would ask the SDRs the question
- 4 about that. But I would not think that that would
- 5 take a long time.
- And then we need to be trending -- doing
- 7 a trend analysis on this data to see if we are
- 8 making progress. I don't think you really ever
- 9 get to a zero state with any data, but you want to
- 10 be making sure that you're moving in the right
- 11 direction. I would expect it to go down because
- we have just started up a new system, and people
- are going to have to adapt their existing systems
- 14 to feed into the new SDR repositories.
- 15 CHAIRMAN O'MALIA: When is that going to
- 16 happen?
- MR. ROGERS: So I'm going to throw that
- over the other side of the table. I guess -- I
- 19 mean, I would say that we already have reports on
- 20 -- operational reports on transactions, what we're
- accepting, what we're rejecting. I think that
- there is going to be further discussion about

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1 harmonization around what is the appropriate level
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- of acceptance or rejection. I don't think that
- 3 we're necessarily going to get to the same place
- 4 across the board, but I think we'll find perhaps a
- 5 balance there.
- 6 The thing that I would throw across the
- 7 table is if we're talking specifically about the
- 8 report that shows you acceptance and rejection by
- 9 submitter, that's a report that we have not seen
- 10 yet, so that would be something that would have to
- 11 be produced by each SDR. It would be a new
- 12 requirement. So the question would be --
- 13 CHAIRMAN O'MALIA: I'm not interested in
- 14 a new requirement, whether they -- I want the
- 15 data. We don't -- you know. I understand we got
- 16 to validate whether they're accepting good data or
- 17 not and to create a new requirement when they
- 18 haven't -- you know, we haven't given enough
- information to fill the current requirements. I
- 20 want to get the good data. What is the process to
- 21 get there?
- MR. ROGERS: I think it's to continue to

- do all the things that we've described, to work
- on, you know, starting off with the 22 fields to
- 3 be having the SDRs reach back to the submitters,
- 4 to do the things that Chris, Bruce, and Jonathan,
- 5 and Greg, for that matter, you know, mentioned in
- 6 terms of looking for standards, seeing if they're
- 7 being applied, reaching back to the submitters to
- 8 get the quality of data.
- 9 The thing that I was specifically
- 10 reacting to in response to your question, though,
- 11 was --
- 12 CHAIRMAN O'MALIA: Validation.
- MR. ROGERS: Yeah. How are we measuring
- the quality of the validation that's happening?
- 15 It's one thing to reach back to them, but we need
- 16 to have a view into is the situation getting
- 17 better. And that's the thing that is feedback
- 18 that we need to get.
- 19 MR. DUMARK: I would say we have a
- 20 compelling reason to make sure the data that we're
- 21 getting, not just as an SDR, but as a data and
- 22 analytics company, to make sure it's of quality.

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1 So we know that there's an existing law
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- 2 out there to report on timely submitters, but in
- 3 terms of our own internal controls, we want to
- 4 know submitters that are submitting information
- 5 that's not of good quality. And so, we absolutely
- 6 will be tracking that from an operational
- 7 perspective.
- 8 MR. ROGERS: And I would expect that
- 9 each SDR has a similar driver, and the only thing
- 10 that I would add to that is we would like to see
- 11 that as well, because we would like to see -- to
- 12 address the issue of data quality, we'd like to
- 13 see, you know, real measures that show that the
- 14 quality is increasing. Us having -- you know, we
- 15 talk about transparency in a variety of different
- 16 aspects. Us having the transparency into that
- will help us have assurances that the quality is
- 18 on the rise. And if not, then we can discuss what
- we're doing about that on a very specific level.
- 20 CHAIRMAN O'MALIA: Michael and then
- 21 Larry.
- MR. ATKIN: Yeah, just a point of

- 1 clarification that might make it easier. So there
- 2 are various types of standards that exist.
- 3 They're not the same, and they're causing a lot of
- 4 confusion.
- 5 So I'm going to suggest that there are
- four steps in this chain that we have to address.
- 7 The first one is the original contract between the
- 8 counterparties defines the data concepts, and
- 9 that's precise as drafted by the counterparties,
- 10 no matter bespoke the contract.
- The language to express those concepts
- is a standard for meeting. It's semantic. And I
- 13 know we manage it. That's an ontology. The
- 14 mechanism to transmit those standards is a
- 15 message, and there are format standards, like FITS
- and FPM, that are used. So the format standard is
- 17 not the same thing as the contractual or
- definitional standard, but they can be aligned,
- 19 and they can be met.
- It's the translation of those concepts
- 21 in the contract or your 22 data points that need
- 22 to be translated into the standard language. That

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1 has to be separated from a calculation process or
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- 2 a derived data formula. That then is a map to a
- 3 standard format, and that's the objective. You
- 4 can't short cycle that process, and right now
- 5 we're kind of missing that language ontology
- 6 translation process to align the meaning of the
- 7 data that's transmitted in those format standards
- 8 when it is possible to do. And maybe that's the
- 9 kind of new direction that you need to head.
- 10 CHAIRMAN O'MALIA: Larry?
- 11 MR. TABB: I want to reinforce, I think,
- 12 something that Superna said. And you've been
- talking a lot about validation and validation is
- incredibly important, but you can't forget about
- process, too. And so you have to define the
- 16 process, or else you wind up kind of like, you
- 17 know, the European take where you can kind of
- 18 report anywhere, and people report twice, and you
- 19 wind up with a process that you're not sure you
- 20 get everything, but you think you reported
- 21 everything, but you can't really find it.
- 22 And so you really need to define the

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1 process, and that's actually going to be hard
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- 2 because that might actually impact, you know, the
- 3 competitive nature of those guys over there.
- 4 CHAIRMAN O'MALIA: Greq?
- 5 MR. WOOD: Yeah. There's just one thing
- 6 I can add onto that. If you look at, like, the
- 7 evolution of trading, and it doesn't quite apply
- 8 in the same way to reporting. But you come across
- 9 multiple standards. Everyone has their own
- 10 standard for doing something. And over time, you
- 11 end up with a best of breed. And really, it takes
- 12 an evolutionary process to actually work out the
- 13 kinks of certain approaches and to standardize on
- 14 the same approaches across different formats.
- I think the problem we have here is we
- don't have the time to go through that
- 17 evolutionary process. So you have to bring
- 18 together multiple standards and try and get our
- 19 best of breed with guidance from the end consumer,
- 20 which is ultimately the CFTC, and of the
- 21 regulators to then hopefully bring together these
- 22 competing standards into something that is going

- 1 to be workable.
- Now, there's no reason why you can't
- 3 have differences in approaches, which certainly
- 4 today is what each of these companies are
- 5 proposing, their business proposition. But we --
- 6 I think the message here is we need to work
- 7 together to close the feedback loop from both the
- 8 end user of the data, the end user of the swap on
- 9 the asset managers, and the providers of the data
- 10 towards what's going very quickly to get that
- 11 standard together.
- MR. THURSBY:: And if I may, I would
- 13 hearken back to some of the comments I shared in
- 14 the beginning, which is I think that's -- if
- you're looking for a place to maybe solve it a
- little better, it is between the end customer, and
- 17 the Commission, and the SDR providers. It's the
- 18 recurring SDRs and one end customers. There's
- 19 plenty of precedent of taking data in, doing the
- 20 transformations that are necessary to represent it
- in a way that is most consumable by the
- 22 Commission. And I think that's something that,

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1 you know, we could do more rapidly than trying to
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- 2 move, you know, a marketplace.
- And I would also call back to a comment
- I made, too, about not to try to avoid, you know,
- 5 the hard work that has to be done for end user
- 6 reporting that will persist beyond the emergence
- of SEFs, but the SEFs and their reporting does
- 8 present a unique opportunity to try to solve for
- 9 what I think is a fairly widespread issue, that we
- 10 can consolidate down to a far fewer number of
- 11 participants. And I think that that's something
- that we have an opportunity now to learn from how
- end user reporting has gone and move to SEF
- reporting in advance of that happening, and make
- sure that the reporting that we'll get out of SEFs
- that will come online are consistent with what our
- 17 expectations are.
- 18 So I think if we can learn something
- 19 from the experience we've gone through thus far
- 20 and move that forward to the next phase, I think
- 21 we would, you know, find a lot of benefit from
- that, and then still continue the end user work,

- 1 you know, in parallel.
- 2 MR. CHILDS: If I may just add to the
- 3 last comments as well. We're making this sound
- 4 like it's, you know, kind of one validation that
- 5 applies to all. We've got five different asset
- 6 classes here, and we run the gamut from
- 7 electronically executed to bespoke trades. The
- 8 level of standardization and the level of
- 9 validation that you can actually apply is
- 10 different based on that continuum. So it may not
- 11 be -- it may not just be one SDR versus another
- 12 SDR. It's the type of trades that you're trying
- 13 to report on and the amount of activity that's
- 14 required on that different continuum of trades is
- something that we all need to continue to work.
- As I say, the stuff that's
- 17 electronically executed, cleared -- a confirm is
- 18 pretty standard right now, and that comes to the
- 19 point about the fed getting involved in the credit
- 20 world. The other end of the continuum is not so
- 21 standard at the moment, and we need to continue to
- work on that.

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                 CHAIRMAN O'MALIA:
                                   Supurna?
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                 MS. VEDBRAT: I think, you know, hearing
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       what everybody has to say, you know, we all agree
       that aggregation of this information will need to
 4
 5
       take place. So as we determine what's the best
      place for that aggregation to happen, if, you
 7
       know, cost benefit analysis is also about
 8
       integration, you know, that will be helpful.
 9
                 CHAIRMAN O'MALIA: Anyone else?
10
                 MR. DURKIN: Commissioner, I mean, in
11
       the past you've successfully utilized working
12
       groups for -- pardon me? Did I --
13
                 CHAIRMAN O'MALIA: You just stole my
14
       thunder.
                 MR. DURKIN: I'm sorry. You know, I
15
      mean -- well, it's worked with this group. So if
16
17
      we, you know, might get some collaboration and
       apparent -- you know, obviously everybody wants to
18
19
      work towards the same common goal. And at the end
20
      of the day, nobody wants to make it difficult in
       any way, shape, or form for the Commission to be
21
```

able to consume the data.

It seems as though there can be a way to

1

21

22

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2
       understand what is it exactly that the Commission
 3
       is trying to be able to retrieve from that
       information. The SDRs are the best experts to
 5
       figure out how can they present that in a way
       that's consumable to the CFTC and give them a
 7
       timeline.
 8
                 CHAIRMAN O'MALIA: Go ahead, Bart.
 9
                 COMMISSIONER CHILTON: I'm just curious,
10
      Mr. Childs. So I think it's a reasonable to ask
11
       us, you know, what's our priority. But as a
12
       registrant, you're supposed to give us the
13
       information to come into compliance. How do you
14
       think you could come into compliance? On what
       sorts of things could you come into compliance
15
16
      with quickly to meet the mandate of Dodd-Frank?
17
                MR. CHILDS: Well, I think we're already
       compliant. If you ask our customer base, they're
18
       reporting the fields of information that's
19
20
       required under the rules. We are receiving data
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every single day. We are providing that through

to the Commission. And, you know, we conducted

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1 portal access the other day. So we are compliant.
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- 2 The question is, though, is to the
- 3 extent that we're all compliant sitting here, and
- 4 everybody is receiving data or reporting that
- 5 data, is it actually the data that you want to be
- able to do your job? So it probably meets the
- 7 rules, and all of our participants would say that
- 8 they're reporting exactly the information that was
- 9 requested of them.
- 10 COMMISSIONER CHILTON: So there's
- 11 nothing that you think that can do that would be
- 12 easier than what you're doing already. I do think
- 13 that, you know, this conversation was a perfect
- 14 conversation from that perspective. There's
- 15 clearly stuff that we need to do collectively as
- an industry to help the Commission get to where it
- wants to get to, to help global regulators get to
- where they need to get to. That's across all
- 19 SDRs.
- 20 But we will argue that we're compliant
- for our customer base.
- 22 COMMISSIONER CHILTON: Thank you.

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1 CHAIRMAN GENSLER: I thought I'd say we
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- 2 do appreciate that DTCC as of yesterday, and I
- 3 think it was just yesterday as a portal, and maybe
- 4 we can look inside. So that's, you know, it's all
- 5 a work in progress. I don't know if you're
- 6 compliant yet, but it's a work in progress.
- 7 I mean, this is not an easy task to take
- 8 an industry that was opaque and make them
- 9 transparent both to the public, as was pointed out
- 10 through Part 43, and to regulators through Part
- 11 45. And today is an enormous help, I think, to
- the Commission, and to John, and to all of you to,
- 13 you know, try to keep this journey going towards
- 14 greater transparency.
- 15 CHAIRMAN O'MALIA: Well, per Bryan's
- 16 suggestion, we'll pull together a team. But I
- 17 think -- I was just talking to John, and the
- 18 effort to continue to work on a bilateral basis
- 19 with the SDR is important. But it is clear that
- 20 we need to make sure that we do this in concert so
- 21 we're all working together so you can disseminate
- 22 that.

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1 What we were discussing a little bit
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- 2 here was who are the right submitters to have in
- 3 the room, and to make sure that that's an
- 4 effective tool. And I think we're interested in
- 5 having the right people and to make sure that this
- is a very manageable process.
- 7 I think, Chris, you pointed out it's
- 8 important to do a GAP analysis, but it's also
- 9 important to -- ultimately the Commission needs to
- 10 make a decision, and you all can talk about it,
- and consensus will be very difficult. But we need
- to make a decision, but based on some of the input
- 13 that you all are providing and working with the
- 14 submitters dealing with the submitters directly in
- order to make sure that they have, you know, they
- can comply with this, do some analysis about the
- 17 most efficient cost-effective way to get the data
- 18 that we need.
- 19 And I think ultimately we'll all be
- 20 better served by that. You'll be in a better
- 21 spot. The SDRs will be fully compliant, and we'll
- 22 have the data we need. So everybody wins in that

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1 situation. But obviously a lot of conversations
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- 2 have to happen, so John and I were going to work
- 3 on to make sure -- a solution so we have the right
- 4 staff in the room working with the right SDRs and
- 5 the right participants. And we'll try to figure
- 6 that out and do that immediately and not -- this
- 7 isn't months. This is within weeks. So we'll
- 8 continue to work with that. We'll obviously work
- 9 with DMO to make sure that we're following the
- 10 rules as they wrote them.
- 11 Rick, I don't know if you want to
- mention anything for the good of the -- otherwise,
- we're going to go to break.
- 14 All right. We're going to just do 10
- 15 minutes. We're already over again, so thank you.
- 16 (Recess)
- 17 CHAIRMAN O'MALIA: Okay. The next
- presentation we have is from Tradeworx, and they
- 19 are a technology firm that has won a contract to
- 20 provide the SEC's Division of Risk Strategy and
- 21 Financial Innovation, Division of Trading and
- 22 Markets with an equity and equity option market

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data collection and an analysis system that
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- 2 combines to data services, applications, and
- 3 related databases, and provides the SEC staff with
- 4 the same speed, ease, and reliability of data
- 5 collection and analysis that is available to the
- 6 most sophisticated of market participants.
- Now, the reason I've asked them to come
- 8 here is to -- once we get our data sort of out and
- 9 we're able to use it, this is the potential. This
- is the value that we will have at the end of the
- 11 day. This is something we will be able to use
- 12 going forward. So I've asked Mike to come in with
- 13 -- and his team at Tradeworx to give us some
- insight. And since we're over time, you know,
- bear with Mike as he tries to fly through this
- 16 thing. And if you have any questions, ask him
- 17 afterwards.
- MR. BELLER: Thank you, Commissioner,
- 19 and thanks to the Commission for giving us this
- 20 opportunity to present. I'm going to go really
- 21 quickly today. I know we're behind time, and a
- lot of important information has been transferred

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1 today. But I think it'll be helpful to give you
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- just a quick picture of what we've done, how we've
- 3 helped the SEC accomplish their mission, and
- 4 possibly give a vision of how we might be able to
- 5 -- the Commission may be able to reach the same
- 6 sort of visibility in the future as this project
- 7 you're embarking upon proceeds.
- 8 A quick background on Tradeworx. We
- 9 were founded in 1999 as a financial technology
- 10 company. We provide the fastest
- 11 commercially-available trading platform in U.S.
- 12 Equities, which currently processes about five
- percent of daily U.S. equities volume, both from
- trade, which is trading operations, and a group
- 15 extremely demanding institutional traders. And we
- 16 provide the MIDAS analytics platform for
- 17 government and private use to the Securities and
- 18 Exchange Commission for visibility into the
- 19 equities and options markets.
- 20 I'm just going to take you back to May
- 21 6th, 2010, the flash crash. What you see is a
- graph of the evolution of S&P 500 throughout the

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1 course of the day, and you see a big dip around
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- 2 2:20 -- 2:40 in the afternoon. How bad was it?
- 3 Spy plunged 4.7 percent in three minutes, and the
- 4 S&P recovered 5.4 percent in the next three
- 5 minutes.
- 6 During that day, three billion equities
- 7 messages were transmitted to markets, and 300
- 8 gigabytes of equities market data was created,
- 9 millions of messages per second in the peak
- 10 message rate. And to a regulator, there's a
- 11 challenge here: How am I going to make sense of
- 12 all this?
- One question a regulator would
- definitely want to ask in this case is how did
- 15 liquidity in the marketplace evolve during the
- 16 flash crash? Was does it take to answer this
- 17 question? You've got to analyze every price tick
- across 5,000 plus stocks and possibly half a
- 19 million options, billions of data points. Is this
- is an impossible task?
- 21 Well, here's the answer. What you see
- 22 here is a graph with a number of stocks trading at

- 1 a penny spread at each time throughout the day.
- 2 It's superimposed on that S&P 500 graph. But the
- 3 green line shows what essentially can be viewed as
- 4 a proxy for liquidity in the market. And you can
- 5 see that there's a big dip in liquidity at the
- 6 time of the flash crash. So this would be
- 7 important information for a regulator to be able
- 8 to see, but it could be very difficult to get
- 9 them.
- 10 Without the appropriate type of system,
- it could take weeks, if not months, to accomplish
- 12 this. But with the type of system -- with a
- 13 system like MIDAS, it can all be done in two lines
- of code and take not weeks, not months, but around
- 2.8 seconds to answer that question.
- How do we do this? It starts with a
- data collection network. We have to collect the
- 18 data at the market data centers, in our case, for
- 19 minimum latency and for the best quality. There
- 20 are six data centers, four in New Jersey, two in
- 21 Illinois.
- 22 Collecting data in 15 different

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1 protocols, millions of messages per second. Just
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- 2 to give a sense of scale, we heard talk about an
- 3 hour ago about essentially 40, 50 million messages
- 4 being collected in a week. Go give a sense of
- 5 scale, the equities and options markets, we're
- 6 looking at 40 to 50 million messages in a typical
- 7 busy minute, so it's a lot of data.
- 8 We've got to capture, we've got to
- 9 store, and we've got to analyze. And I'm just
- going to take quickly into each of these steps to
- 11 give you a sense of what can be done.
- 12 Capturing, it starts with those six data
- 13 centers, and let's drill down on an individual
- data center. Inside a data center, each of these
- data centers has a matching engine, one or more
- 16 matching engines. In this case the Carterette
- 17 Data Center has the NASDAQ matching engine, and
- 18 lots and lots of racks of equipment, a lot of air
- 19 conditioning, a lot of heat and cold blowing
- around. And inside the matching engine, of
- 21 course, you've got all the books. It matches all
- 22 the trades. It generates feeds. And individual

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1 traders here represented by a Tradeworx computer,
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- 2 for example, might send an order and receive data
- 3 feeds and executions from the matching engine.
- 4 It takes very, very fat pipes to collect
- 5 this much data, so we have 10 gigabit or even 40
- 6 gigabit cross connects into these matching
- 7 engines. And all of this data is collected in
- 8 NASDAQ's proprietary protocol. So inside the
- 9 Tradeworx rack here, we have to have a feed
- 10 handler, which normalizes the data. It takes in
- 11 the raw data. It produces the normalized data.
- 12 The normalized data would go into trading servers
- of Tradeworx and other customers of Tradeworx and
- 14 subsidiaries technologies who are trading based on
- 15 that data. But it's also stored for later
- 16 analysis.
- 17 The conversion is fast and robust. The
- 18 conversion is performed in a microsecond to go
- 19 from raw to normalized, and all while processing
- 20 millions of messages per second. But that's not
- 21 the whole problem because we've got six data
- centers, 13 different matching engines -- NASDAQ,

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1 BATTALION'S, EDGX, ICE, CME, NYSE, et cetera, et
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- 2 cetera. And we need to collect all that data, and
- 3 it's a lot of data.
- We discussed some of the scope, but we
- 5 also should bear in mind that each of these
- 6 exchanges is speaking a different protocol, so
- 7 it's a different language. It would be like if
- 8 you had your fixed ML and you have your other
- 9 protocols for reporting swaps, but you also had 13
- 10 other protocols. So there is a big normalization
- 11 problem going on here. There's also a problem in
- that it's very important to have very accurate
- 13 time on the data, because the clocks in each
- 14 system will drift relative to each other.
- So here you see that at the NASDAQ, you
- has some precise time, but in each of these other
- 17 places, there's some other view of time, and we
- 18 have to -- then the problem is compounded by the
- 19 distance between the data centers. So we make use
- of global positioning system, the same system
- 21 that's used to help you find your way from place
- 22 to place using your iPhone or what have you. And

1 we use it to lock time precisely to each location

- 2 and eliminate the synchronization problem.
- 3 Then networking. We have to have very
- 4 fat pipes between each exchange. And for minimum
- 5 latency between New Jersey and Illinois, we even
- 6 have a microwave link because it's much lower
- 7 latency than the available fiber lines. But the
- 8 point is that we can produce a complete and
- 9 accurate and precisely timed picture of the
- 10 markets at each location at any moment of the day
- down to the microsecond.
- Now let's focus a little bit on storage
- 13 because we talked about how much data that the
- 14 Commission has to collect and has to analyze. And
- we have a similar problem on a larger scale in
- 16 terms of volume in equities. Let's take a look at
- 17 that Tradeworx rack where we were collecting the
- data. And what we have to address is, if we're
- 19 going to store all this data, do we want to store
- 20 it in each of these data centers? These data
- 21 centers are very expensive and have very limited
- 22 space because each of these data centers are

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1 specialized to manage the exchange or to hold the
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- 2 exchange that's at the location, and to hold
- 3 everybody else who wants to interact with that
- 4 exchange at the same location. And so the space
- 5 becomes limited and it becomes very expensive.
- Another problem with it is if somebody
- 7 -- in, for example, the SEC, or the CFTC, or a
- 8 customer of Tradeworx, or a subsidiary thesis
- 9 wants to access this data, they would have to be
- 10 physically located in the same data center to
- 11 access it.
- 12 Our solution to this is to move to the
- 13 cloud. Cloud computing is a relatively new
- 14 concept. I would say that the concept really was
- broken open in, say, 2007 when Amazon web services
- 16 was born. Amazon basically took its retail
- infrastructure for managing its retail business
- 18 and decided to make that infrastructure available
- 19 as a service to other people. When it did that,
- 20 it opened sort of a new front in computing where
- it is no longer necessary for somebody who wants
- 22 to build out a set of servers or a set of storage

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1 to do so by obtaining space, and then buying
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- 2 equipment, and then hiring people to put that
- 3 equipment in, and manage that equipment. Instead,
- 4 you can leave that all to the cloud provider, for
- 5 example, Amazon. And when you want servers, you
- 6 simply run a command or bring up a web interface,
- 7 and servers are automatically spun up. Because
- 8 their infrastructure is so large and so scalable,
- 9 however much resource you might need, it's still
- 10 small compared to what they have.
- 11 Advantages of the cloud: Low cost,
- scalable computing, as I mentioned, and easy
- 13 collaboration. So it's easy to share huge data
- sets.
- 15 Tradeworx was an early adopter adopting
- 16 the cloud, the Amazon web services cloud,
- immediately after it was created in '07. What we
- do is we take our data that's at these five --
- 19 these six data centers. We chunk it, compress it,
- 20 and transfer it into the cloud, and then the cloud
- 21 magic happens. Let's talk a little bit about that
- 22 magic.

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The data is collected in the data
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 2
       centers, transferred into the cloud, placed in a
 3
       large scalable database, transferred into data
       servers, which filter and catch the data. Then
 5
       when, for example, a Tradeworx analyst wants to
       use the data, that analyst can log into an
 7
       analysis server, and queries go out, filter data
 8
       comes back, beautiful graphs come back, everyone
 9
       is happy.
10
                 Now, what happens when we have
       additional data sets, additional users? Because
11
12
      we're using the cloud, we simply put those data
13
       sets in the scalable storage of the cloud. We
14
       don't have to make a big capital investment. We
15
       don't have to have a long planning cycle. We just
16
       demand the storage and it's there for us. We fire
17
      up more data servers. Our analysts come in. We
18
       fire up more analytic servers. And all of this
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21 I'm going to go -- again, trying to go 22 as quickly as possible. Focus for a moment on

just interacts with each other in one seamless

19

20

way.

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1 analysis. The data can be analyzed on multiple
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- levels. At the highest level is a graphical order
- 3 book viewer, which lets you view the depth of book
- 4 at any -- to any level of detail, single exchange,
- 5 multiple exchange, simultaneously, time stamped to
- 6 the microsecond. You can move forward, move
- 7 backward through time watching the market evolve.
- 8 You can answer questions like, visualize the order
- 9 book dynamic surrounding a flash crash. See how
- 10 locked cross markets are formed and are dissolved.
- But if that visual representation is not
- 12 what you need, but you need a statistical
- 13 cross-sectional view of the data, you can drill
- down into an interval data research platform,
- 15 which looks at the data on a one second or a tenth
- of a second or a millisecond basis, and lets you
- 17 cluster and partition the data. It lets you do
- 18 cross-sectional analyses and lets you interface
- 19 with, for example, tools you might have on your
- 20 desktop, like Python or R or SAS.
- 21 And finally, if you need -- and using
- 22 that type of system you could answer a question

- 1 like, on a typical day, does spy lead e-minis, or
- 2 do e-minis lead spy?
- 3 If you wanted to go down to the next
- 4 level and actually examine the market data on a
- 5 tick by tick level, we have the tick data research
- 6 platform, which includes a pattern recognition
- 7 capability and a state-of-the art multi- exchange
- 8 simulator. So you can from the highest level to
- 9 the lowest level, and there's always a tool for
- 10 that level.
- Now, let's take a look at we helped out
- 12 the Securities and Exchange Commission with their
- data issues. It stats again with all this data
- 14 being collected in Tradeworx's network and
- transferred up into the cloud. Along comes the
- 16 Securities and Exchange Commission, and they need
- 17 access to this data. But it is a petabyte of
- 18 data. It is an enormous amount of data. It would
- 19 fill racks and racks and racks of computers.
- 20 And to move that all into the Securities
- 21 and Exchange Commission's data center, well, let's
- just say that I don't think this project would've

- 1 happened if we had to do that. Instead, what we
- 2 did was we created a private area within the cloud
- 3 specifically for the Securities and Exchange
- 4 Commission because it wouldn't do for the
- 5 Securities and Exchange Commission necessarily to
- 6 be using servers inside the Tradeworx cloud.
- 7 Sorry, I don't have a pointer, so I can't point.
- 8 The Securities and Exchange Commission has very
- 9 specific security restrictions and limitations.
- 10 They want a moderate system. They have various
- 11 standards that they must meet. And we have to
- 12 comply with those standards if we're going to
- provide anything to the Securities and Exchange
- 14 Commission.
- So we created within the Amazon web
- services using their security tools a virtual
- private cloud set up specifically to the SEC's
- demanding security standards. Then we moved --
- 19 began to transfer our data into that cloud, spun
- 20 up data servers specifically on behalf of the SEC
- 21 cashing and filtering the data. Now SEC users can
- log in to analysis servers, make requests from the

data, get responses, and, boom, get graphs in 2.8

- 2 seconds.
- I think a couple of points I want to
- 4 make here. First of all, the deployment that was
- 5 possible because of the cloud was remarkable in
- 6 both its speed and its cost. We were able to do
- 7 this from the time we got going on the contract to
- 8 about four months before all this data was in the
- 9 hands of the Securities and Exchange Commission
- 10 and available for their analysis. And the total
- 11 cost -- while it's true that building out this
- infrastructure in the first place did cost over
- 13 the years Tradeworx certainly tens of millions of
- dollars, we're able to provide this capability to
- 15 the SEC extremely cheaply, on the order of around
- \$2 million a year for access to this information,
- which would just be impossible if we hadn't been
- 18 able to take this very high-performance technology
- 19 we've developed over the years and then make it
- 20 available in the cloud to the SEC.
- 21 Because of the scalable nature of the
- 22 cloud, the SEC can also add their own data sets,

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and they don't need to do a lot of capital
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- 2 investment or infrastructure planning to make that
- 3 happen.
- So in conclusion, I do want to say that,
- 5 you know, the MIDAS system has been a really a
- 6 roaring success at the SEC. Many more users have
- 7 jumped than we expected, accessing the platform
- 8 from all over across the Agency. Greg Berman has
- 9 said that this basically propels the SEC from zero
- 10 to 60 in one fell swoop. And Elisse Walter,
- 11 Chairman of the SEC, has said that MIDAS is really
- 12 becoming the world's greatest data sandbox.
- 13 You know, I want to conclude by saying
- 14 the Commission is clearly facing a massive pool of
- 15 data, and the Chairman just a few minutes ago has
- 16 expressed a desire to be able to swim in that
- 17 data. And, I guess, maybe the Chairman of the SEC
- 18 views it as a sandbox, and the Chairman of the
- 19 Commission is in favor of swimming pools. But
- 20 either way, the -- we believe that the similar
- 21 tool set of financial big data analytics deployed
- in the cloud can address this issue in a very

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1 cost-effective manner and give the Commission what
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- 2 it wants in terms of the ability to really rip
- 3 through that huge amount of data you're about to
- 4 have available to you and make sense of it in a
- 5 very rapid manner, and exploratory, and
- 6 interactive manner.
- 7 Thank you, and I'm happy to take any
- 8 questions, Commissioner. It's up to you whether
- 9 there's any time.
- 10 CHAIRMAN O'MALIA: I think we're going
- 11 to reserve the questions, but I really appreciate
- 12 you guys coming in and providing us kind of some
- perspective about what ultimately is possible once
- 14 we get our data pool or sandbox in order and fully
- 15 utilize it.
- So let me turn now to our final panel,
- and this is a discussion of the Technology
- 18 Advisory Committee. You all are the best and
- 19 brightest in this field, so I just want to have a
- 20 discussion with everyone here about their thoughts
- 21 on the events of April 23rd, because shortly after
- 1:00 p.m. That afternoon, hack on the AP Twitter

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1 feed with an estimated two million followers
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- 2 seemed to initiate \$100 billion move down, which
- 3 recovered five minutes later.
- The S&P dropped 11 points, .6 percent.
- 5 The Dow dropped 144, down one percent. And the
- 6 CME also witnessed drops of similar one percent
- 7 fall.
- Now that Twitter hacking is a good
- 9 example of the challenges we face on a daily basis
- 10 from a variety of new electronic sources and the
- inputs that have an instantaneous impact on an
- 12 unprecedented scale. The fact that a billion
- dollars in value can be erased from investments is
- 14 very disturbing. So what I wanted to figure out
- and what we thought we'd have a discussion about
- 16 today is your thoughts on it, and think about
- 17 different things about what the right --
- 18 appropriate regulatory response is.
- 19 How do we deal with these scrape and
- 20 trade algorithms that automatically read
- 21 electronic messages and trade? What about the
- time and responses that occur? I mean, it moved

- down very quickly, it came back very quickly.
- What do we need to think about that? Did the
- 3 market respond as intended? We have CME here, we
- 4 have ICE here, two of our exchanges in this
- 5 market. We'd like to understand what happened
- 6 there.
- We had obviously May 6th, we saw a far
- 8 bigger drop, and I think Mike highlighted that in
- 9 his recent presentation. So what does it mean to
- 10 our markets and what happened in our markets? You
- 11 know, I've asked Brian if he'd make a few comments
- about that, but let me -- before I get to Brian,
- 13 let me see if my fellow commissioners would like
- 14 to make any comments about their observations or
- just ask any questions. So, Mr. Chairman?
- 16 CHAIRMAN GENSLER: I will, but I'm going
- to let Bart go first because I know he's up
- 18 against time.
- 19 COMMISSIONER CHILTON: What I want to
- 20 say is sort of what I talked about in my opening
- 21 statement. But, you know, I don't want to go
- overboard with some, you know, super zealous

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1 regulatory thing, so I'm curious whether or not
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- 2 you all think that there's any sort of due
- 3 diligence from the registrant perspective.
- I mean, think about if maybe, you know,
- 5 a large investment bank, for example, if they were
- 6 hacked and put out a false report -- you know,
- 7 crude oil is going to go to 150 or 200 or
- 8 something. But think about this hack attack, if
- 9 it was done in concert with other news services.
- 10 Now, we don't regulate news services, but for the
- 11 folks that have -- that are trading, is there
- something that we should do in addition to what we
- 13 already have? So, for example, you know, our
- false reporting, 6C1(a), our false reporting
- 15 standards. It's not just for intentional giving
- information out that may be false and move
- markets, but it's for reckless. There's a
- 18 reckless standard there. So is that something we
- 19 should look at?
- I really don't know the answer, but I'm
- 21 curious when it's appropriate to hear what you all
- 22 think.

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CHAIRMAN GENSLER: I'm interested in
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 2
       what you have to say. I look at this and I think
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       there are operational risks. As I said earlier,
       the Financial Stability Oversight Council, which
 5
       I'm honored to be on, identified this as one of
       the seven themes just last week in our annual
       report, operational risk and technology, and that
 7
 8
       happens when somebody can hack into a system or
 9
       whether there's just human error that a bunch of
10
       trades are put into a system. And over the last
       18 months, we've had numerous reminders of these
11
12
       operational challenges, mostly in the securities
       world, not in the futures world. But, you know,
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       we're not immune from the same issues of
14
15
       operational issues.
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                 In this circumstance, there's also false
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       reporting that hacked into a system, and so I'd be
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       just interested in feedback, whether there's
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       anything that the CFTC should be doing in terms of
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       having -- to help assure the public that your
       systems, whether you're an exchange, a
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22
       clearinghouse, an intermediary, are robust and
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1 resilient against what we know to be cyber attacks
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- 2 or otherwise.
- 3 CHAIRMAN O'MALIA: Bryan?
- 4 MR. DURKIN: Thank you. I mean, first
- of all, just taking the MNES&P as an example,
- 6 during that five- minute time period, the market
- 7 actually traded from 1573 down to 1557, and then
- 8 it retraced back up to 1573, as you alluded to, in
- 9 five minutes. That was a one percent move in the
- 10 marketplace.
- And as you know, we have a number of
- 12 controls that we have in place to deal with
- aberrant movements in the market, and those are
- 14 really calibrated very much mirrored towards a big
- drop or gap in market performance itself. We did
- not see that at all in the context of the
- movements that we experienced that day. And so
- 18 there was a great deal of liquidity as the market
- 19 was breaking, and it was -- while it was rapid, it
- 20 was orderly in terms of tick per tick trading
- occurring on the downside, with some movement
- 22 upwards, a continued downside, and then a retrace

- 1 back up.
- 2 So throughout that whole period, there
- 3 was never a gap or a, you know, a huge aberration
- 4 in terms of the market itself being able to
- 5 respond to those movements. I mean, obviously the
- 6 market did respond to news, and once that news was
- 7 corrected, you saw the market also responded
- 8 accordingly.
- 9 MR. VICE: I think our markets had a
- 10 similar experience. The types of brakes or speed
- bumps, whatever you want to call it, functionality
- in the system, to arrest spikes. It's similar to
- 13 CME. It's really geared toward more shorter-term
- 14 births, particularly in the absence of sufficient
- 15 liquidity. So given that this happened over a
- longer period of time, none of those -- none of
- 17 that functionality kicked in.
- 18 I think as I step back, you know, being
- in this industry for 15 years or so, I think when
- I first started learning the business, most of the
- 21 people I learned it from had a very kind of purist
- 22 attitude in terms of, you know, as a market

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1 operator, you should intervene as little as
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- 2 possible, you know. Let the market find its
- 3 price. And I think, you know, as I started to
- 4 have some gray hairs, I think we're in a world
- 5 where that is increasingly, increasingly not true.
- And as the exchanges, we've built functionality,
- 7 as we've described here, many times, both of us,
- 8 as have most exchanges to deal with those type of
- 9 short-term spikes.
- I think, you know, when I look at these
- 11 things, like the Twitter incident, I think we're
- 12 probably tilting at windmills if we try to imagine
- 13 all the different ways that bad orders or bad data
- 14 could get fired at us. We have to just insulate
- 15 ourselves from regardless of what the cause of it
- 16 was. I think we need -- they're all going to have
- 17 various types of -- there's a finite type of
- profile generally, and we need to have an answer
- 19 for all those. And I think the market -- everyone
- in the marketplace is at a point now where they
- 21 would prefer intervention and a little longer
- 22 period for the market to find its level on

- 1 legitimate information if it can have fewer of
- 2 these types of spikes and less severity when they
- 3 do occur.
- 4 So I suspect there's more work for us to
- 5 do. We'll probably continue to build more of that
- 6 type of functionality, whether it's a very
- 7 short-term spike or something that's more
- 8 prolonged. But I think that would be my
- 9 suggestion as far as where exchanges would
- 10 continue to direct their resources and effort as
- opposed to trying to -- working with -- alone or
- 12 with the Commission to root out all of the
- 13 different types of bad practices, or even good
- 14 practices that are poorly implemented on the
- various types of traders out there on the other
- 16 end of the trading systems.
- 17 COMMISSIONER CHILTON: So, Chuck and
- 18 Bryan, I mean, the market was resilient. That's a
- 19 good thing. It went down and it came back up.
- But, I mean, people did lose money. I mean, it's
- 21 not like people had stop loss orders in. You
- 22 know, if the price went down on whatever it was,

- 1 they may not have gotten back in. Now a lot of
- 2 cheetahs, lot of HFTs may have been in on the
- 3 downside in getting back.
- 4 But my question is more like, should we
- 5 explicitly require under our false reporting to
- 6 include social networks? I mean, it seems to me
- 7 it's a confluence of if you're a registrant and
- 8 you have a Twitter that you're using, and Twitter
- 9 today just said expect more of these things. And
- 10 how they get in is so simple, I mean, we all see
- it. It's this spearfishing where, you know, it's
- 12 like I send something to Commissioner O'Malia, and
- 13 he thinks, oh, it's Bart, and he clicks on it, and
- 14 then they're in.
- And by the way, we've had something
- 16 similar happen even here. So, I mean, I'm not
- just saying this is, like, bad companies or
- anything. I mean, it happens in government.
- 19 Heck, it happened with the FOMC minutes. So, you
- 20 know, nobody is immune to this stuff.
- But unquestionably, whether or not we
- 22 should have some sort of specific requirement

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1 perhaps under our false reporting that says if
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- you're reckless and not protect having supersized
- 3 cyber security or something else that would allow
- 4 your systems to be hacked, then you could
- 5 potentially, you know, be penalized. I'm not
- 6 saying we should. I don't know. But that's my
- 7 specific question. And I don't know if you -- if
- 8 Bryan or Chuck has a view on it, but I'm
- 9 interested in other folks, too.
- 10 CHAIRMAN O'MALIA: Evelyn?
- 11 MS. FUHRER: Thank you. You know, in
- 12 thinking about, like, the Twitter attack, I mean,
- one of the things that seems to be the common
- thinking is that it was just a hack, you know.
- Just a hack out of Syria, whether it was
- 16 malicious, some kids playing, or, you know,
- hackers trying to outdo each other, you know, we
- 18 don't know.
- 19 But I think to the question at hand and
- the question whether or not we should apply
- 21 regulatory dictates, I think we have to think
- about the pure hacks and whether our people use

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1 these types of techniques to actually try to
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- 2 manipulate the market, okay? There's one thing,
- 3 you know, to penalize somebody if they don't have
- 4 the right level of cyber security. I mean, you
- 5 know, I'm very involved in these kinds of issues,
- 6 and personally I think that, you know, there's
- 7 constantly going to be a tax no matter what people
- 8 do. And in my way of thinking, this is very
- 9 analogous to where we were 20 years ago with
- 10 disaster recovery, you know.
- 11 We have come to a point where there was
- 12 a realization in the marketplace. Things are
- going to happen. Terrorist threats are going to
- 14 happen. Floods are going to happen. You have to
- have disaster recovery. I think that's where we
- are now in the area of cyber security. I think
- we're going to come to recognize that there are
- 18 going to be attacks. Things are going to happen.
- 19 We have to have alternatives to deal with this.
- 20 And here specifically again, you know,
- 21 to my point about I would be more concerned if
- 22 people are maliciously spearfishing or attacking

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because even if the markets are resilient -- go
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- 2 down three minutes, go up three minutes -- if
- 3 people are trying to manipulate the market, they
- 4 could be making a ton of money like you said in
- 5 that particular time.
- 6 Here, you know, there are people who --
- 7 smart people who made money, but it's probably not
- 8 -- I mean, they're probably not the same person
- 9 who hacked the system. So I think we need to be
- 10 careful about how we look at this and really think
- 11 through all the possibilities.
- 12 CHAIRMAN O'MALIA: Supurna and then
- 13 Michael.
- MS. VEDBRAT: You know, this is
- obviously a very difficult problem, you know, to
- 16 be able to solve for. But, you know, one thing
- 17 that I'd just like to discuss is as we break it
- down into its different components. One is the
- 19 source of information, so the source of
- information, you know, happened to be Twitter and,
- 21 you know, whether that's used as a reliable source
- of information to drive a trading strategy that's

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1 questionable in itself. So that's, you know, the
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- 2 source here was hack.
- 3 The other is that information caused,
- 4 you know, movements in the market, you know, which
- 5 could be, you know, various different forms that
- 6 may have triggered signals for trading. You know,
- 7 now those trading signals, you know, they reacted
- 8 to the movement in pricing, which could've been,
- 9 you know, good or bad information. And you can't
- 10 really figure out a way in which to say that,
- okay, these signals were good, that they're going
- 12 to react to changes in the market.
- So, you know, as we try to solve for it,
- 14 you know, we do have to keep those two components
- 15 separate because the second one, you know, it is
- 16 all algorithmic trading. It is high frequency
- 17 trading. And, you know, we want to be mindful
- 18 that we don't in any way harm that end of the
- 19 business because of erroneous information, you
- 20 know, whether it's Twitter or somewhere else, you
- 21 know, driving, you know, the markets to react.
- 22 CHAIRMAN O'MALIA: Michael?

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1 MR. GORHAM: Yeah, two things. One is
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- 2 historical, and in the 18 years that I sprinted
- 3 the CME, there were a number of times where there
- 4 were rumors. In fact, I think it wasn't uncommon
- 5 for the President to be assassinated a couple of
- 6 times a year. So these rumors started --
- 7 CHAIRMAN O'MALIA: Rumor. In
- 8 rumorville.
- 9 MR. GORHAM: Oh, in rumor. Sorry. You
- 10 know the history. So the point is I don't know of
- 11 any case -- it wasn't my job at the time, but I
- don't know of any case that those rumors were ever
- 13 tracked down. And Bryan might know something
- 14 about that.
- But the second is that -- well, my point
- 16 there is people will always try that -- in those
- days it was always for profit that they were
- 18 trying to do it. Second, but speaking, Mr.
- 19 Commissioner, to your point, the -- I guess what's
- 20 not clear to me is would you want the ability to
- 21 go after AP or Twitter in this kind of case if
- 22 there was --

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CHAIRMAN O'MALIA: No. It would not
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 2
       only be somebody that we have jurisdiction over,
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       so you would say, you know, should an investment
       bank, should somebody that trades in our markets
 5
       have a heightened level of cyber security in place
       to avoid having -- because the information that
 7
       registrants may -- if they're hacked in, it may
 8
       mean a lot to the market. We can't control -- I
 9
       can't control, you know, Twitter as a corporation,
10
       but I might be able to -- we might be able to deal
11
       with a market registrant. I mean, I think we
12
       could deal with a -- we may have the authority
       under 6C1(a) now, but I don't know that it's
13
14
       specific enough.
                 And since this is a new issue and we're
15
16
       just getting it on our radar because of the hack
17
       attack, it seems to me that's why we should
18
       consider what we do.
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                 MR. GORHAM: So you think nothing that
20
       we could do would've prevented what just happened,
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but you're just thinking more broadly about the --

okay. Got it. Thanks.

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CHAIRMAN GENSLER: I think -- I mean, to

my eyes, was you said, there's false information

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       whether it's a rumor about the President or other
      rumors that will be here 100 years from now as
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       well. But to me, I use this term -- it's kind of
      boring -- "operational risk." But it's a bit of
 7
       an arm's race between hackers and bad actors, and
 8
       I will include hackers with the bad actors. Oh,
 9
      my god, now they're tweeting about me saying
10
      that's not good maybe.
                 And so it could be a hacker. It could
11
12
      be a governmental or a terrorist organization, you
13
      know. It could be anything out there that just
14
       wants to disrupt the flow of commerce here in the
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system. And that's what's so -- it's just
reminding, to me, this event, as to this bit of an
arms race of how you build firewalls, how you

U.S., whether it's false information or even

trying to get into a clearinghouse system, a

trading system, FINRA system, or an intermediary

21 build appropriate protections at the large

22 financial institutions that exchanges

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1 clearinghouses and the like.
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- 2 We don't regulate AP or Twitter, but I'm
- just saying that's one of the reminders I take
- from this. But Bryan seems to -- I'm sorry.
- 5 MR. DURKIN: I'm just -- without getting
- 6 into any proprietary or confidential information,
- 7 I just want to assure the Commission that the CME
- 8 group has a very robust global information
- 9 security program. We recognize the
- 10 responsibilities that we have as a marketplace,
- and the fact that we have a global network that
- 12 extends itself to, you know, virtually 100
- 13 countries throughout the world. Having a robust
- 14 information security and risk management system in
- place 24 by seven is a top priority to us.
- We're very, I think, conscientious in
- 17 communicating with your team here in terms of our
- 18 efforts and progress in that regard.
- 19 CHAIRMAN O'MALIA: We will go with
- 20 Irene, Larry, Cliff, and then I think Steve had
- 21 something.
- MS. ALDRIDGE: Thank you. I think from

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1 a regulatory standpoint, one thing that may be
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- 2 useful is to actually track persistence of
- 3 entities that trade on similar events, like
- 4 Twitter hacks, because there it's fairly -- I
- 5 wouldn't say "simple," but it's possible to
- 6 demonstrate some sort of an intent. So if the
- 7 same entity trades and persistently benefits from
- 8 something like the Twitter hack, then you can make
- 9 a case that potentially they're doing it or
- 10 they're involved somehow with malicious activity.
- 11 CHAIRMAN O'MALIA: Larry?
- MR. TABB: I look at this as a, you
- 13 know, a couple of different issues. I think, you
- 14 know, first, you can't just look at Twitter, you
- know, because people are starting to mime
- 16 Facebook, and, you know, they're digging down in
- 17 the web. I forget exactly how long ago, but
- wasn't it IBM's corporate earnings were posted
- 19 early, and somebody got a hold of it, you know,
- and traded before it was supposed to get released?
- 21 There are these things that are
- 22 happening all the time, and there are lots of

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folks mining it, so you can't just look at
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- 2 Twitter. People are pulling information from
- 3 everywhere. And so whether it's true or it's not
- 4 true, people are going to be mining the stuff and
- 5 trying to discern issues, so that's -- I think you
- 6 got to take that out. I don't think you're going
- 7 to be able to stop that.
- 8 Then you've got the whole issue of
- 9 market manipulation, people putting out fraudulent
- 10 data. That's illegal to begin with. So the
- 11 question then becomes is how do you track that
- down, and maybe that gets to, you know, Menage and
- 13 Tradeworx, and trying to get a better data
- 14 platform to be able to find, you know. What Irene
- 15 said, how do I find out who's profiting, and maybe
- 16 that's a way to look backwards and see who's doing
- 17 it.
- 18 And then you've got the security
- infrastructure, you know, the futures and
- securities infrastructure, which for most folks
- 21 that I know, you know, it's on all private
- 22 networks. Now that's not to say that I can hack

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1 through an FCM and then, you know, trade through
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- 2 the, you know, the FCM to get into the exchange,
- 3 but there needs to be best practices and support.
- 4 And I think the industry has done a pretty good
- 5 job on the security side of keeping that secure.
- 6 So I'm not a big proponent of doing a
- 7 whole ton more because I'm not sure that, you
- 8 know, you've got news. You're not necessarily
- 9 sure if it's a rumor or not when people are
- 10 trading this down. It's only the point where it's
- 11 going to be determined that it's not true that it
- 12 starts going back up. And, you know, do you all
- of a sudden put, like, three-minute pauses every
- 14 tick or something like that to say, well, is the
- information that Irene is trading on, is it right
- or not? You know, I don't know.
- I think it's really more to do with
- 18 ensuring that the integrity of the infrastructure
- is good. I think that's the biggest thing that we
- 20 can actually focus on, not what people are trading
- on and if the information they're trading on is
- 22 reliable, you know.

1	CHAIRMAN O'MALIA: Cliff?
2	MR. LEWIS: We had some experience or I
3	had some experience with the way you guys reviewed
4	the Commission staff reviewed security
5	arrangements in the context of a designated
6	contract market approval. And I would say that
7	you did a good job. It's probably sensible to go
8	back and look at it as to whether the core systems
9	are secure. But, you know, banks have to do with
10	this with the fed all the time.
11	It all comes down to who on your staff
12	has access to critical systems. Is part of this
13	you go through the process of what they call
14	ethical hacks where you bring in some guys who are
15	sort of shaggy that need a bath, and they try to
16	break the system? And everybody in the financial
17	services industry does that.
18	That said, I think the key thing here
19	was something the Chairman alluded to, which is
20	the extent to which this goes to a different level
21	than merely for profit and goes to the level of
22	state-sponsored terrorist activity. And I think

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that's a totally different kettle of fish, and I
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- 2 don't think -- I think it's fair to say that the
- 3 systems that commercial enterprises can put in
- 4 place would not be expected to be necessarily
- 5 sufficient to a concerted attack, say, by the
- 6 Chinese government.
- And, you know, it sounds like a Clancy
- 8 novel to talk about this, but I would encourage
- 9 whether it's the board that the Chairman is
- 10 talking about or the Commission to worry very much
- 11 about that. I think that's a really big, big
- deal, and complacency is not smart about this.
- 13 You know, as a platform operator, you get service
- 14 attacks all the time, you know, thousands a month,
- 15 but this is a different order.
- And the third thing I'd say is, you
- 17 know, really what you got to come back to, and I,
- 18 you know, I'm not arguing this, but I've known
- 19 those that have. The old days -- I'm looking at
- 20 Chris -- you know, when you'd have a limit, you
- 21 know, price movement limits in markets, you know,
- 22 whether or not because of the state-sponsored

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1 possibility, or, frankly, if the Twitter thing had
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- been true, what sort of price movement, if there
- 3 had been an explosion at the White House, would
- 4 have been a reasonable movement?
- I mean, I can't say, but I think it's
- 6 something that that's -- you can argue a lot about
- 7 what government is for. This is something
- 8 government is for, to figure that out.
- 9 CHAIRMAN O'MALIA: Steve, yeah.
- 10 MR. JOACHIM: I'm not going to try and
- 11 torpedo everything everybody else said. But I
- think that we have to keep our eye on the ball in
- terms of what the problem set is, and the problem
- is a moving target. One thing we know is
- 15 technology is evolving at an incredibly fast pace,
- and it's becoming actually more decentralized.
- 17 And the ability of one individual actor to create
- 18 havoc has grown dramatically. I think if we focus
- on the information flow, I think we're going to
- lose track of what the real problem is.
- 21 The thing that keeps me up at night are
- 22 account intrusions. There are so many points of

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1 entry into the environment today that a bad actor
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- 2 who can step into a weak player -- we're only as
- 3 strong as the weakest link we've got -- could
- 4 ultimately create significant havoc in the
- 5 marketplace. And I think we as regulators need to
- 6 keep our eye on that on a regular basis, always
- 7 trying to find where those weakest points are and
- 8 focusing on those to be sure that we are looking
- 9 to find ways to close those loops.
- I don't think it's information. I think
- it's much more -- we're much in danger of a roque
- 12 trader or a rogue individual executing a
- 13 tremendous number of transactions in a very short
- 14 period of time in a way that potentially could
- 15 have deleterious effect on the broad-scale
- 16 marketplace.
- 17 CHAIRMAN O'MALIA: Thinking of any
- 18 special event in recent --
- 19 MR. JOACHIM: I hope not. I try to
- 20 ignore those.
- 21 CHAIRMAN O'MALIA: Chris?
- MR. HEHMEYER: Just one last thought.

- 1 It is true the rumor thing is illegal, and we've
- 2 talked about, whether it was a wheat embargo or
- 3 the mad cow disease. One thing that's, I think,
- 4 breathtaking is how fast the machines can now
- 5 react, and the ability to distribute information
- 6 can travel so much faster than just in the hallway
- 7 at the Board of Trade. And so that's what's
- 8 breathtaking about it.
- 9 And the challenge for you all, and so
- 10 much of this could be in the data. The challenge
- is that fast doesn't necessarily mean illegal, and
- that's a challenge because it's on the frontier of
- 13 these technologies. And so it's a challenge for
- 14 all of us. Thank you.
- 15 CHAIRMAN O'MALIA: Bryan?
- MR. DURKIN: Just to reiterate, the
- industry and the exchanges in particular have
- taken a number of steps to prevent the types of
- 19 movements that I think a conversation is carrying
- on into now: Velocity logic, stop logic. I mean,
- 21 there's been a number of controls that we have put
- in place over the past two years to prevent those

- 1 types of movements, and the market would
- 2 automatically stop. That was not the case in this
- 3 situation.
- 4 CHAIRMAN O'MALIA: Well, that's easy --
- 5 interesting because a lot of reactions -- because
- 6 it's an automated. I think somebody mentioned it
- 7 was an automated reaction. It moves quickly. Big
- 8 news in the market. But yet this -- in this
- 9 instance, it went fairly -- relatively slow in the
- 10 microsecond trading environment that we're used
- 11 to. So what do you see in the market? Was it a
- 12 different set of participants? Anybody want --
- 13 anybody have any comments that -- I think you want
- to stay away from it, Bryan. But Larry?
- 15 MR. TABB: Well, it was a Twitter feed,
- so it wasn't a registered, you know, AP secure
- 17 line direct feed or Reuters, you know, or
- 18 Bloomberg, you know, authorized, you know. People
- 19 weren't paying for it. So, you know, trading off
- of Twitter is actually something pretty new, and
- 21 there aren't a ton of folks doing it. So because
- 22 it didn't -- you know, if it would've come through

- 1 the Dow Jones, you know, secure high speed, you
- 2 know, news feed, I'm sure it would've had a much
- 3 more severe reaction.
- 4 CHAIRMAN GENSLER: Can I just ask? Are
- 5 people on the Dow Jones feed technology scraping
- 6 the information, looking for words, and then
- 7 having algorithms that trade off of key words?
- 8 MR. TABB: Yes.
- 9 CHAIRMAN GENSLER: That was a yes. But
- 10 you're saying they're not yet doing that over on
- 11 the Twitter feed?
- 12 MR. TABB: Twitter is much more
- difficult. First of all, some of the more news
- 14 feed oriented things they actually have
- 15 elementized news feeds, so, you know, you know
- it's an earnings release. You know it's very
- 17 structured for machines to read this stuff. And
- 18 even some of the more -- you know, the broader
- things are more structured, so they're used to
- 20 being read.
- 21 Twitter, I don't know if it's you. I
- 22 don't know if it's your kid. I don't know if

- it's, you know, someone who doesn't know anything.
- I have to really try to understand, you know, who
- 3 it is, what they're saying, what's the sentiment,
- 4 is it positive, is it negative, what's the
- 5 context, you know, let me back test that.
- So if would've tweeted that same thing,
- 7 it would've had no impact. It was an AP feed,
- 8 hence far more people were reading it. But it's
- 9 still fairly new in terms of how do I think about
- 10 this and is it important or not.
- 11 CHAIRMAN GENSLER: Whereas just I'm
- doing the education. But whether it's Dow Jones
- news feed or some of the other --
- MR. TABB: Well, it pays -- they pay big
- 15 money for those feeds, so --
- 16 CHAIRMAN GENSLER: Paid feeds, a
- 17 Bloomberg feed. There were Bloomberg people here
- 18 earlier.
- MR. TABB: Absolutely.
- 20 CHAIRMAN GENSLER: Those feeds are being
- 21 scraped by computers, or ready by computers, and
- then algorithms trade off of them.

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1 MR. TABB: And because they're more
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- 2 secure, they're more known, they've got -- you
- 3 know, they've got years of back testing that they
- 4 can look at the same kinds of things and determine
- 5 what's the reaction. It's much easier to start
- 6 developing quantitative analytics and what should
- 7 I do if this happens, whereas Twitter, it's all
- 8 over the place.
- 9 And as I said, because AP is AP, you
- 10 know, people are trying to free ride off their --
- 11 you know, off the news feed. So it's one step
- 12 above most of the Twitter stuff, but people are
- 13 starting to look at this.
- 14 CHAIRMAN GENSLER: Thank you. That's
- 15 helpful.
- MS. FUHRER: I have another comment. I
- 17 actually think we got lucky, okay? And the reason
- 18 I'm saying that it was a hack. It was one feed,
- 19 okay? But now that it's out there that AP was
- 20 hacked, if there would be a concerted effort, and
- 21 multiple news sources were reporting the same
- thing, I think we would've had a different result,

- 1 because if you have a non -- besides the fact
- 2 that, you know, how much value should we give
- 3 Twitter and so on and so forth -- I agree with
- 4 everything that's been said -- it was also not
- 5 corroborated.
- 6 So as people are watching all the news
- 7 feeds that they're getting immediately through the
- 8 computer, if it's trading, or individuals that are
- 9 trading would see that it's an outlier and, you
- 10 know, probably not true.
- 11 And so I think that's important because
- most of the disasters, the real disasters, that
- 13 happen is there's multiple bad things happening at
- 14 the same time. So if this could've been
- 15 corroborated and different people had a concerted
- 16 effort to hack into and send out analogous
- 17 messages over different Twitter feeds for
- different corporations, I think we would've had
- 19 different results.
- CHAIRMAN O'MALIA: Keith, and then we'll
- 21 go to John.
- MR. FISHE: Sure. I just wanted to add

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1 something to what Larry said. So the Dow Jones
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- 2 feed that he's talking about can go directly into
- 3 an automated trading system, but it's usually for
- 4 data announcements or economic numbers that come
- 5 out. I don't think that this particular example
- 6 is something where someone scraped and traded off
- 7 Twitter, and that's really also hard to do in more
- 8 legitimate news services like Dow Jones or any of
- 9 the other wires because your text analysis is not
- 10 an exact science.
- 11 And if you honestly want to bet your
- 12 bank on the kind of errors that could come up in
- 13 that, you know. One person writes one thing one
- 14 way, and then puts in a comma in the next time and
- it means something completely different.
- So in this particular case, there was
- 17 actually a pretty good lag between the Twitter
- 18 feed message and the trade that actually moved the
- 19 market, so it's hard to see that that was a, you
- 20 know, scrape and trade activity.
- 21 CHAIRMAN O'MALIA: John?
- MR. LOTHIAN: There are people out there

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who are creating multiple Twitter IDs to magnify
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- 2 their -- the messages that they have about
- 3 political things, about market things, about
- 4 whatever. When the MF Global situation happened,
- 5 I created an MF Global hashtag, and would look at
- 6 anything that would have the MF Global name in it.
- 7 And it was like watching a slot machine it was
- 8 going by so fast. And many of the tweets were the
- 9 same tweets that were, like, being robotically
- sent out to the marketplace, re-tweeted.
- 11 See this all the time. You see this a
- 12 lot in the gold world. You see it a lot in the
- 13 silver world, you know, tweeting for various
- 14 blogs, their messages, trying to influence the
- 15 things with, you know, the central banks are doing
- this or whatever it is. It's out there every
- 17 single day what happened. It's just that in this
- 18 case there were some people that acted on this,
- okay, as opposed to the market just being mature
- and, you know, enough to say I don't need to
- 21 listen to that.
- That being said, there's a company out

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there called Social Media Analytics. They're now
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- produced -- they're now -- they signed an
- 3 agreement with NYC Technologies for distribution.
- 4 And what they do is they take the Twitter feed in
- for a company, and they take all of the various
- 6 tweets, and then they analyze them, and they come
- 7 out with a reading that's a gradient kind of thing
- 8 in terms of positive or negative. But they also
- 9 look into, you know, the sources as to whether
- 10 these are good sources, and also there's a
- 11 qualitative aspect to it, not just a quantitative
- thing so that you can't just flaunt a particular
- 13 company's, you know, out there and get a negative
- reading kind of a thing, okay?
- 15 So in this case, I think that, you know,
- 16 people that responded to a single tweet from AP
- and found out that it was false, you know what?
- 18 They learned a valuable lesson, okay, and the
- 19 market will teach you lots of different lessons,
- and they learned one. It only moved one percent,
- 21 which is pretty good considering.
- 22 And the next time they're going to go,

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and they're going to go, hey, do you see this
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- 2 anywhere else, okay, before they press the button,
- 3 okay? And when you have big events that have
- 4 happened in the market, people call people and
- 5 they go, what is your quote machine say? Mine
- 6 says Dow is down 500 points, you know? I mean,
- 7 that's what people do. They verify information.
- 8 And if somebody is going to act on unverified
- 9 information, you know, they're going to be taught
- 10 a very difficult lesson by the market.
- 11 CHAIRMAN O'MALIA: Any further thoughts,
- 12 comments? Well put, John.
- 13 Well, I want to thank everyone for
- 14 coming out today. Long day, and very interesting
- issues. John, we have a lot of work to do on
- data, and we'll put together a team in a regular
- 17 meeting process so we can get through all of these
- issues as quickly as possible, and cost-
- 19 effectively, efficiently, all of these things, so
- 20 everybody is able to comply quickly and we get the
- 21 data that we need as expected, as provided in our
- 22 rules. So wish us luck on that, right?

Τ	So I want to thank all of my staff, Ali
2	and Shoenice, that helped out, our Commission
3	staff, Margie and the LO staff. And our AV team,
4	the guys that make keep the videos running,
5	Mike, and Gian, and Arc, and Wilbur. So thank you
6	very much for all of their help.
7	And thank you for participating here
8	today. Thanks.
9	(Whereupon, at 4:55 p.m., the
10	PROCEEDINGS were adjourned.)
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1	CERTIFICATE OF NOTARY PUBLIC
2	DISTRICT OF COLUMBIA
3	I, Carleton J. Anderson, III, notary
4	public in and for the District of Columbia, do
5	hereby certify that the forgoing PROCEEDING was
6	duly recorded and thereafter reduced to print under
7	my direction; that the witnesses were sworn to tell
8	the truth under penalty of perjury; that said
9	transcript is a true record of the testimony given
10	by witnesses; that I am neither counsel for,
11	related to, nor employed by any of the parties to
12	the action in which this proceeding was called;
13	and, furthermore, that I am not a relative or
14	employee of any attorney or counsel employed by the
15	parties hereto, nor financially or otherwise
16	interested in the outcome of this action.
17	
18	
19	(Signature and Seal on File)
20	
21	Notary Public, in and for the District of Columbia
22	My Commission Expires: March 31, 2017