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PUBLIC ROUNDTABLE:

CPMI-IOSCO GUIDANCE ON CCP RESILIENCE AND RECOVERY

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P R O C E E D I N G S

(9:00 a.m.)

MR. BANDMAN: Good morning, everybody. Thank you for joining the CFTC's roundtable on the PFMI's consultative guidance regarding the resilience of clearinghouses. We very much appreciate your joining us today. We thank you for the prompt beginning. There are, in addition to the folks here, there are also folks from the CFTC regional offices as well as people who are listening over the phone, and look forward to a very interesting discussion.

I'll be giving further remarks in a moment, but I would like to introduce the Chairman of the CFTC, the honorable, Tim Massad, to speak to us.

MR. MASSAD: Well, thanks, Jeff. I'm just going to say a brief word and, first, welcome to everyone. Thank you very much for being here. This is very, very helpful to the process. As you all know, we're holding this in conjunction with or as part of the CPMI/IOSCO policy study group process on resilience and recovery.

That process is, of course, one of four work streams that were agreed to by the chairs of the FSB, the BCBS, CPMI and IOSCO to look at clearinghouses. So it's an incredible amount of work going on, very, very good work to look at CCP resilience, recovery, and resolution. This is a critical piece of that.

With respect to this piece, as you know, the consultation document was published in August. The goal is to have some guidance to the FSB or to the G-20, I should say, by the time of the G-20 meeting in July. All this discussion of these issues also compliments the domestic work that we at the CFTC are doing on resilience, recovery, and resolution. As you know, we're actively engaged with the CCPs that need to have recovery and plans, and working on getting those done by the end of the year, and also working with the FDIC on resolution.

So this is, frankly, to me, at the top of our agenda. It's one of the most important things we're doing. Having said that, I'm not going to apologize for the fact that because this is also IMF week and there's, as you know, a slew of foreign visitors in town I can't stay, as much as I'd like to, and listen to this.

But I look forward to hearing from Jeff and Bob and John and Tracey and everyone on our team, how it went, and eventually seeing the transcript. So, thanks again.

MR. BANDMAN: Thank you very much, Chairman Massad. I'd also like to recognize Commissioner Bowen who's in the audience. We thank you very much for your support today.

So, as the Chairman said, today's gathering, it's a very important topic. It's very meaningful to a lot of us, and so we appreciate those of you who have gathered. I would like to thank the participants in this and our other panels for coming to Washington to have this discussion. Also, our audience in person today and those listening in. We thank you. I'd also like to thank Tracey Wingate from our staff who has worked very hard on this, and Margie Yates and the D.C. logistics staff who have worked very hard to make this run smoothly.

So today's topic is an important one, as the Chairman mentioned. Our focus is on the recently released CPMI/IOSCO guidance regarding the PFMIs. There are the international standards for the safety and resilience of CCPs, clearinghouses, in the context of U.S. DCOs. DCO is the CFTC term for derivatives clearing organizations. What others may refer to as clearinghouses, but DCO is a term that will be heard a lot today, and it's a CCP that clears derivatives and has regulatory status under our rules, loosely speaking.

So this event is part of the CFTC's continuing efforts to strengthen our DCOs and ensure their resilience. As the Chairman mentioned, a top priority is working with our DCOs to establish robust recovery plans and wind down plans and rules, in many cases, by the end of this year to have those in place.

We published guidance on this subject over the summer to assist the clearinghouses in developing these as well as to inform stakeholders about our priorities and how we're looking at them. We are also working very closely with the FTIC on resolution planning for systemically important clearinghouses.

But although planning for recovery and resolution are obviously important, it's really the clearinghouses day- to-day risk management that is the key to resilience and the safety of our markets. Today we will endeavor to take apart and exam some of the more granular risk management standards that are set forth in the CPMI/IOSCO guidance with respect to stress testing, margin, governance, transparency, CCP contributions to losses, and recovery as well.

As you may know, regulators from around the world have also started this very same process, as have we. Many of you were at BASIL last week for an industry roundtable discussing this guidance. We, at the CFTC, are very interested in getting your insights as industry leaders, clearinghouses, clearing members, clearing participants, and other stakeholders on the potential impact of the guidance in the context of U.S. DCOs.

I'd like to just take a moment to remind everybody of what's at stake with a couple of relevant metrics. There's approximately $300 billion worth of initial margin on our registered DCOs today. So that's a proxy, a very good indicator of the amount of risk that is being managed by our clearinghouses and their importance to our markets and the American and world economy.

Of that $300 billion about two-thirds or $200 billion represents customer margin, and another $100 billion represent margin per house for proprietary positions. So, you know, one of the vital interests at stake is the protection of customers and customer assets. That, again, is a measure of the customer investment and what's at stake.

In terms of variation margin, the daily

settlement of transactions to, again, risk manage these efficiently. Average daily margin over the past year has been approximately $5.8 billion changing hands every day. Again, a measurement of the importance of risk management in this area. The peak variation margin, around the time of BREXIT, was in the neighborhood of over $25 billion. So these are very significant metrics that indicate the importance of these.

As a result of the G-20 reforms clearinghouses are more important than ever and their safety and resilience is critical. Today, we are here to discuss international standards for clearinghouses. The derivates' market, as we know, is a global market. It's not confined to our borders. It's important that authorities internationally has worked together to develop the PFMI's international standards that CCPs around the world abide by.

We've made very good progress on these, but we're not sitting still. That's why a large amount of work has been done to make the PFMIs more granular in these areas to assist the clearinghouses and their risk management. The value of your comments today will help from the thinking and responses to the guidance while it's still being formed. It may also, down the road, influence the thinking of our staff as we may consider whether to incorporate elements of this into our own framework of rules.

Conversations like those today promote convergence and identify the issues before things are set in stone. We've seen what happens when there's a divergence in departure from international standards. In one recent example a set of differences with Europe that took four years, an enormous effort on both sides of the Atlantic to resolve until Chairman Massad and Commissioner Hill reached a common approach earlier this year.

The common approach avoided market disruption and has now been implemented by both sides. But before that occurred it consumed enormous resources and attention on both sides of the Atlantic that might have otherwise been focused on the safety and resilience of CCPs.

I look forward to our discussion today and now turn over to the interminable, Bob Wasserman, our moderator, co-chair of the CPMI/IOSCO policy standing group that developed and issued this consultative guidance. He's also the Chief Counsel of the Division of Clearing and Risk, and also our CBO, our Chief Baking Officer. Now, I'll turn this over to Bob.

MS. WASSERMAN: Thank you, Jeff. I'd like to thank Chairman Massad and Jeff for those remarks. I'd also like to introduce my other colleagues here at the table. To Jeff's right is John Lawton, our Deputy Director for Risk Surveillance and Tracey Wingate to my left.

As the panelists all know, Tracey bore the laboring in getting today's roundtable set up, and has made this, for me, virtually a turnkey operation. I owe her a great debt of gratitude for her deft and successful efforts. I also appreciate the work of our colleagues in our

Office Management Operations who helped get this whole thing physically set up.

I'd like to thank you all for coming to Washington to participate in this industry roundtable. I'm particularly grateful to our panelists, representing DCOs, clearing firms, BIFI participants and others for their efforts here today. I should note that industry input has been a invaluable input into the work of the CPMI/IOSCO policy standing group under the CCP work plan that Jeff and the Chairman have referred to, and that includes two workshops that the PSG held in March and May of last year, some very helpful industry papers that fed into the work that became the consultative document, and an international workshop that was held in Basil last week.

I'm confident that today's roundtable will be similarly valuable, and crucially, that we are looking forward to the written comments that stakeholders will be submitting to CPMI and IOSCO on October 18. As Jeff noted, today's roundtable is focused on the impact of the guidance in the

U.S. context. As CFTC staff participate in the international work, under the supervision of the Commission it is important that we have these domestic impacts in mind.

I should note that international standards and guidance respecting those standards are not self-executing legal requirements here in the U.S. Only the Commodity Exchange Act and the Commission's regulations have that status. One may expect that this guidance once finalized in the international context will result in the consideration of guidance, in some cases, with respect to existing Commission regulations, and in some cases may well require some comment rule making.

That said, it would seem to be best for all concerned, for a number of reasons, including those that Jeff explained, to help ensure that the international guidance that results from this process is well-developed and fit for purpose. I should note there are a number of what my economist friends would call incentives that would support a result where the CFTC ruleset is consistent with international standards and guidance.

It is important to note that the draft guidance focuses on improving work by challenging it. For example, by a CCP's board challenging management, and by clearing members challenging the CCP, or the DCO in our context. Today, and by the written comments on October 18, we hope that you will improve the work of the draft guidance by challenging it. Moreover, today's interaction between stakeholders gives us the opportunity or gives you the opportunity to constructively challenge each other's views, and I very much hope you will grasp that opportunity.

That said, we have a lot to discuss and not a lot of time to do so. Please do try and keep your responses to about two minutes or so, so we can have as much opportunity as possible for exchanging views. I also have a couple of administrative announcements.

First, to be recognized please put your

name tent on its side. Panelists, please press the button to activate the microphone when you speak. I should note that this roundtable is being audio cast to some folks who are calling in, and it is being recorded, and those folks and that recording can only hear what you say if the microphone is on. If you forget to turn it on you may see me pointing at my ear to remind you.

On the other hand, please turn your microphone off when you stop speaking as we can only have a limited number of these microphones on at a time. If you use abbreviations or technical terms please do explain on the first time you use them so that folks who are maybe less familiar can understand what you're saying.

Real administrative stuff, restrooms are outside the room to your right as you leave, down the corridor, and then ultimately to your left. We have some coffee, tea, and decaf in the back, as well as water. As is traditional, there will be cake. In this case, during the second break after the Panel 2 which will be around quarter of noon. There are lemon and chocolate cakes and they are very fattening. You've been warned.

I should note that while my colleagues and I will be asking questions and may express some tentative views, anything any of us says represents, at most, only our personal views and does not represent the views of the staff as a whole or of the Commission. As Jeff mentioned, we will be making a transcript of this roundtable which will be posted on the CFTC website and the video feed will be available eventually on YouTube.

Previous videos have accumulated hundreds of views, and I imagine this will as well. So with that, I'd like to get started with our first panel which will be lasting until about 10:15. That first panel is on stress testing. So I'm going to throw out a question.

The first one is that the guidance provides that the CCP should be conducting distinct but consistent stress tests for credit risk, on the one hand, and liquidity risk, on the other, in accordance with PFMI requirements. These tests need to be structured in a way that is consistent with the rules and procedures that govern how credit liquidity risk is managed on a day-to-day basis and following a participate default. Is the guidance in this area appropriate? Is it sufficiently clear? Who'd like to start?

MR. PERKINS: Good morning. Chris Perkins. I'm from Citi and I'm representing the client clearing member perspective. We believe that robust and consistent stress tests are very, very important. However, we are concerned because it's not about the stress test itself. It's about what clearinghouses do with the stresses that they find, and currently we see a great disparity amongst how they allocate the stress.

We believe that stresses should be allocated in accordance with the defaulter pays model. Meaning that people that bring the stress into the system should have to collateralized against it. So what means in practical terms is that the initial margin plus the skin in the game should be sufficient enough to mitigate the stresses.

The problem that we're seeing is that some CCPs are departing from the traditional waterfall, and rather than focused on allocating these stresses via the traditional waterfall, be it the initial margin, skin in the game guarantee fund and assessments they are allocating to client clearing members these concentration assessments to mitigate the stress.

I guess this is a way of saying that we don't think the guidance is prescriptive enough. What it should do is it should clarify that stress is achieved through, hopefully, robust measures are distributed in accordance with the defaulter pays model. If they're allocated directly to client clearing members because of the stresses that clients are bringing into the system bad things happen. Because what it does is it breaks down portability, and we believe that portability is incredibly important during a time of stress because it allows the system to dynamically rebalance.

So, again, we believe in the traditional waterfall. We believe in the defaulter pays model. We believe in robust and consistent stresses. If a CCP wants to go over and above and be more robust that's their prerogative. However, they need to allocate those stresses in accordance with the defaulter pays model. Thanks.

MR. WASSERMAN: Dale?

MR. MICHAELS: Hi. Dale Michaels, the Options Clearing Corporation. We're good with the guidance that there should be some connectedness between the credit and liquidity stress test. There are a couple points that we would like to point out that seem to be inconsistent with extreme but plausible type of stress testing that might drive guarantee fund.

One in particular, there's some mention of unsynchronized stress test scenarios. What that means is that you could come up with an extremely implausible type of situation. So, for example, if you went to the 1987 stock market crash, you look at a coupled date move. That's around 30 percent. If you take that on the downside from the start, and then also look on the upside you're not only looking at a 30 percent down move. You'd be looking at about an 85 percent up move from that 30 percent down move. Taking in a very small segment of time would be, I would argue, extreme but implausible type of stress testing scenario.

So it should be taken into account with the governance that is around the CCP. We are for transparency. There should be a good governing body. It should be approved by the respective board, the risk committee, and it should be transparent to the firms. We are a believer of transparent stress testing in the scenarios and the governance around so that the clearing members, the buy side know that the stresses that the CCPs are doing and could better manage their books.

As far as concentration stresses, I also am a believer of the defaulter pays model as well. But I do want to point out the unsynchronized scenarios and we'll be likely getting some comments on that piece.

MR. WASSERMAN: Let me press you for a moment on that now.

MR. MICHAELS: Sure.

MR. WASSERMAN: So I understand, from what you're saying, there are clearly cases where unsynchronized stress testing would lead to extreme and implausible. Is there room for more targeted guidance around unsynchronized stress testing? Is it useful in any context or is something that just simply doesn't work?

MR. MICHAELS: It would be hard to come up with a one-size fits all type of approach that could fit all of our different products. We have a myriad of different products that are represented here in the U.S., as far as the options, the commodity products and come up with the one- size fits all, try to get that prescriptive on an unsynchronized scenario when you have different cooling off periods that each of us have.

We have OTC products. We have futures products. Some of them can be very easily auctioned off, some of them take more time. It might make sense to have unsynchronized scenarios if it's longer cooling off periods during the default practice. But for some of the, certainly the exchange traded types of derivatives I think that it would be -- we certainly should look at forward looking stress scenarios. We should be looking at different types of impacts. But to come up and just blindly put in such disconnected, disparate scenarios and say that is the guidance would be, I think, going overboard.

MR. WASSERMAN: Fair enough. Sunil?

MR. CUTINHO: So I want to actually respond to two things. I want to echo, first, what Dale pointed out about unsynchronized scenarios, so I won't repeat those points. He stated them very eloquently.

The issues around defaulter pays model,

we support the views on that as well. But one of the things to keep in mind, I think, when we talk about stress testing is also pro-cyclicality. So what we noticed in the guidance, you know, there are two aspects to this guidance. One is on margins and one is on stress testing.

So when we look at margin there's been a lot of focus on pro-cyclicality and anti-pro-cyclicality measures to take in debt around anti-pro-cyclicality. But when you look at the guidance on stress testing we were surprised to find -- bear in mind that we support the goals of the effort. You know, we want a robust framework from a stress testing perspective and from a margining perspective.

But when you look at some of the guidance, or I would call them prescriptions that are out there. They seem to be very extremely pro-cyclical. So let me just give you some examples. One is automatic triggers or thresholds for collection or coverage of exposures on a same-day basis. That implies that if there are certain things that would take place. Bear in mind it's in conjunction with another aspect of the guidance which talks about intraday changes and positions, and intraday peak-to-trough movement in prices.

So if you take that all into account and you look at what happened on June 24, you know, there were a lot of positions that were changing dynamically. Market participants are reacting to the events that took place. There is a specific exogenous event which is the referendum result itself, and then there are markets that are moving dynamically all the way from Asia time zone to the European time zone to the U.S. time zone. So the positions are dramatically changing.

So if you have a mechanism or as prescribed an automatic trigger for collecting exposures than what you end up doing is you end up sucking a lot of liquidity. You threw out a number that says 20 billion that was collected on that day from a VM perspective. I don't know if all of that is VM. There are different ways of looking at things and I think in the next panel Chris may talk a little bit about experiences that firms had on that day.

But you end up being extremely pro-cyclical, sucking a lot of liquidity in the system. Our question is, isn't that pro-cyclical, right? So in a sense you are putting extreme strain on your clearing member and client community exactly at the same time when liquidity is dear. So the question we have to ask ourselves is, what exposures are recovering?

There is a lot of margin on deposit. We have prefunded resources to cover the risk. Risk teams, and I'm sure this is true of every CCP, have real time systems that monitor exposures of our clearing firms on a real time basis relative to the cover that we have. Okay? But to expect these automatic triggers is, I think, extremely pro- cyclical. We feel that we should go back to the goals of stress testing. What are we trying to really cover?

If we are trying to cover extreme and

plausible circumstances we are going back in time. You know, we can look at those and see where there are gaps in terms of that and the stated goals of the purposes of stress testing. Then the idea is to make sure that we use a combination of tools. Margin is one of them. That's how you come up with shortfalls. Then the rest is uncovered tail losses that have been neutralized.

So, Chris is right. When you end up in a structure where you start going on a gross basis and you start collecting stresses and you only account for losses, and you start sucking this from the system. Then you actually create an extreme strain on, especially, client clearing members. So I will yield my time, but I just wanted to make that point.

MR. WASSERMAN: So let me just clarify where we're going here because, at the moment, you know, given the focus at the moment on stress testing which you're conducting during peace time before the stress events happen. Does more, you know, detailed, rigorous stress testing help alleviate the concerns that you're raising because, essentially, you're participating all of those things that can go wrong and essentially prefunding them, again, during peace time or is this something to how we should be doing that stress testing during peace time?

MR. CUTINHO: No. That is where some of it departs from stress testing. I don't know if this was intended or unintended in the prescription, but the anchoring to changing positions throughout the day that's a part of stress testing. You know? It's not a part of any other section of the guidance. It's a part of stress testing.

Anchoring to intraday movement in prices is also a part of stress testing. So this is why I'm bringing it up within the context of stress testing. We think that that guidance is, you know, not consistent with the role of stress testing which is supposed to be a set of funds that are available to cover extreme stressful scenarios.

If the concern is that at a point in default, right? You need to make sure that, you know, the resources that you have are good to cover the risk exposures that you're dealing with. Then you have to look at the time at which CCP settle with market participants. That's when somebody's supposed to pay you. The point in time they have exposures. Then, you know, CCP runs margins at that same time to cover those exposures and collect those margins.

So the focus to intraday changes and positions, I don't know where the prescriptions are going. But the guidance doesn't seem to be very clear. But it tries to imply, if you read it for what it is written, it tries to imply that stress testing or stress calculations have to be anchored to intraday changes in positions. So that is the concern I'm raising.

MR. WASSERMAN: Great. I've got Chris and then I've got John and then Li, I believe it is.

MR. PERKINS: Just very quickly to echo

what Sunil said. It's been years since we've been in such violent agreement. The bottom line is that stresses should result in a well-calibrated waterfall. That standing waterfall, to his point, is what needs to stand and protect us during times of stress.

As he discussed, if there's a period of time where there is a stress and a CCP starts calling intraday over and over and over again you have pro-cyclical impacts take effect. What it results in is a liquidity race to the bottom. Because if one CCP starts calling the other one is there sitting back on its waterfall there's going to be an underlying race for liquidity. And so we are, again, supporters of robust standing waterfalls.

Rather than think of it like driving a truck over potholes without any shocks. That's what's happening when you're going through these intraday thresholds. It's very, very stressful, challenging, and dangerous in a liquidity perspective.

MR. DABBS: Yes. The only point I'd just like to bring up is that the interconnected nature of the market for the CCPs in general, and when we talk about stress test I think we also need incentives to ensure that when we run the stress tests from a market's perspective that we don't assume that the same liquidity provider that we have assumed in the stress test is no longer there. That they're still providing liquidity.

So I think we need to have incentives to ensure that we don't have -- the largest member isn't also the largest liquidity provider from a repo line perspective or from any sort of funding, and from a custody perspective. So I think that it needs to be looked at through the entire chain as opposed to just the stresses individually, and then liquidity sources being independent.

MR. WASSERMAN: Okay. That's fair. I've got Li, Marnie, Bill, Dale, and then Sunil again. If I've gotten your name wrong I apologize. Sorry.

MR. WANG: Liping from Barclays. I

would just say that the pro-cyclicality, it's a valid point. I think we probably should differentiate between two kinds of pro-cyclicality. I'm sure we understand. Either you hold the position steady and then the market goes into a (inaudible). The margin will increase. So that kind of present you cannot control.

But the other part is that you could suddenly increase the position. That, at least, the position taker you have some control there. I don't think the (inaudible) should cover that. So that's one point.

The second point is that, yes, liquidity, managing that stressor is very important. But let's suppose, for example, if the margin increases, just for the sake of discussion let's say increases $30. We have a cap that you cannot increase more than $20. So you have that $10, you see, I cannot call for that. So what that means is that you will violate your defaulters pay first. So that's one.

The other one is that under covering

will be shared, essentially, through the waterfall by other members. So, essentially, other members would take that kind of, if you will, risk there. So the point we are taking, I know in the margins that we could (inaudible). We probably have to balance between will the default pay first or whether other members should share that versus the liquidity strains that you have to call during the stress period. Thanks.

MR. WASSERMAN: Marnie?

MS. ROSENBERG: Thank you, Bob and Jeff and Tracey and John for inviting me here today. I'm Marnie Rosenberg from J.P. Morgan. I'm speaking on behalf of, obviously J.P. Morgan, but I manage clearinghouses risks. So my remarks are coming from a safety and soundness and a risk perspective, and our firm's ability to measure and manage our risk.

So, first of all, I'll say what I said at the CPMI/IOSCO roundtable last week which I think the guidance, the proposed guidance on stress testing is excellent. I think it's comprehensive. I think you guys, you know, Bob, kudos to you and Danielle LaRuso. You did a really good job pulling this together. It's obvious you took a lot of recommendations through the (inaudible), so we appreciate that.

The first comment. I want to respond to Dale and Sunil on the use of unsynchronized stress tests. I completely respect what both of you said in the specifics related to the clearinghouses that you run. When I look at the global, kind of from a global perspective, which is my responsibility, we see, you know, differences in structures in terms of the period of risk that we have to member defaults. And we see diversified asset classes within a given clearinghouse or clearing segment.

So I would be careful in terms of, you know, suggesting that use of unsynchronized stress test does not apply universally because, I think actually, there are instances where unsynchronized stress tests would be very important in some clearinghouses that I can think of in other markets. So I just wanted to make that point.

Back to, Bob, your original question on the consistency of credit and liquidity stress testing. There are just a few comments I want to make. You know, a default event, a member default where there's credit losses would definitely be associated with related liquidity demands. We all know that. However, there can be a liquidity event which is unrelated to a credit event.

Therefore, so whether it's in terms of coverage standard and related stress scenarios or in terms of application at segment versus a CCP level, assumptions for credit risk should set the minimum for liquidity risk. We don't think you can talk about stress scenarios without talking about coverage. I also said this last week which is there's a perception. I would say that there is a universal cover to standard for credit and liquidity losses. That's actually not the case.

It is the case under AMIR and it is the case for U.S. SIDCOs, and those, obviously, that opt into the U.S. SIDCO rules. We do believe there should be a universal cover two standard. So from a stress testing perspective and an overall coverage perspective we believe that should be the minimum. However, there should be responsibility placed on clearinghouses to assess whether given the distribution of risk and uncollateralized stress loses among the membership it would make sense to cover more than two. Meaning that if there's more of an equal distribution of risk, perhaps, it shouldn't just be cover two. That may not protect the clearinghouse universally.

Then the consistency between credit and liquidity risk management, CCP versus a segment level. Similar to the consistency in coverage, there should also be consistency in how liquidity risk is managed. Where CCP manages credit risk at a segment level there's a limited rationale to manage liquidity risk or recourses at a CCP level on a shared basis. That's the first point I would make.

Even where CCPs manage liquidity at a

shared level, CCPs should be attentive to the challenges associated with modeling stress areas across multiple asset classes. And, importantly, when CCPs have the ability to borrow cash collateral from non-defaulting members, which many do, they should be required to replace these with forms of security collateral and bear the market risk that's associated with that. Clearinghouses should also have responsibility for returning cash collateral and be made liable for this market risk. Thank you.

MR. WASSERMAN: Thank you. Bill?

MR. THUM: So first of all, thank you for inviting me here today to speak. I'm here on behalf of Vanguard and our 9 million investors. We use derivatives, as I've said many times before, principally to hedge the risks that are presented in the portfolios, to invest efficiently, and to manage cash positions.

We've been very involved with regulators over the past few years to help craft the new architecture for derivatives' trading to make sure that it is transparent and stable, and protective of our client assets. You know, coming here today to talk about stress testing, in particular, you know, we look at it from a perspective of being fiduciaries for those assets. Given that there is now a mandate to clear our trades with the clearinghouses rather than trade over the counter and settle bilaterally we're very focused on having transparency in our decision making in terms of our selection of clearinghouses, our select of clearing members.

We have a very robust process presently and review of our clearinghouses, and we have great confidence in them. But we are aware that the information is not easily available or transparent. So in looking at the consultative report I'd like to echo the comments that have been made that it is an excellent framework to strengthen both the issues of stress testing and disclosure related to stress testing. We feel there should be public disclosure of benchmarking tests, and the tests should cover both credit and liquidity risks using both historical and forward looking models.

In terms of additions or improvements to the consultative report, comments letters that we'll be involved in we'll be recommending that. The disclosures should be accurate with penalties for misstatements. The disclosures of the results of stress testing should be available on a central website, and the disclosures should be sufficient to allow informed decision making in selections of clearinghouses.

We agree that the test should include potential sources of liquidity risk and should also address infrastructure failures such as custodian risk. The test should ignore voluntary excess contributions that may be withdrawn, and we also don't feel the test should assume that trades will port given the complexities of porting trades in market stress.

In terms of looking at enhanced aspects of the test, we're focusing on the interrelationship between clearinghouses, clearing members, the products that are traded across clearinghouses, and the risk that potentially can arise when a market participant defaults to a clearing member. The market participant that may clear across various clearing members and in various clearinghouses, and the cascading risks that can therefore arise due to this connection, the interconnectedness between the participants, the clearing members, and the clearinghouses. We agree with the consultative report that this interrelationship should also be recognized in the stress testing.

MR. WASSERMAN: Dale?

MR. MICHAELS: One point back on the intraday, to echo part of Sunil's statement is the intraday positions are, by the very nature, transitory. So when we're doing stress testing from a CCP we can look at end of day positions. We can allocate that based on knowing what the end of day risks are. When we're looking at intraday positions which are transitory.

You have give ups that are happening,

other types of business where to do that it would be a hypothetical, so then we would be doing a hypothetical of a stress test of not real positions, and then would be allocating to the clearing fund based on that hypothetical. So you have a hypothetical stress test on a hypothetical position. It's not necessarily where -- gets you to the transparency that you want to be.

The other point I'd like to make on cover two, cover two liquidity. Understanding that there is a European standard on cover two liquidity, but I'd also like to point out that there are differences underneath there. So when you look at a cover two liquidity standard in Europe they have the practice of being able to use cash collateral from non-defaulters' margin, so non-defaulters' margin could be used as liquidity source for a default. A much different practice than what you see here in the U.S. and the CCPs.

So before we start going and say, cover two for everything, and leave it at that we have to look at the underlying details of what that really means, and figure out what is the practice of each of the markets, and make sure that we're consistent across there.

MR. WASSERMAN: Let me press you just for a moment though on the intraday point. Because you mention the concept of, you know, hypothetical positions and speaking for myself, until I'm told to change my views, I can certainly see a lot of the difficulties around that. On the other hand, I also get concerns and hear concerns from others around, you know, the fact that you never know when a default is going to happen.

An entity which intends on being flat at the end of the day could on the day, you know, on the day of its demise not succeed in that. So in other words, you're not guaranteed that the exposures you see intraday won't be reflected in a default or are you? Is there room, in other words, for something somewhere in the middle here to take into account, somehow, things that are happening intraday to the extent they are plausible? Are they ever plausible?

MR. MICHAELS: So a couple points on that. An intraday, I think, just by looking at stress testing we're discounting the fact that there's other CCPs here have real time intraday risk. We're looking at the positions. We have staff that are looking at the risk that are following up with the clearing member firms, that are doing the analytics, that are looking at an ensuring that the risks that are taken on by each of the clearing members or the buy sides underneath the clearing members are appropriate.

So to look at just intraday stress test and have that be the panacea and say, well, we're going to have that. That ignores everything else that the CCPs do on their day- to-day risk management. So I think that's something that needs to be considered.

The other point is when you look at intraday it's not necessarily looking at the default management process. It's not necessarily the case where we have a default that happens intraday when someone just takes on a position.

What happens is those positions might be taken on. They go to the settlement cycle and in the next morning the settlement bank says no. This is too much. That's when the default process starts. It's not exactly it took up positions and they defaulted and they start doing it at intraday.

So when you start looking at intraday prices, intraday positions it's ignoring the fact that a lot of this is more of the end of day type of stuff when you get to settlement banks and then you start your default measured process at that time.

MR. WASSERMAN: I've got Sunil and then Sebastian.

MR. CUTINHO: I will address a few points, you know, in the following order. I think I'll start with liquidity, just following up on a few things that Dale pointed out. Client porting and spend some time on disclosure, and finally infrastructure failures.

So starting with liquidity, you know, just to add to what Dale is saying, you know, and also touching on one of the points Marnie made. You cannot simply take cash, you know, although there are regulatory jurisdictions. There's differences in one place, that is true, but you cannot simply take cash that the clients post as a liquidity resources without taking into account what kind of a stress you're imposing on them. Right? And you cannot simply

(inaudible) as a free source.

Giving you an example. There are structures in

place where CCPs do look to their membership and the cash that they post in guarantee fund as a liquidity resource in certain situations. Let's say we'll call it a liquidity event. Even there they take great care to make sure that those entities have access to convert their securities to cash so they have easy access to liquidity.

But trying to come up with a standard and then assuming that a CCP can use any clients' cash is actually very -- it can increase systemic risk because think about it. You know, the client can have needs for their cash for things outside the CCP, for risks outside the CCP for which they may want to draw down the cash. So when clients post cash with us or clearing members post cash with us they also, as margin, they have -- there is a certain level of expectation that comes with that. For those entities that don't have access to liquidity facilities they may want to actually draw down that cash for their other needs outside the CCP. So tying that up or taking that away can impose a liquidity strain on them, so it's important to take that into account.

The other thing to remember about liquidity is we've got to go back to the goals of liquidity and the liquidity stress testing. This is a point in time, exercise, at different settlement times. I do agree with the model that you need to have distinct liquidity stress tests. They need to be based on, you know, they need to be consistent with a credit stress test, credit stress testing scenarios so in order to understand the needs.

I completely appreciate that perspective, but one of the things we have to keep in mind is it's a point in time exercise. So at a given settlement time what are the needs So simply coming up with a covers two standard and then assuming that we can use everybody's cash available is not -- I mean, those resources are not always available.

The second thing to keep in mind is when we are putting these standards we also have to take into account what banking regulators are doing for the banking system as a whole. One is, you know, banks are being penalized for providing liquidity facilities in some sense. They have liquidity coverage ratio. You have net stable funding ratio.

At the same time, there are questions on what is high quality liquid assets. So in a sense, people are questioning if treasuries are liquid. So imagine you're trying to create an artificial liquidity squeeze by taking away the normal providers of liquidity because they don't have any incentive to provide liquidity. And at the same time, you're not -- you know, you're not making high quality liquid assets which have a very reliable market.

You're saying that institutions cannot use that as a liquidity resource in their measurement of what is considered liquidity. So I think that is something you have to keep in mind. We cannot look at these CPMI/IOSCO guidelines in isolation. You have to take the whole picture into account.

Client porting. You know, this, I think, is a jurisdictional thing. You have to take into account the structure of the jurisdiction. In some jurisdictions there is net margining. In a net margining scenario and in a scenario where the jurisdiction imposes that you cannot port clients until you get their explicit consent then I completely sympathize and agree with the fact that you cannot port clients. Right?

So in those scenarios porting becomes less probably. In the U.S. you have a structure where, you know, you have a gross margining system. On top of that, we have a negative consent process that allows clients to be ported (inaudible). We have done this empirically. So assuming that all clients would default in stress testing is an implausible standard, so that is what some are asking us to do.

Imagine, assuming that all clients of a clearing member are going to default. That is the assumption that the guideline is presuming, but you need to take into account that not all clients can default. If you were to assume that all clients would default why would they just default to one clearing member? They would default to every clearing member. So that doesn't add up.

So if the question is about porting of clients then you have to take into account what structure does the CCP operate under, okay? And what jurisdiction?

On disclosure, we completely appreciate and support the points in the need to understand risk exposures. So we have disclosures out there right now, quantitative disclosures out there right now. The thing that we have to balance in terms of disclosures, especially concerning results, is that we have to maintain confidentiality of the very same clients and the very same clearing members. You have to draw that balance, so you cannot create harm through disclosures. Perhaps, we need to work together to come up with a mechanism where you can, you know, support a disclosure framework without actually disclosing the risks of clearing firms and clients.

Finally, I'm sorry for being too long. Infrastructure failures. I think a CCPs role is in terms of guaranteeing the performance, okay, of -- you know, in terms of credit risk and we talked about liquidity risk as well. But the CCPs role is not to guarantee all the service providers.

Imagine a clearing member and a client. They have a relationship. They use a custodian.

The few things that have happened recently, clearing members do not guarantee CCPs performance to the clients. They have stopped doing that. Clearing members do not guarantee their custodian's performance to the client. So if something happens to the custodian, you know, between a clearing firm and a client a clearing member doesn't guarantee that. You know?

In some cases, if you think about these infrastructures, you know, some of them are systemic infrastructures. They need to have -- in the U.S. we're doing that through the continuity process or the living will process to make sure that some of these infrastructure maintain continuity of access. I think, you know, we have trouble with CCPs and stress testing having to cover all infrastructure failures.

MR. WASSERMAN: I would just make two notes. First is that I think the idea is that stress test needs to be, basically, bound to the reality. We may not like the reality, indeed, in some cases you and I may have common cause in having problems with certain realities, including in terms of things like bank capital. But the issue is, I think, is that the stress test needs to be bound by that reality, whatever it might be.

The other observation I would just very quickly make is in terms of client porting. I think what the guidance is saying is not assuming that all clients default, but rather that the clearinghouse will not be getting any of the money from the clearing member. In light of porting taking a couple of days as it did, for instance, in MF Global in light of clearing members finding themselves in 10 years of litigation for failing to stop payments that were made upstream, as in the case of the Griffin brothers. It's not entirely clear to me how implausible it is that you won't be seeing any more money from a clearing member regardless of whether the clients themselves default to that clearing member.

I've got Sebastian, Stephen, Marnie,

Nicolas, and Bill. So, Sebastian?

MR. RENARD: Yes, good morning. Thank you for the invitation to this panel. I would like to echo in support the comments with respect to transparency to the clearing members to the stress test results. We believe that under the current states there is little stress test transparency outside of the risk committee context. Sometimes also limited in that context.

So clearing members are essentially required to rely on CCP assurances that they maintain sufficient resources. So we believe that clearing members should receive better disclosure beyond the risk committee level, both regarding stress testing scenarios and the ultimate results. So we therefore recommend access to CCP stress test results so that clearing members can appropriately assess the credit and liquidity coverage. Thank you.

MR. WASSERMAN: Stephen?

MR. BERGER: I want to comment on a few of the topics that were raised. First on the intraday issue, Bob, I'm sympathetic to your point that, you know, at any point in the day the music could stop. So, just trying to think of the right analogy to use here. So I was thinking of a game of musical chairs, and so I think the point is that, yes, the music can stop at any point. We just want to make sure we have enough chairs there, and it's not like the game is being played in school where one of the chairs has been pulled away.

So I think about that in context of how we appropriately design the stress test. I think the two, at least two of the thoughts on a intraday basis are, you know, what positions are there at any point in time that may differ from what positions are there, typically, at the end of the day. And then are there intraday price moves that have occurred historically that aren't observed when we look at end of the day prices.

I'll caveat that by saying that there, at times, erroneous intraday price moves that we would not want to use. But for designing stress tests it does seem reasonable me that you could design a stress test that would look at certain intraday changes that have happened historically that may not be observed at the end of the day, but are still worth running a stress test about.

I just think that's a different conversation than what's the remedy. You learn something from running that stress test, but the logical conclusion of that is not necessarily that we need to start doing extra intraday settlement cycles as a result of that. So it's more what did we learn from running the stress scenario, and did we prove or not prove that we had enough chairs in place when that music did stop, were it to stop in that kind of setup at the end of the day. So, I don't know, that's the lens through which I was looking at the intraday question.

Then, I guess, just two other quick comments on some points that were raised. I think, you know, when we design these stress test scenarios it's readily acknowledged that, you know, the more sophisticated ones are multivariate in nature and assume certain inter-dependencies. So I think it was a point Sunil might have been raising, but, you know, we can't ignore the fact that there are, you know, in crisis scenarios certain things that are, you know, happen that ameliorate the situation.

So if in all the scenarios we look at there's a flight to quality in terms of high quality liquid assets, and those tend to go up in value I don't think we should have all our stress test scenarios necessarily assume that the value of the collateral is plunging at the same time that there are other stresses occurring.

Lastly, I just think that discussion you just had about whether or not we assume or not assume the client, you know, the non-defaulting clients of a defaulting clearing member continue to make good on their variation margin payments or not. In light of the, you know, numbers that Jeff cited at the beginning in terms of 200 billion out of the 300 billion in outstanding IM being, you know, reflecting client positions, I can only assume how much of the daily VM flows are client-driven as opposed to direct clearing member driven.

I guess it either puts the final point on that we need a better system to make sure that those client VM flows can continue even during a, you know, clearing member default. So I don't know that that's necessarily part of this guidance, but certainly it -- given the relative importance of the client IM and VM pools I think we need to ensure that there's a way to make sure that those monies continue to flow to and from the CCP even in a clearing members' default scenario if that's going to be that material in terms of their kind of, essentially, liquidity to contain a function in that scenario.

MR. WASSERMAN: Thank you. Marnie?

MS. ROSENBERG: Thank you, Bob. First I just wanted to go on record to clarify what I said about the use of cash initial margin belonging to the non-defaulters. I am not endorsing or recommending that. I'm suggesting that that is a very common practice when I look at our portfolio globally. That clearinghouses in other jurisdictions are permitted to use that cash collateral, and they're not required to designate securities and cover that market risk.

And so what I'm suggesting is if that becomes a liquidity source then that needs to be properly managed. We, as clearing members, need to be properly protected from that market risk.

The couple other comments I would make with what others have said. I think John made a comment about the reliance on liquidity facilities. I would just say, you know, given the significant interconnectedness between liquidity providers and members we do believe the guidance should set thresholds on the extent to which a clearinghouse can rely on credit lines from members considered in aggregate. That's a really important point.

The other additional point I wanted to make was in response to some of the comments that have been made on transparency. You know, what we need to do as a firm is understand what our potential loss is on our guarantee fund and assessments over a period of time. So we do support the proposed disclosures that are in the annex that suggest on an anonymized basis, a distribution of uncollateralized stress losses.

If we don't have insight into what the risk distribution looks like it's very hard for us to be able to manage and measure that risk. This, by us being able to do that and all the other clearing members here that will make the system safer. So I just want to make sure that's clear.

The other thing that we thought the guidance, there could be more prescription guidance around is the definition of extreme but plausible. We're still kind of challenged by what that means and what risk tolerance mean. I think providing some examples would be really helpful in this way.

Then finally, I would just say, you know, in reading through the section several times as I have, I think one thing that is not very clear or missing is what's done with the stress test results. So, you know, clearinghouses, obviously, can run these models and get the results, but it's really about the interpretation of the results and what they do with them. So we believe that clearinghouses should analyze and ensure that the complexity of the results is well-understood, and not just, obviously, unilaterally applied.

Also, in understanding the drivers and relationships within the data sets to ensure reasonableness and ensure an appropriate level of conservatism and sizing the safeguards. Thanks.

MR. WASSERMAN: Thank you. I've got Nicolas, Bill. Andre, I don't know if you still wanted the floor?

MR. FERNANDEZ: No.

MR. WASSERMAN: Okay. Then Jacob, Dale, and Eileen. So, Nicolas. I will apologize to everyone if I mispronounce your name or garble it in any way. Please correct me.

MR. FRIEDMAN: That's okay. You can

call me Nico. Nico Friedman from Goldman. Just want to make a couple of points. So generally we are very pleased with the guidance. I think it's been comprehensive, particularly around the identifications of the various risks that should be considered through stress testing.

It is probably daunting to think about the actual implementations, particularly as we get more granular, but that's probably the cost that, you know, we're going to have to incur to make sure that, you know, CCPs never get to the point of non-viability which, I think, everyone in this room would agree with.

The topic of stress testing, credit stress testing, liquidity stress testing, are extremely complex. So from a transparency perspective, certainly as clearing members, we would want to have the tools to better understand our potential risk exposures and manage accordingly. But there's another dimension which is the market confidence.

So even if, you know, you cannot

necessarily get to the level of disclosure that we would want because of confidentiality reasons or other aspects just disclosing to the broader markets some of the stress testing shocks, ad hoc scenarios, how CCPs try to anticipate macro events that are out there, and just give the broader confidence to the market that, you know, the resources are sized to whether this kind of scenarios, I believe are going to be very important from a systemic risk perspective.

Just a couple of points on credit risk and liquidity risk, stress testing. On credit, I would generally agree with the point Marnie made that there's a lack of consistency as we go through CCPs globally in terms of definition of extreme but plausible. Some of the actual risk factors are being assumed to size the funded resources. A stress period of risk which is mentioned in the guidance which is extremely important maybe could benefit from being a bit more prescriptive, especially as we think about the liquidity of certain portfolios or certainly thinking about two large members defaulting at once. You know?

In terms of the concentration of the positions associated with that, as well as to the extent there are products where liquidity could drop in terms of stress how do CCPs actually think about incorporating that into stress testing measures. I think that's important.

Finally, on liquidity, I would also agree that in terms of thinking about the right stress scenarios you probably need to look beyond just the credit defaults or defaults of largest members. Certainly thinking about a concurrent (inaudible) in, you know, financing markets, repo markets, operational failures that could be in, you know, from a marketing infrastructure perspective or through members having issues at the same time. That should be considered.

Finally, I think there was a point made as well. The guidance should highlight the need to look beyond clearing members for liquidity because surely a wrong

(inaudible) risk aspect here is
very concerning.

MR. WASSERMAN: So I've got Bill DeLeon, Jacob, Dale, Eileen, Bill Thum, and I think Bill is going to have the last word because then we're going to come to the end of this session. So Bill DeLeon?

MR. DELEON: Bill DeLeon, PIMCO. Thank you, again, for the opportunity to come and speak today. Good seeing you all again. This time on a different coast in a different country.

A couple of comments. First of all, in terms of stress testing, while we understand the need and desire to have public information we're not fully convinced that it is truly necessary to have it public. We do understand the need for stress testing to be conducted by CCPs.

However, our view is that if it becomes a requirement to become public we run the risk that prescriptive stress testing will sort of muddle information because different CCPs and different silos require different tests and have different market conditions. You'll constantly be chasing your tail trying to get meaningful information. It's going to be a difficult problem.

Our concern is, though, that there be mandated tasks that meet some standard and that the CCPs need to attest that they meet those standards and run them on a regular basis. So we are in favor of mandating that certain stress testing be done to meet certain standards. We understand the concern of wanting to quantify things, but our concerns is how do you standardize those things because the stress test for commodities are going to be different than for credit than for equities than for interest rates. So we're just very concerned about that potential, sort of, problem.

So for us, that is less of an issue other than that they're being mandated stress test. They meet certain standards that can be run and conducted on a regular basis, and that the appropriate people at CCPs attest that they are done, and, you know, put their name down that they're run. That they signed off on them on a regular basis. So that's first and foremost.

In terms of liquidity, a bunch of people made this point, but I just want to stress, and I know that this is a sensitive topic for you and many people here and it's not your fault, but I do think that it is important that the stress testing, liquidity stress testing take into account that the collinear relationship between times of stress and the people who provide liquidity during times of stress go away.

So that is to say the people who provided lines of liquidity may be the same people who are defaulting or not have access to provide lines of liquidity. So that is something to think about given the current construct. I know you're working on fixing the current construct, but given the current construct you may not. So I would say, if you can't fix the construct you should think about it.

The last thing I would bring up, and I

know we're going to get into this later is sort of the defaulter pay model and liquidity management in terms of things is you need to have a well-defined structure for how things are paid in the event that a stress occurs and people start losing money. Who pays what, when, and how? And it is key that part of the model is defining where everyone falls, where they get that liquidity, and the best way to ensure that is to make it clear that two things are occurring. That each CCP is a fiduciary.

Part of the remit of a CCP is to clearly state they are a fiduciary. We just talked about $300 billion and how we can sit around here and say that $300 billion at what is concentrated in probably three CCPs, because that's where the vast majority of the capital is, maybe it's four or five, but vast majority is three to four, of that $300 billion is sitting in very small silos.

Telling these people put their hands up, we're fiduciaries and they have to run their stress tests like that and they have to have skin in the game. That is key to how they define things, and the waterfalls need to define that for losses.

MR. WASSERMAN: Jacob?

MR. FEDJE: Thanks, Bob. I just wanted to quick bring up the topic of disclosure again. I understand the clearing members' viewpoint of wanting disclosure for stress testing, but I do also want to echo Sunil's concern about confidentiality, especially with MGEX or really, really small DCO. That confidentiality concern is even more so important considering the very small basket of products, essentially one, in our case. That provides an easy way for people to kind of back into various positions and, I guess, each clearing member's, you know, stake in that, so.

MR. WASSERMAN: Dale?

MR. WASSERMAN: I would like to, from a CCP perspective, echo what Marnie, Nico, and Bill were saying about liquidity facilities with the need for greater liquidity from the IOSCO principles and the guidance. We are, basically, embedding wrong way risks because the same folks that were going to be providing liquidity, because the numbers have those bank lines of the same folks are going to be stressed.

The OCC is taking a lead as far as trying to get non-bank facilities going through a line of caplers, but that's still not good enough. We need to have other ways. I know I'm probably talking to the wrong audience, but just on the off chance that someone from the Fed might be surfing the net and hit this on YouTube I'm going to say that CCPs need to have access to the Fed for liquidity rather than having the intermediary of the clearing member firms.

MR. WASSERMAN: I will note, Dale, it is, I think, the intention of the guidance that you do need to take into account, basically not only liquidity needs, but stresses that might affect liquidity sources. To the extent that that's not clear we should definitely be told to make it clearer.

Eileen and then Bill Thum, and then as I said, we're going to have to end at that point for this session.

MS. KIELY: Thank you so much. My name is Eileen Kiley and I'm here representing BlackRock. Ultimately, I'm representing the thousands of end users of derivatives, the investors that BlackRock invests on behalf of.

Because this is a public forum I'm going to make some statements that may be very obvious to those immediately around this table, but I think it's very important for us, as fiduciaries, that our customers hear this kind of information and really understand what we're talking about here.

So, to start, stress testing is generally used by CCPs to inform the overall size of the financial safeguard package. That is why this process is so critical to the safety and soundness of CCPs. Something that is that critical requires a great level of scrutiny and we welcome the additional guidance that the CPMI/IOSCO has provided with this updated guidance.

Specifically, the making sure that stress tests actually mirror day-to-day operations practices, and, as Bob called it, they will be bound by reality. I think that is a very important element that this adds. Second, and something I don't think has been mentioned yet today, disallowing the inclusion of excess funds that have been posted by clearing members and the clients should not be, you know, should not be included in stress tests. Those funds are put, generally, as operational buffers to allow for operation groups to alleviate their workload. But if any sign of stress were to come out that money is going to be pulled back.

Third, specifically requiring the inclusion of other key participants in the credit liquidity stress testing which everybody's been talking about so far. This idea that, you know, you're a clearing member could also be your liquidity provider. Absolutely, we support that that happens.

Specific to the question that was asked to the panel about the historical -- including all historical stress tests or historical prices movements in the stress tests. I struggle to see how anyone could, with certainty, say that historical price volatility could not reoccur.

So, therefore, while we recognize this might introduce some volatility and some outliers to CCPs statistical analyses I don't think they should be avoided or ignored. Adjusting scenarios for relative versus absolute may be appropriate, as suggested by the guidelines, but taking them out altogether we fell would be inappropriate.

I just want to echo what very many people have said, disclosure of the scenarios run is very important to us, and, in particular, the scenarios that inform the size of the default fund is very important. We recognize the guidance does, indeed, prescribe that. Thank you.

MR. WASSERMAN: We'll talk more about disclosure on our third panel. Bill, you get the last word.

MR. THUM: So I just wanted to build on a comment that Marnie made with respect to initial margin, its use as liquidity. I was going through the report earlier today and flagging different paragraphs. If it was my daughter's Instagram account I would probably put likes next to Paragraph 5.1.2 which says, initial margins use is to cover potential future exposure to a participant and not serve as a liquidity pool or pool to address other defaults. So that's a great paragraph in the report.

I think if it is to be used as a source of liquidity then I agree with Marnie. Its use must be subject to mandated specific guidelines and regulatory oversight, including the provision of collateral limits on the amount and duration of use, and receive senior debt claim status to be paid back ahead of shareholders. That's all I have to say.

MR. WASSERMAN: Thank you. In which event, we come to the end of our first panel. We will have a 15 minute break. If I could ask everyone to please be in your seats and ready to resume at 10:35, precisely. Thanks much.

(Recess)

MR. WASSERMAN: Thank you very much, and thanks to everyone for being very, very prompt. Our second panel is on margin, and specifically the focus is on margin methodologies and essentially how CCPs determine how much margin to charge.

I'd like to start with a question that is covered in both the guidance and the cover note, which is with respect to the margin period of risk, an issue that had been of some small discussion internationally among a couple of jurisdictions.

The PFMIs do not prescribe a minimum margin period of risk. Is further guidance in this area needed? Who would like to start?

MR. FERNANDEZ: We think that some guidance on minimum MPOR would be useful. Of course, that should be linked to the types of products, the specific products and asset classes that a CCP is clearing.

I think in general the guidance is very good about outlining that for all of the different requirements in the margin space, but I think in particular for MPOR, some guidance would be helpful, reference the product, the depth of the market, and the impact of individual participants to follow up on a given market. I think those should be considerations.

MR. WASSERMAN: Thank you. Sunil?

MR. CUTINHO: I also wonder, on some of the points that -- I forget your name. Andres. I haven't met Andres before. Some of the points Andres made. I think the thing to keep in mind is especially the second part of what Andres was suggesting, MPOR is a function, it is a function of the risk profile of the product.

We got into a lot of discussions, you pointed to that. There are a lot of factors involved in actually picking margin period of risk. One of them, and there are a few of them, but one of them is liquidity in the product. The other is concentration of that liquidity in the product.

Having a prescriptive MPOR is something that we feel will be too restrictive and can actually undershoot in some circumstances and overshoot in some circumstances.

I feel there should be a process between regulators and us, which exists in the U.S., where you visit us very often, and where we spend some time discussing these topics, but having a blanket single standard that applies to every product, I think that is not very effective.

MR. WASSERMAN: Okay.

MR. DABBS: Yes, I think we have spent a lot of time talking about the risk of the product and liquidity of the product, but I also think it's important to recognize the timing of the margin requirements and their payments. For clearing members and for house positions, those are basically on demand requirements, so we need margin calls intraday and we also need them at the CCP's discretion.

However, for client positions, those are generally collected on a T+1 basis, so margins due the following day from a variation perspective.

I think we also need to recognize when the clock starts because if you have a default of a clearing member, which is the main scenario we are thinking of, you have default of a clearing member, and you have effectively gone two days without the client meeting margins, because the first day, they didn't have to meet margin, there was no requirement for them to meet variation, and the second, because they wouldn't have met it until the coming day, and the second day, they won't pay to a defaulted clearing member.

So, now the CCP is facing the credit risk of those clients without a guarantor, and it's been two days since variation has been effectively collected in that circumstance.

We do think the timing of one day for positions where you have intraday requirements, you could make that justification, but I think it's important to recognize the timing of when variation is actually due.

MR. WASSERMAN: Okay. I have Chris, Dale, Scott, Marnie, and then I'm going to want to move on to the next question, if I may. Chris?

MR. PERKINS: Thank you. The issue with MPOR is we don't like when labels are attached to MPOR, like futures is two days, and swaps, five days, as an example. It should really be based on the underlying liquidity of the product, based on qualitative and quantitative factors.

The other issue with an MPOR is that if there is a regulatory minimum for MPOR, the market will manage to that level. We think there should be a number of qualitative and quantitative inputs that are put into when a CCP establishes an MPOR.

We talked about some of the quantitative, but when you look at qualitative, look at the number of CCPs in the space, number of clearing members in the space, the concentration amongst clearing members. That's it.

MR. MICHAELS: I echo what Chris had mentioned. It is about the product, coming up with one MPOR fits all. We have seen the regulations evolve where you do see different MPORs for OTC products versus exchange traded.

I think my worry is MPRO is one piece of the margin. Then you start talking about seasonality of the products. That is another piece. Concentration. Add-ons. Liquidity.

If you start going into each individual level, start being very prescriptive, you add in procyclicality, being prescriptive on that, you end up getting into almost a Frankenstein margin model where you have all these pieces being very prescriptive but are you looking at things holistically, are you looking at things across the board, making sure the CCPs are doing the right thing from the overall product and the liquidity and the breadth that is in the markets.

MR. WASSERMAN: Scott?

MR. HILL: I agree with what Dale and Chris have just said. I think you do have to take into consideration all aspects of the model. We have talked about concentration, what your intraday policy is, unit gross or a net regime.

I think there are any number of factors that should be determined, and it should go by the market. It's not the case that two days works for every futures market. It's not the case that five days is appropriate for every OTC market.

I think less prescription in this area is better.

MR. WASSERMAN: Marnie?

MS. ROSENBERG: Thanks, Bob. Marnie Rosenberg, JP Morgan. From a risk perspective, we do believe that the MPRO again is one parameter, one assumption, that goes into a margin model.

However, to what John already said, from a client perspective, when you look at actually the rules that we have looked at in terms of time that the clearinghouse gives for client support, it is way too short. I think that making that assumption is not in conjunction with the objectives that the market has for non-defaulting clients to an alternative clearer.

I would also say that we look at,

obviously, all of our listed derivative memberships globally, and when we look at the margin model and the MPRO and the liquidity of the contracts, we don't believe that an MPRO of one is sufficient.

I would also say when we look at the concentration or liquidity add-on methodology for listed derivatives, again, talking about globally, we don't think the methodology is transparent and necessarily addresses the ill-liquidity of the underlying contract. It really addresses concentration with some of the largest members, and how much risk those members bring.

I think the MPRO needs to be addressed in conjunction with any kind of add-ons, like concentration and liquidity, and given that right now I don't think we have a consistent or strong universal regime for that, I have a hard time suggesting even for house positions that one day would be sufficient.

MR. WASSERMAN: Stephen?

MR. BERGER: I just want to quickly echo others. We agree there should not be a rigid minimum prescribed, and I guess I would note there are already arbitrary minimums for cleared swaps, for example, of five days, which may or may not be appropriate today or continue to be appropriate as those markets evolve. I would caution against having rigid minimums.

MR. WASSERMAN: Nico, I think you will have the last word on MPRO.

MR. FRIEDMAN: Probably in agreement with what has been said, and I think the comment I would have about the guidance, particularly around some of the more complex elements of margin methodologies, which is kind of the aspects we all worry about, which is not observable, so the liquidity, the concentrations, the seasonality. These are really difficult topics to address.

The concentrations, mentioned as elements of the margining system, and on the one hand, yes, you could end up with extremely complex margining models that take into account all of that, but I personally think it is necessary.

Often times in the context of our discussions with CCPs, we get very generic answers around yes, we take into account liquidity or concentration, yes, we do take into account.

The reality is these are such important risk factors, in the context of CCPs having a lot of visibility around trading volumes that can be incorporated into the margin methodologies or interest for products that could be incorporated into concentration, add-ons, I believe it should be more formulaic and that would help certainly with confidence that those purchases are robust.

MR. WASSERMAN: One issue which folks have been speaking about a lot, certainly in the context of margin but elsewhere, is the issue of procyclicality. There is some discussion of that in the guidance, and certainly this is something we have been very concerned about from a U.S. perspective.

I guess the question I'd like to put out on the floor is whether measures to limit the effects of procyclicality in the context of margins should be mandated, and if so, should those measures be principle based or prescriptive? I'd like to recognize my colleague, John Lawton, as the first person to address this.

MR. LAWTON: Thanks, Bob. Some of us on the staff would probably say we think it should be more principle based. We have looked at some of the prescriptive measures in this area, and they seem to be solutions in search of a problem.

Basically, staff has looked at data from a period of over six years and four large contracts in different asset classes, and the demands on liquidity from increases in initial margin were pretty insignificant in size and frequency when compared to demands for variation margin.

The largest VM demands in the four asset classes ranged from 5 to 16 times as much as the largest IM increases.

In one contract, there were actually 924 days when market moves generated VM payments that were greater than the single largest IM increase.

In addition to being smaller, liquidity demands generated by IM increases also were less frequent.

In the asset classes reviewed, IM increases occurred on no more and generally less than 7 percent of the trading days. Another point we noticed is when there were increases, they tended not to be clustered.

By contrast, we saw numerous instances when there were four and five days in a row where VM demands were many times larger than any increases in IM.

In sum, we are sort of puzzled as to why such emphasis has been placed on some of these prescriptive measures in the calculation of IM. It would seem a risk based model that incorporated periods of extreme volatility into its inputs and that achieved 99 percent coverage would largely address cyclicality concerns.

In addition, we do have some concern that if there is any implication that a DCO would feel constrained from increasing IM because of cyclicality issues when they thought because of prudence they really should increase IM as a matter of systemic risk.

MR. WASSERMAN: I have Bill D. I have Sunil, Chris, Scott, Dale, and Nico. Bill?

MR. DeLEON: Bill DeLeon, PIMCO. We agree that any prudent risk management system should have a factor of four procyclicality. We believe it should be principle based, not prescriptive. We agree, and I think the data that John just mentioned sort of proves that the vast majority of models are already calibrated by most CCPs to incorporate these procyclical effects, that is why you don't see these types of effects.

We know that in our risk management models, we have incorporated floors and moving averages to prevent situations where when you enter periods of incredibly low volatility, you don't rely upon the most recent periods of low volatility to calibrate because you will have periods of historic, where things do spike again, and you don't want to have incredibly low initial margin regimes and then wind up blowing up a CCP or not have enough margin in.

We agree there should be principle based models for this. We also believe that most models out there are calibrated already, and good risk management systems will allow for that or be designed that way.

MR. WASSERMAN: Thanks. Sunil?

MR. CUTINHO: I want to echo some of the points, but I just want to give some examples as well. This goes to the point that Dale was making, Frankenstein, if I could borrow that term. Let me try a few ideas. I'm going to respond to Dale as well as Nico and a few things that Bill said.

The first thing is that from our experience, what we have learned is in some jurisdictions they have very prescriptive tools on how to calibrate procyclicality. They have chosen to specify the tools versus go to the principle that margin models should be anti-procyclical.

The problems that we see are that

actually they achieve the reverse. They end up being procyclical. The tools prescribed ended up being procyclical. That is one. Second is we found them to actually be under margin risk. That was another issue that we saw.

Third is they did not fully appreciate the fact that in risk management, there has been a lot of innovation, and at this table, there are a lot of ideas being exchanged, especially when margin models are being designed, and there has been a lot of innovation. There are so many other tools to take into account when you think of anti-procyclicality. Bill had mentioned a few.

There are things like implied volatility where the market itself signals what the volatility is going to be in the future. Dale pointed to seasonality. In some sense, I appreciate where Nico is coming from, that there is a diversity of margin models out there, and they need to have different risk factors, and they need to address all those different risk factors.

Having a regulator prescribe that is

what we have significant concerns with, in the sense that you would end up undershooting significantly and not allowing other mechanisms to manage procyclicality. We have seen that. We have had firsthand experience with that during the equivalence process.

The second part, I wanted to just appreciate where John was coming from. I mentioned some of this during the stress testing panel. If you look at it, CCPs should be very aware of their impact on the broader ecosystem.

Issues that we found on the day after the referendum were actually driven by practices that some felt were normal course of business but continued to do so and extract a lot of let's say losses. They were just covering the losses. Assuming these are uncovered losses.

We were surprised that some people considered these market movements uncovered because there is margin collateral sitting there, there are a lot of assets sitting there to cover the risk, and as Dale pointed out in previous panels, one of the things that CCPs do is on a real time basis, monitor how these positions change, and we are also comparing that against the collateral that we have at our disposal.

If we simply have triggers that sit there and collect money, as John pointed out, VM numbers are significantly high, especially during stress. That is very procyclical.

It seems like we seem to be so narrowly focused on our margin methodology when if you look at the totality of a CCP's actions, procyclicality shows up in many areas, and a CCP should be aware of their actions.

The third one is gross versus net. I know we stated that, I don't want to beat this horse, but what is very funny to us is the numbers that we are pointing out in terms of margin changes, they are so small compared to what happens when you have a net margining regime, and there is a member failure.

In a net margining regime, the CCP has less collateral across the client book of a clearing firm, and if that clearing firm had a default, you have a procyclical trigger there right away forcing clients to put up more margin to get their positions supported, and that is significantly procyclical rather than these statistical measures that we are looking at.

So, in a sense, I think I appreciate where John is coming from, there is a lot more focus on a very, very narrow aspect of margining, with respect to procyclicality, and we are forgetting the bigger picture.

MR. WASSERMAN: Chris?

MR. PERKINS: I agree a lot with what Sunil said, and I wanted to start by referencing the crash of 1987. In the aftermath of that crash, the Brady Commission report came out and cited some of the dangers of intraday one-sided margin calls and their contribution to procyclicality.

Unfortunately, today, we live in an ecosystem that is very tied together. We have mandatory OTC clearing. We're seeing CCPs behave differently, resulting in what could be a liquidity race to the bottom, highlighting some of the procyclical nature of intraday margin calls.

We believe that CCPS again should look at the stresses in the system. They should mitigate those stresses through the traditional waterfall, initial margins, skin in the game, and guarantee fund and assessments.

When CCPs start calling intraday, it provides stress in the system because the other CCPs think they have to as well. If they have robust collateralization and waterfalls already, they shouldn't have to move every time there is a market move. It's incredibly important.

The other issue that we are facing is we are seeing intraday margin calls that cannot be one-sided. If a CCP has to call intraday, we think that call should be coordinated with other CCPs. It should be coordinated with the regulators. It should flow in both directions, so payors should be paid, people that owe money should pay.

The practice of one-sided calling further exacerbates procyclicality. We think there should be additional prescription around avoiding that practice because it is very dangerous, and it could be in the next stress. Thank you.

MR. WASSERMAN: Okay. I have Scott, Dale, Nico, Isaac, Bill T., and Marnie. Scott?

MR. HILL: I completely agree that we shouldn't just focus on the impacts of procyclicality and IM. You have to look at variation margin. You have to look at the various add-ons, concentration, et cetera, all of which can be extremely procyclical. Any margin model has to consider all of those factors and the procyclicality impacts.

I do think there is a reasonable view that says within your IM, you ought to consider procyclicality. I think even as John noted, there is some small amount of procyclical impact.

We have actually had to deploy one of the three Amir methods in our London clearinghouse. I will tell you I am very much in favor of being principle based having gone through that.

If you look at the three prescriptions, in our view, two of them just don't work, one is add 25 percent, which unless you have a way to eat into that is just add 25 percent. Over time, it is completely procyclical. Another is to look at the average over 10 years, which works until you are above that average.

I do think any margin model and every element ought to be able to demonstrate how it deals with procyclical and how it mitigates procyclical impacts, but I think that ought to be a principle, and I think any attempt to prescribe APC on IM, on VM, on add-ons, I think it's a fools err. I don't think you can do it.

MR. MICHAELS: First of all, to John, I appreciate you and your staff's work on looking at some of the details on procyclicality. I think you have come up with some great insights into the issues here, or non-issues, if you will.

One of the things I want to say on the procyclicality point, I think you are seeing that CCPs have generally already achieved that, if you look at the outcomes, as John pointed out. A lot of the procyclicality measures that folks want to see are already embedded into the CCP's practices, without getting so prescriptive as some of the other regulations out in Europe.

One thing I want to add and perhaps to Nico's point, one thing we are very much an advocate of is transparency. What are the liquidation charges, or what are the procyclicality measures?

It should be transparent to the markets so it can be replicable, so that folks know if there are market moves, they know what the margins are going to be moving to, so it's not only just making sure that we are taking it in, but the market understands the measures that we are doing, whether it be procyclicality or liquidity or seasonality, people can understand it and replicate for their purposes, either at a member firm or on the buy side.

MR. WASSERMAN: Nico?

MR. FRIEDMAN: Just a couple of points. Procyclicality is an important topic, perhaps my view is to be slightly more prescriptive. In terms of the prescriptive approaches, that could include loop back pairs, pairs of stress or some buffer, those could have some merit.

For example, a couple of years ago in the winter of 2014, there was a lot of volatility in the energy markets. When I think about coverage, I think about the number of bridges, which is one thing, also the magnitude of the bridges. It is one thing to bridge by a little a few times in a row.

I think the reactions from CCPs in that context was reasonable. CCPs involving energy markets ramped up their initial margin, they didn't do it all at once, they were careful to progressively ramp up the margin levels, and in that context, I think a buffer could help.

In terms of perspectives, I personally

have a lot of respect to the risk management expertise of those CCPs, and the best way to probably prevent procyclicality is to anticipate potential events and dislocations in the markets, the macro risks out there, the outcome of those events.

Brexit is one of them, it could be put into just to anticipate and increase initial margin way before you get close to those events, so that you build in the additional protection over some period of time as opposed to having to react through unpredictable intraday margin calls the day of the events.

MR. WASSERMAN: Let me press you just for a second. I do have a great deal of sympathy about the concept of if you have an anticipated event, maybe you should be preparing for that, but in an ecosystem where clearing members are of necessity set up, I think they have fantastic treasury functions that are set up to meet whatever might happen in variation margin.

How much is the significance of

increases in initial margins, sort of what John was talking about at the beginning?

MR. FRIEDMAN: So, large clearing members only take into account in their liquidity management some amount of intraday variation margin calls. The endpoint of initial margin is also with respect to the clients, their own liquidity, and helping clearing members manage the risk against those clients.

If you get to levels of volatility that were not foreseen, that could result in liquidity calls on clients, and that is something that CCPs could help us with. In other words, we enter volatility, the initial margin that is CCP driven is insufficient, it would be better to prepare the markets more broadly and build buffers.

MR. WASSERMAN: Okay. Isaac?

MR. CHANG: Thank you. Maybe once I would just like to preface what I say, one of the contexts in which we think about these issues is both from a risk management perspective but also from the perspective of an asset management firm that has to execute and trade in these markets every day.

The one thing I would mention that I would remiss in not mentioning is that I think we can probably think about a lot of these topics somewhat like purchasing insurance.

There is a tradeoff here, I think, where we need to thread the needle between -- if insurance premiums were too high, people just won't buy it, right, and the government is dealing with this in other aspects right now, and there is a direct impact on market liquidity, which is another concern that lots of people have raised.

As an asset manager who does traffic in many essentially cleared products and broadly supports central clearing, in topics like margining, I think that is one of the perspectives that at least we don't want to lose.

You can build a system that is absolutely safe and can never fail, but no one ever trades, and then I think we have missed the boat in terms of how do you design. What are we trying to get to at the end of the day?

That's not to suggest that any of the panelists have suggested anything that I think is getting there, but I do think at least that's one of the tradeoffs that I think is implicit in all of the conversations and perspectives that we are bringing.

I'd say on this topic specifically, generally we believe both that adjusting margin for volatility is just sound risk management practice.

Now, I'd agree also with what Bill said. To do it completely formulaically without considering sort of more -- to do it in a naïve way is not the right away to approach it. You want to consider historical context and think about things like floors and downside and so forth.

But broadly speaking, we feel like this is a responsible way to think about the marketplace, even though we understand the potential stresses, and the answer is what else would you do if you don't increase margins when volatility goes up, that seems to us to be not a particularly responsible perspective.

We also strongly agree with a lot of what was said about the approach really best being principles based. Frankly, if the approach is too perspective, I would argue we would introduce more systemic risk because two clearinghouses trading the same products and make margin calls at exactly the same time for the exact same amounts, exactly same positions, some amount of diversification in the system, in risk management, as long as it meets sort of baseline sound practices is actually better, I'd say, for the overall health of the system.

The last thing I would say is both on this topic and the topic we talked about earlier, stress testing, as a buy side participant that has had to make the transition from a bilateral to essentially cleared world in lots and lots of products, transparency for us we feel is an absolute necessity for us to frankly be able to responsibly manage the risks of our portfolios as a fiduciary for our clients.

We need to understand how much cash we need to have on hand. We need to understand the levels of free cash we need to hold in different products.

You know, while I know there has been some discussion on the nature of one-sided margin calls, I think, by some of the other participants, I would just say again from our perspective as a diversified asset manager, that's extremely problematic because we often have one position that is offset by another, and to the extent they are either at different clearinghouses, so cash from one is intended to offset the other, or an un-cleared product where there is bilateral collateral that is being posted.

Regardless, I think, of the eventual answer, we feel like transparency, allowing an asset manager like ourselves to have a good understanding of when cash will be required allows us to act in a responsible manner to make sure we are prepared and think through all the possible eventualities.

MR. WASSERMAN: Okay. I have Marnie, Bill, Eileen, Scott, and Sunil. I will mention one thing, which is if folks could to a certain extent focus a bit on what the guidance currently says.

Are there things that are good, are there things we should change? In other words, ultimately, we need to come to a place which I hope will be the right one, so to the extent you can help us come to that right place, I would view that as very helpful. Marnie?

MS. ROSENBERG: There are a couple of points I would make on procyclicality. First is sort of supporting what Chris said, which is the intraday margin calls on VM and IM in a crisis creates a lot of liquidity strains. As a member but as a risk person, I would say from both a house and client perspective, the challenge is predictability and transparency to what Isaac said.

I get questions related to our own liquidity stress testing. Marnie, what assumptions should we make about what a multiplier under stress conditions the clearinghouses could apply in our IM.

It is something that we need to understand and we worry about. We want to ensure we are being prudent meeting our own regulatory requirements.

I think on the VM point, John, that you made, the end of day, the end process, is a process that exists and that we plan for. On the intraday piece, when we get called for VM, we do believe there should be pass-throughs within a given clearinghouse. It shouldn't be one-sided. That is creating problems in the market.

From an IM and procyclicality perspective, I would say there are different ways to address it. We do happen to like the Amir 25 percent buffer, but with the ability to use that buffer in a crisis. Amir actually allows you to do that. We only know of one clearinghouse in

Europe that does that. Twenty-five percent you could say is arbitrary, but I think as a concept having a buffer, whether it be for intraday margin calls and market movements or if it be sort of from an IM perspective, we think is a good practice.

I think we should focus on what the objective is, which is ensuring that participants can meet their margin calls in a timely manner. I think the delays in order to get internal approvals for large movements could be problematic, so we want to protect the system.

I think ensuring whether it be floors in the model, whether it be a 10 year look back period, which we think should be a universal standard, whether it should be a buffer, I think there are different ways to address the issue. Thanks.

MR. WASSERMAN: Bill T.?

MR. THUM: Yes. I wanted to build on some of the points that have already been made. When we talk about MPOR or indeed the margin add-ons, we really can't talk about them in isolation. We have to talk about them in the context as well as the first panel, stress testing and disclosure, and the panel to come, CCP contributions to the default fund.

As we moved into the cleared space, I think many buy side participants were somewhat frustrated by what was perceived to be an arbitrary MPOR for cleared swaps of five days, also the 10 days for un-cleared swaps. Certainly realized it was kind of a compromise, almost quick and dirty approach that was applied to the rule to get us through the door.

Our sense though is that it overstates the risk for some products, understates the risk for other products. It forces us to put margin into a system that may be excessive in many cases. What to do, if there is no minimum floor on MPOR, how does the system have credibility, understanding, of course, the clearinghouses are looking at it with laser focus and rebalancing and assessing.

This is where stress testing and disclosure comes in, can we have ex-ante tests where we look at what the clearinghouses have set for both the MPOR and for margin add-ons and see to what extent they are tracking appropriate for the risk as presented over time.

I think having it done in a principled way together with ex-ante stress tests and disclosure is a possible means to reinforce not only the appropriateness of the amount but the credibility of the approach and the discipline within the system so that the Commission can expect and anticipate the good work that is being done on a daily basis will be done, and there is a review as to the performance of doing those calculations, and the market has some transparency.

MR. WASSERMAN: Let me press just for a moment because one of the points I think you made, and Isaac, I think you made this as well, is that clients need to understand what calls are going to be made on them. I note the guidance currently says, and I'm looking at 2213, that the Board should ensure that the CCP conducts regular and vigorous due diligence of its participants' understanding and the ability to predict and manage potential changes in margin.

What I think I am hearing you all say is that perhaps that needs to go further and essentially you are looking both at the level of the participants but also at the indirect participants, the clients, and as well there needs to be sufficient information going out so that essentially folks can have the tools to manage those calls.

Is that where folks are going?

MR. THUM: I think it is both managing expectations going forward and also having confidence that not only are our positions being appropriately margined but our brothers and sisters' positions that are coming to the table are being appropriately margined as well.

When you set a floor -- well, when you set no floor, the risk is there is competitive reasons why a margin may be set. When you set a floor, that could be the target that is aimed at without actually recognizing there is additional risk that is being brought into the system.

Yes, I think it is an ability to be able to anticipate what our obligations will be but also to have credibility in how those obligations are being calculated and confidence in them.

MR. WASSERMAN: I have Eileen, Scott, Sunil, John D., Dale, and Bill D. Eileen?

MS. KIELY: Thank you. I'll be brief here. A couple of comments. First, quickly, I do think volatility floors are very appropriate when we are talking about procyclicality. A lot of the CCPs have diligence. That seems to be a fairly common practice but not universal. Secondly, I'll reiterate what we are hearing, and Bob, exactly what you said, which is as an end user, we need the tools to be able to predict what those margin calls could be, and we need the transparency to be able to do that.

We have access to some margin models

through our clearing members to be able to do such a thing, but it is very sporadic. I would even suggest is there some type of a sensitivity analysis that could be standard disclosure that is given to clearing members and customers to give us a sense of what market moves might lead to margin calls.

MR. WASSERMAN: Thanks. Scott?

MR. HILL: Just to directly address your point, I think with regards to the guidance, our view is procyclicality is something that should be considered but it ought to be considered as a part of a holistic risk model, not just IM.

I go back to Nico's point and the energy movements in 2014, and I agree with him that incorporating in your margin model a buffer that reflects a sizable stress period is a good way to build that buffer.

I think it needs to be principle based because if you think about Marnie's comments, she noted they liked the

percent method and the rule allows you

to determine or eat into that buffer. It's not prescriptive on how or when, and she even noted that 25 percent may or may not be the right starting point.

I think our view is procyclicality matters. It matters in every element of the risk model, not just IM, but it does matter in IM. I think there should be international consistency. Having a prescribed set of rules in one jurisdiction and a different prescription in another and having no prescription at all in a third is going to be bad for global markets.

Overall, I do think procyclicality as a part of the risk model matters, and there should be efforts to demonstrate how you deal with it, which may include a buffer built on a stress period in the model.

MR. WASSERMAN: Sunil?

MR. CUTINHO: I will just stick to the points, just to compliment what Scott said. We completely believe in predictability and transparency. I think giving clients and clearing firms, even prospective clients who want to actually bring in risk, having them know what their costs of putting on risk is and how that risk will evolve is something we strongly believe in.

We strongly believe in sharing those tools as well. We also have tools where you can stress and see how your margin will evolve, changes in prices as well as changes in positions.

The second point I'd like to make has to do with a little bit of what Scott said. None of us here are sitting and arguing against having countercyclical or anti- procyclical buffers. It is just what we are worried about or concerned about is prescriptive tools, and then prescriptive interpretations of those tools. As Isaac pointed out, those can actually introduce systemic risk. That is the basic concern we have.

MR. WASSERMAN: Thanks. One other thing I'm going to ask folks if you could address, one of the things -- the guidance does discuss to a certain extent measuring procyclicality.

I guess one question I hope folks will over the course of our discussion address is is it practical to measure procyclical properties of a margin system using quantitative metrics? Are there commonly accepted metrics to do this? Has the fitness for purpose of any of those metrics been reliably demonstrated?

As we are continuing the discussion, I'd like to hopefully get there as well. John?

MR. DABBS: Two points I want to make. I think predictability is what everybody continues to say, and I think predictability from a clearing member and from an end user perspective are equally important in our funding models.

To the point about variation versus initial margin, I think there is a very critical difference between the two. From a variation margin perspective, that just reflects market risk, and everybody around this table measures market risk on a daily basis. That is our job, to understand market risk.

Measuring that, watching that,

monitoring that, is very predictable. Initial margin is not predictable. Initial margin is subjective. We don't have transparency in how the CCP will act.

I'm not saying that is a bad thing or a good thing, but that is always going to be a concern. What we have here, if I take the examples of when initial margin is raised, I can look at what the models would say, but they don't necessarily always act in those manners, so they may more slowly raise initial margins, which is again not procyclical but it's not predictable.

I think when we obsess about initial margin and variation is because variation, I know the market moved, I know it happened in real time, and I know what I am going to have to fund for. Initial margin is slightly more subjective in that it is a decision-making process and it may be something in the future, and at what point do you start to move in a direction of increasing margins is highly subjective.

I know that might happen. I might have

it on my calendar. Nobody in this room can say LC is going to act on this date, CME is going to act on this date, ICE is going to act on this date. Everybody is going to be something different and do it in a different way.

I'm not saying that is good or bad but that is one of the reasons why we focus more on initial margin and variation just because of the measurement and ease of predictability, for lack of a better term, as it is happening.

The second point that we continue to talk about is principles based versus being prescriptive. Again, I would reiterate that I am all for principles based, but we have a fundamental problem in the procyclicality conversation, which is we had an event, it was Brexit, it happened, and one CCP behaved poorly during that.

We need to do better, like whatever we do, we need to do better. In my opinion, we have to use that as our example and as our litmus test, because if we don't take that out of the system, then what good are the rules that we are trying to create and the standards we are trying to create if we have an event like Brexit where one CCP behaved very poorly from a markets perspective in managing liquidity.

How do we solve that if we don't have something that we look back at, whatever we are writing, and say would it have improved that situation. If it didn't, then we are still living with a huge funding regime that just doesn't work. It did not work, it doesn't work, and we can't continue to repeat that.

MR. WASSERMAN: Let me press you on your first point just for a moment, if I may. I take your point that look, you're in the business of predicting market moves whereas there is a different type of variability with respect to IM. On the other hand, I think part of the point is well, yes, but those market moves are much greater in absolute terms than the changes to IM that might follow the market moves, and another point would be, of course, IM could be posted in liquid securities, VM has to be absolute cash.

I guess the point I'm thinking is well, yes, but given that you are already set up for the much larger point, how much of a difference does the delta to the IM make to your ability because you are already so well set up for the greater.

MR. DABBS: Yes. I think when we think about scenarios and when we think about the stress tests that we run as banks and the buy side runs, from their risk management perspective, I think there are provisions and there are also offsetting positions that cannot be seen in the context of these stats, so we may have other positions performing in different directions.

We look at market risk in totality, and we certainly hold capital for that, and we hold funding for that. We can run our models and we can say during those stress periods, how much would we lose, what would happen, et cetera.

Now, you are putting those two things together because typically we're going to be losing money, making money, something is going to be happening on our market risk side, plus there is this other scenario where IM is going to be increasing.

It's making sure that we understand again the predictability of that IM. We probably know sometimes in our businesses faster than CCPs know how much market risk we are losing, especially in the OTC markets. They may not be as observable to the CCPs as they are to us from a dealer perspective.

It's not always unique in that sense, and obviously when we look at net, we look at our net market risk and when those funding sources are due, for lack of a better term. They do go hand in hand, but it is just one that we can predict and predict more in real time and make arrangements for that.

MR. WASSERMAN: I am going to go to Sunil, then Dale, Bill D., and Chris.

MR. CUTINHO: I'm going to just address your question on tools to measure anti-procyclicality or performance against anti-procyclicality growth.

There have been some papers out there most recently incidentally pointing out that a very prescriptive tools based approach is not the most effective way to actually measure anti-procyclicality. Maybe you need to have a more principles based approach.

There were a set of tests. The one thing that we noticed as far as those tools are concerned is that they are focused on a static portfolio, and they just measure changes in the margin or the margin of that portfolio that is static over a 30 day period.

I think listening to the conversation here the bigger issue or the bigger goal for us is to look at the impact of the changes, taking into account changes in positions, et cetera, at a portfolio level across all the products, on the clearing firms and also the client. That is basically where we think we should focus as far as measuring the impacts.

When we look at procyclicality, we look

at the impact of our actions on our clearing firms and impact of our actions on clients of those clearing firms to the extent we know them.

That is where we think the focus should be. We don't agree that a prescriptive set of tools is a good answer, but in terms of outcomes, let's say, goals, on what those measures should be, I think there is more study necessary to get to the right place. At the outset, it has to be at a portfolio level, and not be so focused on a single product or a single static portfolio over time.

MR. WASSERMAN: Thank you much. Dale?

MR. MICHAELS: You asked for perhaps some language that would address procyclicality. I would advocate something along the lines of a clearly articulated framework that's transparent and approved by the appropriate risk committee or board. That way, folks know what it is. It has gone through the governance process. People can prepare for it.

Even with that, I would still argue for

the flexibility needed to address certain events. For example, we talked a little bit about Brexit. There have been government shutdowns. If you look at the prescriptive measures that Amir has, the three, longer volatility, the 25 percent, the 25 percent stress, none of them would have helped for Brexit. We still would have been in the same situation.

What you would prefer to do is think about Brexit, look at past events, make sure you have anticipated the type of volatility that could happen, look at the applied volatilities, and have some type of measured margin increases before the event occurred, and if you are transparent to the public as far as why you're doing it, folks can plan for that, and the members could plan for their liquidity purposes, the clients could plan for their purposes, as long as we are transparent with our thought process going into it.

MR. WASSERMAN: Dale, thank you very, very much, for giving some concrete suggestions, which are very helpful here and will be very helpful in your comment on October 18.

Let me press on one point that you raised. It seemed sort of interesting. Would you see perhaps a distinction between say idiosyncratic events and ongoing markets, so that there may be just some different lines of analysis, or do you think you have to keep it all together?

MR. MICHAELS: That's why I would hate to sit there and say procyclicality, well, we implemented an Amir procyclicality and that takes care of everything. I think there needs to be some additional analysis done for these types of events and give the CCPs the flexibility to react to those events or better, rather than react to them, anticipate them, and ensure your risk measures, your margin, whatever it might be, your add-ons, is anticipated in the possibility that these events could happen, and the after effects of what volatility may occur, what type of pacemaker from those events is occurring.

MR. WASSERMAN: Thanks. Bill?

MR. DeLEON: Thank you, Bob. Bill DeLeon, PIMCO. Two sort of unrelated streams. One from previous comments. We sort of have a different take on sort of the amount of data that is available and the ability to calculate and what we expect to calculate.

We do think there is a huge amount of data available to us and our clients regarding initial margin requirements on a security level or derivative level, and the ability to calculate things on an individual level.

When you get to portfolio margining level, it would be nice to have better tools available, however, you can compute and do certain calculations, and you do get a lot of information available. I do think there are pretty good estimates out there, and there is information. It's not perfect, but it's fairly good.

While we always want better information, I do think there is a fair amount out there, and I think of all the things I worry about, that is not the biggest thing we worry about. I think there is enough and you get what you need, and if you are going to put a portfolio on, you can do enough calculations to see how much margin you most likely are going to need to post before you put those trades on, and you can manage around that.

The other question you asked was sort of measuring procyclicality and looking at that. Unfortunately, there is no forward way to look at it. It's a backwards looking problem. Nico mentioned it, and we talked about Brexit and other things. Those are all forward looking problems. We can all sit here and guess, and part of my job as a risk manager and many people's jobs, is to think about things out of our mind and say hey, this could happen or this could happen, and come up with a stress test and try to predict it. A lot of people do that.

The reality though is we get paid a lot of money to do that, and sometimes we get it right and sometimes we get it wrong, but a CCP or risk management framework needs to be more robust. Procyclicality or stress testing needs to be based on backward looking stress testing checks.

That is why you look at a lot of these backfilled data things, which is why you have floors and you have 10 years of data, and you do back testing things, to make sure your models are not missing historical events or plausible events.

While people have talked about different things using applied volatility, those are all forward looking things. You need to use a combination, and that is why a prescriptive or overly prescriptive model will not work, and you want to have a principles based model which is tried and true, and you need to have one where the board is accountable and there are a bunch of principles the board has agreed to that they are going to enforce and live by, run and check on a regular basis.

MR. WASSERMAN: Thanks. Chris?

MR. PERKINS: Thank you. Getting back to metrics, and I appreciate Bill's comments. If you're sitting in Brexit and the 10 year point drops by 30 basis points, and that automatically triggers 90 basis points of margin being called from a particular CCP, those are the type of metrics that we really want to avoid.

Again, when you go back to a situation like that, we want to look at the entirety of the existing waterfalls to include initial margins, skin in the game, and the guarantee fund. Is there enough collateral within that waterfall to withstand the 30 basis point move, because if it triggers off a process of hyper collateralization, then the other CCPs are going to have to get moving, and that is where procyclicality takes hold.

MR. WASSERMAN: I have Marnie and Nico.

MS. ROSENBERG: My additional comments will be brief. One is one thing we haven't talked about is haircuts and the ability to change haircuts and the predictability on haircuts. I think that is also very important when there are large movements in collateral values.

The other point, Bob, I would make on metrics is I think it is very simple. It's just what have been the largest jumps over a historical period, and calls for. Again, total amount of collateral. To Chris' point, how much are you calling from members and what are those components, and do you see large jumps in certain periods, and does that reflect some kind of issue with the underlying margin model, like there are not enough stress periods or there is not enough of a buffer built in or a floor. Thanks.

MR. WASSERMAN: Nico?

MR. FRIEDMAN: I just wanted to make a couple of points about back testing, which I don't think we have covered yet. I think the guidance could probably be strengthened in a couple of ways. One is the guidance mentioned doing back testing on actual portfolios.

Portfolios, when they are big, diversified, when you look at it as a whole, could actually hide some of the risk, so we would recommend complimenting that with more contract level back testing or even hypothetical portfolio. That was the first point.

Secondly, back testing means a lot of different things to different people. What we are generally seeing consistently is back testing is just checking daily P&L move or tracking daily P&L move versus the actual amount of margin being collected.

That is important such checking takes place, but what happens is if you start seeing some bridges, and I'm going back to the winter 2014 and energy markets, you see those bridges accumulating and the magnitude of them increasing, it's too late. Now you have to massively recalibrate the initial margin, and for all the reasons we explained, you can't do that overnight. You are going to have to step it up over some reasonable period of time.

What we would recommend is to enhance the guidance around back testing and have CCPs look back to specific stress periods and say okay, not necessarily 2008, it could be sovereign events or Brexit, here is my portfolio, if I move it back to June 24, what would my initial margin model have required versus the actual move, and doing just more of a targeted back testing, if you will.

Lastly, just as a general comment, the risk that we are most worried about is the one that cannot be back tested easily, so liquidity and concentrations. I know CCPs have a lot of information that we don't necessarily have. For example, around open interests, and that could help us manage concentration at our single client sort of account level, and conversely, we do have information about liquidity, and our view on liquidity of products in terms of stress, and that is something that could be shared with CCPs as they try to size initial margins, particularly for the most non-linear less liquid buys.

MR. BANDMAN: I have a follow up question for Chris Perkins, just a point you made on this panel and the last one. I just want to make sure we understand it.

Your comment was that a CCP should honor the defaulter pays principle, but they should also look to the waterfall before making the margin call. Trying to reconcile those two ideas, is your point that the clearinghouse should look not just at the amount of IM that it holds, but also at the potential defaulter's slice or contribution to the default fund, or are you saying they should look at the total risk mutualization available in the waterfall in making that decision about whether to call for more on margin?

MR. PERKINS: Thanks, Jeff, for letting me clarify. Again, we believe in the defaulter pays model. We believe the vast preponderance of risk should be mitigated through initial margin. We think that should be supplemented by robust skin in the game. Together, those two elements, and I know we are going to talk about this in the third panel, should mitigate the vast preponderance of the risk. That kind of model best facilitates affordability, which is key to systemic risk and systemic resiliency.

When we are talking about intraday margin calls, obviously the vast preponderance of risk should be mitigated through those two elements. However, you also have a waterfall that you are sitting behind. I think you can avoid the procyclical nature of intraday margin calls that stress the system and lead to a liquidity race to the bottom potentially by recognizing all of the assets in the waterfall. Again, you have to stress the defaulter pays model.

Also, I made the point earlier, we need to avoid these ad hoc charges that are outside the waterfall, whether they are concentration charge margin, et cetera, that is assessed directly to clearing members because of the risk of clients as an example. Very hazardous. Again, it is going to impede affordability.

If an important client, a strategic client, a risky client, or directional client, let me say, is presented to me during a time of stress, if they are generating stresses that I have to mitigate because a CCP is charging me, I'm not going to want to take that portfolio. It is going to be expensive and risky for me.

We are also very concerned on these ad

hoc margin charges. Thanks.

MR. WASSERMAN: Chris, you segued us into the last point. We have about 5 minutes left. With respect to the rest of the guidance, including in particular things like add-on charges, do folks have comments? Hopefully, fairly brief. Marnie?

MS. ROSENBERG: I would start by saying that we agree with the guidance that clearinghouses must use margin add-ons, but only when they need to capture risks that may not be captured in price histories or where there is significant concentration within given positions.

I would note the public quantitative disclosures do not require any disclosures on add-ons. We don't have transparency on how clearinghouses actually model this.

I think on the swap side, I am familiar and involved in the surveys that are done with our traders to provide insight into what those liquidity add-ons should be, but as I said in the earlier panel, when we have looked at concentration of liquidity add-ons in the listed segment, it is not consistent.

I would say it's not related to the liquidity of the underlying contract. It is really for the most part focused on sort of the largest members, and sort of the margin multiplier is added on.

I think more work needs to be done, both in terms of developing kind of best practices in this area, and also providing transparency to the market. Thank you, Bob.

MR. WASSERMAN: Thanks. Dale and Sunil, and Sunil will have the last word.

MR. MICHAELS: Just to clarify what I think Chris was saying. We don't want to necessarily restrict the add- on charges that a clearinghouse can charge to the clients, it is the add-on charges to the clearing member itself that wouldn't apply to the client. Is that correct?

MR. PERKINS: Yes. We appreciate there are risks that need to be incorporated and mitigated, so if a CCP sees a lot of stress in the system, we want them to mitigate that stress. However, it should be mitigated through the waterfall, particularly through initial margin.

We get concerned when there are ad hoc charges allocated to client clearing members because of the risk of another party, again, getting back to defaulter pays.

MR. MICHAELS: From that standpoint, I would very much be an advocate of you need to have the clearinghouses come up with methodologies where you look at the concentration of the particular market, you look at the correlation and correlation breaking, and adding that into the total margin, and looking at liquidity charges that might be added.

As long as that is transparent, it is clearly articulated, hopefully it has also been approved by the governing body of a risk committee or board. That way, the members and the buy side could see it, can anticipate for it. Hopefully, I think that comes to what folks are looking for. As long as we are able to measure it and respond to it, we need to make sure that we have flexibility to have those types of add-on charges.

MR. WASSERMAN: Sunil, we have about one more minute.

MR. CUTINHO: Just to add to what Dale was saying, flexibility is the key point here with respect to add-on, not every add-on can be statistically modeled. You need to take care of event risk, as he talked about.

MR. WASSERMAN: Thank you very much. We have come to the end of our second panel. We're going to have a 15 minute break, until 12:05. Unfortunately, we do not have the budget to give you lunch, even though it is the lunch hour, but instead, we will let you eat cake.

(Recess)

MR. WASSERMAN: We are now going to begin our last and longest session, where we are going to be covering: Governance, Transparency, CCP's Contributions -- DCO's Contributions to Losses and Recovery.

And so I'd like to start with

governance. And I should note the Guidance provides that CCP's Board should have exclusive responsibility for ensuring that the CCP's risk management framework, including its margin system stress testing framework are designed properly. I should note that the intention is not that the Board perform these detailed tasks themselves, but rather that they take ownership of the responsibility to ensure that those tasks are performed properly. And so my question is, is that guidance on the responsibilities of the Board appropriate? Is it sufficiently clear?

So, I guess I will -- since we have a bunch of folks eager to start, I will just go around the table. I've got Scott, I've got Paul, and --

MR. HILL: Okay. Thanks. So, Bob, I think your interpretation of the intent is appropriate. I absolutely do not believe that's what's clear in the Guidance. I don't believe that if any person that sat on one of our Board of Directors read it, they would want to sit on our

Board of Directors any longer. Because I think it reads as if they are responsible for the day-to-day management.

Our view is that the Board is accountable to determine the appropriate risk frameworks, to set risk appetites, to ensure risk model governance, but in all of those things it's more an accountability versus a responsibility. And so our primary comment is that we believe the Guidance is very unclear with regards to the line between what a Board should do, and what day-to-day management should do.

MR. WASSERMAN: And I should note, you know, as I've mentioned a number of times before, in the written comments it would be most helpful if you are clear on that, but as well, to the extent, again, that folks feel comfortable to be sent, I think you understand based on what I was saying, where we are trying to go, if there's ways to express that more clearly detailed suggestions would help because, again, it -- Because what I'm hearing you say is it may be more a failure of expression than a disagreement as to concept.

MR. HILL: That's what we hope is the case, and our comments will reflect how we think it could have been said differently.

MR. WASSERMAN: Okay. In which event I think I will go to Paul, Marcus, Bill D, and then Kim.

MR. CUSENZA: Thank you very much, Bob. So, I'm Paul Cusenza the CEO of Nodal Exchange, and the wholly owned subsidiary, Nodal Clear. I believe that the message, that responsibility should be explicitly with the Board, is in fact the right message. I think it should be with the Board from a responsibility standpoint. But to your point, Bob, with the feedback, and as Scott noted from management and input, and I think that, you know, part of the reason why I believe it should be with Board, too, from a decision-making authority perspective is that there's also other elements here in the United States where, for example, the Public Director representation with greater than 35 percent public directors, and if they are risk competent, et cetera, that provides an important element.

I also believe though that's very important to have the mechanisms for feedback from the stakeholders, including the clearing members and get both disclosure and feedback there. And I think that one place I might go further than what they said in the Guidance, is that I think that feedback should -- from clearing members should be available on a universal basis. And there's a lot of discussion about committees, et cetera, but then there should be universal representation of the clearing members.

And I think individual clearing members should have the right and the ability to have their message conveyed to the Board, so the Board is informed, but then ultimately the Board makes the decision. So I think there has to be cleared that one can inform the Board, but then the Board makes the decision.

MR. WASSERMAN: Thank you. Marcus?

MR. STANLEY: Thank you. Yes. So, I

guess I'd just like to start since there wasn't sort of the -- what one could call the External Public Interest Group, representation on the previous panels. Well, just sort of a general statement about our perspective on this, which is that we view clearinghouses as having a sort of a critical public utility dimension, in terms of their centrality to the market, and also in terms of the dangers that would be created by clearinghouse failure, and in terms of the level and scope of externalities that are implicated by clearinghouse actions.

So, we view people's trust, the reliability of clearinghouses is an absolutely central issue in financial regulation, and we are very concerned about this sort of continual statements by clearing members and by end users on the buy side, that they do not have full transparency into, or confidence in the sufficiency of clearinghouse resources, or the techniques used by clearinghouses for risk management.

I mean JPMorgan in its 2014 papers stated straightforwardly, market participants cannot have full confidence in the sufficiency of clearinghouse resources. So when we look at new constate of papers and proposals, what we are really looking to is, is there something definitive in there that's going to bridge that gap, and bring that confidence for clearing members, for market participants, that they understand the risk management methodologies of clearinghouses.

And I have to say in this consultative paper was, I would say, very principles-based, and non directive, and sort of suggestive, and didn't seem to lay out a disclosure methodology that would definitively permit external validation and checks, even by clearinghouse members on these risk methodologies. There were a variety of suggestions made to the Board in terms of what they should consider disclosing, and that list was -- it was a good list but it was very general.

What is meant by a methodology? You

know, is the methodology something that would permit a quantitative analyst to add a clearing member to really go in and provide an external perspective on whether these margining models were adequate? Not just in terms of broad parameters like the margin creative risk but, say, in terms of the correlation assumptions used for portfolio margining, and so on. And I now that in these international documents are often sort of suggestive when they -- you know, you kind of have to amplify the message in them, because they are written suggestively, but maybe behind the scenes they are more directive.

But I didn't really see anything definitive in terms of the disclosure of the specificity of disclosure, the specific directive to allow clearing members to participate on the relevant committees and the Board; the membership of the Board, that would have brought me that sort of security that this bridge is being -- or that this gap is being closed.

MR. WASSERMAN: Thanks. Bill?

MR. DeLEON: Bill DeLeon, PIMCO. Thank you very much. You know, we agree with your statements and we also agree with Scott's comments that the language is not clear, however, we agree though that the concept is correct, that Board Members should be an oversight, but not a day-to-day management position. So, we would hope that the language would be adjusted to reflect that concept. We think that corporate governance should be corporate governance, and it should not be day-to-day management at the Board level.

MR. WASSERMAN: Thanks. Kim?

MS. TAYLOR: I think my comments are consistent with comments that Scott has made, and comments that Bill has made. Very clearly, there's a problem with the language saying the Board has explicit responsibility for, and then enumeration of very detailed things. Like the best example I think is the approval of removal of a stress-testing scenario. It's a very detailed day-to-day risk management decision. The Board -- or corporate governance principles, at least in the U.S., allow for Boards to rely on the expertise of management that they hire, explicitly to perform the day-to-day management functions, the expertise of the management is available on a 24/7 basis.

The Board is designed to function in an oversight role, and that does not come across clearly in the way that these requirements are laid out. I'm glad to hear you open with the fact that that was the intent of the group, but that definitely is not the takeaway that almost anyone would have from reading this document. So, I think it's important to take the governance aspect up a notch so that Boards are clearly providing corporate oversights, strategic direction, policy oversight.

MR. WASSERMAN: Thanks. I've got, Eileen, Andres, Marnie and Roshan. And again, if I mispronounce anyone's name, please correct me and accept my apologies. Eileen?

MS. KIELY: Okay. Great, you have my name right, so that's good. Picking up on some of the comments, so we actually like a lot of what's said in the governance, notwithstanding that it does seem to sound like you are asking the Board of Directors to actually execute some of these things, but we do agree that the accountability is the important piece here, and we like to see that.

I do want to say, in particular, very happy to see in 2.2.18, that the duties of the representatives or the participants they represent, because we have not had that experience in this handful of Boards that we've been invited on to. We have not felt that our view as the buy side and as a fiduciary has been welcomed in that capacity. So, thank you for including that.

The one other comment I'll make is, the other issue that we have found in our processes on Boards is the nondisclosure agreements that the individual is required to sign, makes it very difficult for them to bring in the relevant expertise at the organizations to really bring the expertise that's needed to bear to the Boards and the risk committees that we sit on. It very important to realize that CCP risk is so multidimensional that there's really no one individual that can bring everything that needs to be done to a particular Board. So, I just wanted to make that comment.

Then the other thing that I wanted to talk about was the disclosure and feedback mechanisms, and this is going I think to what Marcus was just talking about. And we would agree, we want to see a lot more specificity in how those would look. And, you know, I said this last week when we were in one of these roundtables in Europe.

But I'm a practitioner, I'm a credit risk analyst, so I spend my days writing credit risk reviews on CCPs. And in preparing for these meetings I actually went back and looked at 10 CCP reviews that me and my team have done the last six months. And tried to categorize the follow-up questions we had. There's 180 follow-up questions we had from those 10 CCP reviews, and that's after reading all of the disclosures that are available publicly. Most of those, over 50 percent of those were related to default funded margin.

So, while the disclosures are far better than they were, say, even five years ago, due to the PFMIs and the quantitative disclosures, at which time we expect those questions would have been more like 360, a lot more still needs to be done. Specifically, we would actually like to see the disclosures more standardized on the quantitative disclosure front, and I absolutely appreciate that many of the CCPs came together and put together a standardized spreadsheet format, although it's generally an unformatted spreadsheet with 50 different tabs. We do appreciate that there was some consistency, although not all CCPs are following it. And so we do want to see some more standardization on that front.

In addition to that, we recommend that all the disclosures be reviewed by auditors at least annually. I think the disclosures really need to have the same standards that we put to our bilateral counterparts, which would have an audit system in place. And to be clear we recommend that because we found errors in them, and we brought -- whenever we find an error we would bring it to the attention of the of the CCP, and they are very thankful and, oops, okay, let's move on. But that's not acceptable, so we would like to see and audit standard introduced.

And then we would also like to see an MD&A, our management discussion and analysis introduced. I think one would say that the PF and my qualitative standards are meant to be something like that, but I think put the two of them together to help us understand movements in the qualitative -- in the quantitative disclosures. Help us really understand the risks that are going in place.

Again, nothing more than we get in our bilateral counterparts, we are asking for a similar type of disclosure. The last thing I think we need to have is much more explicit disclose on the risk to the end user. And I'm sure we'll be talking about this in short order here, but right now, customers are exposed to the default of the CCP and I guarantee you that it's not well understood by the end user. And so I think those risks need to be very, very well disclosed, up front to all the market participants. And I'll leave it at that.

MR. WASSERMAN: Let me just press you a little bit both for today, but as well for the 18th when -- with the written comments. Can you give us more specific detail as to what you think the guidance should say? You know, and as well how much of this, you know, yes, I will freely admit, and own the fact that PFMI and the Guidance are principles based. How can we do this in a way that essentially fits all sizes, addresses the concerns that have been raised about confidentiality? How, obviously, as I said at the beginning this will -- You know, this document will benefit by challenge, but ultimately we need to figure out, okay, what can we say that would accomplish the goals and do so in a balanced way?

MS. KIELY: I think there's two things

to that. I think, first of all, for us to really get where we need to be we have to go beyond what's in the disclosures right now, or in your consultative documentation. And we probably need to come together as an industry to figure out what should this disclosure look like, right. But to your specific question of what could be done within this document, I think the disclosure of risk to end users, that could certainly be specifically outlined, and an audit requirement can certainly be specifically outlined. Those are the two things that I would suggest, for this purpose, could be made.

MR. WASSERMAN: Great. Thank you much. Andres? And then I'm sorry, I keep on getting your name really badly mispronounced.

MR. FERNANDEZ: I don't think it was that bad, really. I respond to a lot of things. I won't go into that now. Thanks, Bob. Andres Fernandez, at Bank of America Merrill Lynch. On the risk side; we actually like the fact that the Guidance does place explicit responsibility on the

Boards, and we also viewed it as an accountability by the -- that they have to do the work, and I think that that the angle that we've liked, that potentially see it more pointedly discussed in the Guidance, is around how, ultimately the Board will rely on management, but also what is the place of external experts as part of advising the Board in its review of the management -- I'm sorry -- of the risk framework of the CCPs, as well as, you know -- And it goes into quite a level of specificity, right, the responsibilities that are outlined in the Guidance are, you know, margin methodology, plus pro-cyclicality stress testing, and so on.

So, that requires expertise, it's not necessarily expertise that would be broadly shared, or consistently shared across the -- with members of the Board, and so we would like to see potentially more guidance on how that -- what mechanisms, and in what ways that would be covered. And I think it also speaks to the point that Eileen made about the nondisclosure. You know, the fact that perhaps members of the Board have one aspect, or one -- or expertise to bring to the table. They can go back to their firms and certainly rely on folks that are a bit more analytical, or governance expertise, about what are the limits given to the nondisclosure arrangement. Thank you.

MR. WASSERMAN: Thank you. Marnie?

MS. ROSENBERG: Thank you, Bob. Marnie Rosenberg, JPMorgan. I'm also supportive of what the clearinghouse has said on the accountability. When we looked at the back at the language from the original PFMIs, it was more of a suggestion that the Board have that accountability and we like that it's now made an explicit requirement. With that being said, I think there's some specific expansion of the guidance in some areas that we wanted to know the governance overall, but first with respect to the Board.

The guidance suggests that the Board obtain input or justification, scenarios both margin methodology and stress tests from members since it would impact them. We actually think that the input from members should be much broader than that. We believe the Board should have explicit responsibility and solicit participant input on many material risk matters, not just stress testing and margins.

So, by that I mean, changes to membership criteria, and that's a fault management framework, the order of the waterfall, collateral, eligibility requirements, new products in particular being cleared, and this is -- You know, we are at a point of inflection with the non-cleared derivative margin roles we are seeing, increased expansion of products and, you know, more incentives to go towards clearing. So I think product suitability is where we really need to be more engaged with the clearinghouses on this. And then the other thing I would say is, just on the -- you know, provide -- the Guidance we think we should provide direction on the scope mandate structure composition, and objectives that risk committee members.

I mean, Bob, we talked about this somewhat last week, and there's a lot of confusion. In particular about what is the role of the Risk Committee member that is from a member firm? And what I mean by that is, there is some confusion as to just that person represent the interest of their firm, does it represent the fiduciary of the clearinghouse, or are they providing market expertise.

And we believe it should be as the market expert to provide input. And to Eileen's point, we also believe that given that that person may not have all of the expertise they should be able to solicit input from others in the firm from a confidentiality perspective, so they can provide, you know, their best input to the forum.

And then the other thing I would just say is, under member consultation process, and this gets back to us being able to provide input from a member perspective. There needs to be forum where members can provide input, whether these were through former working groups, consultations, it should not result in the CCP electing to use one of these forums, but there should be some kind of a structure that allows members to provide that.

And then there also should be some disclosure provided that if the Risk Committee and the Board chooses not to recognize or agree with that member input and incorporate that into changes, there has to be some kind of audit trail around that. Thank you.

MR. WASSERMAN: Let me press you on one point, because I remember there is the letter was suggesting that essentially there should be two separate mechanisms, both the Risk Committee and a member organization, and I remember my reaction when I was reading that, you know, as government bureaucrats we are sort trained aversively to avoid being overly prescriptive, and creating overly complex requirements. Is there some way to put something like that in the Guidance without falling into that trap of creating just basically something that is too bureaucratic and complex?

MR. ROSENBERG: So, my point was, from a member stakeholder perspective, not all members sit on risk committees, so if you keep them completely separate, a risk committee is the governance mechanism of the clearinghouse, and the members that sit on those risk committees, even in EMIR, EMIR says representatives from clearing members should sit on the risk committees, but it doesn't define what that role, what that representative is.

You know, are they representing their own views from a market expertise, do they represent their firm's views. And we believe from a risk committee governance perspective, they should be representing the interest of their firm, they should be providing expertise to guide the clearinghouse to come to the best decision-making for the market. Right?

So, separately from that we are not being prescriptive as to what kind of form for engaging the broader stakeholder community, we just think that there should be some kind of mechanism to ensure that the clearinghouse and the governance structure receives appropriate input from all stakeholders, and there be some sort of oversight as to how that input is actually taken on board.

MR. WASSERMAN: Okay. I have Roshan, Lindsay, Kim, Nico, Bill DeLeon, and Christal.

MR. ROBERT: Roshan Robert from Barclays. So, listening to Scott, his opening remarks and then to Paul, and well moderated by Bill here. I think there is a requirement for the responsibility and accountability to be sort delineated, and I think that that is a key point right there. Although at least in one place within the Guidance, the Guidance does speak about delegation of authority to managements, so one important point there.

And when mentioning the explicit responsibility of the Board, there is an implicit reference to the fact that the Board should have the view of the CCP's risk tolerance, and in that sense, you know, review the material changes to products, services, et cetera, and periodically review the risk management program as a whole. So, that's sort of like all-encompassing, which makes even more sense for the responsibility and accountability to be sort of delineated.

One other point is that we believe that, you know, the oversight and management of operational risk within the CCPs cannot be understated, and maybe those can be elaborated a little more. And one other point around is guidance related to the CCP's emergency powers, as the discretionary authority available to the CCPs and then emergency situation, this also can be sort of, like elaborate a little more.

I do agree with Eileen's and Marnie's point around the risk committee aspect, you know, wherein the risk committee members from the participants -- don't represent those participants on the risk committee. You know, and at least in one point of the Guidance, the Guidance does speak for the fact wherein the risk committee members represent the firm's views. So I guess articulating that separately within the Guidance may be key. Thank you.

MR. WASSERMAN: Thank you. Lindsay?

MS. HOPKINS: Like so many others, I just want to say that we also agree that the Board should be overall responsible for the risk management framework. The one additional comment I wanted to make actually goes to risk committees as well. In the governance section there is very limited reference to all risk committee complaints, both at some of those more detailed risk-related responsibilities, and we thought it would be appropriate for some of those to go to the risk committee to then report to the Board. So we would suggest, I guess, a more explicit recognition of a committee's role in those governance responsibilities.

MR. WASSERMAN: Thanks. Kim?

MS. TAYLOR: I wanted to talk a little bit more about this issue of whose views the risk committee members represent. And Eileen, you made the reference to 2.2.18 where it talks about the representatives being able to provide the perspective of their firm that they represent, and actually I don't -- That's not the way we read that, we read that as, that's one alternative for getting commercial feedback from the current members would be to let them represent their commercial view on the risk committees. But there are other mechanisms to allow for them to give their commercial feedback.

And I'm kind of making a distinction between the clearing members own views as a user and participant in the market, should be solicited by CCP's just as a nature of anyone who is doing business would naturally want customer feedback about the businesses that they are engaging in. And I think that clearinghouses have various mechanisms for obtaining that type of feedback, and I'm a believer in the use of those of those mechanisms, and that we should have them.

When it comes to risk committee representation though, that is a very specific -- in most cases -- a very specific official part, it's not the final decision-maker, because the Board has ultimate accountability for the risk management framework, and the risk management policy decision-making, but the risk committees are a very real element in the governance process of most of the CCPs where they exist.

And in that role I think it's very important that the participants on that risk committee are acting in the best interest of the mechanism, the systemic risk protection function that the clearinghouse needs to provide, and should be providing their market expertise as individuals in accordance with making sure that the system is as best protected as possible, not providing the commercial views of their firm as to one result or another.

And that is something that we make very explicit in the way we structure our risk committees, and it actually somewhat affects the confidentiality requirements that we also require of those participants. We get the feedback from the commercial elements of the firm in other ways, but for people sitting on these risk committees they are performing a function that is not unlike the function that a Board Member would perform in certain aspects. And their kind of duty of loyalty needs to be to providing the result they are responsible for contributing to.

MR. WASSERMAN: So, I'm actually thinking I'm hearing some degree of convergence here, in the sense that I think there is agreement that you are at least in some -- like in your case, the risk committee does not represent the interest of the members, it is this kind of source of expertise, and then to the extent you want to get the legitimate interest of the members taken into play, you are going to need some other mechanism, however it is specified.

MS. TAYLOR: Yes. We have other mechanisms.

MR. WASSERMAN: Fair enough. And again, remember we are not -- So, again, looking at it generically and what we should be expecting, it sounds like we should be expecting multiple paths to achieve multiple functions. I think one additional thing which may need further work, and whether it's on our part or yours is an open question, is solving this other problem, which is, how can you best get the judgment of the members of the risk committee, whose duty is, you know, again, not to represent the interest of the members, but to get more the clearinghouse as a whole.

Given that some of the challenges may -- You know, no one can be a complete polymath, and be able to have expertise in every area, and so how can you best get the -- you know, the input from the risk committee members to the extent that there may be limitations. And I know there are challenges with relaxing those limitations on their ability to communicate with their colleagues who may have -- you know, again, expertise in different areas. Am I beginning to see the right thing, or am I getting it wrong?

MS. TAYLOR: I think I've heard that around the table, although I can only speak to our own experience in this case, but there are numerous occasions where the risk committee members ask for the opportunity to share the issue with other experts within their firm, and that it is granted. It's just that it is -- it's a part of the good governance process, that it is -- it's not automatically a conduit to kind of commercial feedback from the firm, it's a governance function, and they are allowed to share the information with risk management expertise, or other types of expertise within the firm, but that is a kind of disclosed and granted thing rather than a free for all.

MR. WASSERMAN: Fair enough. Thanks. Nico?

MR. FRIEDMAN: So, maybe let me try to address your last issue, maybe slightly differently. When I think about the largest CCPs in the world, they have plenty of touch points with our firm, to get commercial feedback, to get risk feedback through the risk committees. And the process today is more like the CCP takes into account the feedback and sort of aggregate it and, you know, came up with an overall view of, say, our firm's position on the matter. I think what we are asking when we are suggesting that is more formalized member consultation process is, we would want that overall comprehensive institutional view on a risk matter, to come from us ultimately.

So, in other words, we want to bring in the commercial dimensions. We want to bring in the risk dimensions, and risk is sometimes frontline, train desk perspective, it's also an independent risk perspective, or control side perspective. We want to bring in funding views, or views from our Treasury departments. People in the concert that we are suggesting is just that it's, give us information so that we can, through our own internal governance process, articulate a final view and cast sort of that perspective through a formal process.

MR. WASSERMAN: So, I've got so far, Bill D, Christal, Paul. And then I'd like to if we could, start segueing into one of the points that, Nico, that you raised, which is again, the transparency. So, Bill?

MR. DeLEON: Thanks, Bob. Bill DeLeon, PIMCO. I guess I would just make a simple analogy going back to when we first started talking about this. The way I view it is more of a traditional corporate Board structure. You have a corporate Board that has a responsibility to ensure that functions are carried out. They may not be subject matter experts, but their job is to make sure that the various committees that do the functional work, understand and are carrying out the work, ask the appropriate questions, and are either directly auditing or ensuring that there is an audit group auditing that work.

And that is how I think things should be structured. And if you look at -- I know particularly because I work with CME very closely, how they do things, that's their construct, and I know that other -- exchanges at other things, and I know from my experience with other Boards, in particular at my firm, we are hired by Boards to manage funds. The fund Board does not know how to manage assets. The do know how to ask us questions about how we manager our funds. They do ask us questions about how we do risk management; they do ask us all sorts of questions, they ask us about the process.

They ask, are we doing the process correctly, and that's how I think -- that's the analogy I think you want have is, the Board should be asking the right questions, they are responsible for making sure people are doing the right job, but they don't have to be subject matter experts, they have to be sufficiently knowledgeable, or get people who are subject matter experts in, to make sure people are doing the right thing.

MR. WASSERMAN: And so again, I think there maybe, again, some convergence here. I will note, when I look at the governance in the document as it currently stands, there are references to ensuring that things happen, ensuring that the design is proper and challenging. And as you are putting it, you know, ask the right questions. Clearly there is room for misunderstanding in the current language. Clearly there is room for improvement. Some of those concepts are at least partially there, and so I guess the question is, and a question I hope folks will answer on October 18th, how can we go from where we are to get it right.

MR. DeLEON: Yeah. And I think, you know, if you read it carefully, it's ambiguous, and that's the problems, so depending on who you are, you'll read it one way or another, and given we like to live in a world where there is clarity.

MR. WASSERMAN: Indeed. And you know, again, the purpose of this is guidance to give greater clarity if it is just creating new ambiguities, it's not fulfilling its proper function. And the last thing I'm sure folks were looking forward to is guidance on the Guidance on the PFMI. So, yes, again, the desire is very much, how can we get it right, get it unambiguous, and get it proper? Okay. Christal?

MS. LINT: Christal Lint, OCC. I just want to go back to something Kim said which I totally agree with; which is that, you know, running a business whether it's just CCP or any other business as part of your practice of business, you on a formal and informal basis, in all different forums, and all different subjects, seek and solicit the input of your clients. And, you know, going back and looking attention 2.218 XXXsaid elsewhere as 2.2.18XXX, there's flexibility in that provision.

You know, the FCC recently finalized its PFMI rulemaking for -- covered clearing agencies, which is the analogy to a SIDCO on the CFTC side. And I think one of the benefits they had, because it's been so long, is that it had the benefit of taking into account on the dialogue, even this guidance you could see embedded in their discussion. And they are very focused on, you know, making sure that the CCP take into account all the different perspectives, but they are very principle-based in their approach in terms of how you might do that.

In terms of getting the various different constituents within, for example, a bank getting their perspective, you know, one of the things that we are sort of -- that I haven't heard considered, which is unique to the U.S. and not Europe, is the SRO model, and the fact that there is already a rule-filing process where there's notice of public comment, and an opportunity for the public and various different industry groups, and various different segments of those industry groups to comment on those rulemakings.

On the risk management front, you know, most of those filings are 40.10 filings. So they have to go through an even lengthier advance notice process, and in addition to getting input, you know, from the public on that, and getting input from the regulators in the drafting process, whom I believe are also taking into account the concerns they are hearing from the constituents, but that that's already factored in, and so it sounds like -- I guess I'm trying to get at, and it's not clear what the disagreement is or where there's actually a gap, at least within the U.S. CCPs in terms of this issue.

MR. WASSERMAN: Okay. One thing -- So, I'm going to just sort of throw out again under the table, because -- and I've been hearing some of this, we've been sort of going between the two concepts of governance and transparency. Let me just toss, you know, onto the table the question on transparency and hopefully both can start gently moving down that path. The Guidance provides that it the Board's responsibility to establish a comprehensive disclosure and feedback mechanism for soliciting views from participants and other relevant stakeholders, to inform the Board's decision-making regarding the CCPs risk management framework.

And to this end, the Guidance provides a list of information relevant to margin and stress-testing frameworks that should be disclosed, and suggests a number of ways in which the CCP might solicit feedback from stakeholders. Is that guidance with respect to disclosure, and in particular with respect to margin and stress-testing methodologies appropriate? How can it be -- How should it be improved?

So, at the moment I have Paul, Marcus, Sebastien, and Kim again, and I'll look around to see if I missed anyone else.

MR. CUSENZA: Thank you, Bob. So, in terms of -- One thing I want to at least focus on is risk committee, which is the term that people are using here, but I think it could mean different things to different people. I would like to have at least the Guidance was trying to separate this concept of Board decision-making, and then the mechanisms for feedback and disclosure. In many cases you could actually have two different types of risk committees, and that should be of course up to the clearinghouse, because the risk committee of the Board, which is part of the Board decision-making process, part of the Board responsibility, and its Board Members, and there's also risk committees made up of clearing members, where they are providing the mechanism for the disclosure as well as the feedback.

And particularly in that -- which I agree with, but I think sometimes it's confusing what people what mean when they are saying that we are risk committee. If we are talking about the feedback mechanism risk committees which I think is a very valuable piece, I also agree with what Marnie and Kim were suggesting, but I don't think it should be -- I think it should be the market expertise, that's really brought to bear there in that committee format, and therefore I would delete in 2.218 XXX2.2.18??XXX the parenthetical prescription that it must be the commercial participant perspective and not expertise in general.

But I also agree, very much with what Kim and Christal were saying about the mechanism for having feedback needs to be there. And as I said earlier, I believe every clearing member has got to have a direct access to the Board to inform them, if they can't even get it done in the committee. Because the committee member is one thing, but if you are not in agreement with the committee, you've got to have a voice as a clearing member to go to that Board, that Board has got to hear the minority view as well, I think, in informing them.

And so that when it comes to the question of then transparency and other things too, you know, I certainly believe in what you said upfront, Bob, which is that principles-based as opposed to being overly prescriptive. I'm a big fan of principles, because things can be different for different clearinghouses and how they operated. And so when you talk about like transparency, et cetera, that means some of these, you know, tax items like 2.2.17 that gets really specific in some of its text, and some other areas, you know, they are really specific.

Like every time you meet with somebody you have to keep a record of it, you know, so some of that stuff I would stay away from and go more to the principles-based theme, which I think on that level, which I think many of us said up front, this is okay, in terms of where the guidance is, but I'll leave it at that level, so there's that ability to have the flexibility when appropriate.

MR. WASSERMAN: Fair point. I should note in some cases, and again some of this may not be clear about, and getting the challenge is helpful. The guidance intends to give examples versus prescriptions, but to the extent that that is not coming through or, again, to the extent where you are looking to say, well, no, that should be an example, it should be a prescription, having that in the written comments would be very helpful.

MR. CUSENZA: Yes, I concur, Bob. Just to clarify that, because it's wonderful to get examples, right, because educational, it informs people to really think about issues, so I love the examples and the Guidance and all of that. But it gets dangerous because then people start pointing to that and saying, well, you must do exactly what this says. So I loved when they used the words, for example, should consider, and always a little pause, like, what do they mean when they say you should do this? Does should mean you must do this? Or, what do they mean? Should consider though that, hey, I get that one.

MR. WASSERMAN: Sounds good. Marcus?

MR. STANLEY: Yes. So, in my initial comments I was kind of already getting to that transparency issue, so I'll talk a little more about that, but also, just generally on this issue, what the Board is doing. You know, when you said that you were reluctant to be too directive or prescriptive with clearinghouses, as sot of a general regulatory principle that one should avoid being too bureaucratic. I think, you know, clearinghouses, we all know this, but it bears repeating.

There are just not ordinary market participants because of their -- because of the fact that the government mandates that people use their services, because of their utility character, because of market competition as a mechanism of disciplining clearinghouses, can be questionable in a lot of cases, it can have some counterproductive effects.

So I don't think you can avoid certain kinds of prescriptive elements in how you interact with clearinghouses, and there is this sort of flavor in the Board section here, that you are kind of trying to pass off some of these tougher questions to the Board to figure out. And I think that's where some of this discussion has come up here. You know, are you asking the Board to actually do these very complex things? Or just be responsible for ensuring that a process is being carried through to do them?

Which is what, I think, Bill DeLeon said, is the appropriate role of the Board, that the other people are figuring out that certain standards and processes have been set, and certain kinds of technical experts are available, and the

Board is making sure that those are being engaged in the right way. So, there is -- You know, when you say the Board should have explicit responsibility to assess and limit procyclical changes, you know, that's a massively complex technical challenge that we just discussed in the last panel, and that's something that regulatory -- margin models mandated by regulators are critically involved with.

So, the Board can enforce these things for you, but it's not going to make these decisions. And then when we get to transparency, you know, there is this language, there's a list of many specific things, but then there's this language, should do, should consider information regarding, you know, these things. So, you are kind of like saying, yeah, we know that this is the terrain of transparency, but we are not going to step in there, and set the actually transparency framework; whereas, I totally agree with Eileen that some kind of consistency and transparency, and some kind of communal effort to get together and set that transparency framework would be very useful, and then the Board could be responsible for policing that.

And, again, with the feedback mechanism, the same kind of thing, you know. Instead of biting the bullet and saying, okay, here is how your members -- here is how you have to go your members, here is the advice you have to get from your members, this is what Marnie brought up. You know, do your members get some kind of rebuttable, veto here over certain kinds of things? Again, that's kind of, the Board will set up the feedback mechanism.

And just in terms of the personal expertise of the individuals on the Board, you are not going to have that depth of expertise, and I think you've said that several times that you didn't mean to hand that all off to the Board. But, you know, I think the regulators stepping up in some of these areas, is going to be necessary. And I just want to add one other thing, just because I wasn't on the last panel, so on this pro-cyclicality issue. Is that okay?

MR. WASSERMAN: Go ahead.

MR. STANLEY: Okay. And that was this focus on the initial margin in pro-cyclicality. I think you can't look at just one portion of the waterfall as it regards pro- cyclicality. Pro-cyclicality is all about, it's our entire waterfall with initial margin, create disruptions in the market. So just because initial margin is stable, doesn't mean that it isn't contributing to pro-cyclicality, because if it's inadequate and you push through the other parts of the waterfall, that's a pro-cyclical problem.

MR. WASSERMAN: Sounds good. And again, by the way, just for the record. We would have been happy to have you on the first two panels, just for that record. And also I apologize, because I think I was probably unclear, the issue not that we are unwilling to prescribe standards, for CCPs as regulators. I think it's fair to say that our regulations, indeed, do prescribe such standards. Where we tend to be -- and at this point I'll speak just for myself, where I tend to be a little bit more concerned, is prescribing the precise means of getting to those, of achieving those standards.

And so I think it is important indeed to set regulatory standards, where there may be some distance, and is on this issue of how prescriptive are you on the means to get there, and for my own part, I think there are some advantages to placing the responsibility on the regulated entity to find its own way, adapted to its own particular business model, and all the specifics there, to achieve those standards. So they can't say, oh, look, we did exactly what you said, and it didn't achieve it, so sorry but you didn't ask us to do that.

And to have, you know, again, ensure that at the highest level of the Board, there is ownership of that responsibility, so that you have the Board, basically, taking the responsibility for ensuring that management, who are the folks who will have the direct expertise, in fact, design systems, and have designed systems, that will achieve the requisite goals. So I'm sorry, I was sort of unclear on that.

I've got Sebastien, Kim and Marnie, at this point -- and then Eileen.

MR. RENARD: Thank you. Let's respond to your questions with regard to the guidance over the Board's responsibility to establish a comprehensive disclosure and feedback mechanism. We believe that the guidance is very clear and very appropriate, and that transparency is key. We would like to emphasize the need for a very formal Board process that is capable of considering and incorporating the feedback from key non-CCP stakeholders, including clearing members.

I would believe that further work needs to be done to establish a forum or vehicle for this feedback group. I believe that stakeholders should receive feedback in rational, positive or negative on their proposals once they have been considered by the Board. Separately we would like also to note that there's a need for the CCP approach to the confidentiality required of risk committee members to be standardized.

Given that risk committee members are included in the CCP process for the expertise and then taking into account increasing virtue of products cleared. The confidentiality agreements should allow members to consult with other experts at their firms in order to ensure that best risk management approach at the CCP. On that note we've been involved with a national regulator in an effort to standardize such an approach, to bearing -- reason of success. Thank you.

MR. WASSERMAN: Thank you. So, I've got Kim, Marnie, Eileen, and after that can we perhaps start moving on to CCP's contributions to losses.

MS. TAYLOR: Thanks, Bob. Just one comment stepping back to the Board, responsibility versus accountability issue, one of the last topics that was talked about there, was the importance of the Board as a challenge function to management's decision-making processes, and the more that you make decision-making at the day-to-day level of Board responsibility, the more you erode the value of the Board as a challenge function.

So I think it's important that the mechanism allow for the challenge function of the Board to not be undermined. With regards to some of the transparency issues, I think -- Eileen made a good point early on that the industry has made some very good steps toward having quantitative disclosure set of documents; having taken the last step of kind of making them more consistently comparable, so they are easy for users to evaluate across CCPs.

So it might be that some very valid work could be done in that regard rather than starting from the level of saying there is no disclosure, and we need to start with a whole new disclosure mechanism. It might be that by taking the quantitative disclosure mechanism path, and just standardizing it, we would get a long -- we are already a long way toward where we need to be.

The other item I wanted to talk about a little bit is -- and this was talked about a little bit when stress testing was discussed on the prior panels. There are risks in over-sharing the details of things like stress testing. So we need to be sure that we are setting the right balance. I'm very sympathetic toward the clearing member's desire, or the end user's desire to be able to have something to evaluate the risk profile of the clearinghouses that they are doing business with, very sympathetic to that. But we need to find a way to achieve that without sharing so much detail about the mechanisms that are used by clearinghouses that either people change their behavior to kind of game the system, because they know so much about the requirements.

People feel that the stress testing that the clearinghouse does is like a safe harbor, they don't then challenge themselves to do any further risk management assessment on their own. I think even some of the Fed Governors have made statements about that, creating a risk of mano culture, model mano culture, so everybody gets dependent on the same exact set of risk models, and if there's an error in that model, it's a global error.

So, diversity in the models, and the view points that are brought risk management across the industry is actually a very good thing, and so we don't want to -- we don't want to kind of -- We don't want to create a safe harbor where everybody figures, all I have to do is do what the clearinghouses do, and I'm covered on risk management, and nobody is then challenging clearinghouses' models, to help models become better over time, so there is a risk with the over-sharing.

And then regarding your points about allowing CCPs to establish mechanisms for the transparency and feedback, versus prescribing that, I very much like what you are saying about that physiology, that is not what this document says. This document is very prescriptive, much more leans toward prescribing what clearinghouses need to do versus setting kind of a principle that says, clearinghouse Boards should establish a mechanism for feedback to be considered. Or should ensure that the management includes customer feedback in the processes that they have in place. Something that is in line with your words, is not what's in this document.

MR. WASSERMAN: Let me press you just very quickly on two points. You mentioned the possibility of gaming the system, and I guess my question would be, if in fact the risk evaluation system is well defined, it's not clear to me how people would game that if they essentially change their behavior in reaction to that, wouldn't they, if the system is well developed, well designed, would be reducing risks?

MS. TAYLOR: Yes. If you look at it just at one clearinghouse, yes. It's somewhat different at a clearinghouse level than it is at the bank level, because at the bank level they are looking at the risk across their whole portfolio of things, and some things might evaluated differently in the risk models. In the clearinghouse the risk that we face, is only the risk of the positions that we face.

However, if everybody is kind of prescribed to use the same models across the different clearinghouses -- what we don't want is people taking actions to use certain mechanisms in the market that would temporarily show a reduction in their risk profile, and then maybe their options are going to expire or there could be -- Even the best designed models have blind spots, and so you don't want to create a situation where people can take action to take advantage of the blind spots, and nobody is running any kind of different model to assess that.

MR. WASSERMAN: Okay. And again, I'm speaking not a regulatory prescribed model, but essentially transparency as to this clearinghouse's own model to its members. And I know there's a concern around revealing individual positions. And that is crucial that we don't do that. I guess the question I would have is, if you have dozens or, you know, in some cases perhaps 100 or so, different scenarios, and you are saying, okay here are all these scenarios, we ran all of this, here is the worst across all of those, it's not clear to me when -- you know, with one scenario I can see how you could reverse engineer. If in fact you have as I would think, particularly at a multi-line clearinghouse, many scenarios. It's not as clear to me how that reverse engineering would come to pass.

MS. TAYLOR: Well, I think the concern is that depending on how you read this document, and how any one clearinghouse reads it now, is going to be one thing. How any one clearinghouse is forced to read it, based on how their regulator reads it in the future and interprets it, and imposes requirements on them, based on the regulators read of it, is a different issue.

So, if you end up in a situation -- One risk that we saw in the way that some of the -- particularly the stress testing stuff was written, is that you could be in a situation where the industry is looking to have everybody identified it from X, we would say from X's name, but from X is the same -- here's the result in scenario 1, 2, 3, 4, 10 at this clearinghouse, at this clearinghouse, at this clearinghouse, that than starts to give people an opportunity to figure out who Firm X is.

And when something bad starts to happen to Firm X, or to the country that Firm X is from, or to the market segment that Firm X participates in, it becomes one piece of information that then people can pounce on and use to kind of create the downward pressure, the stock price and viability of Firm X. So that's the type of thing we want to be sure we don't kind of over-disclose even in an anonymous way people will make assumptions

MR. WASSERMAN: Thanks. Marnie?

MS. ROSENBERG: Thank you, Bob. First I wanted to address Christal's point from before. So, we believe that public consultation period is a little late for getting member input from the get go when something is being considered. So I don't -- I think the public consultation process is really important and serves a vital interest. But I sort of see that the clearing member and participants needing to provide that input in the front end, because it does impact the capital, first of all, that we contribute to the clearinghouse with the default fund and our assessments. So I just wanted to make that point.

On the quantitative disclosures, I agree with Eileen that it really goes a far way, and there are obviously differences in implementation, we have to work on that. But when I looked -- when I relooked at the margin disclosures, I don't think that what we are talking about here is far more extensive than what's in the quantitative disclosures; which really just asks for sort of the key assumptions or parameters, but don't allow us to fully replicate and understand the drivers behind the margins.

So, we are very supportive and we were happy to see the cooperation of requiring methodologies, parameters, assumptions for stress testing, and for margin. We need that again to manage and measure our risk. The other thing I would just point out and I think, Kim, this is what you were alluding to in the annex, but the largest uncollateralized stress loss for each clearing member without identifying the scenario or the clearing member, I've asked so many people internally, there's just -- there's nothing that we could do with that information in terms of knowing who that would in the market or the portfolios, or the sensitivities, we are just looking to be able to understand the risk distribution and being able to model our potential risk in a crisis. That's all we are trying to do.

MR. WASSERMAN: Okay. I have Eileen, Chris, Bill D, Christal, Marcus and Nico. At some point we really do need, because we are running out of time here, to get to skin in the game, and I imagine there must be at least somebody around the table who will be going to -- meant to discuss that -- just saying. So, Eileen?

MS. KIELY: Well, I would love talk

about that, but I had a point that I wanted to make first, which is addressing that this 2..2.18, the participation on the Boards, there's a real key difference I think we all need to understand between the buy side participation on these and the clearing member, and the CCP participation. And we've talked about -- you guys keep talking about the commercial interests.

The buy side pays fees to access this infrastructure, so we sit on these committees as a fiduciary for our clients, we are not there for commercial interest of how we would profit from any of these decisions. We are there literally to manage risk on behalf of our clients. So, I think the standard perhaps should be a little different, and that's why I appreciated seeing that. So I just think it's very important for everybody to understand what our goal really is on these committees when you make these comments.

MR. WASSERMAN: Chris?

MR. PERKINS: I guess we could start the skin in the game discussion, if that's okay.

Thank you very much, Bob. We would like to see a greater degree of guidance around skin in the game, we think that it should be more clearly defined. And we have a couple of principles in mind that I'd like to share, as we think about how to contemplate the skin in the game. First it should be calibrated on the basis of a robust and globally consistent, that's very important, minimum standard that's based on analytical risk-based framework.

It should dynamically adjust to the risk in the system, just like all the other elements of the waterfall. We think that there should be a regulatory floor to ensure that the balance of risk prevails if you have a model. And then we also think that skin in the game needs to address the hazards of pro-cyclicality, and you can do so by looking at a backdated -- long-dated average, you can look at introducing a cap. But we just think there's a complete lack of guidance on how skin in the game should be calibrated and we think it's very important to have a clearly-defined guidance for skin in the game.

MR. WASSERMAN: Thank you much. Bill D?

MR. DeLEON: I have to echo Chris' point, and I think this is one of the few times, I would say I actually want not principle-based but I want prescription, and we firmly believe that CCPs are fiduciaries, and they are not just utilities, as Marcus said, they are more than that. They have a fiduciary responsibility, and they are commercial enterprises, holding vast sums of capital.

As Jeff said, they have $300 billion, that is on a levered basis, so if you think about how big a hedge fund that would be, and how many hedge funds out there have $300 billion, you would all scratching your heads, going, well, that's really big. So, my point, and I think several people's point here is, we sit here and we think about how much capital is put in, or required to be put in, and there is no floor, there is no minimum amount, and to us that is mind boggling, that there is no predefined number in the waterfall that comes before client assets, that is required by regulation for CCPs and we believe that this number should be set at a minimum.

Many people have written papers as well as us. We believe that this number should be at least 5 percent of the guarantee fund, and should be fully funded, or it should be at least as big as the third largest contributor, or at least $20 million, and we are probably the lowest of people who have written papers at this table. We believe that this is something that should be prescribed, and it should be for each waterfall, it should be fully funded, and it should be before any client assets ever get there.

And this ensures that the risk management protocols are going to be fully robust, and ensures that the liquidity process is going to be robust as well, because when you have risk management framework which requires that you actually lose your own money out of your earnings before you get to touch anybody else's capital, you are going to be paying attention a lot.

You are not going to be relying on other people's capital, you are not going to be calling liquidity lines, you are not going to be coming up with all sorts of interesting ways to go after people's capital, and coming up with stories, you are going to come with a risk management framework that is really, really robust, and I just want to stress that this is key to ensuring that CCPs are resilient and do not fail, and if they do fail, that the buck stops with the people who own it, and which is the equity holders of the CCP. They do not get to say they are market utility in taking no risk. Because they are earning -- they are earning fees for doing this job.

MR. WASSERMAN: Thank you. Christal?

MS. LINT: Yeah. Briefly, just back to Marnie's comment. I want to clarify that when I referenced the notice of public comment period, it was assuming that as we discussed the CCP's were already taking into consideration market views, clearing member views through the risk committee, and through the other informal mechanisms that, you know, we engage with on a day-to-day basis as we think about implementing things.

So to the extent that there seems to be some concern about making sure the various different perspectives within a bank, for example, may be moved back into the CCP; you know, something along the lines of the commercial interests. Everything as a whole, I think then that would be something appropriate for probably notice and comment period, as opposed to coming through the risk committees.

In relation to skin in the game, you know, in theory there is no -- it's really hard to oppose the fact that there should be an alignment of risks, and the CCP is a risk manager for the market. Focusing what I'll call my myopically on a dollar amount, and focusing on skin in the game and isolation, is sort of disregarding, I think, all of the other things in the consultation, and all the other regulatory requirements that are in place.

When you start to think about the

requirements around governance, and the requirements around bringing in the viewpoints of direct participants and direct participants, other stakeholders like settlement things. When you look at it that way, I mean, you really are already building in a system, where you are accounting for all of those other interests, and it's taking into consideration in the risk management framework. If we didn't have all that other stuff, I understand why it would be more significant to start prescribing specific dollar amounts, be that would serve as the only sort of check in terms of, do CCPs have the right incentives to get their risk management framework correct.

MR. WASSERMAN: So just a couple of things. I've got Marcus, Nico, Scott, Eileen, Kim, Bill T, John D, and Paul. On the one hand, we can go into a little bit of overtime, on the other hand I would like to have at least a couple of minutes at the end to at least very briefly talk about recovery. So, Marcus?

MR. STANLEY: Thank you. So, just going back to this issue just for a moment of confidentiality and disclosures, you know, we are in a world where all the major banks would include most of the major clearing members are doing their own stress tests, and the Fed is releasing all the risk factors. You know, thousands of risk factors for the trading books of those entities. And that is not considered to be a confidentiality concern. So, the idea that -- I would think that it would be possible to do disclosures that protected individual client, or individual member confidentiality, you know, to a level certainly that meets that standard.

And as far as skin in the game, we strongly support clearinghouse skin in the game in order to align incentives and agree with what Chris said about the necessity for some kind of floor on that. I mean, how specific that gets is one thing, but if you are just giving a directive, well you've got to have a dollar, you've got to have some in there, that seems to lack specificity. And just with respect to what Bill said, certainly by saying that clearinghouses were utilities, I certainly did not mean to imply that they were not at the same time other things.

A lot of the complexities of our situation as we've backed ourselves into a situation where our utility entities are also profit-making entities that owe duties to shareholders; so that's a complex situation, and squaring that up requires, I think, skin in the game. I do think there's one extra thing to think about in terms of skin in the game here, that on the bank side of things, there's a lot of attention to individual executive skin in the game beyond even just equity-level skin in the game.

Because in bank resolution, Title II Bank Resolution, the senior management gets fired, and there is the ability to claw back bonuses, on Section 956, there's the ability to claw back bonuses as well. Here we are in a situation where that we actually don't want the clearinghouse to fail. Ideally we would like the clearinghouse to recover and not be put into resolution. And of course there are situations where there can be a market systemic issue that's not anyone's fault, and shouldn't be pinned on a particular person.

But it there is a risk management failure at a clearinghouse, then there ought to be at some point some management consequences and perhaps even some looking back to prior funds that were received. I just want to end, and that goes along with saying there's a fiduciary duty. Because if someone violates fiduciary duty there's some legal liabilities, so I know that would be controversial, but it does exist on the bank side, it's been emphasized on the bank side, and I just want to put it on the table.

MR. WASSERMAN: Thank you. Nico?

MR. FRIEDMAN: So, I'll be brief. I want to go back again to transparency. And lately there's been so much focus on recovery and resolution of CCPs, that I'm worried that there's a growing mistrust that the size of the funding resources of the CCP and the shocks that the CCP can weather. And that's why I think transparency back to market confidence. You need the market to be confident, and be there to support the CCP in times of stress, and the way you achieve that is transparency of stress testing.

And I think there's a spectrum of disclosure days where we were five years ago, and where we are today which is better, where we could be in, you know, five years and get much more granularity around loss distributions, and all things. But, you know, there are simple things just such as, like the point that was just made, which is disclosing to the market, here is the series of very specific, hypothetical, ad hoc scenarios, that we are conducting on a daily basis to ensure the adequacy of funding resources, just that being known by the market to be helpful.

The Guidance talks about to be averse -- stress testing, just flagging some of the banks or the shocks that can be withheld by default funds also will be helpful. So that's all about observable risk, and I think disclosure around the non-observable risk, again, liquidity and concentration of how the CCP sort of risk manages those components is important.

And then finally, on skin in the game, a concept that we've brought up, too, is there is the notion of a second tranche of skin in the game, which again, you know, would give incremental incentives to CCPs to ensure that the default are appropriately sized, and so that could have a positive role as well.

MR. WASSERMAN: Thanks. Scott?

MR. HILL: I'll try and be brief, probably unpopular. So, we, I think we are one of the first if not the first to introduce skin in the game, when we launched ICE Clear Europe back in 2008, and it was strictly a commercial decision. You know, we've heard, maybe it's the third largest or 5 percent, EMIR says 25 percent, CITI wrote a paper that suggested a calibration which I interpreted as effectively the difference between cover 2 and cover 3. Not a single one of those measures are risk based, because the clearinghouse doesn't bring risk. The clearing members, the clients bring the risk, and that's what the margins are intended to manage.

Every dollar of skin in the game that comes in, that stands in front, is a means of increasing the risk that the members and customers can bring to the clearinghouse. So, to be very clear, again, we were one of the first to introduce skin in the game, we've gotten $0.25 billion of skin in the game in today, but we do that because commercially, we think our customers want it there.

I will tell you that the next risk decision that we make, that our risk committee wasn't in support of will be the first. The next risk decision that we make that our Board disapproved of, or that a regulator said no to would be the first. I disagree 100 percent with a view that says that skin in the game somehow aligns risk. Our risk is aligned by our governance structure. Our risks are aligned by our reputation, and the reason that there is no way to determine what an appropriate calibration is, is because the CCP fundamentally does not introduce risk to the clearinghouse that manages it.

MR. WASSERMAN: Scott, can I pres you on that just a bit, because on the one hand I do very much take the point that there is an alignment of incentives through reputation, which I imagine flows into things like shared products, but I guess, isn't the risk that the clearinghouse brings that to the extent the clearinghouse fails in its charge, to manage the risk that these other bring to you, that's essentially the risk that you bring the risk of -- and forgive me, the work failure is perhaps unduly harsh, but it is, I think in this context, the best way of communicating it. And so isn't the issue that what these folks are saying is, okay, how can we make sure that you are properly incentivized beyond reputation to make sure that both, in terms of risk management tools, margin, you know, product selection, all of that, that the incentives are aligned.

MR. HILL: They ensure it by participating in our risk committees, which act as a constraint on what we are able to do. They participate in some cases, by being user members of our Boards of Directors. They are able to manage it based on the size of the positions they choose to bring to our clearinghouse, based on the willingness to support a new product that we launched. There are any number of ways, that people who participate in the markets we clear, have an ability to regulate the risk that we manage, and the manner in which we manage it.

MR. WASSERMAN: Thanks. I think I next have Eileen?

MR. THUM: I think I'm going to stay. So before we end -- So, it's Bill Thum from Vanguard -- And I know it's not on the agenda, but I just do want to touch a little bit on variation margin gains here, and because it is the topic that's being discussed, and there does seem to be some consensus, that it is not an appropriate approach to be used for liquidity or recovery, as it potentially contributes to pro-cyclicality, with participants terminating positions in advance of risking their variation margin.

It creates potentially unlimited risks for participants, and it's unfair, as clearing is mandated, clear trading allows for enhanced protections. The resolution at the end of the default waterfall and following additional CCP contributions and clearing the member contributions, variation margin gains haircutting could be considered, but regulators must first clarify and mandate a workable approach that does not unduly harm directional investors that only have net gains.

Unduly harm hedge investors who might experience stresses, if they are forced to forfeit gains, and may thereby be unable to meet variation margin calls to address position losses, and clarify and mandate guard rails. Mandate specific guidelines, including resolution authority oversight, and no creditor worse off protections, including status as a senior debt claim. The other issue, I think as we continue to probe this, is what do we really mean by variation margin gains haircutting? What aspect of the gains is going to be haircut? What would the approach be? What protections are provided to those that lose their assets? So, from a buy side perspective, I just want to clarify for today that we are very much against using variation margin gains here.

MR. WASSERMAN: Fair enough. Kim?

MS. TAYLOR: Thanks, Bob. I'm back on the topic of skin in the game, and with all due respect to my friend, Scott, sitting next to me, we've had skin in the game in our rules since at least the 1980s, I think since the 1970s, so we were very early adaptor of the fact that the clearinghouse needs to align its incentives for good risk management in the system, with the incentives of the clearing members, by having skin in the game in default management process; so, a big believer in the importance of that.

I do agree with what Scott said about

the people who actually bring risk exposure to the clearinghouse though, are the clearing members, and the clearinghouse has a duty to make sure we are managing the risk of that, and there is governance input into that process from the clearing members. So, the concern that I have about legislating too high, our contribution of the clearinghouse in the risk mutualization or the waterfall, is that it potentially dilutes the very risk mutualization mechanism that is the underpinning of what makes the clearinghouse a successful system risk management, litigator.

The reason that clearinghouses have worked overtime in crisis situations, is a combination of the risk management mechanism that they have in place on a routine basis, and the mechanism that they have in place to manage a default. And very important in that default management process, is the viable participation of the clearing members in helping to contain the risk that the clearinghouse needs to offload. And a very strong control and incentive for the appropriate participation of clearing members in that process, is the fact that they have funds at risk if the process doesn't work.

So, with most risk management issues there is a need to find the right balance, and I'm not sure that kind of legislating a one-size-fits-all approach to what skin in the game has to be from clearinghouse is the best way to find the right balance. To be between ensuring that the clearinghouse has a strong incentive to ensure there's good risk management and ensuring that the clearing members have strong incentives to participate in the default management.

MR. WASSERMAN: And Kim's mention of the default management process is a really good reminder to remind us all that we also want to discuss at least briefly, recovery and the guidance on recovery and what additional or different things that needs to be in that context. So with that in mind could I turn to John?

MR. DABBS: Yeah, I'm good. I'm not going to get you there yet, I'm just going to just get in the game one more time. So, I guess the point that I'd like to make is a very simple one, which is, there's fundamentally no difference between a client clearing member, and a clearinghouse. Neither of us brings risk. So the clearinghouse doesn't bring risk but it brings new members, and we don't bring risk by bringing clients.

Because we don't risk, we are not neutral, they are not neutral, so we are all identical. The only difference between a client clearing member, client clearing, I'm not talking about the clearinghouse positions, but from a client clearing perspective, the only difference is we write a check that says we are good to our last drop, but every single dime of capital in the entity on the line, and clearinghouses do not.

It's just fundamentals in terms of the facts of how it goes. And then, by the way, we participate in recovery, we use our default fund resources, we don't get equity, we don't get paid back. So, I think it's just -- we are not a holder in the recovery, so I just think it's important to -- a lot of these were established because we were -- they were non public, they were utilities, they were used for all of our services and we were all part owner, but now when we look at the structure years later, we can all shake our heads and say, ah, well, that's probably not how we would have designed it. How do we start it from different lens, but that's how it is.

Sizing, we can all debate sizing, but I just think this notion that there is not risk brought to clearinghouses, they get paid for managing the risk, we get paid for managing the risk, we provide the same services, just different -- different users, but it's just a stream down from top to bottom.

MR. WASSERMAN: Thanks. Paul?

MR. CUSENZA: Yes. Thanks. So I want to talk about skin in the game also, but before I do that, real quick because it gets to the point of being overly prescriptive and the dangers of it, because I want to come back to Eileen's comment about 2.2.18, and my point of deleting that was to remove the prescriptive dimension that you must take on the viewpoint of the participant. That doesn't preclude if I delete it, taking on the fiduciary responsibility. And I think that's the importance of flexibility, is that you don't take on the fiduciary responsibility that's great, but then don't prescribe that everybody else has to do the same thing.

So taking that point about skin in the game, so I share what Kim said, and I mean, skin in the game is very old. It goes way back to the beginning of clearing. And from that standpoint it's the right model, and I think it's nice that in 2.29 and 2.210 it prescribes that, in this case, that you do have skin in the game for clearinghouses, because that should be there.

However, while -- and I appreciate Bill's comments by giving three different elements about how you would define that, and we meet all three of those requirements. But that said, I don't think it should be prescriptive because there's dangers in being prescriptive. I like the way this sets it up, that says, here is the motivation and incentives, the way you should think about it and how you should address it, and then I believe that it's the feedback mechanisms that we have with our customers and with our clearing members, that should be an active dialogue, and they should express exactly what they feel and how they feel about that.

And clearinghouses should be responsible to that, and the clearinghouse is not responsible, there are other places you can do business. But I think there should be that, you know, communication mechanism, because I think it's dangerous to get too prescriptive, because one model may seem to be the right model that works at the moment, but may not be the best model all the time, and you have to have flexibility.

MR. WASSERMAN: Okay. I've got Marnie, Bill D, Stephen, Nico, Scott, Isaac; and then with the truism that all good things must come to an end, Isaac will, in fact, be the last word. So, Marnie?

MS. ROSENBERG: Thank you. I'm not going to get into the details on our views on skin in the game. I think my representatives from my peers and buy side said it very well. You know, in our paper in 2014 our recommendation, after actually a lot of analytical work that was done, was the higher of 10 percent of the default fund or the contribution of largest member to create the right incentive, that everybody already spoke to.

One point I want to make though is on capital for non-default losses. And so currently in the PFMIs there is a requirement of six months, of wind-down expenses from an operating capital perspective. And we do believe that's not sufficient. We believe clearinghouses and their parents should be fully responsible for any losses that incur from a non-default loss perspective. And I think as a market we don't have a lot of transparency at this point as to how kind of operational risks, cyber, all of these sort new risks are being managed, and that they are sufficiently well capitalized. And I'm not suggesting they are not, I'm just saying that we don't have a lot of transparency over that. We don't believe that participants should be responsible or bear losses from a non-default loss event perspective.

Bob, you wanted to talk about incentives, so I'm happy to provide our views on incentives in the default management process. You know, we believe incentives obviously play a critical role in determining how market participants will act leading up to the following and default, and into all the stages of default management. Now, a lot of attention is focused on the incentives of clearing members, I just want to make the clear statement that clearing members are sufficiently incentivized to support CCP resiliency, and avoid recovery and resolution.

The bottom line is, we don't want our trades torn up, these are our largest exposures from a credit perspective. And the replacement cost of these trades, plus the non-bankruptcy remote, I am at risk, should the CCP fail to recover, is very, very large. And additionally, the threat of not being paid variation margin owed to us, which is currently in some of the rule books, and the thought, again, of trades being torn up, worries us the most.

We don't want to get to this point. We want to minimize our losses to the default fund and avoid any call on assessments at a time when liquidity will be scarce. We don't participate, and if we don't participate in our auction effectively, we are hit first through generization. So I think there's misperception that I hear, that clearing member may be incentivized to rig the auction by providing low bids, or no bids at all, if they perceive that CCP resolution, for example, provides a better alternative?

For example, if clearing members were to receive equity, or senior debt against their losses, we just don't think this will hold up, because clearing members would be taking a risk of unpredictable losses, that way exceeds default fund assessments, which may not be recouped from any subsequent equity or debt claims.

So, I just want to make that clear that we are well incentivized to participate in the auction. Any kind of threat of our trades being torn up, or the gains that were owed not being paid to us, is incentive enough.

MR. WASSERMAN: Thank you. Bill?

MR. DeLEON: Thank you, Bob. At the risk of getting into a bit of a debate, I did want to respond to a few comments about the CCP market and how things work in real life. It's a monopoly. We have no choice but to use CCPs because that's what the law says, so we have to use them. The dealers dictate with CCPs we use, we've tried voting with our feet, the dealers make us pick were we want to go. There are limited CCPs to go to.

We've spoken actively and often and they haven't listened, so let's be clear, we've done all these things, and we've given input and as have many of our brethren, to risk committees about what we'd like to see. Some of them have listened, some of them haven't. We don't run the CCPs, and this is why we are saying, we think something prescriptive needs to be done, because they are not market utilities, they manage the risk and if something goes wrong, the concept that they are paying out active earnings in dividends, at the end of the day, after they've been paying this dividend stream out, all of a sudden they go bust, and they didn't have any skin in the game, seems sort of backwards to us.

MR. WASSERMAN: Thank you. Stephen?

MR. BERGER: Thank you. Two quick observations on the skin in the game discussion; if you read carefully what's in the current guidance the state of the objective of skin in the game is to enhance confidence. So I think it is -- you know, I guess the more people comment, I think it would interesting if that's what they actually think, that the primary objective is whether -- because a lot of what I hear is a discussion about how the CCP skin in the game could act as a material loss-absorbing resource, but it's not clear to me when you compare the numbers that whether or not we would actually do that.

So, if the true objective is to enhance participants' confidence due to alignment of interests, I think we should be clear about that, and not overemphasize how much it's going to contribute from the loss absorbing resources angle. So just something I'd be interested in hearing people's views on, although, obviously, we don't have time to discuss that today.

The second thing I think is important is that we need to be cognizant that any skin in the game requirements are from what I call business model agnostic. I think the driver of profitability for different companies that run CCPs is different. Some are, you know, very profitable because they have, you know, vertically a line to the exchange, that's a big drive of profitability, but some CCPs are more kind sleepy and boring. And so I don't want to create an incentive for, you know, certain CCPs to have to then go pursue a higher margin business lines to meet certain requirements that aren't necessarily relevant to what they want they wanted to do with their corporate system.

And then finally, just because Bill brought it up, I'll just echo his point on, I guess, this form of recovery topic that variation margin against haircutting does disproportionally allocate losses within this community, and doesn't appear to be fair, equitable paradigm for allocating losses. So I think it's ill advised to say in a core recovery business.

MR. WASSERMAN: Thank you much. Nico?

MR. FRIEDMAN: Yes. I just want to make a couple of points on recovery. First of all we agree with the guidance recovery, the recovery tools that the CCP must develop have to be comprehensive and effective. They should be defined ex ante, we think they should be reviewed by members, functional regulators, as well as the resolution authority who should invest in reviewing the playbook. It should be CCP led with some oversight of the resolution authority.

If you think that the situations under which we would get to that level, we would probably have four or five, you know, large financial institutions in distress, and the resolution authorities' involvement is going to be essential. But we think that resolution should absolutely be the last resort, if there's real threat to financial stability, or to the public interest.

Now, in terms of recovery tools, we could have a long discussion about this, but if you go back to the principle of being comprehensive and effective, if you earn through the waterfall, that includes the skin in the game, the collateral, the assessments, you know, to the members, we used to have loss at that level, losses need to go somewhere, and again, no one wants to get there, but in our view, fashion margin gains, haircutting is probably the least bad option in terms of broad allocation of those losses, and provide incentives for participants who actually bid in the auctions and support the default management process.

So, I understand why it is unpopular because we don't want those losses to ever happen at that level, but again, to us, it's probably the most effective, comprehensive of the tools out there.

MR. WASSERMAN: Thank you. Scott?

MR. HILL: Just quickly. I completely agree with the point that was made. I do believe skin in the game enhances confidence. And when I say commercial, that's effectively how we think about it. It's what the market expects and it's what we do. What I was more objecting to is the thought that it can somehow be defined on a risk basis. And so, you know, we again, have a $0.25 billion, and whether we were one of the first or, you know, it's been done for 100 years, either way the point is $0.25 billion as a means of enhancing confidence is something, commercially, we think makes sense. So that's one thing.

The second thing, I completely agree with Nico on the importance of being comprehensive and transparent, in terms of the recovery and resolution plans. Bob, you know, our team has been doing a lot of work with you and with the industry, at ICE Clear Credit, in terms of developing a very robust recovery plan. I agree the focus should be on recovery in every absolute -- or every instance possible, but we do have to work in resolution when recovery has failed.

And then the last thing I'd like to get on the record with regards to non-default losses. And I completely appreciate Marnie's point, you know, if there are things that are cyber related, operational related at a CCP, you know, that's on us for doing a bad job. But the two most significant, non-default loss, risk that exist are around the depository institutions where we put our cash at the end of the day, and the liquidity that we might need at any given point in time.

And so the thing I'd like to repeat that Dale said one of the earlier panels, and in case the Fed is listening, is central banks can go a long way towards helping with those issues because, you know, two of our clearinghouses have an ability to put cash at a central bank overnight. You know, but we run six, and the others don't have that same access. And I don't know why that will be the case, because I think with the commercial banking relationships that we have when we hand that cash at the end of the day to the commercial they turn around and put it in the Fed.

So, I think having direct access for CCPs to put the cash in the Fed, I think that is a way to eliminate one of the two big risks that I mentioned. The second one is, we take cash and effectively government securities, that's what we take, and so the concept of, in a liquidity test, we can't consider U.S. Treasury to be a liquid asset. It's inconceivable why that is the case, number one. Number two, it's inconceivable to me why a central bank wouldn't say, at a moment of crisis, if you need to turn a Treasury into a dollar, you are able to do that.

And again, that's not giving me broad access to the window, let me bring chairs and tables it's -- A U.S. Treasury becomes a U.S. dollar at a moment in time. It fully -- haircut it if you want, haircut the U.S. Treasury

percent, but give me the 20 cents to deal with the liquidity on the moment. So, with regards to non-default losses, it's a really important topic, but I think there's a really easy solution to the two biggest risks than are NDLs.

MR. WASSERMAN: Thank you. Isaac?

MR. CHANG: So, I guess the challenge of going last is that it's harder to come up with something original that hasn't already been said. But maybe because there have been people who have talked about not bringing risks so I do represent an asset manager, and we do represent investors who do take risks in the marketplaces, in the clear derivatives markets. That said, we also post a lot of margin and we pay a lot of fees, and maybe just sort of echo a point that's already been made, even though there is theoretically competition in the marketplace which should govern market practices, in practice there's really not that much competition, there is not that many choices.

I wouldn't go so, you know -- And I will also sort of mention, you know, when you say that neither clearing firms nor the clearinghouses bring risks to the system, and I think by your comments you acknowledge this is the case, but you may not bring market risks to the same extent, but you certainly bring a lot of operational risks. And so it's harder to quantify, and I think that's why people are struggling a little bit to put a number on it, but I wouldn't want at least to go without saying that I do think that there's material risk of one form or another, at every point in the chain, and certainly we do acknowledge our piece of it, but I wouldn't want it to sort of -- at least not bring it up.

On the last point on recovery versus -- and resolution, you know, look, in a resolution scenario we certainly understand that everything is on the table, but I think our main objection is the arbitrariness of the distribution or the allocation of losses. And again, to the points that have been raised, you know, directional investors who will have gains or losses and not relative value or offsetting positions, would bear the brunt of that burden, and there are alternatives that could be considered that we think would be more fair in that group. But that with, I'll end it.

MR. WASSERMAN: So, I'd like to recognize Jeff, for a couple of closing remarks. Then I will say one or two very last things.

MR. BANDMAN: Thanks. Really, it really has been a great, great discussion today. I just want to kind of pick up and respond to and reiterate on one or two. First of all in response to Scott's comments, I'd like to stick up for the Fed word -- if it's the right way to say it -- but just two observations on that point. You know, first of all, in fact, we have been in very close dialogue with them through the process of issuing and exempt order with respect to customer accounts held by systemically important DCOs at the Federal Reserve banks.

That order was issued over the summer and those accounts are in the process -- we understand that they are being submitted to Fed Board for approval, and we hope that those will be open very soon, so that customer funds from the systemically important -- particulars can be lodged at as one of the news articles put it, when the order was issued on, you know, the world's safest bank.

The second component of that, it actually, as we understand it, it's not within the purview of the Federal Reserve Board itself, to authorize direct access for other DCOs to open accounts there. That would require an Act of Congress to authorize accounts for DCOs other than SIDCOs at Federal Reserve banks. So that should be borne in mind just to let the record reflect that.

To iterate a couple of things that Bob said, and Marcus raised the point I'm glad you did, I mean, our regime under our statute and regulations at the CFTC very much is prescriptive when it comes to the safety and soundness of clearinghouses, our regime of supervision, examinations, risk surveillance and other elements, we certainly are not shy about, you know, making sure that that's the case, and I'm glad you raised the point, so that could be clear to everybody.

The focus of today's dialogue, of course, is you know, with respect to enhancement of the guidance, as we are between the promulgation of the consultative paper and the final version, and we look forward to your comments. You know, in that regard, first of all, I would like to, you know, very much thank the participants. You've shown me very in-depth having consideration review of the guidance in your comments that reflected that at a very deep level, and we look forward to seeing that in your comment letters to enhance the guidance.

You know, I also have to give credit to Bob who, you know, not only is he the Co-Chair of the group that issued the report, but I have many people regard him fairly or unfairly as one of the coauthors of the Guidance; and I think he's has shown today genuine concern to improve the Guidance and solicit comments and feedback, rather than just defend work that could be perceived to be his, or partly his, so I really commend him for that.

I also would like to reiterate one other comment that Bob made which is that, you know, certainly staff of a divisional clearing and risk has been closely engaged in this process, and has great interest in where the guidance will land, and we will in due course, I think, be considering whether it might be appropriate to incorporate elements of this into our own framework.

But, again, to reiterate what Bob said,

you know, for these things to be binding upon at least our DCOs we have a regime that is subject to our statute and regulations, and so if we were to go down that road, of course there would be -- any proposal would be developed by staff with appropriate input. You know, a rule proposal would have to be adopted by our Commissioners subject to full notice and comment at that time.

And with that, I'll turn it back to Bob. And I do thank everyone.

MR. WASSERMAN: Thank you, Jeff. And thank you very much for your kind words, about me especially. Again, I should note, in fairness, that the Guidance in fact is very much an ensemble work, but on the other hand, I will reiterate the fact that the guidance talks about improving work product through challenging it, we've had some very good challenge here today, and I very much expect and hope for, challenge in the written comments that will be submitted on October 18th.

And as again, to reiterate, the more specificity you give us as to what you think should be changed and where you think, in precise terms, it should end up, not guaranteeing that we will, in fact, obey in each case, because among other things, I expect there will be some, shall we say, conflicting comments. But the more specificity we get, the easier it is for us to give -- you know, give folks what they want and to make sure that we are getting it right.

I would very much like to express my very deep appreciation to the panelists who came here today, and thank you very much for your hard work here, and for your travel. I'd like to very much express my appreciation to my colleagues who made this whole thing possible. Heaven knows, I didn't. And wish everyone a safe trip home. And thank you very much.

(Whereupon, at 1:59 p.m., the PROCEEDINGS were adjourned.)

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CERTIFICATE OF NOTARY PUBLIC

DISTRICT OF COLUMBIA

I, Stephen K. Garland, notary public in and for the District of Columbia, do hereby certify that the forgoing PROCEEDING was duly recorded and thereafter reduced to print under my direction; that the witnesses were sworn to tell the truth under penalty of perjury; that said transcript is a true record of the testimony given by witnesses; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this proceeding was called; and, furthermore, that I am not a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

(Signature and Seal on File)

Notary Public, in and for the District of Columbia

My Commission Expires: May 31, 2018