MINUTES OF THE THIRD MEETING OF THE U.S. COMMODITY FUTURES TRADING COMMISSION'S MARKET RISK ADVISORY COMMITTEE NOVEMBER 2, 2015

The U.S. Commodity Futures Trading Commission's ("CFTC" or "Commission") Market Risk Advisory Committee ("MRAC" or "Committee") convened for a public meeting on Monday, November 2, 2015, at 10 a.m., at the CFTC's Washington, DC, headquarters, located at 1155 21st Street, NW, Washington, DC 20581. The MRAC discussed the Central Counterparty ("CCP") Risk Management Subcommittee's recommendations to the MRAC regarding how the CCP default plans that were presented at the April 2, 2015 MRAC meeting can better reflect market conditions in the case of the default of a significant clearing member. The meeting consisted of three panel sessions. Panel I addressed interdependencies among CCPs and key intermediaries. Panel II discussed portability and availability of financial and operational resources by clearing members. Finally, in Panel III, the buy-side representatives presented their views on various aspects of the Subcommittee's recommendations.

MRAC Members and Invited Panelists/Guests in Attendance

Gerald Beeson, Chief Operating Officer and Chief Financial Officer, Citadel
David Burlage, Chief Financial Officer, CoBank
Sunil Cutinho, President, CME Clearing, CME Group ("CME")
Douglas Friedman, General Counsel, Tradeweb
Andrew Gray, Managing Director, Group Chief Risk Officer, Depository Trust and Clearing Corporation ("DTCC")
Michael Hennessy, Vice President, Treasury and Capital Markets, Federal Home Loan Banks of San Francisco
Nathan Jenner, Head, Market Transparency Products, Bloomberg L.P
Jerry Jeske, Group Chief Compliance Counsel, Mercuria Energy Trading, Representing Commodity Markets Council
Thomas Kloet, Trustee, Elmhurst College
Sebastiaan Koeling, Chief Executive Officer, Optiver US, Representing Futures Industry Association Principal Traders Group
Clifford M. Lewis, Independent Director, Eurex Clearing ("Eurex")
Glen Mackey, Chief Risk Officer, NRG Energy Inc.
Kevin McClear, Corporate Counsel, Intercontinental Exchange, Inc. ("ICE")
Dennis McLaughlin, Group Chief Risk Officer, LCH Clearnet ("LCH")
Susan McLaughlin, Senior Vice President, Federal Reserve Bank of New York
Richard Miller, General Counsel, Prudential Financial
Michael Modlock, Head of TriReduce North Americas, TriOptima
Angela Patel, Senior Vice President, Putnam Investments
Edward Pla, Managing Director, Head of Clearing and Execution, UBS Investment Bank
Emily Portney, Global Head of Agency Clearing, Collateral Management and Execution, JP Morgan
Susan O'Flynn, Managing Director and Global Head of CCP Strategy, Governance and Optimization, Morgan Stanley
Marcus Stanley, Policy Director, Americans for Financial Reform

William Thum, Principal, Vanguard
Kristen Walters, Global Chief Operating Officer of Risk and Quantitative Analysis Group, BlackRock
Luke Zubrod, Director of Risk and Regulatory Advisory Services, Chatham Financial
Rana Yared, Managing Director, Goldman Sachs

CFTC Commissioners and Staff in Attendance
Timothy G. Massad, Chairman
Sharon Y. Bowen, Commissioner
Petal Walker, Chief Counsel, Office of Commissioner Bowen, Designated Federal Officer
Robert Wasserman, Chief Counsel, Division of Clearing and Risk

I. Opening Remarks

Ms. Walker called the MRAC meeting to order.

Chairman Massad first provided his opening remarks on the importance of the CCP strength and resilience. Commissioner Bowen then provided her opening remarks, in which she discussed the inaugural April 2, 2015 meeting of MRAC during which CME, LCH, and ICE described their efforts to prepare for a default by a significant clearing member. Commissioner Bowen also noted the creation of the CCP Risk Management Subcommittee, which was tasked with answering whether those efforts could better reflect actual market conditions and how CCPs can better coordinate their actions in this area. She also stated that the Subcommittee would present its recommendations to the MRAC in early 2016. Concluding her remarks, Commissioner Bowen thanked the MRAC and the Subcommittee for their work and welcomed their views.

II. Panel I: Recommendation 1 – Interdependencies Among CCPs and Key Intermediaries

Ms. O'Flynn facilitated the discussion.

Ms. O'Flynn first summarized the Subcommittee's recommendations to: (1) incorporate in default drills the potential default of a large liquidity provider; (2) in stress tests, cover a default by two large clearing members; and (3) disclose CCP liquidity resources to a broad audience, taking into account resource diversity and confidentiality concerns.

The Subcommittee members next presented their views on these proposals. Mr. Cutinho first addressed existing CFTC rules, access to alternate banks, and the roles of the CFTC, SEC, Financial Industry Regulatory Authority, and the Federal Deposit Insurance Corporation. Mr. McLaughlin next discussed CCP deposit accounts at the central bank, portability in a stress scenario, transfer of financial resources, and the impact of liquidity on a CCP's investment activities. Messrs. Cutinho and McClear then discussed the need for CCP's to have access to sufficient liquidity resources during a default event, especially in light of shrinking repo markets and bank balance sheet capacity. Mr. McClear also addressed the role of non-bank resources in ensuring liquidity, the importance of access to the Federal Reserve discount window, ICE's default testing, and transparency-related issues, and also remarked on ICE's confidentiality

obligations. Next, Mr. Lewis described certain differences between American and European clearinghouses, including the fact that Eurex Clearing has full segregation at the customer level, and that it functions as a systematically important bank, thereby having close relationship with Bundesbank. In this context, Mr. Lewis stressed the importance of having access to the central monetary authority. Following these presentations, Messrs. Kloet, McClear, and Cutinho, and Ms. O'Flynn exchanged views on a CCP's disclosure of its liquidity resources.

Ms. Walters next presented the buy-side's perspective on liquidity, addressing issues such as assessment of clients' counterparty credit risk, transparency of the CCP's loss absorbing resources, disclosure of margin methodologies, stress testing, the amount of potential losses, and whether clients will be made whole in a default scenario. Among other things, Ms. Walters also presented arguments in favor of sufficient capital against losses, standardized disclosures, and supervisory stress tests. Mr. Gray followed with remarks on DTCC's efforts to identify and limit exposure to its counterparties, and also encouraged cooperation with the Committee on Payments and Market Infrastructures ("CPMI") of the International Organization of Securities Commissions ("IOSCO").

Next, Mr. Miller remarked on the need to further discuss access to the Federal Reserve discount window during exigent circumstances, and Mr. Wasserman then briefly addressed progress being made by the CFTC, CPMI, IOSCO, and the Federal Reserve Board on certain issues discussed during the meeting. Next, Mr. Cuthino and Ms. Walters exchanged views on the role of the central bank, the scope of transparency, and principle-based stress testing, and Ms. Portney and Mr. Stanley followed with a discussion of the previously discussed access to the Federal Reserve discount window. Ms. O'Flynn concluded Panel I by recapping the discussion and thanking the panelists for their input.

III. Panel II: Recommendation 2 – Portability and FCM Resource Availability

Ms. O'Flynn facilitated the discussion.

Ms. O'Flynn first introduced matters to be discussed during the Panel, in particular the availability of Futures Commission Merchants ("FCMs") in the event of a large FCM default in light of constraints posed by the new regulatory environment. She next asked the panelists for their views, with a focus on financial and operational resources availability.

The panelists first discussed customer access to the market throughout the porting process. Mr. Cutinho supported porting of a group of customers all at once, and also referenced the use of negative client consent and gross margining. Mr. Cutinho also discussed Basel III capital rules on the agency side of a bank's business. In addition, he asked regulators to provide relief to receiving FCMs with regard to the "know your customer" due diligence process so they could expedite the porting process, and also noted the need to have contact information for end clients during porting. Mr. McClear next described steps taken by ICE Clear Credit to facilitate porting, including FCM-focused default testing, automation, and a simulated trustee process. He also stated that customers must have backup FCMs in case of a default by their primary FCM. Mr. McLaughlin added that there must be extra margin to manage client positions.

Mr. Cuthino then suggested a "white knight" planning of a mix of potential solvent FCMs to have available before a default occurs. He also offered that the receiving FCM must be able to take the entire client book, or its subset, and noted the importance of gross margining. Next, Ms. Yared observed that a sufficient margin is not enough to take on the entire portfolio of a failing clearing member due to capital rules. She also discussed coordination between clearinghouses, drills involving European clearinghouses, and auctions for portable client portfolios. Mr. Lewis criticized capital rules and observed that any rules should address end-user protections and certainty of hedging. Mr. Pla next remarked on Basel III and leverage ratio rules, and his remarks were followed by Mr. Stanley who commented on adequate capitalization of mutualized risks and criticism of exemptions from capital rules. Mr. Zubrod focused his remarks on the costs and impact of a backup FCM on clearing, and proposed a financial entity de minimis exception from central clearing.

Ms. Portney and Mr. Jeske next discussed margin segregation and barriers to entry faced by new clearing firms, and their remarks were followed by Mr. McLaughlin's proposal for creating a fictitious clearing member as a mechanism for posting margin for defaulting portfolios. Mr. Stanley responded that he would revisit with the banking regulators the issue of margin segregation. Mr. Cuthino next remarked that many clients are unable to self-clear and that capital to cover risk should consider the margin collected by the CCP from a market participant. Mr. Jeske referred back to his comments on barriers to entry and noted the complexity of hedging portfolios.

Chairman Massad responded that he supported stronger capital requirements for banks and that he appreciated the Supplementary Leverage Ratio ("SLR") as a non-risk based backstop. He also noted the effects of SLR's exposure measurement methodology on client clearing, and called for a realistic measure of the exposure that would allow market participants to hedge risks. Chairman Massad also explained that the Commission will mandate clearing only where it can reduce the overall risk in the system as opposed to increasing clearing as such. He suggested that cash given to the clearinghouse should be deposited with the Federal Reserve. Among other things, Chairman Massad also noted the benefits of gross margining.

Next, Ms. O'Flynn asked the panelists to address new membership models. Mr. Miller responded that financial end users favor a direct access model provided they are not liable for mutualized risk, with Mr. Wasserman noting a general unwillingness to be responsible for mutualized loss. Mr. Yared then highlighted certain practical difficulties in developing an access model on a non-mutualized basis, and Ms. Flynn noted a future possibility of a sponsorship model. Ms. Portney observed that new membership models give greater access to the buy-side, but do so at the expense of the clearing members who have to guarantee the transaction. In response, Mr. Cutinho commented on Basel III rules for repo transactions.

Ms. O'Flynn closed Panel II with a summary of three remaining MRAC recommendations on action process, consistency, and transparency, and stated that they would be subject to future Committee discussions.

IV. Panel III: The Buy-Side Perspective

Mr. Beeson facilitated the discussion.

Mr. Beeson first introducing topics to be discussed during the Panel as well as the panelists. The first panelist, Ms. Patel, addressed concerns regarding financial risk management by CCPs. Among other things, Ms. Patel discussed benefits of derivative contracts, their function prior to Dodd-Frank, and the role of ISDA and collateral documentation. She also expressed concerns about central clearing and the implementation of the principles assessment for financial market infrastructures.

Mr. Thum next addressed issues faced by asset managers and described recommendations by the Securities Industry and Financial Markets Association's Asset Management Group to the CPMI and IOSCO regarding development of Principles for Financial Market Infrastructures, minimum standards for CCPs on risk management, stress testing, and financial safeguards, as well as the public quantitative disclosure standards for CCPs.

Following Mr. Thum's remarks, Ms. Walters described certain recommendations by BlackRock regarding CCPs' risk management practices, including CCP contributions to the guarantee fund, and transparency and consistency of those practices. She also raised concerns about the use of the margin of non-defaulting counterparties as a recovery tool, and the need for resolution plans in a failure scenario.

The open Panel discussion started with Mr. Cutinho's remarks on loss absorbing resources in case of a default, prefunding of customer assessments, and a clearing member's failure at multiple clearing houses. Mr. Thum commented on the need for enhanced standardization and transparency into a CCP's financial operations, and raised a concern about margin haircuts. Mr. Cutinho shared Mr. Thum's concerns about haircutting, but noted that margin gains haircutting would incent participation in default auctions. Mr. Lewis then described Eurex's approach for futures, stating that it allowed tri-party custody of margin money and full customer segregation. Mr. Thum next observed that mandated clearing guidelines should be assessed against risk management factors and be regularly refreshed to ensure that clearing is available at more than one CCP. He also favored standardization and transparency of stress testing. Mr. Miller similarly favored greater transparency as well as consistency of stress testing.

The panelists next discussed risk-based contributions of CCPs. Mr. McClear first raised concerns about a clearinghouse's risk-based contribution to the default waterfall, stating that it could create incentives for participants further down the waterfall to increase their risk. Mr. Thum responded that CCP contributions bring discipline to the CCPs' performance of their roles. Mr. Cutinho next stated that CCP capital contributions to cover the failure of a participant are made from a risk perspective based on the amount of risk CCPs bring to the system. He added that in the "defaulter pays" model of a clearing member failure, a CCP cannot subsidize a clearing member's risk. He explained, however, that CCP operational and investments risks under its control should be borne by the CCP itself. Ms. Portney noted next that CCPs make daily risk decisions involving membership requirements, what products to clear, margin levels, and collateral and haircut requirements. She added that the consensus view of CCP end-users

and customers is that they want CCPs to "have more skin in the game," and advocated enhanced disclosure, greater oversight, and consistency in stress testing. Mr. Pla then opined that stress tests should be standardized, hard to meet, transparent, and easy to understand and compare. Ms. Walters also noted that stress testing standards implemented for commercial and investment banks could also be followed in central clearing.

V. Closing Remarks

Mr. Kloet, who had been asked by Commissioner Bowen to provide closing remarks, thanked Commissioner Bowen for her sponsorship of the meeting and Chairman Massad for his participation. He also thanked Ms. O'Flynn and MRAC for their first two recommendations, and noted that the remaining three recommendations would be considered by the CCP Coordination Subgroup and discussed during the New Year. He then thanked the presenters for their input. Thereafter, Ms. Walker adjourned the meeting at 1:31 p.m.

I hereby certify that the foregoing minutes are accurate:

Petal Walker
Acting Chair, Market Risk Advisory Committee

10/3/17
Date