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

17 CFR Parts 1 and 23 RIN 3038–AE9

Advanced Notice of Proposed Rulemaking (“ANPRM” or “Notice”): Risk Management Program (RMP) Regulations for Swap Dealers (“SDs”), Major Swap Participants (“MSPs”), and Futures Commission Merchants (“FCMs”)

Submitted electronically

Dear Mr. Kirkpatrick,

The Institute for Agriculture and Trade Policy (“IATP”)\(^1\) appreciates the opportunity to respond to some of the questions in the ANPRM.\(^2\)

It is an understatement to say that the ANPRM is timely. If we think of effectively implemented RMPs as tools to obviate or reduce the need for supervisory intervention, 2023 was not a good year for RMPs. It may be gratifying, for example, that the Federal Deposit Insurance Corporation (FDIC) admitted having been lax about analyzing First Republic Bank’s liquidity risk before FDIC shut the bank down in May and sold most of its assets to JP Morgan Chase.\(^3\) More gratifying still would have been if the FDIC had the supervisory resources and the regulatory culture to intervene to prevent First Republic’s reckless dependence on uninsured deposits and unmitigated interest rate risk for its growth.

For the persistently under-resourced Commission, a revised RMP regulation with clear lines of accountability and a framework to analyze new FCM and SD risks will help prevent unmanaged or under-managed risks from disrupting markets and contributing to insolvencies. However, having ample supervisory and regulatory resources cannot ensure that RMPs alone will prevent insolvencies and subsequent bailouts, as Better Markets has demonstrated in its analysis of the contribution of Federal Reserve Bank supervisory failures to the Silvergate Bank, Signature Bank,

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\(^1\) IATP is a nonprofit, 501(c)(3) nongovernmental organization, headquartered in Minneapolis, Minnesota, with offices in Washington, D.C. and Berlin, Germany. IATP participated in the Commodity Markets Oversight Coalition (CMOC) from 2009 to 2015, and the Derivatives Task Force of Americans for Financial Reform since 2010. IATP is an Associate Member of the Commission’s Technology Advisory Council.


Silicon Valley Bank and First Republic insolvencies and bailouts. A strong RMP Regulation must enable the Commission to use its data monitoring and enforcement resources proactively.

**Overview**

In this letter, we contend that both the Commission and Commission registrants will benefit by amending 17 CFR Parts 1 and 23 to anticipate the SD and FCM deployment of artificial intelligence (AI) models in RMPs (as well as in their business units). We also request that the Commission include climate-related financial risk in a proposed rule, preferably as an enumerated risk in reporting to the Commission in Risk Exposure Reports (RERs). We also call for standardization of the RERs to enable the Commission to compare and aggregate risk profiles among FCMs and SDs. With the help of the National Futures Association (NFA) in reviewing monthly SD and FCM risk data, the Commission will be better able to investigate proactively potentially unsustainable risks among CFTC registrants. Proactive investigation to prevent unsustainable risks is preferable to reacting with Commission enforcement actions and fines that seldom prevent recidivism among the largest parents of SDs and FCMs.

**Questions concerning Risk Management Program Governance**

*Question 1 and parts on the definition of “governing body”*

The current definition of “governing body” in 17 CFR Part 23.600 allows for the possibility that the chief executive officer also functions as the governing body, a fundamental conflict of interest: “The chief executive officer of a registrant, or any such board, body, committee, or officer of a division of a registrant, provided that the registrant’s swaps activities for which registration with the Commission is required are wholly contained in a separately identifiable division.” SDs are usually a division of a parent firm. To allow the CEO to act as the “governing body” of the SD means that the Risk Management Unit’s (RMU) operation, even if legally separated from the SD’s “business unit,” may report to nobody other than the CEO. Even the most diligent CEO, who oversees both the RMU and the business unit, should not be permitted to be the final arbiter of the performance of the RMP. That final arbiter should be the board or similar governing body.

Because the board or similar governing body has numerous responsibilities, the definition of “governing body” should stipulate that a subcommittee of the governing body should review the RMP at least annually or “as needed” and the RER at least quarterly or “as needed.” The subcommittee should report its findings to the full board or governing body, including any

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recommendations on the RMP or RMU operations. This definition of “governing body” would apply equally to FCMs.

**Question 2 on the definition of “senior management”**

The definition of “senior management” in 23.600 has both the virtues and defects of total flexibility: “**Senior management. This term means,** with respect to a registrant, any officer or officers specifically granted the authority and responsibility to fulfill the requirements of senior management by the registrant's governing body.” Given the definition of “governing body” cited above, the CEO could dictate who was senior management and who was not without any board oversight. This definition of “senior management,” though flexible to accommodate new positions wholly at the discretion of the CEO, harbors a potentially weak and confusing accountability structure.

As of August 31, 2023, there are 105 SDs, zero MSPs (Major Swaps Participants) and 61 FCMs registered with the National Futures Association (NFA). IATP has not reviewed the senior management structure of the SDs and FCMs. However, we are confident that each SD and FCM has a CEO, a Chief Financial Officer and a Chief Operations Officer, although for smaller FCMs, the latter two positions might be combined. To implement the RMP Regulation effectively, there should be a director of the RMU who would report to the Chief Compliance Officer. These senior management positions should be enumerated in the definition of “senior management.” Given the nearly universal use of automated trading systems and other automated systems in SDs and the largest FCMs, plus the advent of artificial intelligence noted later in our comment, the definition of “senior management” should include “Chief Technology Officer,” unless that position is combined with the Chief Operations Officer. Per our responses to question 7 and parts, the Commission should consider including “Chief Climate Risk Officer” within the definition of “senior management.”

**Question 3, regarding reporting lines for a SD or FCM’s RMU**

Because the RMU operationalizes daily the RMP, the RMU director normally should report to the Chief Compliance Officer who reports to the CEO. However, if the RMP subcommittee of the governing body, as recommended above, wishes to obtain information or insight into the RERs and other aspects of the operationalization of the RMP, e.g., the use of Third-Party Service providers for risk management functions, the subcommittee should be able to directly interview the director of the RMU or the Chief Compliance Officer, with the permission of the CEO. Reporting lines are a means to accountability. A definition of “senior management” that confuses accountability likely will weaken risk management operations.

**Question 4. Should the Commission propose and adopt standards for the qualifications of certain RMU personnel (e.g., model validators)?**

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6 https://www.nfa.futures.org/registration-membership/membership-and-directories.html
If the National Futures Association (NFA) does not already have such standards in place and a process to periodically review them, the Commission should instruct the NFA to do so and to post the standards, and any subsequent revisions of standards, on its website. Given the evolving and emerging trading and clearing technologies, and the Commission’s RMP oversight responsibilities, the Commission should delegate responsibility for standards development and oversight to the NFA.

**Question 5. Should the RMP Regulations further clarify RMU independence and/or freedom from undue influence, other than the existing general requirement that the RMU be independent of the business unit or business trading unit?**

There is probably no way to effectively prescribe RMU independence. A RMU that is sufficiently resourced to operationalize its RMP and that has a clear reporting lines to the Chief Compliance Officer, to other senior management officials and to the governing body, as we have recommended it be defined, should create and maintain a functional independence from the business unit that no definition of “undue influence” can ensure.

**Enumerated Risks in the Risk Management Program Regulations**

**Questions 5, 6 and parts concerning operational risk and technological risk as a separate enumerated risk**

IATP supports aligning the definition of “operational risk” with that of the Federal Reserve and the Basel III standards, i.e., “as the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events.” This general definition of “operational risk” in the RMP Regulation would allow the SDs and FCMs’ RMUs to focus on human failings, e.g., in training, and to distinguish “operational risk” from “technological risk,” which should be an enumerated risk not subsumed under “operational risk,” as we argue below.

Regulation 23.600 c.4 should be amended to require SDs’ RMPs to include “technological risk” as an enumerated risk, as is currently the case for FCMs. The Commission asks, “what if any specific risk considerations” should be incorporated into a revised definition of “technological risk” for SDs and FCMs? The Commission provides an illustrative list of “information technology assets” that could be used to define “technology risk.” Since not each SD and FCM will use these assets in equal manner, the illustrative list should be a footnote to whatever normative definition of “technological risk” that the Commission agrees.

However, the definition of “technological risk” should address the common issue of the adoption and deployment of “information technology assets” by Third Party Service (TPS) providers that the RMU will have to oversee, even if those assets have been purchased and adapted by the business unit to achieve its objectives. We have chosen one of the assets, specialized Artificial Intelligence (AI) models, as a potentially difficult oversight challenge both for RMUs and the Commission.
Commission staff began in 2019 to survey use cases of AI applications to derivatives markets, including for risk management purposes.\(^7\) Since then, AI has become a subject of investigation in the CFTC’s Technology Advisory Committee, with a subcommittee that has initiated work on AI and its use cases in the derivatives markets.\(^8\) The following comment does not prejudge what the subcommittee will recommend to the TAC nor what the TAC will recommend to the Commission on AI. This letter addresses just one issue in AI applications for Risk Management Programs, i.e., the SD and FCM use of TPS providers of AI and the senior management and governing board accountability structure for such use.

According to the National Institute for Standards and Technology, “The AI RMF [Risk Management Framework] refers to an AI system as an engineered or machine-based system that can, for a given set of objectives, generate outputs such as predictions, recommendations or decisions influencing real or virtual environments. AI systems are designed to operate with varying levels of autonomy.”\(^9\) Some of the kinds of outputs that AI models can generate are outputs currently achieved by automated means, such as operational risk controls, but not autonomous generated outputs. The degree of AI autonomy to allow is a challenge both for the industry and the Commission.

According to NIST, the risks of AI deployment include differences among an AI model developer and a firm, such as a SD or FCM, that adopts an AI model for risk management or other purposes: “Risk metrics or methodologies used by the organization developing the AI system may not align with the risk metrics or methodologies uses by the organization deploying or operating the system. Also, the organization developing the AI system may not be transparent about the risk metrics or methodologies it used.”\(^10\) Possible discrepancies between AI models for derivatives risk management as developed by a TPS provider and the firm deploying AI are not yet contemplated in the RMP Regulation.

TPS provision is referenced once implicitly and once explicitly in 1 Part 17 § 1.11. Explicit reference concerns the annual auditing of the Risk Management Program: “The annual testing shall be performed by qualified internal audit staff that are independent of the business unit, or by a qualified third party audit service reporting to staff that are independent of the business unit.”\(^11\) Under the category of “operational risk,” TPS provision is implied concerning the automated trading controls from a TPS that may be adapted to a FCM’s needs:

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\(^8\) “Commissioner Goldsmith Romero Announces July 18 Technology Advisory Committee Meeting,” [https://www.cftc.gov/PressRoom/Events/opaeventtac071823](https://www.cftc.gov/PressRoom/Events/opaeventtac071823). IATP serves on the TAC subcommittee on Emerging and Evolving Technologies, which has initiated work on paper for the TAC on AI.


\(^10\) Ibid., p. 10.

The Risk Management Program shall include automated financial risk management controls reasonably designed to prevent the placing of erroneous orders, including those that exceed pre-set capital, credit, or volume thresholds. The Risk Management Program shall ensure that the use of automated trading programs is subject to policies and procedures governing the use, supervision, maintenance, testing, and inspection of such programs.\(^{12}\)

Because automated trading systems (ATS) compete in the marketplace, even the most reasonably designed automated financial risk management controls can fail, either because of business unit modifications to purchased ATSs or because of disruptive transactions with counterparty ATS design and deployment.

Two academic analysts of ATS failure explain, “Since competing algorithmic trading systems digest and respond to the same market data, they make up a highly interactive market ecology, in which one system’s failures and trading decisions can trigger widespread turbulence . . . inter-algorithmic crashes are an ever-imminent problem for present-day automated markets, and represent a new type of systemic risk.”\(^{13}\) Since the current RMP Regulation requires “policies and procedures” applied to ATS and to automated risk management controls, the Commission should not allow any deployment of AI-guided trading systems or risk controls before they have been subject to similar “policies and procedures,” including those applied to TPS providers of AI models.

The Commission should consider how the SD and FCM Risk Management Program Regulations might be amended to enable RMUs to oversee decisions to deploy generative AI models adapted by SDs and FCMs that have a greater degree of autonomy than is currently feasible for automated trading systems. As indicated above, the design of an AI model may incorporate risks and methodologies not disclosed to the buyer of the AI model intending to deploy it for financial risk management. One research strategy to train AI models to perform in concert with the SD or FCM’s risk management strategy is to train the AI models to act ethically within defined data boundaries and objectives. According to one research group

Much of the research at the intersection of artificial intelligence and ethics falls under the heading of machine ethics, i.e., adding ethics and/or constraints to a particular system’s decision making process. One popular technique to handle these issues is called value alignment, i.e., restrict the behavior of an agent so that it can only pursue goals which follow values that are aligned to human values.\(^{14}\)

\(^{12}\) Ibid., 1 Part 17 § 11.1.3.ii


How computer engineers and programmers train AI models in human values, e.g., those of the SD and FCM RMUs, are beyond our ken. But such training must occur before AI-guided financial risk management is deployed to prevent the systemic risks that are now inherent in automated trading systems.

*Question 7 and parts: on climate risk as a systemic financial risk*

IATP has written to the Commission three times on the risks that climate change poses for derivatives markets and market participants.\(^1\) We will not repeat or summarize those comments here. Instead, we focus on the Commission’s questions on whether climate change related financial risks to SDs, FCMs and their clients should be designated as an enumerated risk and defined as such in the amended FCM and SD Risk Management Program Regulations.

The CME Group has sternly warned the Commission not to issue any regulation regarding climate risk, but instead allow industry to innovate climate risk management products, such as CME’s emissions offset futures contracts,\(^2\) within a framework of high-level principles: “The Commission’s principles-based regulatory foundation enables market stakeholders to create and innovate and should not be compromised by the temptation to reach into policy areas best addressed by regulators with different competencies, history, and expertise.”\(^3\) For example, CME argues that “the inclusion of common scenarios that have been developed to capture climate-related financial risks are not fit for the purpose of DCO [Designated Clearing Organization] stress testing, since they also focus on medium- and long-term time horizons,” rather than on the one to five days of DCO risk exposure for a derivatives contract transaction. According to the CME argument, DCOs, no matter how large their capitalization or aggregate risk exposure, should be exempt from any climate scenario risk analysis.

Another politically influential industry organization, the Futures Industry Association (FIA), doubts that there is any material benefit to characterizing SD, FCM and other intermediaries’ exposure to climate-related financial risk: “Distinguishing the climate-related financial risk that may be posed to an organization’s separate swap dealers, futures commission merchants, introducing brokers, commodity trading advisors and commodity pool operators may be a complex and significant undertaking with no material additional benefit to the disclosure

\(^{15}\) https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=70873&SearchText=Institute%20for%20Agriculture%20and%20Trade%20Policy;  
\(^{2}\) https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=71313&SearchText=;  
\(^{3}\) https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=62490&SearchText=Institute%20for%20Agriculture%20and%20Trade%20Policy  
provided by the parent holding company of these subsidiaries as provided on a firmwide basis.\(^{18}\) IATP does not doubt that the delineation of SD, FCM and other intermediaries’ climate-related financial risk and the development of tools to manage that risk effectively is a complex and resource intensive endeavor to initiate.

However, IATP hopes that the Commission can persuade FIA and other industry groups that there is a material benefit for SDs, FCMs and other intermediaries to proactively analyze their aggregate risk exposures in the contracts in which they transact business. There is material benefit to developing RMPs and RMUs with the capacity to prevent climate-related losses in one automated trading strategy from precipitating default cascades. The research and planning to prevent catastrophic climate-related financial market events, sometimes called “Green Swans,” should not remain confined to the central banks that have been the historical source of emergency loans and bailouts for the SD and FCM parents.\(^ {19}\)

According to a 2021 report by the Financial Stability Oversight Council (FSOC), climate risk is not only a financial risk: climate change poses a risk to financial stability.\(^ {20}\) The CFTC is not a prudential regulator with statutory obligations to ensure safety and soundness. However, the parent firms of most SD and FCM activities are overseen by prudential regulators. SD and FCM risk management programs will be unlikely to fulfill their suitability obligations\(^ {21}\) to their customers if their risk models do not incorporate climate-related financial risks, e.g., the price volatility and deliverable supply futures contract impacts of prolonged, severe and widespread drought in major grain growing regions.

The Commission asks, “a. Should these potential new risks be defined in the RMP Regulations? b. With respect to each newly suggested enumerated risk, what, if any, specific risk considerations should an SD’s or FCM’s RMP policies and procedures be required to include?” (FR, p. 45830) “Climate-related financial risk” should be defined as an enumerated risk in the RMP Regulation. Because all member agencies of FSOC are undertaking work on managing climate-related financial risk under their respective authorities, they should agree on a common definition of “climate-related financial risk” that can then be used in a proposed revision of the RMP Regulation. If the FSOC members delay in agreeing on such a common definition, the Commission could provisionally adopt a definition for the purpose of amending the RMP Regulation and harmonize that definition later with the definition agreed by FSOC.


Regarding “specific risk considerations” for climate risk, the RMP Regulation should outline SD and FCM modeling of climate risk and the process by which senior management and the governing body use RMU modeling outputs to determine the SD and FCM’s risk tolerance, as explained in the quarterly Risk Exposure Report.

The challenges of modeling climate risk realistically by SDs and FCMs are at least two: 1) how to adapt the climate scenario models designed to project macroeconomic effects of climate impacts on the valuation of financial and non-financial assets to SD and FMC climate scenario analysis of derivatives trading? 2) how to incorporate in RMP modeling the severe and more frequent extreme weather events or chronic climate conditions attributed to the onset of climate tipping points?

A recent study by British actuaries characterized many current climate scenario models as the “emperor’s new climate scenarios,” alluding to a fable about an emperor who donned imaginary clothes, but whose subjects dared not to say that he was naked. These authors write, “Tipping points must be included if scenarios are to be realistic. They are no longer high-impact, low-likelihood events but are now high impact, high likelihood, and we need to mitigate and plan for them. Ignoring them in scenarios and modelling significantly understates risk.”

Although the underlying assets of derivatives contracts and the trading infrastructure will be affected differently by different tipping points and/or combinations of tipping points, a FCM or SD RMP that ignores tipping points is very unlikely to successfully manage the financial risks in the asset classes traded by their clients or on their own accounts.

For example, the industrial agriculture use of irrigated water from subterranean U.S. aquifers is a major factor resulting in rates of widespread depletion that exceed recharging from precipitation throughout the United States. There is a wealth of data about aquifer depletion and how it, together with projections from the U.S. Department of Agriculture’s Drought Monitor, will affect crop yields, prevented planting, livestock health and herd size and many other production factors. With what degree of granularity and over what period of trading time can FCMs and SDs credibly model the impact of this physical risk to the underlying assets for an array of agricultural derivatives contracts?

The Commission cannot prescribe how SDs and FCMs should model climate-related financial risk in derivatives trading for contracts in each asset class. But the Commission should amend the RMP Regulation to require that SDs and FCMs model climate risks in two kinds of scenarios: 1) those in which the impact of climate risks on financial valuation and contract design can be


readily projected and managed; 2) those of climate tipping points that present severe, prolonged and irreversible risks to all asset classes in SD and FCM client portfolios. With what modeling data and physical risk and transition risk scenarios can SDs or FCMs advise clients for the next quarter, the next year and longer? Can negative tipping points be hedged with what the “emperor’s new climate scenario” authors call “positive tipping points,” resulting from major shifts in policy, investment strategies and risk tolerance determinations that incorporate the high likelihood of negative tipping points?

**Questions concerning Periodic Risk Exposure Reporting by Swap Dealers and Futures Commission Merchants**

Because risk management is a core function of SDs and FCMs, IATP was surprised to read in the preface to the ANPRM that there is no uniform format for the Risk Exposure Reports (RERs). As a result of inconsistent RER reporting, it is difficult for the Commission to compare how enumerated risks and other risk factors are reported:

> Commission staff has observed significant variance among SD and FCM RERs with respect to how they define and report on the enumerated areas of risk (e.g., market risk, credit risk, liquidity risk, etc.), making it difficult for the Commission to gain a clear understanding of how specific risk exposures are being monitored and managed by individual SDs and FCMs over time, as well as across SDs and FCMs during a specified time period (Federal Register, p.45828)

It appears that some registrants are complacent about the consistency, timeliness and comprehensiveness of the information included in the RERs. As a result, senior management and governing boards of the SDs and FCMs, as well as the Commission, may not have the quality and quantity of information to manage one or more areas of risk.

> . . . the Commission frequently receives RERs in inconsistent formats containing stale information, in some cases data that is at least 90 days out-of-date. Furthermore, a number of SDs have indicated that the quarterly RERs are not relied upon for their internal risk management purposes, but rather, they are created solely to comply with Regulation 23.600, indicating to the Commission that additional consideration of the RER requirement is warranted. (FR 45828)

The only saving grace about the perilous state of RERs is that some SDs are so concerned about the deficiencies in the content and use of the RERs, they shared these concerns with the Commission. SD parent firms include Systemically Important Financial Institutions. Most SDs have ample resources to enhance their Risk Management Units (RMUs) and urgently need to greatly improve the quality, comprehensiveness and timeliness of their RERs.
The financial data of the largest FCMs reported to the Commission\(^{24}\) likewise indicate that they have the resources and the urgent need to build RMUs whose RERs will be regarded by senior management and the governing board as an essential asset of the firms, and not a compliance burden to be lifted by providing the Commission with minimum data and insight into the robustness (or not) of a firm’s RMP. Since large firms may register both SDs and FCMs with the Commission, the cost efficiencies of increasing RMU personnel and other resources should render moot concerns about the costs of building robust RMUs that are independent from SD and FCM business units, particularly at moments when the objectives and obligations of the RMUs may conflict with those of the business units.

IATP notes that the ANPRM makes no mention of Third-Party Service (TPS) provision of risk management and automated trading software, such as that used by Commodity Trade Advisors and Commodity Pool Operators. The Commission should clarify that SDs and FCMs who outsource some, many or all their RMP functions to TPSs must include TPS risk modeling and other risk management functions in SD and FCM reporting to senior management, the governing body and Commission. SDs and FCMs using TPSs for risk management remain responsible for compliance with Commission RMP requirements.

The Commission asks, “At what frequency should the Commission require SDs and FCMs to furnish copies of their RERs to the Commission?” (FR 45830) In consideration of the current and likely future CFTC staffing levels to review the RERs, the current quarterly submission is adequate. However, an efficient and effective Commission review of the RERs requires the development of a reporting template developed jointly with NFA and aligned with the content requirements of the monthly SD risk data reporting to the NFA. (In response to question 5)

We do not understand why NFA does not require FCMs to file monthly risk data. However, for the Commission to have the data basis for a comprehensive and comparable RMP overview of SD and FCM trading, the reporting requirements for SDs and FCMs should be aligned except in cases where SD and FCM risks can be demonstrated to be categorically distinct (Responding to question 3 b.)

The Commission asks, “Are there additional SD or FCM specific data metrics or risk management issues that the Commission should consider adding to the content requirements of the RER?” (Question 4) RERs are not posted on the CFTC website, as far as we can determine. (The Commission does not ask about whether RERs should be available to the public. They should be, at least in a summary provided by the Commission.) IATP is not an NFA member and so cannot access the NFA reports to know what the current RER reporting format is.

However, we believe that a RER template should allow SDs and FCMs to report risk management issues per enumerated risks. For example, if a SD announced that it would begin

to trade some contracts with a generative AI strategy but discovered during beta testing that the risk management control for the AI testing model needed further development, it could so inform senior management, the governing body, the NFA and the Commission of this issue and that it had amended its announcement. If climate scenario testing for oil and gas derivatives produced results that changed how senior management and the governing body determined an FCM’s risk tolerance for those contracts, it could so inform those officials.

**Conclusion**

IATP greatly appreciates the many thoughtful questions posed in this ANPRM, only a small fraction of which we have answered. As stated above, this ANPRM couldn’t be timelier. Though it will be challenging to issue a RMP rulemaking and more challenging still to finalize such a rule, RMP requirements that incorporate emerging and evolving risks in the derivatives markets are critical to maintaining market integrity and to ensuring that these markets serve the public interest, as well as industry interests. IATP looks forward to commenting on proposed amendments to the RMP Regulations for SDs and FCMs.

Respectfully submitted,

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