

Commodity Futures Trading Commission ("CFTC," "Commission") Three Lafayette Centre 1155 21st Street NW Washington, DC 20581 April 24, 2024

REQUEST FOR COMMENT ON THE USE OF ARTIFICIAL INTELLIGENCE IN CFTC REGULATED MARKETS 1

The Institute for Agriculture and Trade Policy ("IATP")² appreciates the opportunity to respond to this Request For Information (RFI). IATP is an Associate Member of the Commission's Technology Advisory Council and a member of the TAC subcommittee on Emerging and Evolving Technologies that is close to finalizing a paper on Artificial Intelligence (AI). Part of the following comments summarize IATP contributions that were not included in that paper or that were included in a scaled down version. The questions posed by the Commission staff, though very pertinent to regulated entities, are too numerous for IATP to answer. Some of our responses to the questions will be thematized and will often refer to the questions by their number in parentheses.

An issue that will affect the use of AI CFTC regulated markets but that is not under CFTC jurisdiction

The following section responds to the last sentence of the RFI: "Staff welcomes any relevant comments, including on related topics that may not be specifically mentioned but that a commenter believes should be considered." (p. 12)

When Commission staff meet with registered entities about how they use AI models in research, data analytics trading, risk management, clearing, self-regulation and for other purposes, they should also ask registrants to comment on their priorities for current and

¹ https://www.cftc.gov/PressRoom/PressReleases/8853-24

² 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.

prospective uses of AI. One reason to ask about these priorities is that AI is not an infinitely reproducible technology that cannot be applied to an infinite number of use cases.

The "elephant in the room of AI" that few among AI product developers wishes to discuss publicly is, according to a Microsoft AI engineer, the unsustainable natural resource –both energy and water— use of AI.³ The rate of unsustainability is suggested by water use in Microsoft and Google data centers in West Des Moines, Iowa. For example, a local citizen's lawsuit revealed, "As Google and Microsoft prepared their Bard and Bing large language models, both had major spikes in water use — increases of 20% and 34%, respectively, in one year, according to the companies' environmental reports."⁴ The Microsoft engineer also reports on a recently introduced Senate bill to remediate AI's unsustainability but that bill is very far from being enacted and appropriated. There is, of course, mainstream press coverage of the contribution of AI to data center energy crises.⁵

Whether proposed technological solutions for generative AI's environmental unsustainability are economically feasible and technologically effective, the CFTC should be part of an interagency task force to establish priorities for AI use and to develop an agreement on how to triage that use before unlimited use contributes to widespread water and energy crises. *The New York Times* series, "Uncharted Waters" illustrated in granular and extensive detail the depletion of U.S. aquifers under Business-As-Usual water use that is expected to increase with the acceleration of climate change.⁶ The Times series identified industrial agriculture, mining and "enhanced oil recovery" (i.e., fracking) as opponents of the regulation of water use. To that list may be added in the near future financial service firms whose business plans become increasingly dependent on AI use. The Commission should use information gathered by this RFI to work with other financial regulators to ensure that AI can be used sustainably, as well responsibly, in the near future.

Question 1. Scope: What criteria should be used to differentiate between AI and other forms of automated trading?

One criterion that is often pointed to as a distinguishing line between AI driven trading strategy and an algorithmic driven trading strategy is the degree of autonomy of the AI model. If the AI model modifies the algorithm in response to how it interprets trading data and other information built into the model, no human intervention may be required to

⁴ Ibid.

https://www.nytimes.com/2024/02/29/business/artificial-intelligence-data-centers-green-power.html?partner=slack&smid=sl-share

⁶ "Uncharted Waters," *The New York Times*, several articles in 2023 and 2024. https://www.nytimes.com/series/uncharted-waters

³ Kate Crawford, "Generative AI's costs are soaring—and mostly secret," *Nature*, February 20, 2024.

⁵ E.g., Patrick Sisson, "AI Frenzy Complicates Efforts to Keep Power-Hungry Data Centers Green," *The New York Times*, February 2, 2024, updated on March 19, 2024.

change an unprofitable trading strategy into a profitable one. A traditional algorithmic trading strategy requires human intervention to be modified. A classic instance of human intervention to correct a failed algorithmic trading strategy was the decision by Goldman Sachs in 2019 to withdraw its recommendations on physically backed derivatives contracts. IATP summarized this decision in our August 24, 2020, letter to the Commission concerning what we believe is its deficient and unenforceable "Principles of Electronic Trading" rule.⁷

Two analysts of automated trading pointed to the "inherent heterogeneity" in information about underlying assets, e.g., live cattle contracts, that algorithms could not successfully standardize into trading strategies.⁸ As reported by the *Financial Times* the Goldman note to investors explained that the trading risks of physical commodities concerned "idiosyncratic" events whose heterogeneous information could not be standardized and incorporated into the algorithmic trading of Goldman's "momentum strategies." For example, Goldman said its algorithmic strategy could not have anticipated the 50% increase in the price of the lean hog futures contract because of the "idiosyncratic" impact of African Swine Fever in China on the underlying asset.⁹ In theory, an AI model would train on information about the underlying assets of physically backed contracts in such a way that "idiosyncrasies" formerly interpreted by commodity specialists would now be standardized into a modifiable algorithm without human intervention that could result in profitable trading. However, as climate change multiplies the severity, frequency and unpredictability of such "idiosyncratic" information, even AI directed automated trading systems may have to be recalibrated by human intervention.

Question 6. AI and third-party service providers ... What challenges may CFTC-regulated entities face when attempting to manage, update, or deconstruct the decisions or analysis made by third-party created software or technology?

Question 18. Third-party service providers Are there any risks specifically associated with using AI technologiescreated by third party providers? What efforts are users of third-party AI technology taking to understand and mitigate these risks? What due diligence procedures are in place to evaluate the risks posed by third-party providers prior to adopting third-party AI technologies? What disclosures should be required regarding a firm's use of third-party providers for AI services?

⁷ https://www.iatp.org/documents/comment-cftc-principles-electronic-trading

⁸ Antti Belt and Eric Boudier, "Hyperliquidity: A Gathering Storm for Commodity Traders," Boston Consulting Group, November 2016. https://www.bcg.com/publications/2016/energy-environmentmetals-mininghyperliquidity and Emiko Terozano, "Commodity investors embrace algorithmic trading," Financial Times, July 6, 2017. https://www.ft.com/content/c386de76-61a2-11e7-8814-0ac7eb84e5f1

⁹ Phillip Georgiadis, "Goldman jettisons all its commodity recommendations," Financial Times, April 26, 2019. https://www.ft.com/content/b4b31544-6804-11e9-9adc-98bf1d35a056

IATP cannot respond to Commission staff questions about specific third-party AI models adapted by CFTC-regulated entities. However, we can respond generically to the questions above, first in terms of a challenge identified by the National Institute for Standards and Technology (NIST) report on a risk management framework for AI.¹⁰ According to NIST, the risks of AI deployment include an AI training alignment gap between a third-party AI model developer and a firm, such as a Futures Commission Merchant (FCM), that adopts a thirdparty 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."¹¹ The Commission could require registered entities to disclose their use of third-party AI service providers. However, such disclosures would not provide the Commission with useful information during market disruptions unless the third-party service providers of AI models were themselves designated as Commission registrants required to disclose to the Commission its risk metrics and the methodologies used to train the data for the AI model adapted by another registrant for trading and other purposes.

One research strategy to train AI models to perform in concert with the third-party client's risk management and trading strategies 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.¹²

What these human values are can vary widely within different units of the same registered entity. For example, the human values of the business unit may not be the same as those of the risk management unit. However, a minimum regulatory requirement for each unit that adapts a third-party AI model to align with the purposes of the unit is that the model or models must undergo well-documented value alignments. If value alignment testing of a model fails prior to commercial application of the third-party provider model, senior management will be faced with the challenge of obtaining the risk metrics and training methodologies from the third-party service provider to be able to successfully align values

¹⁰ "Artificial Risk Management Framework 1.0," National Institute for Standards and Technology, U.S. Department of Commerce, January 2023. https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.100-1.pdf

¹¹ Ibid., p. 10.

¹² R. Noothigattu et al.: "Teaching AI Ethical Values Through Policy Orchestration," IBM Journal of Research and Development, (2019), p. 1.

https://www.cs.cmu.edu/~rnoothig/papers/policy_orchestration.pdf

or make the painful and probably expensive decision not to use the AI models of the third party service provider.

Another challenge for registrants' use of third-party AI models is to distinguish between value alignment in the updating or management of the model by intermediaries and the requirements for AI safety to prevent harm to the customers of intermediaries. According to a recent Trail of Bits research article, achievement of value alignment does not represent and should not be allowed to substitute for ensuring that the AI-based systems deployed do not inadvertently cause harm, in this case, to market participants. Researcher Heidi Khlaaf writes, "The AI community, conflating requirements engineering with safety, has allowed those building AI systems to abdicate safety by equating safety measures with a system meeting its *intent* (i.e. value alignment) [*italics* in the original]. Yet, in system safety engineering, safety must center on the lack of harm to others that may arise due to the system intent itself."¹³ Commission staff review of responses to Questions 6 and 18 from registrants will help staff determine whether registrants distinguish between value alignment and safety requirements as registrants evaluate third party models for purchase and then adapt them for the registrants' needs.¹⁴ The Commission should distinguish value alignment from safety system requirements in its updated Risk Management Program requirements for how registrant risk management units assess, respond to and report operational or technological risk, e.g. of AI guided algorithmic trading.

Question 7. Governance of AI Uses. Is the use of AI audited for accuracy and safety? How frequently are AI systems updated?

The current Risk Management Program regulation requires an annual audit of automated risk management and automated trading systems. However, AI driven automated systems would be learning continuously from the data they process and adjust the model/s accordingly relative to risk tolerance parameters set by senior management. An annual swap dealer or FCM audit of the AI models it updates and deploys would be temporally out of sync with the data driven evolution of those models.

A recent article that surveys auditing and inspection practices in other federal agencies identifies challenges to establishing and maintaining a robust third-party ecosystem for AI auditing.¹⁵ These researchers demonstrate why internal audits alone, such as those

¹³ Khlaaf, Heidy, "Towards Comprehensive Risk Assessments and Assurance of AI-Based Systems,"TrailofBits,2023,https://github.com/trailofbits/publications/blob/master/papers/toward comprehensive risk assessments.pdf#start-of-content

¹⁴ In separate publications, Trail of Bits outlines a risk management framework that would employ the comprehensive risk assessment approach in Ms. Khlaaf's paper to prevent and minimize harm from AI-based systems.

¹⁵ Inioluwa Deborah Raji, Colleen Honigsberg, Peggy Xu and Daniel Ho," Outsider Oversight: Designing a Third-Party Ecosystem for AI Governance," June 9, 2022. <u>https://arxiv.org/pdf/2206.04737.pdf</u>

mandated by the current RMP Regulation for SDs and FCMs, are insufficient to ensure trust and accountability. They identify a roadblock to effective auditing of AI models and a possible means of overcoming that roadblock.

Lack of access to data and algorithmic systems strikes us as the most significant vulnerability of the current AI audit ecosystem. Protecting proprietary information is not a proper response, as all audit systems provide some sort of privileged access to auditors, and disclosure does not have to be direct nor absolute. The National Institute of Standards and Technology, for instance, protects models by having companies run models via a custom Application Program Interface (API) for the Face Recognition Vendor Test (FRVT). Such mediated access, subject to auditor vetting (perhaps by an audit oversight board) and consistent with the audit scope, will be critical to enabling third party auditing of AI systems.¹⁶

Commission registrants would be wise to allow access to data and algorithmic systems by third party auditors per the parameters proposed by this research group or other financial auditing experts. If CFTC registrants maintain a roadblock to their AI data and AI driven algorithmic systems, they may enable a buildup of vulnerabilities not only within the registrant's operations but among the registrant and its counterparties. A safe and accurate use of AI requires robust third-party auditing.

Question 13. Market Manipulation and Fraud: Does the proliferation of AI present increased risks of manipulation, fraud, or other illicit activity in the markets overseen by the Commission? Why or why not? How have governance structures addressed this risk? What, if any, policies should be considered, in addition to existing rules, to address potential increases in illegal conduct as a result of the use of AI? Please also specifically comment on whether the adoption of AI may impede enforcement of antifraud and market manipulation regulations. . . Describe efforts to use AI-based market supervisory technologies to detect market manipulation or fraud.

In a recent speech, Acting Comptroller of the Currency Michael Hsu warned of a "potential explosion" of AI enabled financial fraud, particularly by fraudsters that target the elderly and "vulnerable communities."¹⁷ Acting Comptroller Hsu cited AI deep fakes and voice cloning as fraud facilitating technologies. Customers of registered entities in markets regulated by the Commission are likely to become more vulnerable to fraud as Designated Contracts Markets self-certify new contracts oriented to retail customers, e.g., those with carbon emissions offset credits or crypto currencies as underlying assets. AI facilitated trading and clearing of such contracts with a degree of autonomy beyond that of current

¹⁶ Ibid., p. 8.

¹⁷ Michael Stratford, "Banking regulator warns of "potential explosion" of AI-fueled financial fraud," Politico Pro, April 4, 2024. https://subscriber.politicopro.com/article/2024/04/banking-regulator-warns-of-potential-explosion-of-ai-fueled-financial-fraud-00150576

automated trading and clearing functions will exacerbate current risks and challenge the Commission's data surveillance and enforcement investigation capabilities.

If U.S. legislation is enacted to make the Commission the primary regulator of digital asset contracts, IATP anticipates a large increase in trading in that asset class under a rule that would greatly increase the number of registered entities trading via a decentralized finance model. If Congress fails to appropriate sufficient funds for personnel, computer infrastructure, personnel training, enforcement actions and other resources required to implement this new digital asset Commission mandate, IATP anticipates an increase in fraud and market manipulation, particularly in the spot market contracts that serve as underlying assets of derivatives contracts. The Commission reported that in Fiscal Year 2023 about half of its 96 enforcement actions involved digital assets, largely crypto currencies.¹⁸ The Commission's current customer protection authorities should be expanded in digital asset legislation to facilitate more efficient enforcement actions and to take into account the use of AI to automate the traditional Know Your Customer and Anti-Money Laundering functions of SDs and FCMs.

An AI enabled increase in market manipulation is likely because of the difficulty of documenting the management structure intention of even such a relatively simple market manipulation technique as spoofing. In IATP's critique of the proposed "Principles of Electronic Trading,"¹⁹ we analyzed the CFTC staff "Interpretive Guidance and Policy Statement on Disruptive Practices"²⁰ We reached this conclusion (p. 12):

Perhaps the most important sentence in the staff interpretation of Dodd Frank "spoofing" authority is this one: "Because CEA section 4c(a)(5)(C) requires that a person intend to cancel a bid or offer before execution, the Commission believes that reckless trading, practices, or conduct will not constitute a 'spoofing' violation."²¹ Because of the very high burden of proof to demonstrate knowing intent to "spoof," it has been extraordinarily difficult to prosecute cases in which the market impact of reckless trading was well documented but the intent of the market participant to spoof was denied and undocumented or ambiguously documented.²² Designing software to enable circumvention of risk controls and spoofing by a client has not been prosecutable: the defense claimed the algorithm was not designed to

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https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/dtp_facts heet.pdf

²¹ Ibid. at p. 2.

²² Peter J. Henning, "The Problem with Prosecuting 'Spoofing'," The New York Times, May 3, 2018.

¹⁸ "CFTC releases FY 2023 Enforcement Results," Release number 8822-23, November 7, 2023. https://www.cftc.gov/PressRoom/PressReleases/8822-23

¹⁹ https://comments.cftc.gov/PublicComments/CommentList.aspx?id=3127

evade DCM risk controls but that the algorithm merely "malfunctioned" as it interacted with the DCM's risk controls. $^{\rm 23}$

Documentation of the intention of the person engaged in algorithm spoofing was exceedingly difficult prior to the advent of AI directed trading. Even with new AI specific risk management rules, detecting AI enabled market manipulation, much less demonstrating intention to manipulate, will be all the more difficult.

Fortunately, according to an academic survey of market participants, the use of generative AI, the most autonomous form of AI, is not widespread, so the Commission has time to develop policies to reduce AI enabled market manipulation with the cooperation of registrants. The survey points to technological problems with generative AI as a major impediment to its uptake by financial service firms. For example,

Once such [company trained AI off the shelf] software is complete, its output may be problematic. The risks of bias and lack of accountability in AI are well known. Finding ways to validate complex output from generative AI has yet to see success. Any new tool has to be designed to avoid violating other actors' intellectual property (IP) rights; and generative AI algorithms may act unpredictably— even illegally— especially when interacting with other ones. Finally, so-called "hallucinations," or confident wrong answers, are a worry with any use of generative AI. These risks mean that financial services companies must be cautious in how they deploy generative AI.²⁴

Nevertheless, financial service companies, including CFTC registrants, will be under investor and customer pressures to deploy generative AI algorithms before they have been value aligned and tested for accuracy, safety, explainability and other critical factors in the responsible use of AI. The Commission should organize roundtables of registrants and representatives from the various disciplines that contribute to the development and manufacture of graphic processing units and AI model training and testing to prevent economic and reputational pressures from driving premature deployment of AI models by CFTC registrants.

In theory AI models should improve current data surveillance technologies to detect fraud and market manipulation if they are trained on an array of data that includes a registrant's historical trading data, currently used algorithms, the specifications of self-certified

²³ Janan Hanna, "Spoofing Mistrial Shows Limit of Dodd-Frank on Fake Trade," Bloomberg, April 12, 2019.

²⁴ "Finding value for generative AI in financial services," MIT Technology Review Insights, November 2023, p. 5. https://wp.technologyreview.com/wp-content/uploads/2023/11/MIT-UBS-generative-AI-

report_FNL.pdf?utm_source=pdf&utm_medium=all_platforms&utm_campaign=insights_report_surve y&utm_term=11.27.23&utm_content=insights.report

contracts, information about the underlying assets of those contracts, and rulebooks of selfregulatory organizations and of the Commission. However, integration of information through training is a necessary but not sufficient condition for fraud and market manipulation detection. A recent report by the Department of Treasury highlighted challenges to the cooperative use of AI to detect financial fraud:²⁵

Collaboration in the fraud-protection space, however, appears to be less coordinated than for cyber protection. Except for certain efforts in banking, there is limited sharing of fraud information among financial firms. A clearinghouse for fraud data that allows rapid sharing of data and can support financial institutions of all sizes is currently not available. The absence of fraud-related data sharing likely affects smaller institutions more significantly than larger institutions.²⁶

Large institutions may believe they can absorb fraud-related financial and reputational losses and therefore have no need to share fraud related data. As a result, no individual firm may wish to volunteer as a first mover on sharing fraud data that can serve as training data to develop AI model enabled fraud detection. The Commission could propose a study by Financial Stability Oversight Council agencies to propose a design for the systemic sharing of fraud related data among the agencies' registrants. If AI-enabled fraud becomes endemic, Commission enforcement activities are unlikely to prove effective unless perpetrators are designated as "bad actors," with the more intensive surveillance that comes with such a designation.

The Commission's proposed revision of its Risk Management Program rule offers registered entities the opportunity to clarify the structure of accountability for the purchase, modification, management and auditing of AI models driving algorithmic trading and risk management. This clarification is not only required for reporting on operational risks more comprehensively to the Commission, but also for investigating the causes of market disruptive events that otherwise might be explained away to the public as a "computer glitch" or a "software problem."

Question 19. Risks to competition. Does the use of AI and its potential to create large economies of scale present the potential to harm competition among market participants? Please specifically address any market functions that are at the greatest risk of seeing harm to competition through the increased adoption of AI.

The risks to competition in derivatives trading are well established. Four banks, JP Morgan, Citibank, Bank America and Goldman Sachs continue to dominant derivatives markets,

²⁵ "Managing Artificial Intelligence-Specific Risks in the Financial Sector," U.S. Department of Treasury, March 2024, p. . https://home.treasury.gov/system/files/136/Managing-Artificial-Intelligence-Specific-Cybersecurity-Risks-In-The-Financial-Services-Sector.pdf

²⁶ Ibid., p. 3.

holding about 87.4% of notional value in derivatives as of December 31, 2023.²⁷ These banks already have tremendous economies of scale that will enable them to develop and deploy AI models across the many asset classes in which they transact business. For example, their SDs and FCMs will be able to offer their clients predictive analytics in derivatives trading through Large Language Models for commodity index trading and smaller language models for trading in specific commodities and contracts. Less well resourced SDs and FCMs will be at a competitive and technological disadvantage, particularly in asset classes, such as agricultural derivatives, where domain knowledge should be more important to successful hedging than access to the most technologically complex and expensive trading technology.

IATP reported on the first two CFTC co-sponsored Agricultural Futures Conferences during which the displacement of commodity specialist trading strategies was discussed.²⁸ One commodity trader whose commercial hedger customers were unable to access contracts to lay off price risks effectively, not just because they could not afford access to super-computers, but because of the automated trading order message "noise" that impeded price discovery and risk management. He asked a question that went unanswered at the conferences: 'What does it matter that automated trading lowers transaction costs, if the trading technology of commercial hedgers is not fast enough to acquire positions to lay off risks?' That question remained unanswered by proponents and providers of "technology neutral" trading technologies. Yet it is a question that still remains relevant with the advent of AI directed algorithms and not only for small to medium-sized market intermediaries and participants.

One way for Commission staff to gauge what would be lost for agricultural futures hedging and forward contracting with the ongoing loss of commodity specialists would be to survey small and medium-sized registered entities about whether they have investigated the cost of purchasing and adapting small language AI models for their customers' trading strategies and risk tolerance. Perhaps these entities will be more resilient to competition erosion than IATP believes, but the Commission should pursue its investigation of the impact of AI on competition among CFTC registrants.

²⁷ 'Quarterly Report on Banking and Derivatives Activities, Fourth quarter 2023," Office of the Comptroller of Currency, March 2024, Figure 10, p. 33. https://www.occ.gov/publications-and-resources/publications/quarterly-report-on-bank-trading-and-derivatives-activities/files/q4-2023-derivatives-quarterly.html

²⁸ Steve Suppan, "Regulating agricultural futures markets to benefit producers, processors and consumers," Institute for Agriculture and Trade Policy, May 9, 2019.

https://www.iatp.org/blog/201905/regulating-agriculturalfutures-markets-benefit-producersprocessors-and-consumers and Suppan, "Managing low and volatile a price farmer anxiety? CFTC goes to the heartland," April 8, 2018. https://www.iatp.org/blog/CFTC-goes-to-heartland

Conclusion

On October 14, the *Financial Times* published a summary of an interview with Securities and Exchange Commission Chair Gary Gensler.²⁹ He urged "swift" regulatory action to prevent a "nearly unavoidable" financial crisis within the next decade triggered by an unregulated use of artificial intelligence (AI) models. Chair Gensler characterized such regulatory action as a "hard challenge," in part because of the jurisdictional limitations facing federal financial regulators. Chair Gensler, formerly CFTC Chair during the Obama administration, wrote in 2020 as an academic at the Massachusetts Institute of Technology about the 'deep learning' technological and other factors that could trigger a financial crisis .³⁰ Because several of these factors, e.g., in adequate capital reserves against losses, lie outside of the CFTC's jurisdiction, IATP recommends that the Commission designate staff to participate in a Financial Stability Oversight Council working group on systemic risks in the use of AI models applied to all asset classes overseen by FSOC agencies.

Both the Treasury and OCC reports on AI indicate that there are empirically grounded risks for such a working group to explore. The FSOC term sheet for a working group study should be delimited to what the agencies know and what they have learned from registrants. Some CFTC registrants may be concerned that such a study will deter market participant acceptance of AI mediated contract research, trading and risk management. IATP believes that FSOC principals can allay these concerns and characterize an FSOC working group AI study as an input into the responsible use of AI.

IATP thanks the Commission staff for these thought-provoking questions and hopes that our responses assist the Commission as it determines what part of AI governance can be delegated to self-regulatory organizations and what amendments to CFTC rules, guidance and policy can best ensure the responsible (and sustainable!) use of AI.

Respectfully submitted,

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²⁹ Stefania Palma and Patrick Jenkins, "Gary Gensler urge regulators to tame AI risks to financial stability," October 14, 2023, Financial Times. https://www.ft.com/content/8227636f-e819-443a-aeba-c8237f0ec1ac

³⁰ Gary Gensler and Lily Bailey, "Deep Learning and Financial Stability," November 13, 2020. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3723132