April 24, 2024

Mr. Christopher Kirkpatrick

Secretary

Commodity Futures Trading Commission

Three Lafayette Centre

1155 21st Street, NW

Washington, DC 20581

**Re: Request for Comment on the Use of Artificial Intelligence in CFTC-Regulated Markets**

Dear Mr. Kirkpatrick:

S&P Global Commodity Insights (Commodity Insights) welcomes the opportunity to provide comments on the Commodity Futures Trading Commission’s (CFTC’s or the Commission’s) Request for Comment (RFC) on the use of Artificial Intelligence (AI) in CFTC-Regulated Markets. Commodity Insights is a strong supporter and proponent of AI and is working on both integrating AI into existing products and functions as well as creating new products all with the goal of assisting employees and enhancing customers’ experience.

Commodity Insights is a division of S&P Global. S&P Global is the world's foremost provider of credit ratings, benchmarks, analytics, and workflow solutions in the global capital, commodity, and automotive markets. With every one of our offerings, we help many of the world's leading organizations navigate the economic landscape so they can plan for tomorrow, today. S&P Global’s business divisions include S&P Global Ratings, S&P Global Market Intelligence, S&P Dow Jones Indices, S&P Global Commodity Insights, and S&P Global Mobility.

Commodity Insights employs over 4600 people in more than 19 offices worldwide located in global business and energy centers on five continents. Each day, Platts, our Price Reporting Agency (PRA), publishes thousands of daily price assessments, covering nearly every commodity, many of which are used as benchmarks in the physical and futures markets. Alongside our Platts price assessments, Commodity Insights publishes news, commentary, fundamental market data and analytics across commodity sectors, including oil, natural gas, LNG, generating fuels, power, shipping, metals, chemicals biofuels, fertilizers, food and grains, hydrogen, ammonia, renewables and carbon.

S&P Global has been a leader of Artificial Intelligence (AI) in financial markets since its acquisition of Kensho Technologies in 2018. Since the acquisition, the Kensho team has been building and deploying transformational technology solutions for S&P Global as well as for external clients. By applying its AI and machine-learning capabilities, Kensho is accelerating and automating core workflows and transforming the way data is ingested, linked and tagged, and how insights are discovered. Kensho’s core capabilities include machine learning, natural-language processing (NLP), and data discovery. S&P Global is combining Kensho’s AI/ML technology with its unparalleled datasets to create a significant competitive advantage. With the help of Kensho, the Commodity Insights technology team is incorporating AI into existing products to provide value for internal and external use.

S&P Global believes that governments and regulatory agencies should seek to establish AI oversight policies that are targeted and proportional in order to mitigate adverse consequences, while remaining considerate of the established best practices and existing laws and regulations. Further, existing regulatory agencies have a wealth of subject matter expertise that can be applied to overseeing the use and impacts of AI within their existing regulatory scope.

Bearing in mind the request from the CFTC to respond directly “about AI use in CFTC-regulated markets rather than broader questions about AI,” this comment letter responds in a manner where Commodity Insights believes it can contribute meaningfully as the CFTC considers the important issues at hand.

**Scope**

The definition of artificial intelligence as outlined in President’s Executive Order on the “Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence,” is an acceptable definition for addressing artificial intelligence in a general sense. However, it should be noted that the definition of artificial intelligence provided in Sec. 3(b) of the President’s Executive Order does not include generative artificial intelligence. When looking at AI in Commission-regulated markets, we believe market participants would benefit from a more tailored definition, especially with respect to where AI applications are incorporated into the market activity within the CFTC’s purview.

AI tools and applications leveraged in Commission-regulated markets are likely to vary in form and scope. The tasks AI applications are likely to perform, however, will likely be targeted and specific, unlike the ‘general artificial intelligence’ models of today’s commercialized Large Language Models. As such, their risk profiles will differ from larger general AI models. The more specific the definition of AI for Commission-regulated markets, the better market participants will be able to innovate and leverage available technologies to ensure effective and efficient functions of markets while maintaining compliance with current and future regulation.

**General Uses**

Platts uses AI as part of its effort to assess what the price of a given commodity is at a particular time. For example, as part of the market outreach done by Platts, buyers and sellers submit bids and offers, referred to as “heards”, that are used to assess a commodity’s price. Heards are textual in nature, submitted within set parameters and are therefore ideal machine ready data for AI to process. Prior to the use of AI, PRA employees would have to collate the heard data, process it manually and only then leverage it for price report analysis. Now, AI can process this data in real time, and, after confirming the results, a Platts market reporter can publish a price assessment on a far more expedient timeline. This use of AI in turn allows Platts market reporters to do more market engagement and research, resulting in even more robust price assessments.

As is rapidly becoming industry standard practice, Commodity Insights developers also leverage AI tools like GitHub Copilot to provide productivity gains for software engineers and developers. The use of tools such as GitHub Copilot is, of course, vital to remaining competitive in today’s rapidly evolving environment and is not unique to markets regulated by the CFTC.

**Potential Uses of AI**

Because a major concern for any developer or user of AI should be the potential for hallucinations, Commodity Insights is proud of its ongoing work on retrieval augmented generation (RAG) AI. Developers at Commodity Insights are combining LLM models with indexed data so that a response to a query provides a citation to the source data when providing an answer. RAG cannot eliminate hallucinations, but will ensure that users receive information to support an answer rather than the simple answer. This is very much aligned with Platts’ overall philosophy as well as the IOSCO Principles for Oil Price Reporting Principles in being transparent in how we arrived at a given price assessment by publishing price assessment rationales. We at Commodity Insights see RAG as likely to become standard for AI tools used in financial markets and other use cases where data verification is of paramount importance.

**AI Roadblocks**

A major barrier for the widespread adoption of AI in markets regulated by the Commission as well as more broadly is the uncertainty of intellectual property protections for companies developing AI products and functions. In particular, companies that rely on intellectual property protections as part of their business model, like Commodity Insights, want to ensure protection of their intellectual property if a third party uses that intellectual property in an AI application (e.g., to write a report using underlying data or develops an AI product based on underlying data). While not directly in its remit, it is nevertheless important for the Commission to keep intellectual property considerations in mind while it provides guidance on the use of AI is the markets it regulates.

**AI and Third-party Service Providers**

Few companies have the skilled workers and resources to create leading edge AI models, such as large language models (LLMs), fully in-house, especially with respect to compute. Due to these constraints, many AI product developers are reliant on third parties’ base models when creating AI applications, upon which they may build products, often leveraging proprietary data. Commodity Insights leverages both in-house models and third-party models but is similarly positioned to others in reliance upon cloud service providers.

Currently, developers that are reliant on third party models face potential legal liability risk when a bias or other problem is discovered in the base model which could impact the end product’s utility, accuracy, or effectiveness. It is important to provide clarity for companies on the scope of their liability in such instances, including if the problem has an impact on a market regulated by the CFTC that might impact, for example, an exercise of enforcement discretion. Ideally, any upcoming regulation or enforcement guidelines would provide safe harbor for companies that build AI applications and products on top of third party LLMs for faults not controllable by the end developer. Such safe harbor would foster greater AI growth within Commission regulated markets.

**Governance of AI Uses**

As we do with our governance more broadly, Commodity Insights takes the governance of AI within functions and products seriously. In addition to steps taken by S&P Global overall, Commodity Insights has a Chief Technology Officer (CTO) responsible for overseeing the use and incorporation of AI across Commodity Insights products and is building governance of AI into its broader governance structure, including specifically with regard to its Platts business. Commodity Insights is also considering the applicability of existing external governance standards, such as the AI Risk Management Framework (RMF) developed by the National Institute of Standards and Technology. All of these efforts are geared towards ensuring that Commodity Insights maintains its high governance standards with regard to the important work it does.

As a best practice and as but one example, Commodity Insights ensures that there is a “human in the loop” for internal uses of AI to add an extra level of content verification. For example, the use of AI in publishing price assessments has rapidly accelerated the publishing timeline, but a Platts market reporter always maintains editorial control, assessing input data and confirming that the resulting price assessment is aligned with expectations.

**Cybersecurity**

Cybersecurity is a significant concern for all businesses and GenAI opens new avenues for bad actors. As with all new technologies, it is important for all stakeholders to be vigilant in managing cybersecurity risk in a way that best mitigates the opportunities for bad actors to impact markets regulated by the Commission.

**Data Quality**

The output from AI is only as good as the data upon which AI draws. A concept gaining traction in the industry is that of “AI Ready Data”, which heavily overlaps with more traditional concepts of data governance. Adoption of good data governance and strong machine-readable metadata remain stubbornly elusive across industry. Commodity Insights believes that further standardization and investment in metadata is required in order for both producers and consumers of data to adequately address data quality issues. This will accordingly improve the reliability of AI-generated data including in the markets regulated by the Commission.

**Concentration**

Currently, components of AI models and AI models themselves are procured from a relatively small number of firms. This is largely due to the aforementioned constraints on computing power, cloud storage, and skilled developers. Foundation models are exceedingly and prohibitively expensive to develop. As such, few companies are able to develop the largest and most capable models. While this results in concentration risk, Commodity Insights views this risk as generally in line with other types of concentration risk including any in Commission-regulated markets.

Large language models, however, are the first technology for which the application programming interface (API) is human language. Human language is nearly infinitely transferable across platforms as the language itself is not proprietary, nor difficult to procure. As an end user, the switching costs are much lower for LLMs than for other technologies reliant on proprietary APIs, therefore mitigating concentration including in markets regulated by the Commission.

**Conclusion**

S&P Global Commodity Insights strongly supports the incorporation of Artificial Intelligence into the markets overseen by the Commission. AI is already enhancing productivity and the robustness of existing products and functions produced by Commodity Insights, thereby strengthening the efficiency and operation of energy and commodity markets. Recognizing that there are potential dangers and risks, Commodity Insights nevertheless welcomes thoughtful and tailored regulation of AI within markets overseen by the Commission in order to protect market participants and consumers.

Sincerely,





Pierre M. Davis Dan Bennett

General Counsel Head of Data & Technology

S&P Global Commodity Insights S&P Global Commodity Insights