October 5, 2021

Christopher J. Kirkpatrick
Secretary
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, D.C. 20581

Re: Cboe Futures Exchange, LLC Rule Certification
Submission Number CFE-2021-026

Dear Mr. Kirkpatrick:

Pursuant to Section 5c(c)(1) of the Commodity Exchange Act, as amended ("Act"), and Regulation 40.6(a) of the regulations promulgated by the Commodity Futures Trading Commission ("CFTC" or "Commission") under the Act, Cboe Futures Exchange, LLC ("CFE" or "Exchange") hereby submits a CFE rule amendment ("Amendment") to provide additional guidance regarding prohibited disruptive practices. Exhibit 1 to this submission sets forth the rule changes included in the Amendment. The Amendment will become effective on October 20, 2021.

CFE Rule 620 (Disruptive Practices) prohibits various disruptive practices and CFE Policy and Procedure XVIII (Disruptive Trading Practices) ("P&P XVIII") of the Policies and Procedures section of the CFE Rulebook lists various factors that CFE may consider in assessing whether conduct violates Rule 620. The Amendment makes the following clarifying updates to P&P XVIII.

- CFE is amending the provisions of Section E of P&P XVIII in the following manner:
    - The title of Section E of P&P XVIII is currently "Orders entered by mistake". The Amendment revises the title of Section E of P&P XVIII to be "Orders entered by mistake or error" to clarify that Section E of P&P XVIII covers Orders entered either by mistake or error. The Exchange considers the terms "mistake" and "error" to be synonyms for one another while recognizing that a mistake may be more associated with human action while an error may be more associated with system behavior. To the extent that there is a difference between the two terms and that Section E of P&P XVIII refers to "errors" within the text of the provision, the Exchange is making this change to make clear that a mistake is encompassed within the references to "errors" in the text of the provision.
    - The first sentence of Section E of P&P XVIII currently provides that: "An unintentional, accidental, or 'fat-finger' Order will not constitute a violation of Rule 620, but such activity may be a violation of other Exchange rules, including, but not limited to, Rule 608 (Acts Detrimental to the Exchange; Acts Inconsistent with Just and Equitable Principles of Trade; Abusive Practices)." The Amendment inserts the word "typically" after the word "not" in that sentence so that the sentence provides that an unintentional, accidental, or "fat-finger"

Order will not typically constitute a violation of Rule 620, but such activity may be a violation of other Exchange rules, including, but not limited to, Rule 608.

  - The second sentence of Section E of P&P XVIII currently provides that: "Market participants are expected to take steps to mitigate the occurrence of errors, and their impact on the market." The Amendment further fleshes out this sentence by revising it to provide that: "Market participants are expected to take reasonable steps or otherwise have controls to prevent, detect and mitigate the occurrence of errors, market disruptions and system anomalies and their impact on the market."

  - The Amendment adds the following sentence at the end of Section E of P&P XVIII in reference to the second sentence of Section E of P&P XVIII: "Failure to take reasonable steps to prevent, detect and mitigate such errors, market disruptions, system anomalies or impacts may violate Rule 609 (Supervision) or other Exchange rules."

- Section K of P&P XVIII describes factors that may be considered in determining whether a market participant intended to disrupt the orderly conduct of trading or the fair execution of transactions or demonstrated a reckless disregard for the orderly conduct of trading or the fair execution of transactions. CFE is amending Section K of P&P XVIII to provide that additional factors that may be considered in this regard include, but are not limited to, the impact to other market participants' ability to trade, engage in price discovery, or manage risk.

- CFE is making the following clarifying updates to the provisions of Section U of P&P XVIII:

  - The title of Section U of P&P XVIII is currently "Submission of partial messages to reduce latency or purposeful corruption of data packets". The Amendment revises the title of Section U of P&P XVIII to be "Submission of partial messages to reduce latency or purposeful submission of intentionally corrupted or malformed data packets".

  - The second sentence of Section U of P&P XVIII currently provides that: "Purposefully corrupting or constructing malformed data packets also has the potential to disrupt the systems of the Exchange." The Amendment revises this sentence to provide that: "Purposefully submitting intentionally corrupted or malformed data packets also has the potential to disrupt the systems of the Exchange."

- CFE is adding an example of prohibited activity under Rule 620.

  - P&P XVIII includes a non-exhaustive list of various examples of conduct that may be found to violate Rule 620.

  - The additional example provides a specific illustration of a trading strategy that may violate Rule 620 which involves purposefully submitting malformed data packets to CFE's trading system ("CFE System") as part of a trading strategy to reduce latency. In particular, this type of trading strategy may violate Rule 620(b)(iv) which provides that no Person shall intentionally or recklessly submit or cause to be submitted an actionable or non-actionable message(s) that has the potential to disrupt the systems of the Exchange or other market participants.

  - The example includes the following fact pattern: A market participant engages in a trading strategy where the market participant's trading system is designed to purposefully submit malformed data across one or more physical connections to the Exchange. For example, based on information received, the participant's trading system begins constructing an order message (e.g., an Ethernet Frame, TCP or IP packet, etc.). The trading system is designed so that if further information is received during construction that negates the desire or need to trade the order being constructed, the trading system will stop construction and submit the incomplete data to the Exchange. Because the incomplete data (e.g., a TCP/IP packet missing required TCP or IP fields such as Sequence Number or Destination Port) cannot be properly processed by a network switch or receiving device at the logical or physical entry point to the CFE System, the receiving device will discard the data. If no further information is received by the trading system during construction that would negate the desire or need to trade the order, the trading system will complete construction of, and submit, the data so that an Order message from the trading system is able to reach the CFE System. The practice of submitting to the Exchange purposefully incomplete or malformed data packets has the potential to disrupt the systems of the Exchange and may violate Rule 620(b)(iv).

The Amendment is consistent with similar updated guidance provided by other designated contract markets ("DCMs") regarding disruptive practices.[1]

CFE believes that the Amendment is consistent with the Designated Contract Market ("DCM") Core Principles under Section 5 of the Act. In particular, CFE believes that the Amendment is consistent with DCM Core Principles 2 (Compliance with Rules), 4 (Prevention of Market Disruption), 7 (Availability of General Information), and 12 (Protection of Markets and Market Participants) in that the Amendment provides additional guidance regarding disruptive practices that violate CFE Rule 620. CFE considers the revisions to P&P XVIII relating to factors that the Exchange may consider in assessing whether conduct violates Rule 620 and to include an additional example of prohibited activity under Rule 620 to be within the scope of existing CFE rules, including current Rule 620, P&P XVIII, Rule 608, and Rule 609. Although this is the case, CFE believes that it is beneficial to provide additional guidance to market participants through the inclusion of further detail in P&P XVIII.

CFE also believes that the Amendment is consistent, in particular, with the Electronic Trading Risk Principles recently adopted by the Commission.[2] The Electronic Trading Risk Principles are intended to address the potential risk of a DCM's trading platform experiencing a market disruption or system anomaly due to electronic trading. For example, CFTC Regulation 38.251(e) provides that a DCM must adopt and implement rules governing market participants subject to its jurisdiction to prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading. The Amendment furthers the goals of the Electronic Trading Risk Principles by making clear, among other things, (i) that market participants are expected to take reasonable steps or otherwise have controls to prevent, detect, and mitigate the occurrence of errors, market disruptions, and system anomalies and their impact on the market and (ii) that factors which may be considered in determining whether a market participant intended to disrupt, or demonstrated a reckless disregard for, the orderly conduct of trading or the fair execution of transactions include, but are not limited to, the impact to other market participants' ability to trade, engage in price discovery, or manage risk.

---

[1] These DCMs are ICE Futures U.S., Inc. ("ICE"), Chicago Mercantile Exchange, Inc. ("CME"), The Board of Trade of the City of Chicago, Inc., New York Mercantile Exchange, Inc., and Commodity Exchange, Inc. Each submitted rule certification filings to the CFTC to effectuate their respective updated guidance. See, e.g., ICE Submission 21-44 (June 22, 2021) and CME Submission No. 20-306 (July 16, 2021), which are available on the CFTC website.

[2] See CFTC Final Rule regarding Electronic Trading Risk Principles, 86 FR 2048 (January 11, 2021).

By providing additional guidance relating to the application of CFE's rule provisions with respect to disruptive trading practices, amended P&P XVIII contributes to the protection of CFE's market and market participants from abusive practices; to the promotion of orderly, fair, and equitable trading on CFE's market; and to precluding activity on CFE's market that is disruptive to the operation of the Exchange or the ability other market participants to trade, engage in price discovery, or manage risk.

CFE believes that the impact of the Amendment will be beneficial to the public and market participants. CFE is not aware of any substantive opposing views to the Amendment. CFE hereby certifies that the Amendment complies with the Act and the regulations thereunder. CFE further certifies that CFE has posted a notice of pending certification with the Commission and a copy of this submission on CFE's Web site (http://markets.cboe.com/us/futures/regulation/rule_filings/cfe/) concurrent with the filing of this submission with the Commission.

Questions regarding this submission may be directed to Arthur Reinstein at (312) 786-7570 or Michael Margolis at (312) 786-7153. Please reference our submission number CFE-2021-026 in any related correspondence.

Cboe Futures Exchange, LLC

/s/ Michael Mollet

By: Michael Mollet
Managing Director

EXHIBIT 1

The Amendment, marked to show additions in underlined text and deletions in ~~stricken~~ text, consists of the following:

* * * * *

Cboe Futures Exchange, LLC
Policies and Procedures Section of Rulebook

* * * * *

XVIII. Disruptive Trading Practices (Rule 620)

Rule 620 prohibits disruptive trading practices as described by the Rule. The following are a non-exclusive list of factors that the Exchange may consider in assessing whether conduct violates Rule 620.

A. - D. No changes.

E. Orders entered by mistake or error

An unintentional, accidental, or "fat-finger" Order will not typically constitute a violation of Rule 620, but such activity may be a violation of other Exchange rules, including, but not limited to, Rule 608 (Acts Detrimental to the Exchange; Acts Inconsistent with Just and Equitable Principles of Trade; Abusive Practices). Market participants are expected to take reasonable steps or otherwise have controls to prevent, detect and mitigate the occurrence of errors, market disruptions and system anomalies and their impact on the market. This is particularly true for entities that run algorithmic trading applications, or otherwise submit large numbers of automated Orders to the market. Failure to take reasonable steps to prevent, detect and mitigate such errors, market disruptions, system anomalies or impacts may violate Rule 609 (Supervision) or other Exchange rules.

F. - J. No changes.

K. The Exchange's definition of "orderly conduct of trading or the fair execution of transactions"

Whether a market participant intends to disrupt the orderly conduct of trading or the fair execution of transactions or demonstrates a reckless disregard for the orderly conduct of trading or the fair execution of transactions may be evaluated only in the context of the specific instrument, market conditions, and other circumstances present at the time in question. Some of the factors that may be considered in determining whether there was orderly conduct or the fair execution of transactions were described by the Commission as follows: "[A]n orderly market may be characterized by, among other things, parameters such as a rational relationship between consecutive prices, a strong correlation between price changes and the volume of trades, levels of volatility that do not dramatically reduce liquidity, accurate relationships between the price of a derivative and the underlying such as a physical commodity or financial instrument, and reasonable spreads between contracts for near months and for remote months." Antidisruptive Practices Authority, 78 Fed. Reg. at 31,895-96. Additional factors that may be considered include, but are not limited to, the impact to other market participants' ability to trade, engage in price discovery or manage risk. Volatility alone, however, will not be presumptively interpreted as disorderly or disruptive as market volatility can be consistent with markets performing their price discovery function.

L. - T. No changes.

U. Submission of partial messages to reduce latency or purposeful ~~corruption of~~ <u>submission of intentionally corrupted or malformed</u> data packets

Engaging in a pattern and practice of submitting partial messages for the purpose of seeking to reduce latency has the potential to disrupt the systems of the Exchange. Purposefully ~~corrupting or constructing~~ <u>submitting intentionally corrupted or</u> malformed data packets also has the potential to disrupt the systems of the Exchange. The Exchange considers any market participant engaging in either of these practices as part of a trading strategy to have recklessly disregarded the potential to disrupt the systems of the Exchange in violation of Rule 620(b)(iv).

V. - W. No changes.

X. Examples of Prohibited Activity

The following is a non-exhaustive list of various examples of conduct that may be found to violate Rule 620.

- A market participant enters one or more Orders to generate selling or buying interest in a specific contract. By entering the Orders, often in substantial size relative to the contract's overall pending order volume, the market participant creates a misleading and artificial appearance of buy- or sell-side pressure. The market participant places these large Orders at or near the best bid and offer prevailing in the market at the time. The market participant benefits from the market's reaction by either receiving an execution on an already resting Order on the opposite side of the book from the larger Order(s) or by obtaining an execution by entering an opposing side Order subsequent to the market's reaction. Once the smaller Orders are filled, the market participant cancels the large Orders that had been designed to create the false appearance of market activity. Placing a bona fide Order on one side of the market while entering Order(s) on the other side of the market without intention to trade those Orders violates Rule 620.

- A market participant places buy (or sell) Orders that the market participant intends to have executed, and then immediately enters numerous sell (or buy) Orders for the purpose of attracting interest to the resting Orders. The market participant placed these subsequent Orders to induce or trick other market participants to execute against the initial Order. Immediately after the execution against the resting Order, the market participant cancels the open Orders.

- A market participant enters one or more Orders in a particular market (Market A) to identify algorithmic activity in a related market (Market B). Knowing how the algorithm will react to order activity in Market A, the participant first enters an Order or Orders in Market B that the market participant anticipates would be filled opposite the algorithm when ignited. The participant then enters an Order or Orders in Market A for the purpose of igniting the algorithm and creating momentum in Market B. This results in the market participant's Order(s) in Market B being filled opposite the algorithm. This conduct violates Rule 620(b)(i), as the Orders in Market A were not intended to be executed, and Rule 620(b)(ii), as the Orders in Market A were intended to mislead participants in related markets. If the conduct resulted in a disruption to the orderly execution of transactions, it may also violate Rule 620(b)(iv).

- A market participant enters a large aggressor buy (sell) Order at the best offer (bid) price, trading opposite the resting sell (buy) Orders in the book, which results in the remainder of the original aggressor Order resting first in the queue at the new best bid (offer). As the market participant anticipated and intended, other participants join the market participant's best bid (offer) behind the market participant in the queue. The market participant then enters a large aggressor sell (buy) Order into the market participant's now resting buy (sell) Order at the top of the book. The market participant's use of the Exchange's match trade prevention functionality or other wash blocking functionality cancels the market participant's resting buy (sell) Order, such that market participant's aggressor sell (buy) Order then trades opposite the Orders that joined and were behind the market participant's best bid (offer) in the book.

- A market participant places large quantity Orders during the pre-opening period in an effort to artificially increase or decrease the EOP with the intent to attract other market participants. Once others join the market participant's bid or offer, the market participant cancels the market participant's Orders shortly before the opening.

- During the pre-opening period, a market participant enters a large Order priced at a bid higher than the existing best bid or at an offer lower than the existing best offer, and continues to systematically enter successive Orders priced further through the book until it causes a movement in the best bid or best offer. These Orders are subsequently cancelled. The market participant continues to employ this strategy on both sides of the market for the purpose of determining the depth of support at a specific price level for the product before the market opens.

- A market participant enters a large number of messages for the purpose of overloading the quotation systems of other market participants with excessive market data messages to create "information arbitrage."

- A market participant enters messages for the purpose of creating latencies in the market or in information dissemination by the Exchange for the purpose of disrupting the orderly functioning of the market.

- A market participant engages in a trading strategy where the market participant's trading system is designed to purposefully corrupt data sent across one or more physical connections to the Exchange. For example, prior to the occurrence of an event or signal, the market participant's trading system begins transmitting to the Exchange data necessary for an Order message (e.g., Ethernet frame; Internet Protocol (IP) packet; Transmission Control Protocol (TCP) packet; etc.). The trading system is designed so that if the event or signal does not occur as expected, the trading system will corrupt the partially transmitted data, for instance by invalidating the Frame Check Sequence (FCS) checksum causing the packet or Ethernet frame to be dropped by a network switch or receiving device at the logical or physical entry point to the CFE System. If the event does occur as expected, the trading system will complete the partially transmitted data so that an Order message from the trading system is able to reach the Exchange trading platform. The practice of purposefully corrupting data packets submitted to the Exchange has the potential to disrupt the systems of the exchange and may violate Rule 620(b)(iv).

- A market participant engages in a trading strategy where the market participant's trading system is designed to purposefully send to the Exchange untradeable Orders or Orders that have no reasonable probability of trading. For example, prior to the occurrence of an event or signal, the market participant's trading system begins transmitting to the Exchange data necessary for an Order message (e.g., Ethernet frame; TCP packet; etc.). The trading system is designed so that if the event or signal does not occur as expected, the trading system will complete the partially transmitted data and successfully submit an Order message to the Exchange. However, because the event or signal did not occur as expected, the trading system is designed to render the completed Order message untradeable or improbable of trading. This may be accomplished, for example, by submitting the Order message as a Fill or Kill Order type with a price or quantity that causes the Order to immediately be cancelled by the trading platform. This may also be accomplished, for example, by submitting the Order message at an off-market price, deep in the order book, and intending to cancel that Order prior to execution. The practice of purposefully sending untradeable Orders or Orders that have no reasonable probability of trading may violate Rule 620(b)(iv). Further, it is a violation of Rule 620(b)(i) if the market participant intends, at the time of Order entry, to cancel the Order prior to execution.

- A market participant engages in a trading strategy where the market participant's trading system is designed to purposefully submit malformed data across one or more physical connections to the Exchange. For example, based on information received, the participant's trading system begins constructing an order message (e.g., an Ethernet Frame, TCP or IP packet, etc.). The trading system is designed so that if further information is received during construction that negates the desire or need to trade the order being constructed, the trading system will stop construction and submit the incomplete data to the Exchange. Because the incomplete data (e.g., a TCP/IP packet missing required TCP or IP fields such as Sequence Number or Destination Port) cannot be properly processed by a network switch or receiving device at the logical or physical entry point to the CFE System, the receiving device will discard the data. If no further information is received by the trading system during construction that would negate the desire or need to trade the order, the trading system will complete construction of, and submit, the data so that an Order message from the trading system is able to reach the CFE System. The practice of submitting to the Exchange purposefully incomplete or malformed data packets has the potential to disrupt the systems of the Exchange and may violate Rule 620(b)(iv).

* * * * *