



March 12, 2019

VIA E-MAIL

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

Re: **ICE Futures U.S., Inc. Proposed Amendments to Rule 4.26 Order Execution (New Passive Order Protection Functionality) Industry Filing (IF 19-001)**

Dear Mr. Kirkpatrick,

CTC Trading Group, LLC (“CTC”)¹ welcomes the opportunity to comment on the proposed rule amendments that ICE Futures U.S., Inc. (“ICE”) has submitted to the Commodity Futures Trading Commission (“Commission”), pursuant to Commission Rule 40.6(a).² ICE’s proposed amendments to Rule 4.26 (“Proposal”)³ would allow for the implementation of Passive Order Protection Functionality, which is designed to mitigate the damaging effects of high-speed trading strategies on displayed liquidity providers. According to the ICE Proposal, the mechanism would work by creating a very short delay or “speed bump” (as proposed, a few milliseconds) for incoming orders that would otherwise transact immediately opposite resting or “passive” orders. ICE submits that this short delay would help foster competition by ensuring all market participants have at least some minimum amount of time to react to price changes in related markets. This will also reduce the advantage held only by the small number of players who use extreme low-latency technology to “snipe” investors who take very slightly longer to reprice resting orders in response to new information. CTC recommends approval of the Proposal because we believe it offers an important opportunity to improve the fairness of the market and, in so doing,

¹ CTC is a proprietary trading firm that provides liquidity in the regulated futures options and securities options markets in the U.S. and internationally.

² Commission Rule 40.6(a) requires that: 1) a registered entity has filed its submission electronically with the Secretary of the Commission; 2) the registered entity has provided a certification that it has posted a notice of pending certification with the Commission and concurrently posted a copy of the submission on its website; 3) the Commission has received the submission not later than the open of business 10 business days prior to the implementation of the rule or rule amendment; 4) the Commission has not stayed the submission pursuant to §40.6(c); and, 5) it is not a rule or rule amendment of a designated contract market that materially changes a term or condition of a contract for future delivery of an agricultural commodity enumerated in section 1a(4) of the Act or an option on such a contract or commodity in a delivery month having open interest.

³ See Rule amendment certification filing by ICE Futures U.S. Inc. (ICE) Rule 4.26 to allow for the implementation of Passive Order Protection (POP) Functionality (Submission No. 19-119) (Industry Filing IF 19-001)

directly encourage additional displayed liquidity and efficient price discovery to the benefit of all investors and end users.

Microsecond-Level Pick-Offs are Contrary to a Healthy Market

CTC believes that healthy markets are characterized by transparency, fairness, deep liquidity, and efficient price discovery. However, the current arms race for speed increasingly runs counter to these principles, and is particularly disincentivizing displayed liquidity. Specifically, “sniping” or “pick-offs” occur when a market participant intentionally employs a strategy that uses a miniscule speed advantage to execute against resting quotes before they can be changed in response to new relevant information, such as changing prices in a related market. These changing prices in the related market also drive the party who *submitted* the resting quotes to simultaneously attempt to respond by repricing their quotes—indeed, that party may have a quote at a new price already “in flight” on its way to the exchange, or even pending acknowledgement inside the exchange’s matching engine, when they receive the adverse execution triggered by the “sniper.” Under current market structure, however, if the sniper is faster by *any* amount of time—often a millionth or a billionth of a second—they can force the liquidity provider to trade with them at an immediate loss. This creates a huge incentive for some trading firms to invest in messaging speed at the expense of all else.

To be clear, in cases like these, both the liquidity taker and the liquidity provider are aware of new relevant information and *act upon it approximately simultaneously*; the liquidity provider sends an order to update or cancel its quote, and the high-speed trader sends an order to execute against that same quote. This is not, as some commenters have indicated, a “last look” that is available to liquidity providers; it is instead literally a race of orders in response to the new relevant information. The more often one of these predatory orders wins the race, the more the risk/reward dynamic shifts in a way that discourages displaying liquidity. This practice has created a “never-ending arms race for speed” that is counter to investor protection and the public interest.⁴ Liquidity providers aren’t stupid: if they find themselves instantly regretting many of their trades, they will show less attractive prices to the market. The practical effect of this vicious cycle is obvious: liquidity providers widen their spreads, decrease quote sizes, and, in some cases, elect not to display liquidity altogether—or incur ever-spiraling costs to ensure they can outrace the predators at the millisecond, then microsecond, then nanosecond level and beyond—to the detriment of investment in pricing and risk management infrastructure that actually benefits the marketplace. The result of unmitigated microsecond-level pick-offs is a market that is less fair, with less

⁴ Eric Budish (University of Chicago Booth School of Business), Peter Cramton (University of Maryland), and John Shim (University of Chicago Booth School of Business) have modeled this situation, which they identify as “a never-ending arms race for speed,” and characterize the result as “a classic prisoner’s dilemma: snipers invest in speed to try to win the race to snipe stale quotes; liquidity providers invest in speed to try to get out of the way of the snipers; and all trading firms would be better off if they could collectively commit not to invest in speed, but it is in each firm’s private interest to invest.” They conclude, “Our results say that sniping is negative for liquidity and that the speed race is socially wasteful.” See Eric Budish, Peter Cramton, and John Shim (2015). “The High-Frequency Trading Arms Race: Frequent Batch Auctions as a Market Design Response.” *Quarterly Journal of Economics*, 130.4. Retrieved from <http://faculty.chicagobooth.edu/eric.budish/research/HFTFrequentBatchAuctions.pdf>.

displayed liquidity, less aggressive pricing, and therefore less efficient price discovery and inferior service to investors, end-users, and the public interest.

Asymmetric Speed Bumps Would Offset this Risk

CTC believes that asymmetric speed bumps, like the one being proposed by ICE, are an effective way to mitigate the negative effects of this arms race for speed, while increasing fairness in the market and promoting competition to display liquidity. By instituting a very short delay during which instructions to update or cancel a resting order can be received, the risk that a liquidity provider's order will be executed at a price or size they instantly regret will be reduced. This makes the market fairer for all parties and translates directly into liquidity providers being able to display tighter spreads and larger quote sizes.

Indeed, a short exchange-imposed speed bump is a particularly efficient way to increase competition to provide liquidity. Currently, liquidity providers must reduce their pick-off risk through some combination of widening spreads, decreasing quote sizes, quoting in fewer contracts, or (for those firms that have the significant resources needed) giving up and joining the never-ending arms race for speed. Mitigating this risk through an exchange-imposed speed bump will lower the barrier to entry and allow more firms to once again be competitive at providing liquidity, and to quote more aggressively when they do. Notably, while asymmetric speed bumps encourage and promote competition among liquidity providers, they do *not* hinder competition among liquidity takers: because orders subjected to a speed bump are still processed sequentially, there is still an incentive for liquidity taking firms to compete to be the fastest. This is the beauty of the speed bump as a solution: it protects resting orders of all market participants while still preserving the opportunity for those who wish to pursue higher speeds to do so. This affords the best service and pricing to investors and the ultimate benefit goes to the public.

Counterarguments Misrepresent the Proposal

Unfortunately, proposals to introduce speed bumps and related mechanisms are often mischaracterized in the public debate in the financial press. For example, media coverage⁵ indicates that one firm opposed to the Proposal inaccurately compared it to a "last look"—a controversial practice that allows banks, once informed that a trade is imminent, to back away from prices they've previously committed to. However, ICE clearly states the Proposal entails *zero* information leakage ("[t]he trader who submitted the resting order will not be notified that there is an incoming order waiting to take liquidity"⁶) and is therefore, by definition, not a "last look" in any sense of the word. The same institution alleges that this proposal would "hurt end investors,"⁷ when in fact the probability is effectively zero that an actual end user would, for unrelated reasons, send an order on the relevant side of the market *during the precise millisecond-level window corresponding to a contemporaneous market-moving event that causes a liquidity provider to reprice*. Aside from such extraordinary coincidences of timing, the only orders that would generally be

⁵ See "ICE Wants to Bring First 'Speed Bump' to Futures Markets" by Alexander Osipovich, *The Wall Street Journal*, February 15, 2019. <https://www.wsj.com/articles/ice-wants-to-bring-first-speed-bump-to-futures-markets-11550228400>

⁶ See Proposal, p. 1 (emphasis in the original).

⁷ See *supra*, footnote 5.

Mr. Kirkpatrick
March 13, 2019
Page 4 of 4

deprived of executions by the Proposal are those sent by sophisticated electronic trading firms engaging in high-speed sniping based on immediately-prior receipt of market-moving information. CTC expects that the Commission has heard similar misrepresentations from other opponents of the Proposal, and respectfully asks that they be duly set aside.

* * * * *

As described above, CTC believes that microsecond-level pickoff strategies, which use a speed advantage to trade before resting orders can be updated, are contrary to a healthy market. The risk they introduce, and the corresponding cost of the never-ending arms race for speed, has resulted in less aggressive pricing and inferior displayed liquidity on many markets and in many asset classes. Asymmetric speed bumps are an efficient way to mitigate this risk and once again encourage competition to display liquidity. For these reasons, CTC respectfully recommends that the Commission approve the Proposal.

Sincerely,



Steve Crutchfield
Head of Market Structure