

July 17, 2019

Ms. Vanessa A. Countryman
Secretary
Securities and Exchange Commission
100 F Street NE
Washington, DC 20549-1090

Re: EDGA Asymmetric Speed Bump Proposal (File No. SR-CboeEDGA-2019-012)

Dear Ms. Countryman:

Citadel Securities¹ appreciates the opportunity to provide comments to the Securities and Exchange Commission (the “Commission”) on the proposal by Cboe EDGA Exchange, Inc. (“EDGA”) to introduce an asymmetric speed bump (the “Proposal”).²

Under the Proposal, EDGA will apply a delay only to incoming liquidity taking orders. EDGA has failed to demonstrate how this asymmetric speed bump is consistent with the Securities Exchange Act of 1934 (“Exchange Act”). Below, we detail significant concerns with the Proposal, notwithstanding the fact that EDGA correctly concludes that its quotations will no longer be eligible for protected status. In doing so, we address three common misconceptions about asymmetric speed bumps. Contrary to statements in the Proposal:

- **There is no precedent in the U.S. equities market.** The speed bumps implemented by the Investors Exchange LLC (“IEX”) and NYSE American LLC (“NYSE American”) are fundamentally different from the *asymmetric* speed bump proposed by EDGA. To date, no asymmetric speed bump has been implemented in the U.S. equities market.³

¹ Citadel Securities is a leading global market maker across a broad array of fixed income and equity securities. In partnering with us, our clients, including asset managers, banks, broker-dealers, hedge funds, government agencies and public pension programs, are better positioned to meet their investment goals. On an average day, Citadel Securities accounts for approximately 21 percent of U.S. listed equity volume, 23 percent of U.S. listed equity option volume, and more than 39 percent of all retail U.S. listed equity volume.

² 84 Fed. Reg. 30282 (June 26, 2019), available at: <https://www.govinfo.gov/content/pkg/FR-2019-06-26/pdf/2019-13537.pdf> (the “Proposal”).

³ We note that, in one other instance, Commission staff permitted an asymmetric speed bump proposal to move forward on a pilot basis before the action was stayed and reviewed by the Commission (and ultimately the proposal was withdrawn). See Self-Regulatory Organizations; Chicago Stock Exchange, Inc.; Notice of Filing of Amendments No. 1 and No. 2 and Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendments No. 1 and No. 2, to Adopt the CHX Liquidity Enhancing Access Delay on a Pilot Basis, Release No. 34-81913 (Oct. 19, 2017), available at: <https://www.sec.gov/rules/sro/chx/2017/34-81913.pdf>; and Letter from Secretary of the Commission to Albert (A.J.) Kim, VP and Associate General Counsel, Chicago Stock Exchange, Inc. (Oct. 24, 2017), available at: <https://www.sec.gov/rules/sro/chx/2017/34-81913-letter-from-secretary.pdf>.

- **The speed bump is explicitly designed by and for a small subset of traders who wish to exploit its asymmetrical design.** This asymmetric speed bump provides an advantage to only one specific type of market participant – a trader who has the *ability and desire to exploit a 4 millisecond window to cancel or reprice displayed quotes with the express purpose of selectively avoiding incoming orders*. This is precisely why support for asymmetric speed bumps comes almost exclusively from a small subset of traders⁴ seeking to both design and exploit changes in market structure for their own benefit, at the expense of all other market participants, including retail and institutional investors. And while such traders may promise cooperating exchanges tighter displayed spreads or larger displayed size, the fleeting and illusory nature of such quoting activity⁵ comes at a significant cost to the market as a whole. While asymmetric speed bumps are falsely advertised as protecting investors, the only real beneficiaries are a select group of traders who are not just able to – but are actively seeking to – exploit the functionality.
- **The Proposal will adversely impact all types of market participants and orders (including retail and institutional investors).** Each time a trader utilizes the asymmetric speed bump to cancel or reprice a displayed quote, *any* incoming order that would have otherwise immediately executed (but for the delay) is negatively impacted. A simple example is a large institutional order that is routed to multiple exchanges simultaneously; it is very likely that the EDGA portion of the order will be filled at a worse price since EDGA liquidity providers will be able to cancel or reprice their displayed quotes based on the most recent market data showing liquidity being taken from multiple other venues. The Proposal will also impede the ability of ETF market makers to reliably access displayed quotations in the underlying securities for hedging purposes, increasing the risks associated with providing ETF liquidity and leading to wider spreads, costs that will be disproportionately borne by retail investors.

In addition to detailing concerns regarding the Proposal’s consistency with the Exchange Act, we also highlight that there are several novel issues that require further clarification resulting from EDGA’s proposal to publish its best bid and offer to the Securities Information Processor (“SIP”) as manual, unprotected quotes.

⁴ See, e.g., (i) letter from XTX Markets to the Commission (Re: Roundtable on Market Data and Market Access) advocating for asymmetric speed bumps at pages 9-10, available at <https://www.sec.gov/comments/4-729/4729-4681565-176567.pdf>; (ii) CFTC comment file on an asymmetric speed bump proposed by ICE for certain gold and silver futures contracts, where of the three commenters in support (versus seven against), two were from XTX Markets and Chicago Trading Company, available at: <https://comments.cftc.gov/PublicComments/CommentList.aspx?id=2946>; and (iii) comment file on an asymmetric speed bump proposed by CHX, where the Chicago Trading Company was also one of the two commenters in support (versus nine against), available at: <https://www.sec.gov/comments/sr-chx-2017-04/chx201704.htm>.

⁵ See, e.g., Letter from Eric Swanson, EVP, General Counsel and Secretary, BATS Global Markets, Inc. to the Commission dated October 25, 2016, available at: <https://www.sec.gov/comments/sr-chx-2016-16/chx201616-12.pdf> at page 2: “Bats is concerned that any benefit of that additional delay in the form of tighter displayed spreads and larger displayed size may in fact prove illusory by providing the liquidity provider time to adjust its displayed quotation.”

I. The Proposal Should be Disapproved Under the Exchange Act

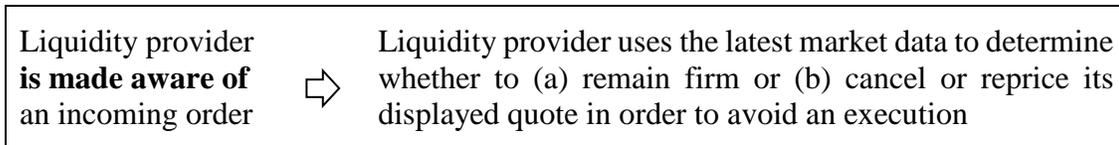
The asymmetric speed bump proposed by EDGA is fundamentally different from the speed bumps implemented by IEX and NYSE American and is not consistent with the Exchange Act.

A. The Proposal Results in Unfair Discrimination and Undue Burdens on Competition

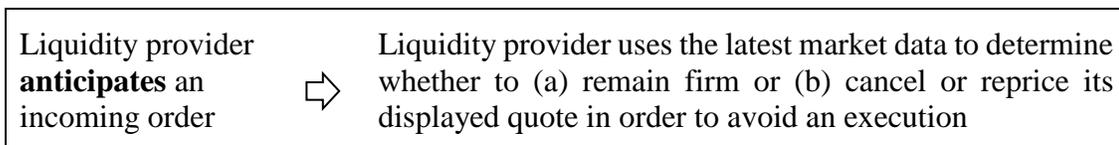
The Proposal is discriminatory on its face, as the speed bump will only be applied to slow down certain orders and exchange participants (*i.e.* liquidity takers and not liquidity providers). As EDGA acknowledges, the Proposal is specifically designed “to protect liquidity providers.”⁶ Below, we explain why this discriminatory treatment is sufficiently material to be considered “unfair” and, therefore, prohibited by Section 6(b)(5) of the Exchange Act. We then detail the significant burdens on open and fair market competition resulting from the Proposal that are inconsistent with Section 6(b)(8) of the Exchange Act.

The Proposal gives liquidity providers a highly material advantage that will impact all market participants’ access to EDGA quotations

The highly material advantage given to liquidity providers is the ability to back away from displayed quotations after quickly processing and evaluating the latest market data (*i.e.* a “last look” in practice). Supporters of the Proposal may argue that liquidity providers are not given a “last look” since they are not notified on an order-by-order basis of specific incoming orders that are being delayed. This argument misses the point, however. Traditional “last look” functionality operates as follows:



While a liquidity provider is not notified on an order-by-order basis of incoming orders under the Proposal, the liquidity provider is largely able to achieve the same result by using market data to anticipate when there are likely to be incoming orders that are delayed. As a result, the Proposal operates as follows:



From the perspective of a liquidity provider that is able to quickly process and evaluate the latest market data and act accordingly to cancel or reprice displayed quotes within the length of the asymmetric delay, there is little economic difference between these two scenarios. In both, the

⁶ Proposal at 30282.

liquidity provider is using the latest market data to determine whether to back away from displayed quotations in order to avoid executions. We detail how this works in practice in the examples below involving retail and institutional orders routed to multiple exchanges simultaneously.

Giving liquidity providers the ability to back away from displayed quotations will impact all market participants' access to EDGA quotations. EDGA asserts that the Proposal is narrowly aimed at reducing purported "cross-asset latency arbitrage"⁷ without "unnecessarily burdening the ability of investors to access displayed liquidity on EDGA."⁸ We explain below why these assertions are misleading and false.

First, while EDGA conveniently neglects to define "cross-asset latency arbitrage," it appears to capture a wide range of trading activity that directly benefits end investors. For example, ETF market makers need to promptly and efficiently conduct hedging activity in the underlying securities. EDGA would appear to apply the evil-sounding moniker of "cross-asset latency arbitrage" to this and other common types of beneficial trading and hedging activity.⁹ The Proposal will impede the ability of ETF market makers to reliably access displayed quotations in the underlying securities for hedging purposes by giving EDGA liquidity providers the opportunity to cancel or reprice displayed quotations after observing the occurrence of related ETF executions. This will materially increase the risks associated with providing ETF liquidity and will lead to wider spreads, costs that will be disproportionately borne by retail investors.

Second, the Proposal will negatively impact both institutional and retail orders that have nothing to do with arbitrage. Consider the following simple examples:

- An institutional investor sends an intermarket sweep order ("ISO") in order to purchase a large block of shares. It is very likely that the EDGA portion of the ISO order will be filled at a worse price since EDGA liquidity providers are able to reprice displayed quotes based on the most recent market data showing liquidity being taken from multiple other venues. Indeed, enabling EDGA liquidity providers to reprice a displayed quote whenever a large order takes out the current quote across all other exchanges appears to be a *core feature* of the EDGA Proposal.
- A retail investor enters an order to sell 300 shares, and three exchanges, one of which is EDGA, are displaying a bid for 100 shares at the NBB of \$10.00. One-third of the total order is routed to each exchange. The investor's order is executed on the other two exchanges, but the portion sent to EDGA fails to execute since it is subject to the asymmetric delay and the EDGA liquidity provider decides to reprice its displayed quote based on the most recent market data showing liquidity being taken from other

⁷ *Id.* at 30289.

⁸ *Id.*

⁹ Indeed, a significant amount of market making activity requires prompt and efficient hedging in either the same or correlated instruments.

venues. As a result, one-third of the total sell order fails to execute at \$10.00 and would likely be subsequently executed at a lower price, harming the investor.

At any given time there are likely to be incoming buy and sell orders submitted by a range of market participants that are attempting to interact with displayed liquidity on EDGA. Each time a liquidity provider utilizes the asymmetric speed bump to cancel or reprice a displayed quote, *any* incoming order that would have otherwise immediately executed (but for the delay) is negatively impacted. Prior to approving the Proposal, we urge the Commission to require EDGA to quantify the potential impact on retail and institutional orders and ETF market liquidity.¹⁰

The Proposal results in undue burdens on competition

The Proposal provides an advantage to only one specific type of market participant: a trader who has the ability and desire to exploit a 4 millisecond window to cancel or reprice displayed quotes with the express purpose of selectively avoiding incoming orders. This burdens market competition in at least two important ways:

- **EDGA liquidity providers are given an advantage over liquidity providers on other markets.** While EDGA liquidity providers have a mechanism to avoid unfavorable executions, liquidity providers on other markets do not. Instead, their quotations and executions will contribute to the market data analyzed by EDGA liquidity providers when deciding whether to cancel or reprice displayed quotations.
- **EDGA liquidity providers are given an advantage over EDGA liquidity takers.** Giving EDGA liquidity providers a mechanism to avoid unfavorable executions means that access to displayed quotations on EDGA will be negatively impacted when the market is moving in favor of the liquidity taker. There are no equivalent protections for liquidity takers to avoid executions when the market is moving against them.

Given the burdens on competition described above, it is not surprising that support for asymmetric speed bumps comes almost exclusively from a small subset of traders seeking to both design and exploit changes in market structure for their own benefit, at the expense of all other market participants (including the retail investment community that currently benefits from low cost ETFs).¹¹

As further detailed in Section I.B below, the EDGA rule filing provides insufficient detail regarding a number of important topics, including the Proposal's burden on intermarket and

¹⁰ We note that EDGA claims "updated quotations would be more likely to impact latency sensitive market participants attempting to trade at times when the market is about to move to a new price level," but provides no support for such a claim. Proposal at 30291.

¹¹ See *supra* note 4.

intramarket competition.¹² Consistent with the Commission’s previously articulated position that “[g]enerally, the Commission would be concerned about access delays that were imposed only on certain market participants,”¹³ we urge the Commission to carefully assess the Proposal’s impact on market competition (and require EDGA to provide further information as necessary) before establishing a precedent that may result in a proliferation of asymmetric speed bumps across the U.S. equities markets.

We acknowledge that, in one other instance, Commission staff permitted an asymmetric speed bump proposal to move forward on a pilot basis before the action was stayed and reviewed by the Commission (and ultimately the proposal was withdrawn).¹⁴ However, the current Proposal differs from that prior rule filing in several material respects, including:

- The Proposal is a permanent rule change instead of a time-limited pilot program;
- The Proposal does not include any enhanced obligations that EDGA liquidity providers must satisfy in order to benefit from the asymmetric speed bump;
- The currently proposed delay is substantially longer; and
- No market quality metrics are being regularly collected or assessed under the Proposal in order to specifically evaluate the impact of the asymmetric speed bump if implemented.

Taking into account these significant differences, along with the concerns detailed above, the Commission should conclude that the Proposal results in unfair discrimination and undue burdens on competition, which are prohibited by Sections 6(b)(5) and 6(b)(8) of the Exchange Act.

B. The Commission Lacks Sufficient Information to Conclude the Proposal is Designed to Protect Investors and the Public Interest

The EDGA rule filing provides insufficient detail regarding a number of important topics, including:

- EDGA does not provide any data regarding the trading activity it classifies as purported “cross-asset latency arbitrage” and the purported impact on EDGA market quality. Among others, EDGA must explain whether trading activity by ETF market makers will be impacted under the Proposal, and, if so, why it is appropriate to hinder the ability

¹² Sufficient detail in the rule filing is critical to enabling the public to provide meaningful comment and the Commission to determine whether the filing is consistent with the Exchange Act. *See* Staff Guidance on SRO Rule Filings Relating to Fees (May 21, 2019), available at: <https://www.sec.gov/tm/staff-guidance-sro-rule-filings-fees>.

¹³ Commission Interpretation Regarding Automated Quotations Under Regulation NMS, 81 Fed. Reg. 40785 (June 23, 2016) at FN 75, available at: <https://www.govinfo.gov/content/pkg/FR-2016-06-23/pdf/2016-14876.pdf>.

¹⁴ *Supra* note 3.

of ETF market makers to manage their risk following the execution of an ETF transaction.

- EDGA fails to provide data to evaluate the impact on winners and losers from the Proposal. For example, how often are EDGA liquidity providers expected to exploit the asymmetric delay? How many retail and institutional orders will be impacted? How will ETF market makers be impacted and what are the resulting costs for retail investors in terms of quoted spreads and overall ETF liquidity? The potential impact on end investors is extremely important.¹⁵
- EDGA asserts that the Proposal should be expected to result in “improvements to market quality,”¹⁶ but does not provide any supporting data demonstrating the positive impact of an asymmetric speed bump and ignores potential negative impacts, including on ETF market quality.¹⁷
- Finally, EDGA asserts that the Proposal is “designed to encourage liquidity provision,”¹⁸ but does not explain how the interaction of EDGA’s inverted fee structure with the Proposal will deliver the claimed benefits. Please see Annex A for a comparison of market quality on EDGA and EDGX, which provides insight into the potential impact of the inverted fee structure on EDGA.

We submit that all of the topics above are required under Section 19(b) of the Exchange Act and are critical to enabling the public to provide meaningful comment and the Commission to determine whether the filing is consistent with the Exchange Act.¹⁹ Ultimately, EDGA has the burden of demonstrating that the Proposal is consistent with the Exchange Act and satisfies a cost-benefit analysis, taking into account the potential adverse impacts detailed herein and the practical implementation costs associated with a proposal that increases complexity in the U.S. equities market.

¹⁵ With respect to a similar proposal, see Recommendation of the SEC Investor Advocate (Feb. 28, 2018), available at: <https://www.sec.gov/comments/sr-chx-2017-04/chx201704-3169295-161957.pdf> and Comment Letter from Healthy Markets Association (Mar. 17, 2017), available at: <https://www.sec.gov/comments/sr-chx-2017-04/chx201704-1648304-148475.pdf>.

¹⁶ Proposal at 30290.

¹⁷ We note there is research suggesting that asymmetric speed bumps tend to result in wider spreads and worse market quality. See Haoming Chen et al., “The value of a Millisecond: Harnessing Information in Fast, Fragmented Markets” (Nov. 18, 2017), available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2860359.

¹⁸ Proposal at 30291.

¹⁹ See Staff Guidance on SRO Rule Filings Relating to Fees (May 21, 2019), available at: <https://www.sec.gov/tm/staff-guidance-sro-rule-filings-fees>.

II. The Proposed Publication of Manual, Unprotected Quotes to the SIP Raises Novel Issues that Require Further Clarification

We agree with EDGA that the proposed asymmetric speed bump should not be considered *de minimis* under the Commission’s Automated Quotations Interpretive Guidance.²⁰ In our view, asymmetric speed bumps are never *de minimis*, regardless of length, given the materiality of the advantage provided to a subset of market participants and the potential impact on fair and efficient access to displayed quotations, as detailed in Section I above. We recommend that Commission staff update its additional guidance regarding speed bumps to reflect the differences between symmetric and asymmetric delays.²¹

As a result of not being considered *de minimis*, EDGA’s quotations will not be eligible for protected status in the event the Proposal is approved. However, EDGA proposes to publish its quotations to the SIP as manual, unprotected quotes. This leads to a number of novel issues that must be considered and clarified by the Commission or FINRA, as appropriate, prior to any approval of the Proposal. There are significant implications resulting from a national securities exchange classifying all of its quotations as manual, and the following list highlights some (but not all) of the issues that require further clarification:

- Is this an appropriate use of the SIP? Can a venue with only unprotected quotes publish to the SIP? What are the implications for the different SIP Plans and for revenue sharing?
- How is the NBBO determined when the SIP contains both protected and unprotected quotes? How is the routing of certain orders, such as ISOs, affected? Will market participants be required to make technological changes as a result?
- Without protected quote status, would EDGA continue to meet the Rule 604 standards for displaying customer limit orders?
- What is the impact on the pricing of pegged orders, such as midpoint orders, due to EDGA setting a best-bid or best-offer with an unprotected quote?
- Is EDGA’s request to extend the “Flickering Quote Exception” to unprotected quotes appropriate?²² We note this may result in situations where a quote published on the SIP is locked or crossed with a protected quote, leading to potential confusion regarding best execution obligations and executions occurring outside of the protected NBBO.

²⁰ 81 Fed. Reg. 40785 (June 23, 2016), available at: <https://www.gpo.gov/fdsys/pkg/FR-2016-06-23/pdf/2016-14876.pdf>.

²¹ See Staff Guidance on Automated Quotations under Regulation NMS (June 17, 2016), available at: <https://www.sec.gov/divisions/marketreg/automated-quotations-under-regulation-nms.htm>.

²² Proposal at 30286.

- More generally, how are best execution obligations interpreted when the SIP contains both protected and unprotected quotes? How are 605 statistics calculated? Will the Proposal negatively impact efforts to improve execution quality disclosures?

In light of the myriad topics which require further careful consideration, we urge the Commission to find that EDGA has failed to provide the level of detail required under Section 19(b) of the Exchange Act and to disapprove the Proposal.

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We appreciate the opportunity to provide comments on the Proposal. Please feel free to call the undersigned at [REDACTED] with any questions regarding these comments.

Respectfully,

/s/ Stephen John Berger

Managing Director

Global Head of Government & Regulatory Policy

Annex A: Comparison of Market Quality at EDGA vs. EDGX

As noted in Section I.B above, the EDGA rule filing makes a number of unsupported assertions, including that “cross-asset latency arbitrage” is negatively impacting market quality on EDGA²³ and that the proposed asymmetric speed bump should be expected to result in “improvements to market quality.”²⁴

However, a comparison between EDGA and EDGX reveals very different measures of market quality, suggesting that other factors are affecting market quality on EDGA.

For the month of June, an analysis of SIP data for a subset of 361 stocks²⁵ in the S&P 500 finds the following quoted spreads and percentage of time at the NBBO:

	Median Quoted Spread (cents)	Average % Time at NBBO (both bid & ask)
EDGX	6.44	24.0%
EDGA	35.16	9.2%

These results show the median EDGA spread across all 361 stocks to be more than 5X wider than those on EDGX. In addition, EDGX was at the NBBO almost 3X more of the time than EDGA.

Given that market makers on both venues should be subject to similar risks relating to “stale” quotes being lifted by other market participants, the above data suggests that the lower market quality of quotes on EDGA is due to some other fundamental difference between EDGA and EDGX, such as the fee/rebate structures on the two venues. Before being permitted to introduce an asymmetric speed bump, EDGA should be required to analyze available market data to explain current market quality metrics and why a novel, and harmful, market structure mechanism is required to address a concern that might otherwise be addressed through a change to the existing inverted fee structure.

²³ Proposal at 30289.

²⁴ Proposal at 30290.

²⁵ To avoid outliers the analysis considers all stocks in the S&P 500 that had an average quoted spread on EDGX of 20 cents or less, as computed by sampling the SIP at 1 minute intervals between 9:45 and 15:45 ET over all dates in June.