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Filed Electronically

July 17, 2019

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

Re: Proposed Rule Change - File No. SR-CboeEDGA-2019-012

Dear Ms. Countryman:

T. Rowe Price Associates, Inc.[1] appreciates the opportunity to comment on the above-referenced proposal (the "**Cboe EDGA Proposal**") by Cboe EDGA Exchange, Inc. ("**EDGA**" or the "**Exchange**") to introduce a Liquidity Provider Protection ("**LP2**") on EDGA. As proposed, the purpose of the rule change is to introduce a delay mechanism on EDGA that is designed to protect liquidity providers and thereby enable those liquidity providers to make better markets in equity securities traded on the Exchange.

We support innovation and enhancements to benefit the marketplace, specifically those which promote liquidity provision, and we commend EDGA for taking steps to address cross-asset latency arbitrage. However, on balance we cannot support the Cboe EDGA Proposal as we feel it would introduce deleterious effects and more undesirable complexity to the market as discussed below.

EDGA states "[t]he LP2 delay mechanism would provide a market structure that has the potential to increase market quality and provide a fair and orderly market for all market participants that choose to trade on EDGA."[2] We disagree with that premise and believe the proposed delay mechanism is intended to help a very specific class of market participants, specifically, highly sophisticated market makers.

As a long-term institutional trader, our trading activity on EDGA can be broken down into two categories, each of which would be impacted by LP2: (i) posting displayed liquidity through submitting passive orders on the highest fee inverted (taker-maker) venue to get to the front of the order book queue, and (ii) utilizing aggressive orders which cross spreads as we remove liquidity from the marketplace. We estimate that about 40% of our executed passive EDGA orders are beneficially filled (meaning the prevailing quote is stable and remains intact

[1] T. Rowe Price Associates, Inc. and its advisory affiliates provide investment management services to numerous individuals, institutions, and investment funds, including the T. Rowe Price family of mutual funds. As of June 30, 2019, T. Rowe Price Associates, Inc. and its affiliates managed approximately $1.12 trillion in assets, based on preliminary data.

[2] Cboe EDGA Proposal at page 2.

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after the execution), while for the remaining 60% of our passively filled EDGA orders, we are adversely selected. If a specific class of highly sophisticated market participants can adjust their displayed quotes based on changes in market information, then we believe our ratio of beneficial passive fills on EDGA will decline significantly. The ability of sophisticated market makers to adjust quotes as a result of the asymmetrical speedbump will entice them to place passive bids and offers more frequently on EDGA. This will make EDGA's currently shallow order book queues artificially longer and similar to other venues where buy-side participants and other institutions struggle to reach the top of queue. We believe LP2 will lessen the frequency of our EDGA orders being beneficially filled and also increase the chance of an unfavorable fill where we are adversely selected – by way of an analogy to the world of cinema, as the sophisticated market makers duck to protect their quotes, we are left to be hit with the paint can, like Daniel Stern in the film Home Alone.

With regard to LP2's impact on our aggressive spread crossing activity, the 4-millisecond delay introduced by LP2 will create significant uncertainty of execution ("fill rates") and severely impede the ability of long-term investors to access displayed quotations simultaneously. According to the SEC's Quote Life Data Series found on its MIDAS website, 15.59% of quotes in large stocks are canceled within 1-millisecond (12.63% for Mid-Cap and 14.27% for small stocks, respectively). One-millisecond is only a quarter of Cboe's proposed delay and the level of arbitrary cancellations is already significant. Under a 4-millisecond time-frame, we would expect arbitrary cancellation rates to rise considerably. If we decide to access the quote on EDGA solely, we anticipate an increase in quote fading at other exchanges for that security resulting in an adverse change to the National Best Bid Offer ("**NBBO**") and ultimately reducing the incentive for liquidity providers to post larger size at EDGA.

If approved, the Cboe EDGA Proposal would open the door for other exchanges and venues to attempt to compete based on the novelty of their speedbumps. The additional complexity and confusion created by more manual unprotected quotes that must be disseminated by the Securities Information Processors may be harmful to long-term investors. The following example illustrates the complexity and possible confusion created by an unprotected manual quote:

- Assume the protected NBBO is $10.00 x $10.05, and 100 shares are offered on EDGA at $10.02 (displayed, but unprotected).

- If an algorithm is looking for midpoint executions in ATS venues, it is unclear whether the prevailing midpoint is $10.01 or $10.025. If the answer is $10.01, then a change to the unprotected quote on EDGA would have material impacts to mid-point pricing. If we use $10.025, then the algorithm is faced with the best execution dilemma of determining whether it is preferable to ignore the EDGA quote or alternatively, try to access the quote at EDGA that may not ultimately be attainable.

Once again, we appreciate Cboe's willingness to explore options other than transactional pricing to solve issues identified in the marketplace. We continue to advocate for an exhaustive review of Reg NMS, in particular, reconsidering the ongoing need for the Order Protection Rule. While the Cboe EDGA Proposal would represent an interesting experiment regarding narrow aspects of the Order Protection Rule, the potential benefits would be outweighed by the increased complexity and unintended consequences of this potentially precedent setting proposal.

Thank you again for the opportunity to comment on the Cboe EDGA Proposal. Should you have any questions or wish to discuss our letter, please feel free to contact us.

Sincerely,

Mehmet Kinak
Vice President & Global Head of Systematic Trading & Market Structure

Jonathan D. Siegel
Vice President & Senior Legal Counsel (Legislative & Regulatory Affairs)