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February 12, 2016

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Brent J. Fields
Secretary
Securities and Exchange Commission
100 F St. NW
Washington, DC 20549-9303
Rule-comments@sec.gov

Re: Investors' Exchange LLC Form 1 Application, File 10-222

Dear Mr. Fields:

Thank you for the opportunity to comment on the IEX application for exchange status.

I think the critical issue brought to light by the IEX exchange application is the degree of latency exchanges should be allowed to (intentionally or unintentionally) impose upon market participants and which functions of the exchange should be subject to regulatory oversight regarding this issue.

The reality of our market system is that latency exists within exchanges, between exchanges, and between participants and exchanges. No amount of technological innovation will eliminate the processing time to make decisions, nor the time to transmit information between markets and participants. Participants and exchanges will expend large amounts of capital to reduce latency in all its forms to create competitive advantages in exchange for operating risk as capital markets have done for centuries. However, latency will forever go hand-in-hand with operating a market. Here I echo Professor James Angel[1] in suggesting the question begged by the IEX application is one of degree –what amount of delay is acceptable? When do delays in processing/transmitting information become detrimental to operating a national market system? This is not a new question, but it would appear the current answer may need revisited as a result of the IEX application.

It is my opinion that the degree of latency is most important for questions involving how current exchanges will be forced to interact with a new (potentially slower) exchange. Whether having an exchange with more intramarket latency is beneficial will be answered with time through competition[2]. The key issue is how this will influence other exchanges' ability to price and (re)route orders while maintaining the rules outlined by Regulation National Market System (NMS). This concern has been voiced repeatedly in other comment letters from NASDAQ,

[1] http://www.sec.gov/comments/10-222/10222-35.pdf
[2] At other points in our market's history we have wondered other details such as would an electronic west coast exchange be more beneficial? It wasn't and through competition the Arizona Stock exchange closed in 2001.

BATS, etc.… and would seem to be meritorious of careful study. BATS's most recent comment letter dated December 20, 2015[3] appears to distill the issue down to one item; once an order at IEX executes, how do outgoing updates and actions then proceed?

Specifically:

1. Should outbound updates be subjected to a similar intramarket latency as inbound orders? (How should IEX update market participants and exchanges?)
2. Should IEX's routing broker-dealer (IEX Services LLC – IEXS) receive re-routing orders with an intramarket latency following order execution on IEX? (How should order routing be conducted on behalf of IEX?)

Consider the four cases created by these two questions. First, take the case where both questions are answered affirmatively (as suggested by BATS). In that scenario both market participant updates (direct feed) and the routing broker-dealer are subjected to the routing delay of 350 microseconds (ms). Theoretically, away exchanges would have the benefit of adjusting pegged orders based on the new information provided by the Securities Information Processor (SIP). However, based on publicly available latency statistics it would seem doubtful that even with the 350 ms delay a market venue will be able to use an updated SIP in time to alter pricing based on NBBO changes.[4] What does seem clear is that this would put IEX's router broker-dealer in a footrace with some of the market's faster participants. If fast participants can achieve lower intermarket latency than exchanges' routing broker-dealer[5] this would seem to provide the opportunity for latency arbitrage. Second, imposing no delay on either activity, routing or market update, would appear to have a similar outcome. Third, imposing a delay on IEXS and not the market update (direct feed) might accomplish the goal of updating other venues via the SIP but clearly allow market participants the ability to front run IEXS based on the round trip information provided in IEX's comment letter dated November 23, 2015.[6]

This leaves the IEX proposed option of delaying update messages (direct feed) while allowing IEXS immediate access to the (re)routing order. One concern voiced by BATS is that this practice allows order submitters to IEX to conduct a form of latency arbitrage where orders

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[3] http://www.sec.gov/comments/10-222/10222-256.pdf

[4] IEX has stated that the SIP is immediately updated following a message receipt. So the message to the consolidated tape is only delayed by intermarket latency. According to the Consolidated Tape Association, it takes between 300-400 ms (https://www.ctaplan.com/sip-metrics) to process a message which is approximately the same amount of latency imposed by the IEX intramarket delay. Assume for a moment the intramarket delay and SIP processing time are the same. Then the away venue in the BATS example will only be able to use an updated SIP NBBO if the latency between IEX-SIP vendor + SIP vendor-away venue is less than the latency of IEX-away venue. This seems unlikely for all venues except possibly a venue that houses the SIP processing.

[5] This is suggested by Brad Katsuyama during CNBC's "The Great HFT Debate" https://www.youtube.com/watch?v=RcpmHyPD_PY

[6] In that comment letter, IEX provides example customer round trip latency for four separate anonymous brokers. Brokers 1 & 2 suggest round trip latencies to BATS and EDGE exchanges in the sub 200 ms range.

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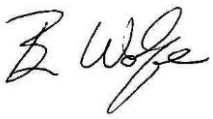
partially execute on IEX and then reroute to an away venue and fill at a stale price.[7] Typically a latency arbitrage strategy involves a fast trader observing some *other trader's* trade/information and then executing on an away venue. Since the example offered by BATS is price movement on the away venue based on a single trader's action this seems odd as an example of arbitrage. This example would seem to effectively work like a basket of intermarket sweep orders (ISOs) that are timed to remove potential front running. In my opinion the fourth scenario produces an outcome that seems more in line with the spirit of an integrated market not latency arbitrage.

In summary, I think the key issue at hand is how a venue's latency impacts current exchanges' ability to act in accordance with Regulation NMS. I support the pilot proposal suggested by James J. Angel in his comment letter and echo his opinion that while there does not appear to be an immediate cause for concern with the current IEX exchange proposal, there is uncertainty in how interaction between the exchanges will ensue which gives justification to such a pilot study.

Respectfully,



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[7] http://www.sec.gov/comments/10-222/10222-256.pdf , page 4