

October 7, 2017

Brent J. Fields, Secretary
Securities and Exchange Commission
100 F Street, NE
Washington DC

Re: Release No. 34-80041, File No. SR-CHX-2017-04, Chicago Stock Exchange, Inc., Notice of Filing of Proposed Rule Change to Adopt the CHX Liquidity Enhancing Access Delay ("Filing"); Release No. 34-80740, File No. SR-CHX-2017-04, Chicago Stock Exchange, Inc., Order Instituting Proceedings to Determine Whether to Approve or Disapprove a Proposed Rule Change to Adopt the CHX Liquidity Enhancing Access Delay ("Order")

Dear Mr. Fields:

This letter is in response to the Chicago Stock Exchange's ("CHX") partial amendment to SR-CHX-2017-04, the text of which was recently submitted as a comment letter to the Filing.¹ The Amendment outlines a two year pilot of CHX's Liquidity Enhancing Access Delay, a discriminatory proposal to advantage the exchange's select middlemen. It says CHX needs a pilot to answer all the questions put to it in the Order.

I've argued that one effect of the Filing is that non-LEAD market makers could suffer discriminatory and unpredictable LEAD queue delays and that the Filing bestows a new and unjustified regulatory subsidy on CHX's market makers.² And then using CHX's own thought experiments, I've also argued that if its LEAD market maker program is successful the discriminatory impact against non-LEAD market makers gets worse.³

If the SEC is considering a pilot of the program, while the data and statistics CHX says it will collect and disclose are very useful, the SEC should insist CHX collect and disclose much more. Some of the summary statistics CHX has offered, aggregated over a trade day, will not spot excessive delays, in the same way in which we would never spot a 600 lb man in a crowd if all we got was the crowd's average weight, or if all we got was a count of anyone weighing over 200 lbs.⁴

So for every message and for the lifetime of the pilot the CHX should timestamp every transaction on receipt, on LEAD queue entry and exit (if applicable), and on matching engine processing start and finish. Every message should be labelled as LEAD market maker or not and as delayable or not. Every message should also be clearly labelled if it was received immediately before, during, or immediately after a "Period of Exceptional Volatility"⁵ and the "PEVRange" value itself. Any analyses should be broken out to reflect these periods and their PEVRange values. Any analyses should include a variety of descriptive statistics, including extrema, deciles, and 95th and 99th percentiles.

To assess the Filing's impact on competition, CHX should also collect and disclose order book queue metrics. The metrics should include, for every stock in which a LEAD market maker is registered, the total number of times and the total length of time any LEAD market maker's order is ranked first at a price,

¹ Letter to Eduardo A. Aleman, Assistant Secretary, SEC, from Albert J. Kim, Vice President and Associate General Counsel, Chicago Stock Exchange, September 19, 2017 ("Amendment").

² Letter to Brent J. Fields, Secretary, SEC, from R. T. Leuchtkafer, September 29, 2016 ("Leuchtkafer 1"); letter to Brent J. Fields, Secretary, SEC, from R. T. Leuchtkafer, December 14, 2016 ("Leuchtkafer 2"); letter to Brent J. Fields, Secretary, SEC, from R. T. Leuchtkafer, March 14, 2017 ("Leuchtkafer 3"); letter to Brent J. Fields, Secretary, SEC, from R. T. Leuchtkafer, June 15, 2017 ("Leuchtkafer 4").

³ Letter to Brent J. Fields, Secretary, SEC, from R. T. Leuchtkafer, July 10, 2017 ("Leuchtkafer 5").

⁴ Amendment, "Variable Processing Delay Statistics," page 52.

⁵ Amendment, page 14.

the number of times and the total length of time any LEAD market maker's order is ranked first at a price when there were other orders at that price, the number of times and the total length of time any non-LEAD market maker's order is ranked first at a price, the number of times and the total length of time any non-LEAD market maker's order is ranked first at a price when there were other orders at that price, and the number of times and the total length of time any non-LEAD market maker's order is ranked behind a LEAD market maker's order at a price despite being received first. These metrics should be calculated for trade dates in the aggregate, but also for a short period immediately before, and then during, and then immediately after any Period of Exceptional Volatility, and should include the PEVRange value itself.

To assess the extent to which the Filing fails the Three Stooges test⁶ by merely shifting latency arbitrage costs to non-LEAD market maker participants, another anti-competitive effect of the Filing, CHX should collect and disclose the number of times a non-LEAD market maker's resting order was executed within 350 microseconds of any LEAD market maker's order cancellation at the same price or better. And then to further assess the extent to which the Filing resurrects "maybe quotes" to our markets, CHX should collect and disclose the number of times any LEAD market maker's order was cancelled while any marketable contra sat in the LEAD queue.

The far more justifiable outcome here is simply to deny the Filing. As I have argued at length the Filing is discriminatory, anti-competitive, and a blatant attempt to restore time and place advantages to exchange intermediaries without the restraints we once required of them,⁷ sabotaging two decades of market reforms.⁸ It's a particular insult to Reg NMS. Reg NMS was a market reform milestone that strongly discouraged exchanges from shoveling time advantages to their gangs of privileged intermediaries. The result was vastly increased quote competition within and among exchanges in the National Market System. And there are likely other ways to solve CHX's problem without unraveling Reg NMS.⁹ All CHX offers in reply to these concerns is that it believes its market quality will improve, we can imagine in the same way a starving man might improve if we toss him some Twinkies and a bottle of vodka. Maybe so, if only for a while, but it doesn't mean we should write that diet into law.

Sincerely,

R. T. Leuchtkafer

⁶ See Leuchtkafer 4, page 9.

⁷ Such as negative obligations and, at a price, inferior queue position to the public's orders.

⁸ See notes 2 and 3.

⁹ See Leuchtkafer 4, page 11.