CHICAGO STOCK EXCHANGE

James G. Ongena
Executive Vice President
and General Counsel

March 29, 2018

Eduardo A. Aleman
Assistant Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Release No. 34-82034;[1] In the Matter of the Chicago Stock Exchange, Inc. ("Exchange" or "CHX") - For an Order[2] Granting the Approval of Proposed Rule Change[3] to Adopt the CHX Liquidity Enhancing Access Delay ("LEAD") on a Pilot Basis (File No. SR-CHX-2017-04)

Dear Mr. Aleman:

The Exchange is submitting this letter[4] in response to a recent memorandum[5] submitted by the Office of the Investor Advocate ("OIA") of the U.S. Securities and Exchange Commission ("SEC" or "Commission") recommending that the Commission reverse the Approval Order granting approval of the Proposal, as amended, to implement LEAD[6] on a pilot basis. The

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1 See Securities Exchange Act Release No. 82034 (November 8, 2017), 82 FR 52762 (November 14, 2017).

2 See Securities Exchange Act Release No. 81913 (October 19, 2017), 82 FR 49433 (October 25, 2017) ("Approval Order").

3 See Securities Exchange Act Release No. 81913 (October 19, 2017), 82 FR 49433 (October 25, 2017) ("Amendments 1 and 2"); see also Securities Exchange Act Release No. 80041 (February 14, 2017), 82 FR 11252 (February 21, 2017) ("Proposal")

4 The Exchange has submitted six previous letters with respect to the Proposal and hereby incorporate the letters, the Proposal, as amended by Amendments 1 and 2, and the Approval Order to this response. See Letter to Eduardo A. Aleman, Assistant Secretary, Commission, from James G. Ongena, Executive Vice President and General Counsel, CHX (March 24, 2017) ("First CHX Letter"); see also Letter to Eduardo A. Aleman, Assistant Secretary, Commission, from James G. Ongena, Executive Vice President and General Counsel, CHX (June 30, 2017) ("Second CHX Letter"); see also Letter to Eduardo A. Aleman, Assistant Secretary, Commission, from Albert J. Kim, Vice President and Associate General Counsel, CHX (September 9, 2017) ("Third CHX Letter"); see also Letter to Eduardo A. Aleman, Assistant Secretary, Commission, from Albert J. Kim, Vice President and Associate General Counsel, CHX (October 18, 2017) ("Fourth CHX Letter"); see also Letter to Eduardo A. Aleman, Assistant Secretary, Commission, from James G. Ongena, Executive Vice President and General Counsel, CHX (December 8, 2017) ("Fifth CHX Letter"); see also Letter to Eduardo A. Aleman, Assistant Secretary, Commission, from James G. Ongena, Executive Vice President and General Counsel, CHX (January 24, 2018) ("Sixth CHX Letter"). All comment letters on the Proposal may be found at https://www.sec.gov/comments/sr-chx-2017-04/chx201704.htm.

5 See Memorandum to Commission, from Rick A. Fleming, Investor Advocate, Office of the Investor Advocate, Commission (February 27, 2018) ("OIA Memo").

6 As summarized under the Fifth CHX Letter:

> LEAD is an intentional access delay designed to enhance displayed liquidity at CHX by minimizing the effectiveness of certain predatory trading strategies that seek to execute

Exchange strongly disagrees with the OIA's recommendation for the following reasons. First, the Minimum Performance Standards[7] for LEAD Market Makers ("LEAD MMs"), which include minimum execution requirements that will promote competition among LEAD MMs for execution priority, as well as aggressive quoting requirements, are substantial requirements that will result in market quality enhancements to the investing public and thus the obligations are commensurate with the benefits afforded to LEAD MMs. Second, both the LEAD and NYSE designated market maker ("DMM") programs provide qualified liquidity providers with similarly effective tools to better manage adverse selection risk and thus similar market quality obligations are appropriate. Finally, the LEAD pilot will provide the Commission and public with valuable information regarding the actual market impact of LEAD on the U.S. equities markets and is therefore consistent with the Commission's stated goal of a data-driven approach to market regulation. For these reasons, the Exchange submits that the conclusions of the OIA Memo are misplaced and the Approval Order should be affirmed.

1. The Minimum Performance Standards are substantial requirements that will promote competition among LEAD MMs, which will in turn enhance market quality.

The OIA claims that since 35.2% of CHX trading account and security combinations ("Combinations") in February 2017 (i.e., 76.1% of CH2 Combinations and 33.7% of NY4 Combinations[8]) would have met the Minimum Performance Standards, the obligations are a "low

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against stale quotes during times of market transition. Specifically, LEAD will apply a 350-microsecond intentional delay to all incoming order-related messages submitted to the Exchange's matching system, except that non-marketable liquidity providing orders and related cancel messages submitted by LEAD Market Makers will not be delayed. In addition, LEAD Market Makers will be subject to heightened market quality obligations, which will ensure that CHX quotes remain reliable and accessible. Moreover, so that the Commission and the Exchange could evaluate the actual impact of LEAD on the market before making any final determination as to the appropriateness of LEAD implementation on a permanent basis, the Commission staff approved LEAD as a two-year pilot program, during which time the Exchange will be subject to comprehensive data collection and analysis obligations. All data collected and analyzed during the pilot will be made publicly available, subject to certain member confidentiality considerations, which will further a robust and transparent colloquy regarding LEAD's actual market impact. See Fifth CHX Letter, supra note 4, at 1.

[7] The Minimum Performance Standards include the following requirements: (1) submit bids and offers at or within Designated Percentages half of those applicable to regular CHX Market Makers; (2) maintain a continuous average two-sided quotation at the NBBO of at least 10% over the course of a calendar month; (3) a LEAD MM's Qualified Executions in a security must comprise on an equally-weighted daily average at least 2% of all Qualified Executions in the same security over the course of a calendar month; and (4) at least 80% of the LEAD MM's Qualified Executions in a security must result from its resting orders over the course of a calendar month. See Article 16, Rule 4(f)(2) of the Rules of CHX ("CHX Rules").

[8] CHX maintains two datacenters at NY4 in Secaucus, New Jersey and CH2 in Chicago, Illinois. All securities traded on CHX are assigned to, and traded at, a primary matching location; provided, however, in the event of a disaster recovery scenario, a security could be traded at a datacenter that is not its primary matching location. The primary matching location of all securities are determined pursuant to CHX procedures, which include notice to Participants and confirmation by senior CHX management, and a list of the primary matching location of all securities is currently published on the CHX website. Of the more than 8,000 securities traded at CHX, just over 100 have a primary matching location at CH2, with the remainder at NY4 (see http://www.chx.com/market-data/traded-issues/).

bar"[9] and for the 1/3 of NY4 Combinations that would have met the Minimum Performance Standards in February 2017, the standards are "meaningless and insubstantial obligations to accept in exchange for obtaining the significant discriminatory benefit provided by the proposed speedbump."[10] The Exchange disagrees.

First, the Exchange would like to clarify an important point regarding the February 2017 statistics summarized above. As the Exchange noted under Amendment 1,[11] the February 2017 statistics illustrate the percentage of Combinations that would have satisfied three of the four Minimum Performance Standards. Specifically, the Exchange was unable to measure the percentage of Combinations in February 2017 that maintained a continuous two-sided quotation at one half the Designated Percentages.[12] This is because the Exchange did not have an active market making program in February 2017 that would have necessitated quote maintenance surveillances and thus the Exchange did not collect such data.

This fact illustrates an important limitation of the "10% NBBO Requirement" statistic: while it accurately measured the percentage of time that quotes attributable to a Combination were priced at the NBBO during the month of February 2017, it does not provide any information as to the percentage of time a quote was attributed to the Combination. In other words, the denominator in the "10% NBBO Requirement" statistic is equal to the length of time quotes attributed to the Combination remained on the CHX book and not the aggregate time of all regular trading sessions during the month of February 2017. For example, if a Combination was attributed a single quote that rested on the CHX book for 60 seconds and was priced at the NBBO for 7 seconds, and was not attributed any other quotes for the month of February 2017, the Combination would have passed the 10% NBBO Requirement threshold for the purposes of the February 2017 statistics. Therefore, the February 2017 and January 2016 statistics represent conservative figures that most likely overstate the percentage of Combinations that would have met the three measurable Minimum Performance Standards.[13]

Considering the above, the fact that at least 65% of all Combinations would not have met the measurable Minimum Performance Standards in February 2017 (and at least 82% of all Combinations in January 2016[14]) clearly indicates that the obligations are substantial. The Exchange trades approximately 100 securities at its CH2 datacenter, most of which are exchange-traded funds ("ETFs") that are highly correlated with certain futures contracts traded in Aurora, Illinois. Given the proximity of the CH2 datacenter to Aurora, Illinois, CH2 liquidity providers are incentivized to provide liquidity in the ETFs that are highly correlated to the futures

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9 OIA Memo, supra note 5, at 7.

10 Id. at 8.

11 See Amendment 1, supra note 3, n. 12 (page 12).

12 See supra note 7.

13 Based on observations of quoting activity at CHX, the Exchange believes that, aside from a few active liquidity providers, virtually none of the NY4 and CH2 Combinations would have met the continuous two-sided quotation requirement in February 2017. As noted above, given the Exchange's data limitations, the Exchange is unable to provide supporting data at this time.

14 See Second CHX Letter, supra note 4, at 7-8.

markets and consequently the percentage of CH2 Combinations that meet the measurable Minimum Performance Standards are high. However, LEAD has the greatest potential to enhance market quality in the approximately 8,200 securities traded at NY4, of which, on a single trading day in August 2017, 5,387 securities had no displayed market and approximately 7,200 securities had no matching activity.[15] The OIA Memo incorrectly discounts the magnitude of the market quality enhancements that will be realized at NY4 by speculating that the firms attributed to the NY4 Combinations "may have different business models,"[16] thereby suggesting that such firms would not participate in the LEAD program. To the contrary, the Exchange has received significant interest from established liquidity providers in becoming registered as LEAD MMs, including CHX members that maintain trading accounts at NY4, as well as firms that are not currently CHX members. As such, the Exchange believes that the Minimum Performance Standards are substantial and material.

Moreover, in stating that the Minimum Performance Standards would be "meaningless" for the 33.7% of NY4 Combinations that would have met the measurable Minimum Performance Standards in February 2017, the OIA Memo fails to consider the impact of additional competition from new LEAD MMs. As noted above, the Exchange believes that the implementation of LEAD will result in an increase in the number of liquidity providers at CHX and thereby enhance competition between orders for execution priority. Consequently, incremental competition from new LEAD MMs will make it harder for the incumbent liquidity providers to continue to be able to satisfy the minimum execution requirements described below. Therefore, the Exchange submits that the Minimum Performance Standards are not meaningless for the 33.7% of NY4 Combinations that would have met the measurable Minimum Performance Standards in February 2017.

The OIA further claims that under the proposal "LEAD Market Makers are not obliged to provide any price improvement"[17] as the "actual minimum performance obligations are not adequately designed to provide such a benefit to market quality."[18] Therefore, OIA concludes that "there are no definite benefits for retail and institutional investors under this proposal."[19] The Exchange disagrees.

LEAD is a competitive program whereby two or more LEAD MMs could be assigned to a security and compete for execution priority. In addition to heightened quoting requirements, the Minimum Performance Standards include the following two execution requirements: (1) a LEAD MM's Qualified Executions in a security must comprise on an equally-weighted daily average at least 2% of all Qualified Executions in the same security over the course of a calendar month; and (2) at least 80% of the LEAD MM's Qualified Executions in a security must result from its resting orders over the course of a calendar month.[20] While the Minimum Performance Standards

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15 See Amendment 1, supra note 3, n. 12 (pages 8-9).

16 OIA Memo, supra note 5, at 9.

17 OIA Memo, supra note 5, at 8.

18 OIA Memo, supra note 5, at 9.

19 OIA Memo, supra note 5, at 10.

20 See supra note 7.

do not explicitly require quoting activity that improves the prevailing NBBO, in order for a LEAD MM to meet its execution obligations, the LEAD MM must successfully establish execution priority relative to other liquidity providers at CHX and away trading centers, which is achieved first by providing the best price.[21] Thus, contrary to the OIA's claim that any market quality enhancements from LEAD are too speculative,[22] the Minimum Performance Standards by way of the minimum execution requirements will compel LEAD MMs to achieve execution priority, and the resulting competition on price will result in definite market quality enhancements.[23]

Accordingly, given that the Minimum Performance Standards are substantial and promote competition for execution priority, which will result in market quality enhancements, the Exchange submits that the Minimum Performance Standards are commensurate with the benefits afforded to LEAD MMs.

2. The LEAD and NYSE DMM programs provide similar benefits to liquidity providers and therefore the Minimum Performance Standards are appropriately similar to the NYSE DMM market quality obligations.

The OIA suggests that LEAD affords LEAD MMs with an advantage far greater than the execution parity advantage afforded to NYSE designated market makers ("DMMs") and therefore the market quality obligations of LEAD MMs should be significantly more aggressive.[24] The Exchange disagrees.

The OIA understates the significant advantage afforded to NYSE DMMs by way of DMM parity. While mechanically different, the LEAD and NYSE DMM programs provide similar protections to displayed liquidity providers from adverse selection risk in return for heightened market quality obligations. Specifically, DMM parity permits a DMM to sit back in execution priority, yet participate in trades ahead of other members that have established execution priority relative to the DMM, thereby reducing its risk of adverse selection during times of market transition. LEAD reduces a similar risk of adverse selection by enabling LEAD MMs to aggressively quote while providing a brief window for the LEAD MM to adjust its stale quotes and avoid getting picked off during times of market transition. Given this fundamental similarity between the LEAD and NYSE DMM programs, the Exchange believes that similar quoting obligations are appropriate.[25] Moreover, as LEAD is designed to encourage larger displayed liquidity at aggressive prices, the Minimum Performance Standards include additional minimum execution requirements, which as

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21 See e.g., Article 20, Rule 8(b)(1) of CHX Rules.

22 See OIA Memo, supra note 5, at 8-9.

23 The Exchange notes that the OIA Memo discounts the market quality enhancements that would result from larger displayed orders, which LEAD is designed to enhance. Under the Approval Order, the SEC staff recognized that larger displayed size and more aggressively-priced orders could lead to broader enhancements to market quality by improving the NBBO and increasing quote competition. See Approval Order, supra note 2, at 49443. The Exchange agrees. Price discovery is a function of price and size. Thus, any measure of market quality must equally consider both factors.

24 See OIA Memo, supra note 5, at 7.

25 See generally NYSE Rules 103B and 104; see also supra note 7.

described above, are designed to compel competition on price to achieve execution priority. Accordingly, the Exchange submits that the Minimum Performance Standards are appropriate.

3. **The LEAD pilot is consistent with the Commission's goal to utilize data and pilot programs to enhance the Commission's oversight and rulemaking functions.**

The Exchange notes that permitting LEAD to be implemented as a pilot and the Commission's analysis of pilot data would be consistent with Chair Clayton's statement regarding the importance of data in the Commission's oversight function:

> Just as investors look for material information upon which to base their investment decisions, the Commission uses data to support and enhance our oversight function, including in our analysis of market structure, as well as for investigations, examinations and market analyses and reconstructions.[26]

Moreover, Chair Clayton specifically noted the importance of pilot programs, such as the recently proposed Rule 610T of Regulation NMS to conduct a Transaction Fee Pilot in NMS stocks, in supporting data driven rulemaking:

> More generally, I believe that a thoughtful and methodical, data driven approach to market structure will help us fulfill our mission to protect investors, maintain fair, orderly and efficient markets and facilitate capital formation. Pilot programs such as the ones I just described allow us to evaluate whether adjustments to our market structure are necessary or appropriate, and if so, how to appropriately tailor them. At the same time, I also recognize that pilot programs – whether in the form of Commission or SRO initiatives – cannot simply live on in perpetuity. Once pilots have achieved their purpose in terms of providing the Commission and SROs with adequate data for reasoned decision-making, they should either be wound down or, when appropriate, made permanent.[27]

The Exchange believes that the LEAD pilot is consistent with Chair Clayton's statements and would help the Commission fulfill its mandate under the Securities Exchange Act of 1934. The approved LEAD pilot was the result of comprehensive discussions between Exchange and SEC staff, during which time the Exchange stated that it was willing to modify the terms of the pilot, including the Minimum Performance Standards and pilot data collection parameters, if it became apparent that such changes would be necessary. The Exchange reaffirms this commitment and stands ready to help ensure that the Commission's goal of a data driven approach to market regulation is realized.

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26 Chair Jay Clayton, "Oversight of the U.S. Securities and Exchange Commission" (testimony, Washington, DC, September 26, 2017), https://www.sec.gov/news/testimony/testimony-clayton-2017-09-26.

27 Id.

For these reasons, as well as the reasons outlined in the Approval Order and the Exchange's filings[28] and previous comment letters related to LEAD, the Exchange respectfully requests that the Commission affirm the Approval Order without further delay.

Sincerely,

James G. Ongena
Executive Vice President and General Counsel
Chicago Stock Exchange, Inc.

cc: Chair Jay Clayton
Commissioner Michael S. Piwowar
Commissioner Robert J. Jackson Jr.
Commissioner Hester M. Peirce
Commissioner Kara M. Stein

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[28] See supra note 3.