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April 18, 2016

VIA E-MAIL

Brent J. Fields
Secretary
Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549-1090

Re: Order Instituting Proceedings Regarding Investors' Exchange LLC ("IEX") Form 1 Application (Release No. 34-77406; File No. 10-222) and Notice of Proposed Commission Interpretation Regarding Automated Quotations Under Regulation NMS (Release No. 77407; File No. S7-03-16)

Dear Mr. Fields:

On behalf of NYSE Group, we respectfully submit the attached letter to provide comments on Order Instituting Proceedings Regarding Investors' Exchange LLC ("IEX") Form 1 Application and Notice of Proposed Commission Interpretation Regarding Automated Quotations Under Regulation NMS.

Sincerely,

Elizabeth K. King

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Dear Mr. Fields:

The NYSE Group appreciates the opportunity to comment on the amendments to IEX's application to register as a national securities exchange[1] and the Securities and Exchange Commission's ("Commission") proposed new interpretation with respect to the definition of automated quotation in Regulation NMS.[2] The Commission proposes to change its view on automated quotations, which other market centers are required to avoid trading through or locking or crossing. Specifically, the Commission proposes to change its view that automated quotations not include any coding of automated systems or other type of intentional device that would delay the action taken with respect to a quotation.[3] We are pleased that the Commission recognizes that IEX's proposed POP/coil is an intentional device that would delay trading with IEX's quotation and that therefore a change in the Commission's interpretation of Regulation NMS is required in order for IEX's quotation to be a Regulation NMS "protected quotation." Moreover, NYSE Group supports the Commission's proposed approach to re-interpret Regulation NMS, rather than provide an exception to only one exchange. By re-interpreting

1 Securities Exchange Act Release No. 77406 (March 8, 2016), 81 FR 15765 (March 24, 2016) ("Notice of IEX's Amended Form 1").

2 Securities Exchange Act Release No. 77407 (March 8, 2016), 81 FR 15660 (March 24, 2016) ("Proposed Regulation NMS Re-Interpretation").

3 Under Regulation NMS, a protected quotation must be an automated quotation. 17 CFR 242.600(b)(57), and an automated quotation must immediately and automatically execute, cancel any unexecuted portion of, and transmit a response to the sender of, an incoming immediate-or-cancel order. 17 CFR 242.600(b)(3). The Commission stated in the Regulation NMS adopting release that "[t]he term 'immediate' precludes any coding or automated systems or other type of intentional delay that would delay the action take with respect to a quotation. Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, at 37497 (June 29, 2005) ("Regulation NMS Adopting Release").

Regulation NMS, the Commission would allow other exchanges to introduce their own delays and compete on a level playing field with IEX.

While NYSE Group supports the Commission's procedural approach, we believe that allowing exchanges to intentionally delay access to their protected quotations is not in the interests of investors. Since Intercontinental Exchange, Inc. acquired control of NYSE Group in November 2013, we have expressed the view that the regulatory framework for U.S. equity markets incentivizes fragmentation of orders across trading venues and compels market participants to create complex responses to this fragmentation. This extreme complexity and fragmentation does not promote investor confidence and has been a key point of the market structure discussion over the past several years.[4] The Commission's proposed new interpretation to allow exchanges to intentionally delay access to protected quotations for up to 1 millisecond would, if adopted, be a deliberate step towards even more market-wide complexity and fragmentation and we caution against the Commission taking this step.[5] This expected result is one upon which commenters who have been the strongest supporters of IEX's application agree. Nevertheless, if the Commission chooses to adopt this new interpretation of Regulation NMS, NYSE Group will compete with its own variations of delay as permitted under the rules the Commission establishes.

I. <u>The Commission's Proposed New Interpretation of an Automated Quote under Regulation NMS</u>

The Commission has requested comment on a proposal to interpret "immediate" when determining whether a trading center maintains an "automated quotation" for purposes of Rule 611 to include response time delays at trading centers that are *de minimis*, whether intentional or not. Specifically, the Commission's proposed re-interpretation of "immediate" for purposes of Regulation NMS would allow for automated systems or intentional devices that would cause delays of less than a millisecond in quotation response times. The Commission states that it preliminarily believes that, in today's market, a millisecond "may be at a *de minimis* level that would not impair a market participant's ability to access a quote, consistent with the goals of Rule 611 and because such delays are within the geographic and technological latencies experienced by market participants today."

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[4] See SEC Chair Mary Jo White Speech at Sandler O'Neill & Partners, L.P., Global Exchange and Brokerage Conference, New York, NY (June 5, 2014); Testimony of Jeffrey Sprecher, Chairman and CEO, Intercontinental Exchange, Inc. before U.S. Senate Committee on Banking, Housing, and Urban Affairs (July 8, 2014).

[5] See Letter to Brett J. Fields, Secretary, Securities and Exchange Commission, from David Lauer, Chairman, Healthy Markets Association (dated April 1, 2016) (Stating that "[w]e are concerned that the SEC's new proposed interpretation would undermine the fairness and efficiency of the markets, introduce significant unnecessary complexities, and create significant risks for investors.").

The Commission is proposing this re-interpretation because IEX's POP/coil "delays inbound and outbound messages to and from IEX Users, [which] raises a question as to whether IEX will, among other things, 'immediately' execute IOC orders under Rule 600(b)(3)(ii), 'immediately' transmit a response to an IOC order sent under Rule 600(b)(3)(iv), and 'immediately' display information that updates IEX's displayed quotation under Rule 600(b)(3)(v)."[6] For IEX to maintain its POP/coil and for its quote to be a "protected quotation," the Commission must change its interpretation of Regulation NMS.

IEX and other commenters have argued that the Commission need not re-interpret "immediate" for purposes of determining whether a trading center maintains an automated quotation, but should instead approve the POP/coil as consistent with an exchange's other obligations under the Exchange Act.[7] The Commission does need to find that IEX's rules, including its POP/coil, are consistent with the Exchange Act in order to approve IEX's exchange application. However, this is not the only request IEX is making. IEX has also asked that the Commission require *other market centers* to treat IEX's quotation as a protected quotation under Regulation NMS. *Other market centers* can only be obligated under Regulation NMS if the Commission separately determines that IEX's quotation is a protected quotation. It appears, however, that some commenters are requesting that any such new interpretation apply only to IEX and not any other market center that competes with IEX. Such commenters thus, object to the Commission's proposed new interpretation, which would apply to all market centers subject to Regulation NMS, not only IEX. We agree with the Commission's procedural approach, which applies any new interpretation of Regulation NMS to all market centers. Exchange rules are separately subject to the Commission's determination that they are consistent with the requirements applicable to exchanges.

Below, we provide our views on the expected, and potential unintended, consequences of the Commission's proposed policy change.

A. Exchanges' Response to Any New Interpretation

Any Regulation NMS re-interpretation would only be the beginning of the debate regarding the application of delays. A reinterpretation by the Commission of "immediate" for purposes of determining whether a trading center maintains an "automated quotation" will lead to other exchanges considering whether and how to apply their own delays and to which orders, messages and data such delays would apply. Each new exchange proposal would be filed with the Commission under Section 19(b) of the Exchange Act and the Commission will be required to determine whether

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6 Proposed Regulation NMS Re-Interpretation, <u>supra</u> note 2, at n. 77.

7 See Letters to Brett J. Fields, Secretary, Commission, from David Lauer, Chairman, Healthy Markets Association (dated April 1, 2016); from Sophia Lee, General Counsel, IEX (dated November 13, 2015).

proposed differences in delays between order types or between certain orders and certain messages is consistent with the requirements that exchange rules not unfairly discriminate and not impose any unnecessary or inappropriate burden on competition. Accordingly, the impact of the Commission's proposed re-interpretation of "immediate" under Regulation NMS depends on how the Commission, in the future, applies its authority to approve or disapprove exchange rule changes.

Most immediately, if the Commission approves its proposed re-interpretation of Regulation NMS, it will need to consider whether IEX's proposed application of its 350 microsecond delay to some orders, a 700 microsecond delay to other orders, and no delay to updating dark, pegged orders, is consistent with the Exchange Act. In its exchange application, IEX proposes to delay the sending, cancellation and modification of displayed orders for the express purpose of providing a systematic and measurable advantage to its dark, pegged orders. Resting pegged orders on IEX's book, all of which are dark orders, would be processed within the IEX trading system without any delay and without a separate message being transmitted from outside the trading system, which would otherwise traverse the POP/coil, for each update. By contrast, displayed orders on the IEX book could not be updated in response to current market conditions without traversing the POP/coil. Accordingly, IEX is discriminating between dark pegged orders and displayed orders on its market.[8] To approve IEX's exchange registration, the Commission would have to find that IEX's proposed preferential treatment of resting dark orders, through the application of a delay only to displayed orders and orders attempting to access liquidity on IEX, is consistent with requirements that exchange rules "not be designed to permit unfair discrimination between customers"[9] and "not impose any burden on competition not necessary or appropriate in furtherance of the purposes of [the Exchange Act]."[10]

Commission approval of IEX's proposal to treat dark orders more favorably than displayed orders would be a significant departure from the way current exchanges operate. It would also be a significant departure from the key role of exchanges in today's equity market structure under the Order Protection Rule, which is to promote the display of liquidity so investors can engage in a transparent price discovery process. NYSE Group agrees with other commenters who have noted that approval of IEX's proposal to favor hidden orders by disadvantaging displayed orders would lead to less transparent markets, wider spreads and higher costs for investors.[11] Nevertheless,

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8 While other markets update pegged orders in the same way as IEX, they do not intentionally delay the ability to update displayed orders on their book or to enter or cancel interest.

9 15 U.S.C. 78f(b)(6).

10 15 U.S.C. 78f(b)(8).

11 See, e.g., Letters to Brett J. Fields, Secretary, Securities and Exchange Commission, from Charles M. Jones, Robert W. Lear Professor of Finance and Economics, Columbia Business School, New York, NY (dated March 2, 2016); from John C. Nagel, Esq., Managing Director and Sr. Deputy General Counsel, Citadel LLC (dated April 14, 2016); from Mary Ann Burns, Chief Operating Officer, FIA Principal Traders Group (dated April 14, 2016).

NYSE Group exchanges would have to consider how to compete with IEX for dark orders and whether they would need to similarly provide those dark orders certain advantages over displayed orders. As exchanges make changes to compete with IEX, the Commission will be required, through the rule filing process under Section 19(b) of the Exchange Act, to identify and make determinations of whether differences in the application of a delay to some orders and not others is consistent with the Exchange Act.

NYSE Group is exploring what types of orders it could delay and by what amount in order to respond to the potential new market structure dynamics that would be opened by a new interpretation of Regulation NMS and the approval of certain types of discrimination among order types by exchanges, as proposed by IEX.[12] For example, NYSE Group is considering the following potential new market structure scenarios, among others:

- *Would the Commission permit an exchange to give participants posting displayed protected quotes, such as market makers and other liquidity providers, an opportunity to re-price their orders before trading with aggressive orders by applying a delay to aggressive orders?*

  For example, an exchange could delay incoming marketable orders, including IOC orders, upon entry for up to 1 millisecond. After 1 millisecond, the incoming order's marketability would be re-evaluated and, if still marketable, it would trade with orders on the book. If not still marketable, the incoming order would be cancelled without revealing information that it had attempted to access the book. This type of selectively applied delay would have an impact similar to that proposed by IEX, but would provide displayed liquidity the ability to manage the risk of interacting with

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[12] The Commission previously approved CBOE's Quote Lock timer, which provides that, when market makers' quotations lock with each other, market makers' quotes will trade with each other differently than the way non-market makers would trade with market makers' quotes. Specifically, CBOE's Quote Lock timer provides that when two Market-Makers' quotations lock each other they will not trade with each other for a "counting period" not to exceed 1 second. During this "counting period" the exchange will disseminate a locked quote and allow customer and broker-dealer orders to trade with the Market Makers' quotes. See CBOE Rule 6.45A(d). Unlike IEX's proposal, however, CBOE's Quote Lock Timer is designed to encourage displayed liquidity by market makers who have affirmative quoting obligations.

Nasdaq OMX PSX ("PSX") also proposed instituting a 5 millisecond delay in the execution time of marketable orders. PSX stated that its proposal was designed to encourage market participants to display more liquidity. Securities Exchange Act Release No. 67680 (August 17, 2012) 77 FR 51073 (August 23, 2012) (SR-Phlx-2012-106). According to Nasdaq, PSX withdrew this proposal because of concerns that its proposed delay would cause PSX's quotations to lose their status as protected quotations and may not be consistent with the firm quote rule. See Letter to Brent J. Fields, Secretary, Commission, from Joan C. Conley, Senior Vice President & Corporate Secretary (dated November 10, 2015) (commenting on IEX's exchange application).

aggressive orders triggered by short-term information asymmetries, rather than only allowing dark, pegged orders to manage such risk, as IEX has proposed.

- *Would the Commission allow an exchange to collect orders in sub-millisecond batches and then enter them simultaneously in a randomized manner while preserving its protected quote?*

  This type of "batch order processing" of orders would be a change from the current way in which all exchanges process orders, which is immediate in a first-in-first-out manner. Batch order processing would reduce the incentive for some market participants to respond faster than others on a sub-millisecond timescale.

- *Would the Commission allow an exchange to delay certain incoming messages, but not others, or delay them by different amounts of time within 1 millisecond?*

  For example, rather than delay all orders, could an exchange delay only routable orders that would fully exhaust its resting liquidity at the limit price? Could an exchange delay some incoming orders for 310 microseconds and others for 800 microseconds? Could an exchange delay incoming orders by different amounts of time depending on the primary business of the member sending the order or the beneficial owner of the account on whose behalf the order is sent? What about response times to IOC orders? Could they be delayed by different amounts of time depending on the type of order or the primary business of the sender?

- *Would the Commission allow an exchange to delay certain outgoing messages, but not others, or delay them by different amounts?*[13]

- *Would the Commission allow an exchange to delay inbound messages, but not outbound messages? Or to delay outbound messages, but not inbound* messages?

In sum, the Commission's proposed re-interpretation of "immediate" would open up a new dimension on which exchanges will compete. NYSE Group, like other exchanges, would experiment and compete with others to develop new and varied combinations of relative time delays.

[13] IEX plans to delay its broadcast of certain proprietary data products by 350 microseconds while immediately delivering quote and trade data to the SIPs. While this phasing may be acceptable under Rule 603, it would add yet another unnecessary dimension of complexity to their venue and the overall equity marketplace.

B. Preferential Treatment of Dark Orders Diminishes the Value of the Publicly Displayed Quotation

The Commission adopted Regulation NMS in furtherance of its responsibilities under Section 11A of the Exchange to facilitate the establishment of a national market system to link together the multiple individual markets that trade securities.[14] The Commission's proposed re-interpretation of Regulation NMS does not discuss how this interpretation would impact the Commission's objectives in Regulation NMS generally or the specific purposes of the Order Protection Rule. For example, the Commission noted in its proposed re-interpretation that, when it adopted Regulation NMS, the purpose of the Order Protection Rule was to incentivize greater use of displayed limit orders, which contribute to price discovery and market liquidity.[15] However, the Commission does not discuss what impact its proposed re-interpretation would have on this important policy goal.

As discussed above, we are concerned that the proposed re-interpretation of automated quotation opens the door to exchanges giving dark orders certain advantages over displayed orders, as IEX proposes to do. This result would undermine an important objective of the Order Protection Rule. As the Commission observed in adopting the Order Protection Rule, "strengthened protection of displayed limit orders would help reward market participants for displaying their trading interest and thereby promote fairer and more vigorous competition among orders seeking to supply liquidity. . . . [and] strong intermarket price protection offers greater assurance, on an order-by-order basis, that investors who submit market orders will receive the best readily available prices for their trades."[16] We believe that our concern that IEX's proposal to systematically disadvantage displayed orders relative to dark orders through its delay is evidenced by IEX's own data that more than 90% of its trading volume is from execution of dark orders.[17]

C. One Millisecond is Not *De Minimis*

NYSE Group believes that 1 millisecond is not a *de minimis* amount of time in today's market. The Commission has not provided support for its conclusion in its proposed re-interpretation of Regulation NMS. Indeed, Commission staff data provide support for the contrary conclusion.[18] Specifically, the Conditional Frequency Quote Life data are provided in microsecond increments, itself showing that Commission staff believes that a millisecond is of insufficient granularity for purposes of today's market. In addition,

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14 Regulation NMS Adopting Release, supra note 3, at 37497.

15 Proposed Regulation NMS Re-Interpretation, supra note 2, at text accompanying n. 16 - 18.

16 Regulation NMS Adopting Release, supra note 10, at 70 FR 37496, at 37501.

17 See IEXtrading.com/stats/. Currently, IEX's quotations are displayed, but are not "protected quotations" for purposes of Regulation NMS.

18 See https://www.sec.gov/marketstructure/datavis/quotelife_stocks_lg.html#.VxPvCflVg6w

these data show that a material proportion of trades and cancellations occur in less than 1 millisecond.

II. Manipulation

The Commission asks for comment on whether its proposed re-interpretation of Regulation NMS raises concerns regarding manipulation. The Commission's proposed re-interpretation would allow exchanges to intentionally delay access to their publicly displayed quotations for up to 1 millisecond. As a consequence, pegged orders resting on other exchanges, including orders that peg to the midpoint of the NBBO, would peg to quotations, which market forces prevent from being updated. If stale prices are guaranteed to be displayed for a specified period of time of up to 1 millisecond, pegged orders on other exchanges can be traded against at known stale prices.

This new market structure dynamic could be a potentially new mechanism for spoofing by a trader placing a displayed order on an exchange with an intentional delay, with the objective of affecting pegged orders on other exchanges.

III. IEX's Amendments to its Affiliated Routing Broker

In the Notice of IEX's amended Form 1, IEX proposed a different approach to outbound routing than was presented in its original filing. Under this new approach, IEX's outbound routing function would interface with the IEX matching engine on the same terms as other IEX members. Routable orders sent to IEX would be delayed 350 microseconds more than non-routable orders sent to IEX. In addition, messages from the IEX order book back to IEX's routing logic also would be subject to a 350 microsecond delay.[19] NYSE Group agrees that these additional delays imposed on IEX's routable orders and routing function address our and other commenters' concerns that IEX's routing functionality and IEX's affiliated routing broker-dealer, IEXS, would have had an unfair advantage over other broker-dealers.

However, IEX's proposed new treatment of routable orders introduces another way in which IEX is proposing to discriminate in the treatment of different types of orders. Routable orders sent to IEX would now take 350 microseconds longer to reach the IEX book than non-routable orders. For this reason, the Commission "is evaluating whether IEX's revised proposal for handling routable orders sufficiently addresses concerns that

[19] The Commission asks for comment on whether there are material aspects of IEX's proposed revised routing functionality that are not clearly presented in IEX's revised rules and addressed by IEX's Form 1, as amended. NYSE Group does not believe that IEX's serial responses to comments provide the detail in its rules that other exchanges are required to provide, nor do they allow market participants and investors to fully evaluate IEX's proposed routing functionality. Moreover, because these representations are not included in IEX's rules, it is not clear that future changes to IEX's routing functionality would be subject to filing rule changes with the Commission under Section 19(b) of the Securities Exchange Act of 1934 ("Exchange Act").

its proposed rules may not be consistent with the [Exchange] Act, for example whether they constitute unfair discrimination, or impose an unnecessary or inappropriate burden on competition.“ IEX has explained that it is adding the additional delay to routable orders to place other routing brokers who are members of IEX on the same footing as IEX. We agree that this change addresses our previous concerns that IEXS would have an unfair advantage over other routing brokers. We believe, however, that IEX should also explain why its proposed solution to segment between routable orders and non-routable orders is not unfairly discriminatory or an inappropriate burden on competition.

IV. Conclusion

NYSE Group does not support the Commission's proposed re-interpretation of Regulation NMS because it would inevitably lead to more market complexity and diminish the quality of displayed liquidity. It would lead exchanges to develop ways to provide relative time advantages to certain market participants or order types and to respond to those more complex order types on other markets. While there will always be inherent delays based on geography or technology differences, re-interpreting Regulation NMS to allow for intentional, systematic delays would allow market centers to differentiate in the relative delays applied to various types of orders, messages and data. The Commission should focus on these inevitable consequences and determine the permissible applications of a delay by exchanges and other market centers displaying protected quotations before arbitrarily defining as *de minimis* a 1 millisecond delay.

Moreover, the Commission has received data and other comments that market quality will suffer from the introduction of a delay. We agree with these comments and do not believe the Commission should move forward with the re-interpretation of Regulation NMS unless it can provide data and evidence that leads to a contrary conclusion about the impact on investors.

Sincerely,

Elizabeth K. King

cc: Mary Jo White, Chair
Michael Piwowar, Commissioner
Kara Stein, Commissioner
Stephen Luparello, Director, Division of Trading & Markets
Gray Goldsholle, Deputy Director, Division of Trading & Markets

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