CITADEL

April 14, 2016

Brent J. Fields
Secretary
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-0609

Re: Release No. 34-77407; File No. S7-03-16; Notice of Proposed Commission Interpretation Regarding Automated Quotations Under Regulation NMS

Dear Mr. Fields:

Citadel LLC ("Citadel")[1] appreciates the opportunity to comment on the Securities and Exchange Commission's (the "Commission" or "SEC") proposed interpretation of "automated quotations" under Regulation NMS.[2] The Commission proposes to issue an interpretation that would for the first time allow exchanges to intentionally delay access to protected quotations for less than 1,000 microseconds because these delays would be considered *de minimis*.[3] For the reasons provided below, the Commission should not adopt the proposed interpretation.

The Commission should not implement this significant change through high-level interpretive guidance issued in connection with a single market participant's Form 1 application.[4] Rather, the Commission should only consider a change of this magnitude through a careful and thorough rulemaking process. Regulation NMS was unequivocally premised on the plain meaning of the term "immediate."[5] Immediate generally means "acting or being without the intervention of another object, cause, or agency" or "happening or done without delay."[6] Regulation NMS in

[1] Established in 1990, Citadel is a leading global alternative asset manager and market maker. With over 1,500 employees, Citadel serves a diversified client base through its offices in the world's major financial centers, including Chicago, New York, London, Hong Kong, San Francisco, Dallas and Boston. On an average day, Citadel accounts for over 14 percent of U.S. listed equity volume, over 20 percent of U.S. listed equity option volume, and comparable market share in many of the world's leading financial markets.

[2] Securities Exchange Act Release No. 77407, 81 FR 15660 (March 24, 2016) ("Proposed Interpretive Guidance").

[3] *Id.* at 15665. Please note that 1,000 microseconds equals 1 millisecond.

[4] *See* The Investors' Exchange ("IEX") Form 1 Application, *available at* https://www.sec.gov/rules/other/2015/investors-exchange-form-1.htm.

[5] When adopting Regulation NMS, the Commission stated explicitly that "[t]he term 'immediate' precludes *any* coding of automated systems or other type of intentional device that would delay the action taken with respect to a quotation." Securities Exchange Act Release No. 51808, 70 FR 37496, 37534 (June 29, 2005) ("Regulation NMS Adopting Release"). The very definition of an automated quotation for which this guidance on the meaning of "immediate" was provided consists of five elements, four of which specifically demand immediate and automatic action. 17 CFR 242.600(b)(3)(ii)-(v).

[6] "Immediate," Merriam-Webster (2016).

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no way qualified the term immediate to permit anything other than its plain understanding, including any allowance for a *de minimis* intentional delay. Thus, in addition to the pragmatic benefits a full rulemaking would provide for this important change, it would seem that the law may require such an about-face to be effected by way of a formal rulemaking.

In addition, the proposed interpretation would badly damage the markets. Contrary to the conclusion in the proposed interpretation, 1,000 microseconds is a material amount of time to delay access to quotations and is thus not *de minimis*. As a result, the proposed interpretation would materially harm market transparency, increase transaction costs for all investors, facilitate market manipulation, and add enormous complexity and uncertainty to our market structure.

I. Rulemaking Is Needed to Change the Foundation of Regulation NMS

A fundamental principle of Regulation NMS is that immediate access to quotations facilitates the efficient pricing, display, and execution of orders. It is primarily for this reason that the Commission stated when adopting Regulation NMS that "a trading center's systems should provide the fastest response possible without *any* programmed delay."[7] The Commission fully acknowledged the importance of speed to the new market structure under Regulation NMS, noting that "[o]ne of the primary effects of the Order Protection Rule adopted today will be to promote much greater speed of execution in the market for exchange-listed stocks."[8]

It is difficult to square this foundation with the proposed interpretation. Despite having premised Regulation NMS on access to quotations without intentional delays, the Commission now proposes to reinterpret the meaning of the term "immediate" to permit intentional or programmed delays of less than 1,000 microseconds. When adopting Regulation NMS, the Commission deliberately chose to rely on this intentional delay ban, rather than "set forth a specific time standard for responding to an incoming order."[9] Yet now, the Commission proposes to do just that by establishing a 1,000 microsecond standard to determine permissible and impermissible intentional delays. This is a significant change to one of the pillars of our market structure.

It would be unprecedented for the Commission to effect this significant a change in market structure through interpretive guidance. The tool of issuing interpretive guidance has generally been reserved for the purposes of resolving ambiguity in previously adopted terms[10] or to provide guidance on how a new product or service not contemplated at the time a rule was adopted should

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[7] Regulation NMS Adopting Release at 37519 (emphasis added).

[8] *Id.* at n.21.

[9] *Id.* at 37519.

[10] *See, e.g.*, Securities Exchange Act Release No. 75592, 80 FR 47829 (Aug. 10, 2015) (providing interpretive guidance to resolve ambiguity on the issue of the scope of employment retaliation protections under the SEC's whistleblower rules under Section 21F of the Exchange Act).

be treated under existing rules.[11] The impetus for the proposed interpretive guidance at hand, IEX's intentional delay aspiration, is neither of these. There has been no ambiguity about what "immediate" means in this context, and the Commission explicitly contemplated and rejected the concept of a programmed or intentional delay at the time it adopted Regulation NMS.

The use of interpretive guidance here is particularly concerning because it diminishes the importance of a broader assessment of the impact of this change on all market participants that would occur through a formal rulemaking. With only a 21 day comment period, there is not adequate time for the public to analyze the likely impacts of this fundamental change.

In contrast, a standard rulemaking process would, among other things, (1) ensure that the SEC's Division of Economic and Risk Analysis has an opportunity to fully consider and assess the costs and benefits of the change, (2) provide market participants with adequate time to evaluate fully and comment on the likely impacts of the change, (3) allow for adequate consideration of alternative approaches, and (4) further inform, discipline, and refine the Commission's deliberations and design of marketplace rules.[12] A formal rulemaking would also benefit from the input of the Equity Market Structure Advisory Committee, whose very purpose is to advise on these types of issues. That input would also present an opportunity to consider other changes to Regulation NMS as part of a comprehensive review of market structure, including those needed to ensure that any permitted intentional delays are appropriately assimilated into the existing or revised framework.[13]

II. The Proposed Interpretation Lacks an Adequate Foundation

A. One Thousand Microseconds Is Not *De Minimis*

The Commission provided no quantitative, statistical, or economic analysis to support its selection of 1,000 microseconds as an appropriate proposed *de minimis* threshold for permitted

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[11] *See, e.g.*, Securities Exchange Act Release No. 54165, 71 FR 41978 (July 24, 2006) (providing interpretive guidance with respect to the safe harbor under Section 28(e) of the Exchange Act to clarify "the scope of 'brokerage and research services' in light of evolving technologies and industry practices.").

[12] Even certain commenters that generally supported IEX's application to become a national securities exchange have expressed concern about the broadly drawn nature of the Commission's proposed interpretive guidance. *See e.g.*, Nicole Bullock, *IEX's ambitions to test SEC's rules*, Financial Times (March 29, 2016) ("'While the SEC's interpretation seems to open the door for IEX, it may also open the door for enormous unintended consequences,' says Tyler Gellasch, executive director of Healthy Markets, a non-profit group focused on market structure reform. 'Rather than just deciding one thing, they would be deciding a lot of very complicated issues. The minute you go down this road you don't know where it goes.'"). *See also* Letter to Brent J. Fields, Secretary, Commission, from David Lauer, Chairman, Healthy Markets Association (April 1, 2016).

[13] *See* Mary Jo White, Chair, Commission, *Enhancing our Equity Market Structure*, Speech at the Sandler, O'Neill & Partners, L.P. Global Exchange and Brokerage Conference (June 5, 2014) (noting that "A core focus of [the SEC's] comprehensive review [of equity market structure] will be whether and how the SEC's regulatory approach for trading venues should be changed to reflect significantly changed conditions.") *available at* www.sec.gov/News/Speech/Detail/Speech/1370542004312#.U5HI-fmwJiw.

intentional delays. A formal rulemaking process would include a thorough analysis of whether any intentional delay should be allowed and if so, the appropriate duration and framework for any such delays.

Empirical data shows that when it comes to trading stocks on exchanges in today's markets, 1,000 microseconds is material, and not in any respect *de minimis*. For example, the Commission's Market Information Data Analytics System ("MIDAS") data shows that for large stocks during the fourth quarter of 2015, 9.44% of total trades and 13.18% of total cancellations occur within 1,000 microseconds of order placement.[14] For large exchange traded products ("ETPs"), the data shows that 10.76% of total trades and 12.23% of total cancels occur within 1,000 microseconds of order placement.[15]

De minimis is generally defined to describe something that is so small or trivial that it is not worth consideration.[16] A time interval in which approximately 10% of executions in many of the most widely traded stocks typically occur is manifestly not *de minimis*. Indeed, Nasdaq's CEO recently estimated that "Nasdaq alone handles $3bn in volume for activity that occurs within one millisecond of receiving a displayed order."[17]

Looking at the question in another way, empirical academic research has similarly found that the IEX intentional delay of 350 microseconds "is not a *de minimis* delay."[18] This study evaluated the advantage that the repricing of pegged orders on IEX would have over incoming orders subject to IEX's intentional delay. The study concluded that the 350 microsecond speed advantage a pegged order would enjoy on IEX relative to incoming orders is worth an average of approximately 1.67 cents per share and would potentially impact approximately 15% of all transactions.

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[14] *See* SEC Market Structure, Data Visualization, Conditional Frequency: Large Stocks Q4 2015 (1000 microsecond duration range) *available at* https://www.sec.gov/marketstructure/datavis/quotelife_stocks_lg.html#.Vv6XMOIrLct.

[15] *See* SEC Market Structure, Data Visualization, Conditional Frequency: Large ETPs Q4 2015 (1000 microsecond duration range) *available at* https://www.sec.gov/marketstructure/datavis/quotelife_etp_lg.html#.Vv6Yu-IrLcs. The data reveals roughly similar numbers for mid-cap ETPs and mid-cap stocks, with 10.52% of total trades in mid-cap ETPs (8.84% of total trades in mid-cap stocks) and 10.27% of total cancellations in mid-cap ETPs (8.43% of total cancellations in mid-cap stocks) occurring within 1,000 microseconds. *See* SEC Market Structure, Data Visualization, Conditional Frequency: Mid Cap ETPs Q4 2015 (1000 microsecond duration range) *available at* https://www.sec.gov/marketstructure/datavis/quotelife_etp_md.html#.Vv6iK-IrLcs.

[16] *See e.g.*, "*de minimis*," Merriam-Webster (2016) (defining *de minimis* as "lacking significance or importance; so minor as to merit disregard"); Black's Law Dictionary (2d ed.) (defining *de minimis* as "a Latin phrase that means of a trifling consequence and a matter that is so small that the court does not wish to even consider it.").

[17] Nicole Bullock, *Nasdaq warns on rise in equity order types if IEX given approval*, Financial Times (April 12, 2016) (quoting Robert Greifeld, chief executive of Nasdaq).

[18] Letter to Brent J. Fields, Secretary, Commission, from Charles M. Jones, Robert W. Lear Professor of Finance and Economics, Columbia Business School, New York, New York (March 2, 2016) ("Jones Letter").

This impact of approximately 1.67 cents per share is over five and a half times larger than the maximum permitted access fee for protected quotations. When it adopted Regulation NMS, the Commission established a 0.3 cents per share cap on access fees for accessing protected quotations.[19] The Commission chose a protected quotation access fee cap of 0.3 cents per share because fees above that level might have too large an economic impact on the accessibility of protected quotations. The Commission should not allow intentional protected quotation access delays that have a far greater economic impact than the maximum permitted protected quotation access fee.

In addition to assessing the trade-by-trade impact, this same study extrapolated from this data and found that the economic impact of an intentional access delay of 350 microseconds for trades on a single exchange with Nasdaq's current market share would be approximately $400 million annually.[20] Including multiple exchanges in the analyses and increasing the delay threshold from IEX's 350 microseconds to the 999 microsecond maximum delay proposed by the Commission would drastically increase this aggregate impact.

B. Intentional Delays Are Different Than Geographic Delays

The Commission's proposed interpretive guidance also relies on the assumption that there are no material differences between inherent geographic delays and intentional delay mechanisms. The proposed interpretation essentially argues that because 1,000 microseconds is shorter than many of the inherent geographic delays between various exchange data centers, the proposed IEX intentional delay is not "inconsistent with the purposes of Rule 611."[21] Put another way, the proposed interpretation concludes that an intentional delay of less than 1,000 microseconds is less than inherent geographic delays between certain exchanges and is thus acceptable.[22]

The fundamental problem with this comparison is that it ignores important differences between inherent geographic delays and the intentional nature of the IEX delay mechanism. Inherent geographic delays cannot be applied selectively and impact all exchange communications with members and other exchanges. In contrast, IEX has located its matching engine near the other major exchanges' data centers and implemented an artificial delay mechanism so that IEX can operate at high speed and selectively apply an artificial delay to certain exchange communications and certain order types, but not others.

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[19] *See* Regulation NMS Rule 610(c). 17 CFR 242.610(c).

[20] Jones Letter at 4.

[21] Proposed Interpretive Guidance 81 FR at 15665.

[22] To this end, the Commission cites the geographic delay between most equity exchanges data centers in New Jersey and the Chicago Stock Exchange's ("CHX") data center located in Chicago. *Id.* at 15664. While there is no doubt that traversing this distance takes longer than 1,000 microseconds, CHX offers immediate access to its system without any intentional delay as well as co-location services.

If it were true that inherent geographic delays were actually equivalent to intentional delays of less than 1,000 microseconds, then eliminating the IEX delay mechanism and relocating the IEX matching engine 38 miles away from its current location would achieve the same result that IEX intends. Doing so, however, would not accomplish IEX's objectives. This is precisely because the express purpose of IEX's intentional delay *is to prevent immediate access to IEX quotations while preserving the ability of IEX to immediately receive and act on quotation data from other exchanges*. As IEX itself explained, "In conjunction with the [IEX delay mechanism], IEX aggregates the fastest available proprietary data feeds from each of the exchanges in order to update its own understanding of current market prices as quickly as possible."[23] If IEX instead located its exchange 38 miles further away from all other exchanges than its current location, IEX would delay its receipt of market data from other exchanges, thus frustrating IEX's goal of rapidly receiving and reacting to market data from other exchanges.[24]

III. The Proposed Interpretation Would Make it Easier to Manipulate Markets

The Commission asked for comment on whether the proposed interpretation raises "concern[s] about market manipulation."[25] By permitting intentional quotation access delays of up to 999 microseconds, the proposed interpretation would make it easier for market participants to manipulate the market by taking advantage of stale and inaccessible quotations displayed during the duration of any access delays. These techniques could be particularly powerful in relatively illiquid stocks.

A simple example illustrates this point. A market participant could, for example, safely manipulate a closing auction by sending displayed orders to an exchange with an intentional 999 microsecond delay and timing the submission of those orders for display 998 microseconds or less before the close. No other market participant would be able to execute against these quotations before the close because no market participant could reach them in time.

IV. The Proposed Interpretation Would Result in the Proliferation of Intentional Delays, Which Would Damage Market Transparency and Efficiency

If the Commission issues the proposed interpretive guidance, exchanges would begin to implement intentional delays of varying lengths and designs, leading to a far more complicated and less efficient market structure.[26] Although Commission staff, pursuant to delegated authority,

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[23] Letter to Brent J. Fields, Secretary, Commission, from Sophia Lee, General Counsel, Investors' Exchange LLC at 4 (November 6, 2015).

[24] Another difference between geographic delays and artificial delays is that locating an exchange further away from other exchanges benefits the markets by improving market resilience because a local disaster that impacts other exchanges is less likely to impact a remotely located exchange.

[25] Proposed Interpretive Guidance at 15665.

[26] It is worth noting that delay mechanisms would spread quickly in part because deciding whether to implement a delay mechanism would not be a fair choice. Regulation NMS would effectively put any exchange that does not implement a delay at a competitive disadvantage. A non-delayed exchange would be forced by Regulation NMS to

may still have an opportunity to review these mechanisms before they are implemented, it would be exceedingly difficult for the staff to recognize all of the implications and impacts of each delay mechanism, and make well-informed statutory and public policy decisions about which types of new delay mechanisms to approve.

A. Other Exchanges Would Implement Intentional Delays

As other exchanges implement their own intentional delays, more and more stale quotations would pollute market data.[27] As exchange data feeds no longer reflect the actual prices and sizes currently available, broker-dealers responsible for routing customer orders would become increasingly unsure of current prices and sizes available in the market.

Moreover, exchange clocks today are already not consistent with one another and the timestamps generated by each exchange have varying levels of precision. This makes it exceedingly difficult in the current market structure to properly sequence market events across multiple trading venues. These issues would only be amplified by permitting intentional delays.

A hybrid marketplace would thus evolve in which some exchanges provide immediate access and data, while others do not. The last time a hybrid market structure was addressed by the Commission was when it adopted Regulation NMS and decided that slower manual quotations should not be given protected status, while truly automated quotations should. It is unclear why, 10 years later, the Commission's assessment of the next generation of hybrid markets should depart from this dividing line.

B. As Delays Spread Across Exchanges, Market Transparency and Efficiency Would Suffer

Delayed dissemination of market data and access to exchange quotations would make it harder to assess current market prices and liquidity. Market participants would grow increasingly unsure of their ability to access displayed quotations and would thus become less willing to post tight displayed liquidity given their uncertainty about current market prices and supply and demand. Most importantly, as market transparency deteriorates, quoted bid/offer spreads would widen and displayed liquidity would diminish.[28] As this vicious cycle accelerates and more market

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respect the delayed prices of delayed exchanges, while delayed exchanges would be able to immediately consume and react to data from un-delayed exchanges.

[27] *See, e.g.*, Letter to Brent J. Fields, Secretary from Elizabeth K. King, General Counsel and Secretary, NYSE Group (Nov. 12, 2015) ("[I]f the Commission re-interprets Regulation NMS's definition of an automated quotation to permit systematic delays, other exchanges would likely make similar assessments.").

[28] The correlation between access delays and bid/offer spreads is vividly demonstrated by a study that showed that when Deutcshe Boerse reduced latency on its exchange, bid/offer spreads narrowed substantially. *See* Charles M. Jones, *What do we know about high-frequency trading?*, Columbia Business School, Version 3.4, at 23 (March 20, 2013) *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2236201.

participants rely on hidden orders, transaction costs would increase for all investors.[29] Ultimately, the cost of capital for corporate America will increase, reducing employment and job creation.

Access delays on multiple exchanges would also result in numerous other more technical market dysfunctions. Locked and crossed markets would proliferate because exchanges would have to wait for published prices on delayed exchanges to update every time the market for a stock ticks up or down. In addition, midpoint and other pegged order liquidity on exchanges and dark pools would diminish if intentional delays are allowed on exchanges. Most midpoint liquidity is pegged to the national best bid or offer ("NBBO"). If intentional delays are permitted, every time market prices tick up or down, the NBBO would be incorrect for at least the duration of any intentional delays. As a result, midpoint orders would be pegged to a stale NBBO and would be forced to transact at inaccurate prices. As one of the most extensive users of pegged orders in the U.S. markets, we are confident that this would strongly discourage market participants from providing midpoint liquidity to the detriment of investors that benefit from the price improvement that it provides.

C. Selective and Varying Application of Intentional Delays

By permitting intentional delays, the Commission would also open the door to the selective application of intentional delays, further adding to market complexity and potentially harming market efficiency. According to Nasdaq's CEO, if the Commission adopts the proposed interpretive guidance, the number of exchange order types "could jump from 360 to 5,000."[30] This is an issue that the Commission would face immediately in considering IEX's Form 1 Application, which proposes that hidden pegged orders would be able to reprice immediately in response to changes in the market without being subject to IEX's proposed 350 microsecond intentional delay.

The incentive to use such orders is further enhanced by IEX's proposal to offer a special pegged order type called a "Discretionary Peg Order,"[31] which offers additional protection against an unfavorable execution by preventing the order from executing in certain circumstances when un-delayed market data from other exchanges indicates to IEX that the market is moving against the pegged order. The aggregate impact of encouraging the use of these pegged orders, all of which are non-displayed, would be to further promote the use of dark liquidity and discourage public display of limit orders in contravention of a primary goal of Regulation NMS.[32] As a result

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[29] *See* Staff of the Division of Trading and Markets, Commission, equity Market Structure literature Review Part I: Market Fragmentation, at 10-11 (October 7, 2013) (describing numerous empirical studies indicating that an increase of dark trading frequently leads to a reduction in market quality).

[30] Nicole Bullock, *Nasdaq warns on rise in equity order types if IEX given approval*, Financial Times (April 12, 2016) (quoting Robert Greifeld, chief executive of Nasdaq).

[31] *See* proposed IEX Rule 11.190(b)(10) on Exhibit B of IEX's Form 1 application, *available at* https://www.sec.gov/rules/other/2015/investors-exchange-form-1-exhibits-a-e.pdf#page=45.

[32] Regulation NMS Adopting Release at 37505 ("Price protection encourages the display of limit orders by increasing the likelihood that they will receive an execution in a timely manner and helping preserve investors' expectations that their orders will be executed when they represent the best displayed quotation. Limit orders typically

of these pegged order speed advantages, the price formation facilitated by displayed limit orders that is the hallmark of national securities exchanges is likely to be muted on IEX given the pegged order exception to IEX's intentional delay.[33]

Other proposed exceptions to intentional delays would surely follow adoption of the proposed interpretation as other exchanges experiment with intentional delays. For example, would an exchange be permitted to retain protected quotation status if it:

1. Allowed orders that improve the national best bid or offer to avoid delays or face a shorter delay?

2. Allowed certain order types to avoid delays or to be subject to delays of different durations?

3. Exempted customer orders from delays?

4. Exempted market maker or lead market maker quotations from delays?

5. Exempted orders from delays for a fee?

6. Varied delay duration on a stock-by-stock basis?

7. Imposed a delay with a randomized duration?

As the Commission considers such other intentional delay mechanisms, the Commission would also need to answer the many other questions that the proposed interpretation does not address. For example:

1. Must access delays be measured on a one-way or round trip basis? Put another way, may an exchange delay communications to *and* from members 999 microseconds each way?

2. What is the starting point and ending point for these measurements?

3. Who will be responsible for measuring the latency at protected quotation venues?

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establish the best prices for an NMS stock. Greater use of limit orders will increase price discovery and market depth and liquidity, thereby improving the quality of execution for the large orders of institutional investors.").

[33] Professor Jones found that "less than 10% of current IEX volume involves a displayed order, and this mix seems likely to continue if IEX's current exchange application is approved." Jones Letter at 3. *See also supra* notes 18-20 and accompanying text (describing the scope of pegged orders repricing advantages, which could equate to $400 million annually to pegged orders relative to non-pegged orders subject to the IEX intentional delay).

4. Will latency measurements include both intentional and unintentional delays? For example, if an exchange has 999 microseconds of intentional delay, and 5 microseconds of unintentional delay, is that acceptable?

5. How much latency variance will be permitted? Will this variance be measured statistically (*e.g.*, number of standard deviations) or as a simple average, or with zero tolerance? Will delays be measured stock-by-stock, for each exchange system component, or for the exchange as a whole?

6. What will the process be for removing protected quotations status from an exchange that violates the permissible intentional latency threshold?

7. Does the Commission plan to periodically reevaluate this standard in the future in light of changing technology and trading methods?

D. Any New Guidance Should be Narrowly Tailored

To answer these many questions, it is critical that the Commission engage in a comprehensive rulemaking before considering making a change of this magnitude. If the Commission disagrees and wants to accommodate the IEX Application, then the Commission should narrowly tailor its actions to accomplish that result and reserve for another day any other type of exchange structure and delay mechanism.

For example, intentional delays of less than the supposedly "*de minimis*" 1,000 microsecond threshold should, at the very least, be further restricted through the interpretive guidance or otherwise to only be permissible where the intentional delay applies equally to all market participants and order types. Moreover, no order type, such as pegged orders, should be permitted to circumvent access delays directly or indirectly by repricing without delay, while other order types are subject to access delays that prevent immediate modification or cancellation. Such limitations would go a long way toward curbing variations of intentional delays that may be even more harmful to equity markets than IEX's proposed delay mechanism.

While this may require further steps and additional time to accomplish, the Commission should not rush this important policy decision. There is no urgent or pressing benefit to the broader market that would result from providing IEX with protected quotation status on the first day that it begins operating as a national securities exchange. Indeed, IEX has made clear that "the equity markets should stand for freedom of choice."[34] If IEX launched its exchange without protected quotation status, market participants would continue be free to choose to trade on IEX.[35]

The imperative of taking careful, deliberate, and thorough steps to ensure the best market structure for all investors outweighs the financial and market share goals of a single market participant. Unlike rulemakings and other reform initiatives, such as those following the Flash Crash, here there is no market emergency that justifies rushing through a major market structure change, particularly when the risks posed by the change are so significant.

V. Conclusion

The Commission has not articulated a compelling reason why an exchange with intentionally delayed quotations should have protected quotation status, rather than be treated as an exchange with manual quotations. As we and numerous other commenters on IEX's Form 1 Application have explained at length, intentional delays are simply bad for equity market structure.[36] Permitting exchanges to intentionally delay access to protected quotations would hinder the efficient formation of prices, impede the ability of market participants to readily access quotations, increase transaction costs for all investors, increase the cost of capital for corporate America, and result in a dramatically more complex market structure. Regulation NMS has been premised since its inception on the elimination of intentional delays to avoid such inefficiencies, and the result of this design has been the most robust, efficient, and liquid market in the world.

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[34] Letter to Brent J. Fields, Secretary, Commission, from Sophia Lee, General Counsel, IEX Group, Inc., New York, New York at 19 (November 13, 2015).

[35] It is also worth noting that since 2013, market participants have been free to route to IEX. Despite an aggressive marketing campaign and extensive free publicity, the result thus far has been a market share that is just north of 1 percent.

[36] *See e.g.*, Letters to Brent J. Fields, Secretary, Commission, from John Nagel, Esq., Managing Director, Citadel LLC (Nov. 30, 2015) ("IEX's model ignores the very real problems that arise when an intentional access delay limits a market participant's ability to seek the liquidity it needs on other markets and appropriately adjust to changes in the marketplace"); John Nagel, Esq., Managing Director, Citadel LLC (Nov. 6, 2015) ("Immediate access to place and modify orders and quotations is not just necessary for liquidity provision by the high-frequency trading firms that IEX derides, but also for 'large order execution algorithms often used by or on behalf of institutional investors.'"); Larry Tabb, CEO, TABB Group (Nov. 23, 2015) ("While the 'speed bump' works in a dark, non-price discovery market, however, it is questionable how this speed bump provides benefit in a lit market where priced non- marketable limit orders and marketable orders interact directly and are not matched at the prevailing midpoint of away markets."); Adam Nunes, Hudson River Trading LLC (Jan. 7, 2016) ("Delaying direct market data and execution acknowledgments has the effect of delaying price discovery as all market participants will use the delayed, stale quotes that IEX communicates."); D. Keith Ross, Jr., Chairman and CEO, PDQ Enterprises, LLC (Mar. 16, 2016) ("[G]ranting the delayed quotes at IEX protected status has the potential to cloud price discovery and impede market efficiency to a great degree."); Elizabeth K. King, General Counsel and Secretary, NYSE Group (Nov. 12, 2015) ("NYSE believes [intentional delays] would be a step backwards in the development of the national market system."); James J. Angel, Ph.D., CFA, Associate Professor, McDonough School of Business, Georgetown University (Dec. 5, 2015) ("How then should the SEC deal with this regulatory uncertainty as to whether designating IEX quotes as protected quotes will mess up the market? Public policy should be based on more than guess work.").

For these reasons, the Commission should not adopt the proposed interpretive guidance. To the extent the Commission wants to consider allowing intentional delays for protected quotations, the Commission should do so only through a thorough rulemaking proceeding. The Commission should not do so by issuing high-level interpretive guidance that contradicts prior Commission statements and the clear language and design of Regulation NMS.

Please do not hesitate to contact me with any questions.

Sincerely,

John C. Nagel, Esq.
Managing Director and
Sr. Deputy General Counsel
Citadel LLC

cc: Mary Jo White, Chair
Kara M. Stein, Commissioner
Michael S. Piwowar, Commissioner
Stephen Luparello, Director, Division of Trading & Markets