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January 5, 2015

Via Electronic Submission (http://www.sec.gov/cgi-bin/ruling-comments)

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

Re: Plan to Implement a Tick Size Pilot Program (File No. 4-657)

Dear Mr. Fields:

Citadel LLC[1] ("Citadel") appreciates the opportunity to comment on the proposed national market system ("NMS") plan to implement a tick size pilot program (the "Proposed Plan").[2] The exchanges and the Financial Industry Regulatory Authority, Inc. ("FINRA") (collectively, the "Participants") filed the Proposed Plan as required by the Commission's order to act jointly in developing an NMS plan to implement a tick size pilot program (the "Pilot Order").[3]

While it is tempting to run frequent pilots to test theories about possible regulatory changes, the Commission must first carefully weigh the potential benefits of a pilot against the inherent uncertainties, costs, and risks associated with conducting a pilot. The Commission should only undertake a pilot when this balance is clearly favorable.

Rather than relying on the shortcut of an NMS plan to implement a tick size pilot, which largely circumvents this important cost/benefit analysis, the Commission should instead perform a thorough cost/benefit analysis *before* proceeding. If the Commission then decides to move forward with a pilot, the Commission should publish that cost/benefit analysis for notice and comment through a standard Commission rulemaking. This step is particularly warranted for a market structure decision as significant as determining the minimum tick size.

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[1] Established in 1990, Citadel is a leading global financial institution that provides asset management and capital markets services. With over 1200 employees globally, 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. Citadel Securities operates an industry leading market making franchise and an institutional markets platform. On an average day, Citadel accounts for over 14 percent of U.S. listed equity volume and over 20 percent of U.S. listed equity option volume.

[2] *See* Securities Exchange Act Release No. 73511, 79 FR 66423 (Nov. 7, 2014).

[3] *See* Securities Exchange Act Release No. 72460, 79 FR 36840 (June 30, 2014).

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The Proposed Plan, in its current form, cannot pass a reasonable cost/benefit analysis and we are skeptical whether the Proposed Plan, or any tick size pilot premised on the Pilot Order, can be simplified and narrowed to do so. The potential benefits that supposedly may accrue from the proposed increase in tick size are highly speculative, while the costs of a pilot will be material for market participants. The Proposed Plan will require the industry to incur significant expenses on systems development, and pose a substantial risk of system malfunctions and market disruptions. We further believe the pilot will raise trading costs for investors, especially for stocks included in the pilot that trade with an average spread that is less than the proposed minimum tick size.

Regardless of the Commission's final decision on whether and how to test wider tick sizes, under no circumstances should the Commission implement a tick size pilot that includes a trade-at rule. A trade-at rule is completely unrelated to the principal goal of the pilot and infuses the proposed tick size pilot with a wholly unrelated set of variables that would obfuscate observations regarding the impact of larger tick sizes. A trade-at rule also adds enormous cost, complexity, and risk to the pilot. Moreover, as explained below, the Commission has not demonstrated a reasonable basis for inserting a trade-at rule into the tick size pilot.

I. THE TICK SIZE PILOT HAS NOT YET PASSED A COST/BENEFIT ANALYSIS AND THE CURRENT IMPLEMENTATION PROCESS IS FLAWED

A. The Premise of the Tick Size Pilot is Questionable

The tick size pilot effort is founded upon unfinished legislation designed to test a questionable hypothesis. In 2012, through the JOBS Act, Congress directed the Commission to study the impact of wider tick sizes on the trading of smaller issuers. The Commission submitted the required report to Congress in July 2012 in satisfaction of its obligations under the JOBS Act. In 2014, the House passed H.R. 3448, the Small Cap Liquidity Reform Act (the "Duffy Bill"), that would have instituted a tick size pilot for five years. While the Duffy Bill was passed in the House, it was never taken up in the Senate, and Congress has not enacted any further directives to the Commission regarding tick sizes.

The genesis of this legislation was the unsupported notion that wider spreads resulting from quoting and trading restrictions may lead, indirectly, to enhanced capital raising opportunities for smaller U.S. companies. More specifically, there was speculation that by increasing the spread between the bid and offer, brokerage firm trading desks would see increased profitability. In turn, there was further speculation that this increased profitability would provide these brokerage firms increased incentive to take smaller companies public and encourage research analyst coverage. Several leaps of faith are required to accept the viability of these assertions.

First, one must assume that wider spreads will lead to increased profitability for market makers. It is telling that market makers with significant market share are not pushing for wider tick sizes. It is a safe assumption that if an increase in tick sizes would materially increase market maker profitability, then many of these market makers would be publicly and passionately arguing that the Commission should widen tick sizes. Thus far, the silence is deafening.[4]

Second, even if market maker profitability does increase, one must then conclude that the increased profits will be used to provide research on small cap companies and encourage these brokerage firms to help more of these companies go public. That conclusion is dubious and could not be tested in one year. For one thing, many of the most active and competitive market makers, like Citadel, do not even provide research or investment banking services. In addition, there is no indication that the number of IPOs has been constrained by lower trading volumes and reduced market maker profits from the trading of these securities. The direct approach of reducing the regulatory and legal burdens of newly public companies, like those included in the JOBS Act, is far more likely to increase the number of IPOs, than the indirect approach of widening spreads to "enrich market makers" at the expense of retail and institutional investors.

While any pilot necessarily tests an uncertain theory, we submit that the theory should be more credible than the theory that underpins the proposed tick pilot.

B. The Commission Should Not Implement a Tick Size Pilot through an NMS Plan

The Commission should abandon its efforts to implement a tick size pilot through its authority to order the Participants to adopt NMS plans. Instead, the Commission should pursue the pilot, if at all, through notice and comment rulemaking, the same process that the Commission used when it adopted a short sale price test pilot in 2004. By attempting to impose a tick size pilot through an NMS plan order, the Commission has chosen a path that will lead to considerable changes in the trading of hundreds of securities at substantial cost without subjecting the Commission's decision to notice and comment rulemaking and without a legislative directive to do so (after all, the Duffy Bill was never passed into law). We do not believe that the temporary nature of a significant pilot should exempt it from traditional rulemaking. Further, while we appreciate the opportunity to comment on the Proposed Plan, the current process bypasses the essential first question – whether the Commission should have issued the Pilot Order in the first place.

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[4] Similarly, it is telling that there is a lack of public support for the pilot by almost all of the investment banks that would presumably benefit from any increase in small-cap IPOs.

In addition, structuring the tick size pilot as an NMS plan grants special status to exchanges in the design and implementation of material changes to the U.S. equity markets, while excluding other classes of market participants such as broker-dealers, issuers, investment funds, and the general investing public. Further, by allowing the exchanges to propose the manner in which a tick size pilot is implemented, the Commission is excluding exchange competitors from the process. As a result, the exchanges are attempting to use their power to design the tick size pilot plan to help their business models at the expense of their competitors. The Proposed Plan varies from the Pilot Order in material ways, each of which is highly favorable to the business interests of the exchanges, including as follows:

- the Proposed Plan adds a size requirement to the NBBO-quoting exception from the trade-at rule;
- the Proposed Plan extends trade-at protection to protected quotes that are not at the NBBO;
- the Proposed Plan narrows the NBBO quoting exception from the trade-at rule to ensure that an exchange member quoting at the NBBO on an exchange cannot trade-at the NBBO anywhere other than on that exchange; and
- the exchanges propose to exempt their own retail liquidity programs from the five cent increment requirement.

Each of these changes would naturally maximize the volume of trading that must occur on exchanges, which in turn would allow the exchanges to maximize their revenues from this trading volume.

Further, structuring the tick size pilot as an NMS plan avoids the need to conduct and publish a cost/benefit analysis for public comment. A cost/benefit analysis is critically important when the Commission is considering a material market structure change, especially one that, as explained below, can reasonably be expected to be very expensive to implement and potentially harmful to investors.

Finally, we note that Rep. Duffy, the primary force behind the Duffy Bill, has written a comment letter saying that a tick size pilot should not be implemented through an NMS plan, but rather should be implemented through a standard Commission rulemaking.[5]

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[5] *See* Letter from Rep. Sean P. Duffy to Chair Mary Jo White, U.S. Securities and Exchange Commission (Nov. 17, 2014) (the "Duffy Comment Letter"), available at http://www.sec.gov/comments/4-657/4657-43.pdf (stating "Further, as possibly the strongest supporter in Congress for a Tick Size Pilot Program, I hope that the final Plan for the Pilot be as

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If, after evaluating the comments on the Proposed Plan, the Commission still intends to impose a tick size pilot, the Commission should withdraw the Pilot Order and proceed with a notice and comment Commission rulemaking.

C. A Cost/Benefit Analysis is Critical

However speculative the benefits of a tick size pilot may be, the costs and risks are real, particularly with respect to increased investor costs and necessary systems changes and related operational risk (especially those associated with a trade-at rule). We estimate that the direct implementation costs would be millions of dollars for Citadel alone. These costs will be incurred through, among other things, strategic planning, software programming and testing, and compliance and supervisory oversight. These implementation costs are separate and apart from any trading costs associated with the changes dictated by the pilot itself (*e.g.*, transacting at worse prices). To our knowledge, neither the Commission nor the Participants have attempted to estimate the substantial costs to implement the tick size pilot specified in the Pilot Order or the Proposed Plan.

More importantly, increasing tick sizes will harm investors by increasing the cost to invest. The very reason the Commission required the industry to move from trading in fractions of a dollar to penny increments was to benefit investors though reduced spreads and lower trading costs.[6] Moving in the opposite direction will increase trading costs and likely reduce liquidity. Historically, the Commission has sought to influence market structure in ways that have reduced, rather than increased, trading costs. The Commission should be wary of taking any action that would reverse that course.

The Commission should address these issues by performing a cost/benefit analysis before imposing a tick size pilot on the markets. We understand that a tick size pilot, by its

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open and inclusive of a process as it can be. Therefore, I question the rationale of the Commission *ordering* the self-regulatory organizations to develop a plan, instead of engaging in a full rule-making process, as I directed the Commission to do so in H.R. 3448. Engaging in a rule-making process would have allowed all interested parties to contribute to the Plan's draft development, instead of a few.").

[6] *See* Regulation NMS: Proposed Rules and Amendments to Joint Industry Plans, Securities Exchange Act Release No. 50870, 69 FR 77424, 77458 (Dec. 27, 2004) (stating "the move to decimals (and specifically the move to a penny MPV for equity securities) also has reduced spreads, thus resulting in reduced trading costs for investors entering orders— particularly smaller orders—that are executed at or within the quotations"); *see also* SEC, Recommendation of the Investor Advisory Committee Decimalization and Tick Sizes (Jan. 31, 2014), available at http://www.sec.gov/spotlight/investor-advisory-committee-2012/investment-adviser-decimilization-recommendation.pdf (stating "there is ample evidence that increasing tick size would harm retail investors.").

nature, is designed to inform the Commission regarding the costs and benefits of increasing tick sizes, but this does not mean no cost/benefit analysis is necessary. A thorough cost/benefit analysis would inform the Commission regarding potential modifications to a tick size pilot or, if the costs are simply too high entirely, dictate that no pilot is appropriate.

II. THE TRADE-AT PROVISIONS DO NOT BELONG IN A TICK SIZE PILOT

A. A Trade-At Rule Should Not be Included in a Tick Size Pilot

Imposing a trade-at rule will not provide any information regarding the impact of changing tick sizes – the very goal of the tick size pilot. Further, while we understand that the Commission has raised questions regarding the pros and cons of a trade-at rule in the past, the trade-at rule required by the Pilot Order will provide little, if any, useful information for purposes of evaluating a broader trade-at rule. The proposed trade-at rule is simply too limited in terms of the number, type, and trading volume of securities to provide useful information. As Stephen Luparello, the Director of the Commission's Division of Trading and Markets, has said, "If you were going to do a trade-at pilot, that is not the segment of the market you do it in."[7]

The proposed trade-at rule (and likely any trade-at rule) is also a major undertaking, in many ways akin to the implementation of the Order Protection Rule of Regulation NMS, likely requiring more than a year of planning and implementation. Firms will need to spend substantial time and sums of money to modify their order routing and trading systems, exchanges and other market centers will need to change how they operate, and all market participants will need to adapt to the changes made by others. Given the one year duration of the pilot and its limited application, some market participants will simply choose to limit their transactions in the securities subject to the trade-at rule.

Moreover, there are also extraordinary risks associated with major, industry-wide systems changes, and the Commission should be loath to require such fundamental technology changes for a temporary pilot — let alone a temporary pilot that is supposed to be studying a completely unrelated topic. This is particularly true given that at the same time, firms must implement systems changes to accommodate the Consolidated Audit Trail, among many other Commission and SRO initiatives. After taking so many important steps to improve the resilience of the markets, including for example by adopting Rule 15c3-5 and Regulation SCI, it would be unfortunate if the Commission approved a pilot that imposed such an extraordinary degree of operational risk on the markets.

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[7] *Brokers Attack SEC's Plan as Trojan Horse*, Bloomberg News, Nov. 11, 2014, available at: http://www.bloomberg.com/news/2014-11-11/brokers-attack-sec-s-plan-as-trojan-horse-designed-to-hurt-them.html

On top of all this, the Commission has not offered enough of a justification of the need for, or benefits of, imposing a trade-at rule. The Commission merely states, summarily, in the Pilot Order that it "preliminarily believes there is a possibility trading volume could migrate away from 'lit venues' … to 'dark venues' as a result of wider tick sizes, and that as a consequence, Test Group Three could test whether a trade-at rule prevents such migration." The Commission offers no support for these possibilities built on possibilities. On the contrary, we believe that with respect to Test Group Two, some liquidity is actually likely to migrate from dark venues to lit venues. There is a tremendous amount of un-displayed midpoint liquidity on the exchanges which would be more sought after with wider tick sizes. Moreover, dark pools are today are able to execute trades in increments smaller than a half penny, and would no longer be permitted to do so for Test Group Two securities.

B. Changes are Needed if a Trade-at Rule is Included in a Tick Size Pilot

To the extent the Commission goes forward with a tick size pilot that includes a trade-at rule, the rule should be refashioned to simplify it and maintain execution quality.

First, the trade-at rule should not prohibit a trading center from executing a quantity greater than the quantity displayed at the top of the trading center's book. For example, exchanges should be allowed to execute their reserve size within the context of a trade-at rule. There is substantial un-displayed liquidity at exchanges through iceberg orders and other non-displayed orders, and tapping this additional liquidity, much of which would not otherwise be available on exchange, is very important to institutional and retail investors.

Second, the trade-at rule should allow a market maker quoting on an exchange to trade-at that price internally. Absent such a change, market makers would either have to route all of their customer order flow to the exchanges, or display their quotes through FINRA's alternative display facility (the "ADF"), which would enable them to internalize customer order flow. Requiring use of the ADF is inefficient as most firms currently do not use the ADF due to its lack of routing and execution functionality. Moreover, if the Commission wants to incentivize and reward market makers who provide liquidity, the Commission should not force market makers to route all of their orders to the exchanges who would then reap the full benefit of their unnecessarily high, but permitted, "taker" fees.

III. OTHER IMPORTANT CHANGES ARE WARRANTED

If the Commission decides to go forward with a tick size pilot, it should be as simple to implement and cost-efficient as practicable.[8] To achieve that goal, the Commission should take the following steps (in addition to eliminating the trade-at rule):

- Eliminate the rule that would require market makers to calculate and report their profitability data. This would be a very costly endeavor for market makers with little, if any, discernible benefit.[9] At most, the Commission should accept raw data from the market makers so that the Commission can analyze the data. Of course, the required information is highly confidential and should be provided full FOIA protection from disclosure.

- Block size orders should be exempted in their entirety from the limitations of the tick size pilot. This would help protect the execution quality currently received by institutional investors.

- The number of securities subjected to the tick size pilot should be reduced as suggested by Rep. Duffy in his comment letter. Considering the adverse execution quality investors in pilot securities will face, the number of such securities should be as low as possible and should only include stocks that trade with an average spread greater than the proposed wider minimum tick size. In this regard, the Commission should identify and include only small cap companies with lower liquidity, rather than including the more liquid mid cap companies covered under the Proposed Plan.

- Price improvement, as an exception from the execution limits of Test Groups Two and Three, should not be limited to "retail" orders; rather, the

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[8] *See* Duffy Comment Letter (stating "Finally, I would like to stress my hope that the final Plan for the Pilot be as easy and simple to understand and navigate as possible, while also containing minimal compliance costs and collection of proprietary data. That is what I strove to do in H.R. 3448, and what I hope the Commission does as well. Consequentially, I have concerns that the complicated exclusions and prohibitions included in the Plan's Test Groups, along with the collection of some of the profitability data, may be counter to those goals.").

[9] The proposed data to be collected would be noisy at best and unlikely to support any meaningful analysis because the competitive landscape for trading these securities will be temporarily disrupted by the pilot. Some market makers may see reduced profits simply because they pull back from trading these securities to minimize the substantial costs needed to adapt to trading these securities optimally during the pilot, while other market makers who invest heavily to quickly adapt may see increased profits simply because other competitors are temporarily pulling back during the pilot.

exception should be expanded to all customer orders, including institutional orders.

- Exchange retail liquidity programs should not receive any special treatment that is not afforded to other market centers.

IV. CONCLUSION

Considering the dubious rationale for a tick size pilot as well as the certain high costs that would be imposed on investors and the industry, the Commission should seriously reconsider whether to go forward with any tick size pilot. If the Commission goes forward with a tick size pilot, it should be narrowly tailored, focusing simply on tick sizes and not extraneous issues such as a trade-at rule, and should apply to a smaller subset of issuers. Any tick size pilot also should be subjected to notice and comment rulemaking, including a rigorous cost/benefit analysis, and not be designed by securities exchanges that have a clear focus on their own profitability.

Please call me at ([redacted] with any questions regarding these comments.

Sincerely,

John C. Nagel
Managing Director & Sr. Deputy General Counsel

cc: Mary Jo White, Chairman
Luis A. Aguilar, Commissioner
Daniel M. Gallagher, Commissioner
Kara M. Stein, Commissioner
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Stephen Luparello, Director, Division of Trading & Markets
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