August 9, 2010

Elizabeth M. Murphy
Secretary
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-0609

RE: CBOE Comments on File No. S7-21-09; Release No. 34-62445

Dear Ms. Murphy:

The Chicago Board Options Exchange, Incorporated ("CBOE" or "Exchange") appreciates the opportunity to submit this comment letter on the proposal ("Proposal") by the Securities and Exchange Commission ("Commission" or "SEC") to amend Rule 602 of Regulation NMS under the Securities Exchange Act of 1934 ("Exchange Act") to eliminate the use of "flash orders" by equity and options exchanges.1 The Commission previously solicited comment on the Proposal, and CBOE submitted a comment letter strongly opposing the Proposal, particularly with respect to its application to listed options.2 The Commission has since determined to solicit additional comment on the impact of the Proposal on the listed options markets.3 As discussed below, CBOE continues to be strongly opposed to the Proposal, especially as it relates to listed options.


2 See Letter re: CBOE Comments on File No. S7-21-09 (Flash Orders), from William J. Brodsky, Chairman and Chief Executive Officer, CBOE, to Ms. Elizabeth M. Murphy, Secretary, Commission, submitted on Nov. 18, 2009 (http://www.sec.gov/comments/s7-21-09/s72109-75.pdf).

I. Summary of the Reopening Release

As noted above, the Proposal would amend Rule 602 of Regulation NMS (the quote rule) to eliminate an exception to the quote rule, which the Commission refers to as the “flash exemption” in the Proposal, which the Commission states would effectively preclude the use of flash orders by equity and options exchanges. The quote rule currently requires exchanges to make their best bids and offers in U.S.-listed securities available in the consolidated quotation data that is widely disseminated to the public. The quote rule, however, excludes any bid or offer executed immediately after communication and any bid or offer communicated by a responsible broker or dealer other than an exchange market maker which is cancelled or withdrawn immediately after communication. The Proposal would eliminate this exception in an attempt to ban what it calls “flash orders.”

In the Reopening Release, the Commission seeks additional comment on the Proposal as it relates to the listed options markets. In particular, the Commission notes that with respect to listed options, many of those submitting comment letters opposing the Proposal focused on the differences between the cash equity and the listed options markets. The Commission further notes that certain commenters also were concerned that, in the absence of a fee cap for options, elimination of the flash order exception could lead to even higher access fees.\(^4\)

To assess these concerns and other issues, the Commission decided to reopen the comment period to gather additional information on the impact of the Proposal on the listed options markets. The Commission is seeking additional comment on, among other things, the effect of a proposed cap on access fees for listed options, and on the execution quality that flash orders receive in the options markets.\(^5\) The Commission is particularly interested in the extent to which flash orders, if they fail to receive an execution in the flash process, “miss the market” by either receiving an inferior price through an execution against a displayed quotation or no execution at all. The Commission asserts that no useful data was provided on this execution quality issue during the initial comment period.

II. Overview of Concerns and Relevant Data

CBOE continues to strongly oppose application of the Proposal to the listed options markets. To the extent that a decision on the Proposal will be based on data, we note that the Proposal itself offers plentiful data demonstrating the tangible benefits that flash trading confers to investors, while not one single statistic is offered in the Proposal or the Reopening Release in support of a flash order ban. At the same time, no data have been submitted demonstrating that flash trading harms investors. Of course, the Commission’s rulemaking cannot be based on

\(^4\) CBOE’s primary objection to the Proposal is that it effectively eliminates customer choice regarding where to route orders. Exchanges have always been able to match prices offered by competing exchanges, but the Proposal would eliminate that most basic business function thereby compelling customers to route orders based solely on displayed price and nothing else.

"conclusory or unsupported suppositions." *NetCoalition v. SEC*, No. 09-1042, slip op. at 23 (D.C. Cir. Aug. 6, 2010). We believe the Proposal is unwarranted for the listed options market and would affirmatively harm investors as well as competition between exchanges. We further believe that the Fee Cap Proposal is a red herring with respect to flash orders and that the Proposal is unsupportable on its merits for the listed options market with or without adoption of the Fee Cap Proposal. We supplied sufficient data and analysis in our prior comment letter to demonstrate the veracity of our position. Nevertheless, as the Commission has reopened the comment period to solicit comments specifically on the potential effect of the Proposal on the listed options market, we provide additional analysis and data to support our views and we respond to the specific questions posed in the Reopening Release. Some highlights of the data are provided below:

- In May 2010, CBOE “flashed” only 1% of the total contracts received by CBOE in multiply listed options. This is consistent with the Commission’s findings in the Proposal and demonstrates that CBOE is overwhelmingly quoting at the national best bid/offer (“NBBO”). Further, over half of the orders routed away by CBOE are concentrated in four classes (all of which typically involve flickering quotes). Thus, electronic step-up, in effect on CBOE since early 2006, is hardly the primary means of trading options on CBOE, but it is a competitive and important customer service offering that provides users with choice of venue accompanied by significant cost savings. Importantly, our step-up program is voluntary. In fact, routing to CBOE is voluntary. Yet, brokerage firms consistently choose the CBOE model which offers the advantages of step-up for retail customer orders.

- In May 2010, CBOE routed away 3,506,020 customer contracts at a cost to CBOE of $1,261,364 or approximately $0.36 per contract. CBOE also stepped up for 6,617,248 contracts on customer orders during that period. Using the same cost per contract, that results in a savings to customers of $3,643,573 in a single month. This very tangible benefit to investors should not be ignored by the Commission when considering the proposed flash ban. If a $0.30 fee cap were in place, the savings would still have been over $3 million.

- In May 2010, for all instances in which there was sufficient size at the away NBBO market(s) to fully execute a flashed order at the time of order receipt by CBOE (the “relevant NBBO”), the percentage of flashed contracts that were executed at the relevant NBBO price was 95.81%. The percentage of such contracts that were executed at a price superior to the relevant NBBO was 0.23%. The percentage of such contracts that were executed at a price inferior to the relevant NBBO was 1.06%. The remaining percentage (2.9%) constitutes orders that did not trade immediately after the flash/route or that were cancelled. For purposes of this statistic, if a trade did not occur within 1 second of receipt at CBOE or within 5 seconds if the order were routed away, it was counted as unexecuted or cancelled. Thus, some of these contracts were executed seconds or minutes later at the NBBO price after booking.
up mechanism actually “missed the market.” It should be kept in mind that orders trying to directly access the displayed NBBO sometimes miss the market as well.

- In May 2010, in situations where CBOE was not at the NBBO and the away size was not adequate to fill the order, CBOE provided through its step-up mechanism supplemental NBBO liquidity constituting an additional 67% of the away displayed NBBO size. By way of example, if CBOE receives an order to buy 17 contracts at $2 (while CBOE is displaying a $2 offer) but another exchange is displaying a $1.99 offer for 10 contracts, CBOE flashes the 17 contract order at $1.99 and the entire order is executed at that price. Without the flash, only 10 of the 17 contracts would have been executed at $1.99 and the balance would have been executed at $2. We consider this to be formidable added liquidity at the NBBO price. Some would characterize it as price improvement since the extra liquidity at the NBBO is really providing a better price for 7 of the contracts in the example than if step-up did not exist.

- In June 2010, CBOE was on at least one side of the NBBO in penny classes 91.9% of the time compared to 81.1% for NYSE Arca Options (“Arca”) (the most prolific maker-taker options exchange). In June 2010, CBOE was on both sides of the NBBO in penny classes 65.7% of the time compared to 66.5% for Arca. This supports our contention that aggressive quoting is very prevalent on traditional exchanges. Indeed, aggressive and matching quoting are behaviors associated with market makers, not exchanges. Both traditional and maker-taker exchanges have market makers that quote aggressively as well as market makers that quote in a manner that could be characterized as “matching” markets at competing exchanges. We further note that several exchanges employ maker-taker pricing for some option classes, but traditional pricing for other classes. Also, some exchanges do not even have market makers quoting in every series of option classes they trade.\(^7\)

- In June 2010, CBOE was alone on the NBBO 0.651% of the time in penny classes compared to 0.594% for Arca. Again, this statistic supports our contention that CBOE market makers engage in competitive and aggressive quoting.

- In June 2010, CBOE’s average quoted size in penny classes was 197 contracts compared to 66 contracts for Arca. We are not trying to disparage Arca, we are drawing these comparisons to highlight that our market model is robust and adds significant value and choice to the listed options marketplace.

- On May 6, 2010, CBOE’s equity option market share was several points higher than our year-to-date average. If CBOE’s market model were reliant on passive matching quotations (as the Reopening Release implies regarding traditional exchanges), we question why CBOE consistently excels during periods of market turbulence. We also question why a rulemaking is being considered that so directly harms one particular

\(^7\) For example, see BATS Exchange, Inc. Rule 19.5.
market model when it adds value to the marketplace including during periods of instability.

Without restating verbatim all the arguments made in our prior comment letter, it is useful to summarize briefly the main points we made on why the Proposal would harm the listed options market. CBOE developed its step-up mechanism to meet the needs of its customers.8 Recognizing that multiple exchanges are typically quoting at the NBBO, that many execution factors are important to customers in addition to displayed price (such as fees, system reliability, speed, customer service, and willingness to remediate errors), and that it is not always possible to display the NBBO at all times, CBOE created a mechanism that quickly achieves NBBO pricing and supplemental liquidity for customers with added cost savings.9 CBOE has been advised, and consistently receives feedback confirming, that firms representing retail customers very much appreciate our step-up feature.

Step-up mechanisms are particularly important and valuable when considering the unique characteristics of the options market. Unlike the stock market, the options market is a quote driven market with hundreds of thousands of options series, most of which are constantly changing due to changes in the price of the underlying instrument. It would be a virtually impossible task for any options exchange to be at the NBBO all the time for all options series it quotes. Submitting an options order to the step-up process enables CBOE to match and improve upon prices of competing exchanges and to add liquidity beyond the displayed market. It is a competitive tool that enables the Exchange to maintain its traditional market model while ensuring firms that send us their customer orders will obtain best execution for those orders even during the minority of times that CBOE's quotes are not at the NBBO. If a firm does not want to avail itself of the flash order mechanism, it is free to opt out of that process (and free to not route to CBOE). The flash order mechanism affirmatively helps long term and retail investors as the orders from these participants are the large majority of orders submitted to our flash mechanism.

In the Reopening Release, the Commission notes that some commenters tried to link the existence of flash orders to the absence of an options access fee cap or were concerned that elimination of the flash order exception could lead to higher access fees. We think that linking an options access fee cap to the Proposal is a red herring. The step-up capability was developed by quote driven exchanges such as CBOE to deal with rapidity of quote changes in the hundreds of thousands of options series well before maker-taker pricing existed in the options market. It is a competitive tool that enables us to maintain our market model while providing the possibility of improved executions for customers. We have noted in a different comment letter why the Fee

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8 We prefer the use of the term “step-up” to “flash” as it more accurately describe the purpose of the mechanism to permit liquidity providers to step-up to provide an execution at the best bid or offer or better.

9 We note that our step-up mechanism was in place long before maker-taker pricing entered the options marketplace. Thus, any assertions that step-up was created to combat maker-taker exchanges are false.
Cap Proposal, if adopted, would be very harmful to the listed options market. It does, however, share one similarity with the Proposal. Both would restrain the ability of options exchanges to innovate and compete. Adoption of either proposal, but especially the adoption of both, would force a homogenization of the listed options market, to the detriment of investors in these markets. As we set forth in our Fee Cap Proposal comment letter, the existence of competing market models offers a significant benefit to investors, and we fail to see why rulemakings are underway to address “problems” that do not exist and that certainly have not been quantified. See NetCoalition, slip op. at 12 (the Administrative Procedures Act requires the Commissions to articulate a “rational connection between the facts found and the choice made”), quoting Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). In light of the lack of evidence of harm to investors, it is inconceivable that rules should be passed that disfavor the CBOE’s market model, a model that is successful and one that traders turn to during times of instability, and that favor market models with a particular pricing structure (maker-taker). Moreover, both proposals ignore the clear differences between the stock and listed options market that make each of these proposals extremely harmful to the listed options market.

In sum, a flash/step-up capability enhances competition between and among options exchanges, enables different models of options exchange structure, promotes best execution for customers, and is consistent with aggressive quote competition. Below we address the specific questions posed in the Reopening Release.

III. Responses to Questions Posed

We respond below to each of the ten questions posed in the Reopening Release. We list the questions in the order presented in the Reopening Release, and provide our response to them below. Rather than including the full questions from the Reopening Release, we summarize each of them below.

Q1. If the SEC adopted a cap on access fees for listed options, would the change remove the need for exchanges to use flash orders to prevent customers from incurring high access fees?

No. Forcing public customers to pay $0.30 a contract (under a fee cap) instead of $0.45 cents (without a cap) for NBBO executions would not diminish customer desire to avoid those fees altogether as they typically do when they route to CBOE through the step-up program. $0.00 in fees is infinitely better than $0.30 in fees for customers. As we noted earlier in this letter, in one month, CBOE saved investors over $3.5 million, and if the proposed fee cap had been in place during that month the savings still would have exceeded $3 million.

As discussed above, the primary impetus for the step-up functionality on CBOE is to enable the Exchange to service our order flow, specifically for those infrequent instances when

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10 See Letter re: Proposed Amendments to Rule 610 of Regulation NMS, File No. S7-09-10, from William J. Brodsky, Chairman and Chief Executive Officer, CBOE, to Ms. Elizabeth M. Murphy, Secretary, Commission, submitted on Jun. 21, 2010 (http://www.sec.gov/comments/s7-09-10/s70910-20.pdf).
our quotes are not at the NBBO. An access fee cap would not change this. If anything, an access fee cap might increase the need for flash orders as such a cap would reduce the competitive position of traditional, quote-driven markets, with the concomitant possibility of spreads widening. Currently, only one percent of the contract volume received by CBOE is exposed to the step-up mechanism. These data clearly illustrates that the current level of access fees does not lead to a large use of the step-up mechanism. We believe the Commission should give considerably more weight to the multiple tangible benefits of step-up that have been highlighted by many, including the Commission, than to the speculative, unsubstantiated, and self-serving criticisms of flash orders that have been offered, as it considers this rulemaking proposal.

Q2. Comment and data are requested on the execution quality, including implementation shortfall of latency or nonexecution, received by investor orders in listed options that are placed in a flash mechanism.

Order exposure during the step-up process on CBOE can last up to 150 milliseconds (frequently orders are matched within 10-30 milliseconds). Our data indicates that in May 2010, for orders for which sufficient displayed liquidity existed at the away NBBO at the time of order receipt, 70% of the contracts exposed to step-up were executed on CBOE in the step-up mechanism at the NBBO or better (0.23% at a price superior to the NBBO). 26% of the contracts were routed to the NBBO market(s) and successfully executed at the relevant NBBO price. 1.06% of the contracts were executed at a price inferior to the relevant NBBO, and 2.9% were not immediately (within several seconds) executed and were, thus, booked in our system or cancelled (it is possible that many of them were ultimately filled at the relevant NBBO price later in time).11 These figures should not be evaluated without first understanding that sending orders into a step-up mechanism is voluntary, that significant extra liquidity is provided in our step-up mechanism, that a small percentage of orders sent directly to the NBBO market will still miss the market due to latency in order transmission or market data feeds, and that some flashed orders actually receive price-improvement over the NBBO. We further note that brokerage firms that are subject to and assume best execution responsibilities for customer orders frequently take advantage of our step-up offering.

Thus, the large majority of orders experience no implementation shortfall from non-execution. As the vast majority of orders sent to the step-up mechanism are from long term/retail investors, who are the focus of the Commission’s concern in issuing the Proposal, any delay in routing for a small minority of the one percent of contracts sent to CBOE should be of little or no concern to the overall executions of such investors. The benefits of price and quantity improvement in the step-up mechanism far outweigh any perceived detriment from the microsecond latency and the non-execution potential. As we stated earlier, in May 2010, step-up accounted for over $3.5 million in savings to customers. The “cost” associated with the 1.06% of qualifying contracts executed at an inferior price (noted in the preceding paragraph) is

11 Limiting the same calculation to orders of 50 contracts or less (typically retail orders), CBOE filled flashed contracts at the NBBO 96.5% of the time (via either step-up or successfully routing to an away market), inferior to the NBBO 1% of the time, superior to the NBBO 0.3% of the time, and did not fill immediately or were cancelled 2.2% of the time.
$81,317. That figure is quite small when compared to the cost savings afforded by flash, and it is further offset by the 0.23% (noted above) of qualifying orders that received executions at a price superior to the NBBO which represents a $17,769 savings.

The typical access cost paid by public customer orders handled through CBOE’s step-up mechanism is $0.00. Compared to the $0.36 per contract average in May 2010 for away executions referenced earlier in this letter, that is significant savings to those customers (over $3.5 million in one month). Compared to a $0.30 rate under the proposed fee cap, that is still significant savings to those customers (over $3 million in one month).

CBOE has not detected a correlation between the use of step-up and certain market conditions. Instead, as we pointed out earlier, step-up and outbound routing are concentrated in a small group of tight-market, flickering, penny increment option classes.

Q3. Comment and data are requested on the execution quality received by investor orders in listed options that are not flashed. How can investors and brokers compare execution quality statistics for flashed versus non-flashed orders?

For marketable orders in multiple list products not processed through step-up, in May 2010, CBOE executed 99.67% of the contracts associated with those marketable orders at the NBBO, 0.31% were executed at prices better than the NBBO, and 0.03% received executions at prices inferior to the NBBO (due to flickering quotes).

CBOE, like other options exchanges, voluntarily provides execution quality statistics (they are available on our website). Overall, our statistics show that CBOE provides competitive executions that are wholly consistent with best execution principles. We do not separate out orders subject to step-up versus non-step-up orders in our statistics as the former account for only one percent of received contracts. If brokers requested information on step-up statistics, we would accommodate their request, but we believe that many brokers conduct their own execution evaluations (including through third party vendors). Brokers recognize that the orders they send to our step-up mechanism receive the real possibility of price and/or quantity improvement. If they do not want to utilize the step-up mechanism, they can still submit orders to CBOE while opting out of this mechanism. The key point is that the step-up mechanism provides a means for brokers to submit combined order flow to CBOE as their execution destination of choice, knowing that in the small percentage of time our quotes are not at the NBBO, their orders will not be simply routed away with automatic pass through of away access fees, but instead will receive the possibility of an execution at the NBBO or better, and at no cost.

Q4. What steps do brokers take to assess whether flashed orders in listed options miss the market. What data or other objective evidence do brokers use to assess whether flashed orders receive best execution?

Brokers have best execution obligations that take into account many factors in addition to execution price. We believe brokers are primarily focused on obtaining best executions for customer orders and that they are comfortable that CBOE’s step-up process complements their best execution objectives. It is our understanding that many brokers conduct comprehensive
execution quality reviews, and we expect that a pattern of inferior executions, through a step-up process or otherwise, would not go undetected. Orders submitted to CBOE’s step-up mechanism do not miss the market if executed in step-up. For orders sent to step-up and then routed away to another market, an overwhelming percentage of these receive the desired execution. As noted above, orders submitted to step-up have the opportunity for price and/or size improvement. It is clear that the step-up mechanism at CBOE promotes best execution by permitting an order sending broker to direct order flow to CBOE, where our quotes are at the inside an overwhelming percentage of the time, while enabling the orders to be subjected to exposure and potential price improvement in the infrequent instances when we are not quoting at the NBBO. Without a step-up mechanism, we could be forced to route away a much larger percentage of order flow than now occurs, with a resulting consequence of greater latency and non-execution risk for those orders. We fail to see how that is beneficial to long term investors in listed options.

Q5. One commenter suggested that only in “rare” instances do flashed orders that are routed away miss the NBBO market, and that in those rare instances the brokers typically honor the NBBO for their customers. Do commenters agree with this statement?

Obviously we agree as we made that assertion in our prior comment letter on the Proposal, and it continues to be our understanding since we submitted that comment letter. To be clear, when we say brokers honor the NBBO for customers, we are referring to the NBBO at the time the order was received at the flashing exchange.

Q6. Do commenters agree that liquidity providers on maker/taker exchanges quote more aggressively than other exchanges once their displayed quotes are adjusted for access fees? Are the liquidity rebates the only reason that their liquidity providers quote aggressively?

We disagree with this simplistic characterization. Our data suggests the opposite, in that quotes from CBOE, which is not a maker-taker exchange, are on the inside in penny classes as much or more than the most prominent maker-taker exchange (and that does not take into account the considerably lower fee structure at CBOE for public customers which makes CBOE’s quotes that much more attractive). Yes, in a discreet group of classes, we route orders to maker-taker exchanges more than they route to CBOE, but that should not diminish the value of the considerable aggressive quoting that occurs on CBOE across thousands of option classes. In fact, our experience is that quoting aggressiveness varies across liquidity providers on a particular exchange more so than between separate exchanges. That is, each exchange, regardless of market model, will have some liquidity providers that quote more aggressively than other liquidity providers at that exchange. Oftentimes quoting behavior from the same liquidity provider can be different on a class-by-class or series-by-series basis. This is true regardless of market models. Additionally, we strongly believe that a non-NBBO quote can still be, and often is, an aggressive quote that is not attempting to match another quote. It is interesting to note that several options exchanges use the maker-taker model for some options classes and the traditional model for other options classes. This further demonstrates our contention that an options exchange will select the market model it thinks will best attract liquidity and order flow, and should be free to do so.
The step-up function is an important adjunct to the traditional model in today’s listed options market structure. The SEC should be promoting competition among market models, not dictating one model over another. Exchanges compete across multiple dimensions, not just bid and offer prices. These non-price factors include liquidity depth, trading rules and the quality of trade processing services provided. The proposed ban on step-up trades is an attempt to regulate how different exchanges compete amongst themselves. Different investors, however, prefer different trading environments. In cases such as this, where there is no evidence of harm to investors, the success of exchanges should be determined by marketplace competition.

Q7. To what extent do liquidity providers on payment for order flow exchanges quote aggressively rather than merely match quotes? Would eliminating the flash order “exception” lead to more aggressive quoting and narrow the NBBO? Does the answer change depending upon whether the SEC adopts the Fee Cap Proposal?

We strongly disagree with the premise that traditional exchanges do not quote aggressively. CBOE’s quoting statistics (especially when compared to other markets) speak for themselves. The fact that we consistently display “aggressive” quotes and also operate a program whereby we administer the payment for order flow process used by our market makers, clearly demonstrates that aggressive quoting and payment for order flow are not contradictory or mutually exclusive. As to the second part of this question, there is no flash order “exception.”

The electronic step-up functionality of CBOE evolves from a manual step-up process that was used for years on virtually every stock market and was a mainstay of manual options markets. CBOE merely has automated the process to work in an options market structure where the quotes of hundreds of thousands of options series are constantly changing and trading is conducted primarily by electronic means. Eliminating this functionality would not narrow the NBBO.

Adoption of the Fee Cap Proposal would worsen the situation. Both the Proposal and the Fee Cap Proposal would stifle innovation and competition in the options markets. CBOE’s quotes are already competitive. We fail to understand why the Commission is exploring the regulatory reengineering of an options marketplace that is already vibrant and ultra-competitive, and that has not experienced significant problems.

Q8. Does the flash mechanism enable payment for order flow exchanges to compete for order flow? Would eliminating the flash exemption lead payment for order flow exchanges to respond competitively by more aggressive quoting or through greater use of price improvement mechanisms targeted at non-professional order flow?

CBOE already competes aggressively for order flow through offering better prices and sizes for investor orders. Eliminating the step-up functionality would hamper our ability to compete in this regard. Our step-up mechanism already allows for responses to offer price improvement over the NBBO. If, in this question, the Commission is referring to price improvement crossing mechanisms, those mechanisms service a different type of order flow and

12 Today, option trading floors typically handle large and complex order flow- not the smaller retail order flow that is prevalent in our electronic step-up system.
would not be a suitable replacement for step-up (namely, those mechanisms are for paired orders sent to the exchange for price improvement and facilitation/solicitation).

**Q9. Does the absence of OTC trading in listed options result in more “uninformed” order flow reaching the exchanges, so that liquidity providers can quote tighter spreads? Do price improvement mechanisms attract a large percentage of order flow in listed options? Would the figure be higher if the SEC eliminated the flash order exception?**

Yes, unlike the stock market where retail order flow is siphoned off to dark pools for execution, we believe that requiring all orders in listed options (regardless of user category) to interact and execute on an exchange is healthy, appropriate, and beneficial to spreads and investors. The absence of off-exchange trading in listed options improves market quality by centralizing trading and promoting order interaction. In light of the events of May 6, 2010, the absence of this interaction in the stock market is something the Commission should examine. Further, the Commission should take great care before implementing a rulemaking that in any way erodes a liquidity provider’s incentive to make markets. In sum, with hundreds of thousands of options series, it would be impossible to ensure competitive quoting in most options series if trading occurred off exchanges.

As to price improvement mechanisms, we are unsure as to which ones the Commission is referring. Price improvement is available on our trading floor, through various electronic crossing mechanisms, and through our step-up process. They all involve order exposure, something that is a hallmark of the options marketplace. We believe they all offer value and factor into our customers’ decision to route orders to CBOE. To answer the SEC’s specific question on price improvement percentages, in May 2010, 3% of electronically traded contracts on CBOE received price improvement. We would not expect that percentage to increase if step-up were banned. We do not believe that price improvement mechanisms must guarantee the NBBO in order to attract order flow.

**Q10. What is the effect on order execution quality, as well as on the nature of competition in the options markets, of the absence of publicly available order execution quality data such as that provided for stocks under Rule 605?**

CBOE, as with other options exchanges, does make execution quality data available on our website (pursuant to recommendations from the SIFMA Equity Options Trading Committee) so that users can judge objectively what they know from using our market as to the quality of executions we provide. We would not be opposed to the SEC providing some standardization of the publication of this data across options exchanges as long as the data required was meaningful for listed options. Importantly, if users did not feel comfortable using step-up functionality, they would forgo use of that process. The fact that they rarely, if ever, choose to avoid the step-up functionality shows that they recognize the value that the function has in providing quality executions to their orders.

CBOE believes there is vigorous quote competition between and among market makers on its exchange and between it and other exchanges. This is borne out by the data, which shows an intensely competitive market share landscape and a vibrant options market. In considering
these issues, however, the Commission must bear in mind that there are hundreds of options series for each underlying stock, the majority of which have little volume on any given day. Most trading interest is concentrated in certain series. Thus, the large majority of series depends upon market maker quotes for liquidity. It is a testament to the quality of the current listed options market structure that order execution quality is still high in the lesser traded series, albeit not as high as in the most actively-traded series, as one would expect.

IV. Additional Comments on the Proposal

In addition to our responses above, we have several general comments about the Proposal and the Reopening Release. While many of these comments are similar to ones we have made before, we believe that they are worth reiterating to address inaccurate views in comment letters that continue to be repeated since the Proposal was originally issued.

In particular, we strongly disagree with the view that liquidity providers on maker-taker options exchanges quote more aggressively than liquidity providers on other options exchanges. The nature of the Commission’s questions in the Reopening Release suggests that the Commission may hold this view. For instance, the Commission asks in Question 7 of the Reopening Release “[t]o what extent do liquidity providers on payment for order flow exchanges quote aggressively rather than merely match quotes?” This view could not be farther from the truth. In fact, the data cited above does not support this view. The step-up mechanism provides a vehicle for market makers on CBOE to match the NBBO at other markets in the rare instances when CBOE is not at the NBBO. Relying on the “first responder takes all” step-up mechanism would not be a viable business model for a market maker as there is no guarantee that that the market maker would trade sufficiently. CBOE’s market makers clearly do not make this the centerpiece of their trading strategies.

In addition, it bears repeating that the stock and options markets are different. In the stock market, the NBBO is frequently driven by limit orders. That is not the case in the options market. Instead, the NBBO is driven by quotes from market makers a great deal of the time. This is due to the nature of the options markets, where multiple options series trade on a particular underlying security and the prices of those series need to be updated on a continual basis in response to changes in the price of the underlying security. Because it is impossible for market makers to be at the NBBO 100% of the time, the step up process is crucial to encouraging market makers to quote in many options series. Banning step-up in the options market could lead to market makers quoting in fewer series, which would ultimately work to the detriment of investors by limiting their investment choices.

Moreover, none of the reasons given by the SEC to proceed with this rulemaking makes sense in the context of the options markets. For instance, the SEC expresses concern that the use of flash orders may create a two-tiered market. That is simply not true with respect to their use on CBOE. As we noted previously, the step-up functionality is used on CBOE when the Exchange is not allowed to execute or display an order. Under the current linkage plan for the options markets, the options exchanges are subject to a prohibition on trading-through the NBBO
as well as a prohibition on locking or crossing the markets. Thus, if CBOE is not at the NBBO for an option and receives a customer limit order to buy that option, CBOE cannot execute that order at its offer because such an execution would violate the prohibition on trading-through the NBBO, and cannot display that order because such a display would lock the market in violation of the prohibition on locking or crossing the markets. This leaves CBOE with three choices, cancel the order, immediately route the order, or attempt to match the away price before routing to a competitor. CBOE exposes that order for potential execution at the Exchange (along with the possibility of price and/or size improvement) prior to routing it to the exchange at the NBBO if not executed on CBOE. This is the only situation in which we “flash” orders. Clearly, this is not a situation where a two-tiered market is created. Instead, it is situation where we are offering a service to customers, many of whom would rather have their orders executed at CBOE if given the choice. The Commission’s Proposal would eliminate this choice.

The SEC also expresses concern that the flash order mechanism could be used to front-run customer orders. That is highly unlikely at CBOE given the typically small order size submitted through our flash process. Further, because options pricing is formulaic, the possibility of front-running is further diminished. Small option orders are very unlikely to “move the market,” and thus are not candidates for frontrunning. In other words, orders exposed in CBOE’s flash process are generally too small to cause market participants to adjust their behavior to take advantage of those orders. Moreover, traders concerned about front-running can choose to not have their orders flashed. The fact this happens rarely, if ever, is proof that the SEC concern with front-running lacks empirical support. Indeed, we are not aware of any complaints submitted to us alleging front-running in connection with our step-up process.

Further, CBOE fails to understand how the Proposal squares with certain concerns expressed in the market structure concept release (“Concept Release”) and the report on the so-called “flash crash” on May 6, 2010 (“Flash Crash Report”). In both the Concept Release and the Flash Crash Report, concerns were expressed about the loss of market maker liquidity in the stock markets and the problems that can arise as a result of this loss of liquidity. In light of these concerns, CBOE is puzzled as to why the Commission would go forward with the Proposal given that one of the possible consequences is a loss of market maker liquidity in the options markets and a reduction in the ability of the traditional exchange model to compete. We also


15 For example, the Flash Crash Report found that the crash may have been caused or exacerbated by, among other things, a generalized severe mismatch in liquidity, as evidenced by sharply lower trading prices and possibly exacerbated by the withdrawal of liquidity and the use of market orders, including automated stop-loss market orders designed to protect gains in recent market advances.
offer our observation that the presence of the maker subsidy on maker-taker exchanges likely leads to non-market makers (high frequency traders) "quoting" on those exchanges as these firms monitor the markets on the traditional exchanges and then factor in the maker subsidy to generate a price that may improve on the traditional exchange quote in some instances.

In the end, implementing the Proposal would be particularly harmful to exchanges such as CBOE that have a traditional model. In essence, the Commission would be favoring one market model – the maker-taker model – over the model employed by CBOE and certain other options exchanges. Currently, there is a tremendous amount of competition between these market models and we believe that investors benefit from that competition. Banning flash orders in the options market would adversely affect that competition, to the detriment of investors.

The proposed ban limits the ability of exchanges to compete with respect to terms other than price. Exchanges compete on a multiple dimensions including price, depth, and a variety of ancillary services. The proposed ban limits the ability of investors to transact on an exchange that provides a preferred set of ancillary services, even when they would receive the same price through step-up. In doing so, the proposed ban reduces an exchange’s incentive to invest in providing high quality ancillary services. This in turn reduces the quality of services provided by exchanges, limits competition, and harms investors.

Moreover, by favoring one market model over another, there is a serious question as to whether the Commission’s Proposal is consistent with the Exchange Act. Under Section 3(f) of the Exchange Act, the Commission when engaged in rulemaking is required to consider, in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation. Because of the adverse impact the Proposal would have on competition as noted above, the Proposal does not appear to be consistent with this statutory requirement.

In addition, the interpretation the Commission makes in the Proposal with respect to Rule 602 of Regulation NMS (the quote rule) appears to be arbitrary. In this regard, the Commission is proposing to delete the language in Rule 602(a)(1)(i)(A), which according to the Release provides the exception from the quote rule that allows exchanges to flash orders. In the release issuing the Proposal, the Commission indicates that mechanisms that provide the opportunity for a price better than the NBBO would be permitted under the Proposal. However, our step-up

16 In particular, the Commission states:

The Commission recognizes that a number of exchanges currently offer a variety of trading services other than flash orders that conceivably could be affected by the elimination of the paragraph. These may include price improvement auctions and various types of facilitation and exposure mechanisms for large orders. The Commission preliminarily believes that the status of these trading mechanisms under Rule 602 would not be altered by the proposed amendment. For example, the Commission preliminarily believes that orders exposed as part of a competitive auction that provides an opportunity to obtain better prices than displayed quotations generally would not constitute bids and offers that must be provided to the consolidated quotation stream, nor would the responses to those orders if they were actionable only with respect to the exposed order.
mechanism is competitive and allows for price improvement, therefore we are confused as to why the Commission would consider it as no longer being allowed under the proposed change to Rule 602.17 Candidly, we find Rule 602 and the proposed changes to be very confusing and quite detached from today's trading environment.

If the Commission is so concerned about flash mechanisms that match the NBBO, we fail to see why it permits (and has permitted for a long time) arrangements in which a specialist or market maker agrees to match the NBBO for incoming order flow even if such liquidity provider is not quoting at the NBBO. See NetCoalition, slip. op. at 17 (an agency acts arbitrarily by "fail[ing] adequately to justify departing from its own prior interpretation" of a statute”), quoting Goldstein v. SEC, 451 F.3d 873, 883 (D.C. Cir. 2006). In this regard, one of the primary opponents of flash orders, NYSE Arca Options, just submitted a rule filing proposing to allow Order Flow Providers to arrange for a guarantee of execution of an options order by a particular Market Maker at the NBBO rather than routing the order to another market.18 In addition, NYSE Amex has adopted an order type called a Tracking Order, which is an undisplayed limit order executable only at a price matching the NBBO that will not be routed to another market (i.e., any unexecuted portion will be cancelled).19 Further, much of the retail flow in the Nasdaq stock market is executed through arrangements in which market makers match the NBBO. We do not understand how the Commission can distinguish these arrangements from flash mechanisms. Indeed, the step-up functionality provides actual order exposure to CBOE participants in order to solicit competitive responses, where the NBBO match guarantee provides no order exposure for a liquidity provider to step-up and execute an order at the NBBO.

If the Commission were to go forward with the Proposal with respect to the options markets, which we strongly believe should not occur for the reasons set forth above, there are several ways in which the Commission can proceed while lessening the impact on competition and costs associated with the Proposal. In this regard, the Commission could clarify that any flash functionality offered by exchanges that allows for price improvement would be permissible and consistent with the changes to Rule 602. In addition, the Commission could require exchanges to make their flash functionality optional to customers (which CBOE currently does). These steps would address certain of the Commission's concerns about flash orders, such as whether flash trading is conducive to aggressive quoting and whether customers can avoid flash processes if desired to avoid potential front-running, while allowing options exchanges to continue to offer a service that is viewed favorably by retail customers.

See 74 FR at 48638 (footnotes omitted).

17 Along these lines, we are confused as to how the Commission could choose to "apply" Rule 610(d) of Regulation NMS (the locked and crossed markets prohibition) in some instances but not others.

18 See SR-NYSEArca-2010-74. (http://apps.nyse.com/commdata/pub19b4.nsf/docs/FA918E154B660837852577720073CFF1/$FILE/NYSEArca-2010-74.pdf). We note that the filing may have been withdrawn by Arca.

19 See NYSE Amex Rule 900.3NY(d)(5).
Based on the notable absence of any question in the Reopening Release regarding the application of the Proposal to options trading floors, we commend the Commission for presumably determining that trading floor processes are substantially similar to the various price improvement auctions preliminarily recognized by the Commission as not being affected by the proposed change to Rule 602 (something we pointed out in our original comment letter).

V. Conclusion

For the reasons set forth above, we strongly believe that the Commission should not go forward with the Proposal with respect to the listed options markets. Overall, eliminating the step-up process in the options market will be harmful to the markets and to investors.

Thank you for the opportunity to comment on the Proposal. Please contact me at (312) 786-7001, Joanne Moffic-Silver, General Counsel & Corporate Secretary, at (312) 786-7462 or Angelo Evangelou, Assistant General Counsel, at (312) 786-7464 if you would like to discuss our views further.

Sincerely,

[Signature]

cc: The Honorable Mary L. Schapiro, Chairman
The Honorable Luis A. Aguilar, Commissioner
The Honorable Kathleen L. Casey, Commissioner
The Honorable Troy A. Paredes, Commissioner
The Honorable Elisse B. Walter, Commissioner
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