CITADEL

November 20, 2009

Elizabeth M. Murphy
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-1090

Re: *Elimination of Flash Order Exception From Rule 602 of Regulation NMS*
File No. S7-21-09

Dear Ms. Murphy:

Citadel Investment Group, Inc. ("Citadel") appreciates the opportunity to comment on the Securities and Exchange Commission's proposal to eliminate the flash order exception from Rule 602 of Regulation NMS.[1] Through its affiliates, Citadel operates one of the most active U.S. equity and option market making businesses, and is a leading market participant in many of the world's derivatives and securities markets.[2] Our experience and daily function as one of the largest liquidity providers in the world's electronic markets gives us unique insights regarding the impact of the Proposal on the listed options market.

By banning the options exchanges' use of "step-up" mechanisms, the Proposal would inflict unintended and substantial damage to the price transparency, liquidity, and execution quality currently enjoyed by retail customers. The elimination of step-up mechanisms, and the continuing absence of any limits on market access fees, would disrupt a healthy, but precarious, equilibrium that has evolved between exchanges with customer priority models (such as the Chicago Board Options Exchange ("CBOE") and the International Securities Exchange ("ISE")) and exchanges with "maker-taker" models (such as the Nasdaq Options Market ("NOM") and NYSE Arca Options ("ARCA")).[3] When appropriately managed, this equilibrium works to the

---

1 Securities Exchange Act ("Exchange Act") Rel. No. 60684 (Sept. 18, 2009), 74 Fed. Reg. 48632 (Sept. 23. 2009) (the "Proposal").

2 On an average day, Citadel accounts for approximately 8% of U.S. listed equity transactions, and 30% of U.S. listed equity option transactions. Founded in 1990, the Citadel group of companies includes an asset management division that principally executes alternative investment strategies across multiple asset classes, and Citadel Securities that includes investment banking, a sales and trading platform, an industry leading market making franchise, and Omnium, a recognized administrator serving financial institutions. With more than 1,200 team members, Citadel operates in the world's major financial centers, including Chicago, New York, London, Hong Kong and San Francisco.

3 NASDAQ OMX PHLX, Inc. and NYSE Amex LLC also have a customer priority market structure.

131 South Dearborn Street 312-395-2100 Telephone
Chicago, Illinois 60603 312-267-7100 Facsimile

CITADEL

advantage of retail investors, and its disruption would disproportionately reward professional, proprietary trading firms at the expense of retail investors.

As previously discussed in our petition to implement an options market access fee cap, the existing market structure for listed options is already facing a serious risk of potential disequilibrium.[4] Without step-up mechanisms, the migration of order flow to maker-taker pricing would be irreversible, dramatically altering the landscape of the U.S. options exchanges. For these reasons, the Commission should protect the flourishing, retail-oriented U.S. listed options market structure and permit the continued use of options step-up mechanisms.[5] Indeed, the Commission should go one step further to strengthen investor protection by promptly acting on our Fee Cap Petition.[6]

I. Background on the Listed Options Market

Options market step-up mechanisms should be evaluated in the broader context of how the listed options market operates today and how it differs substantially from the market for cash equity securities.

In the cash equity market, orders may be executed either on or off an exchange. As a result, broker-dealers may execute the customer orders they receive by trading with the customer directly out of the broker-dealer's proprietary market making account (so-called internalization). In the listed options market, in contrast, orders may only be executed on a securities exchange.

The customer priority exchanges have structured their markets to provide substantial benefits to public customers. On these exchanges, customer orders receive free executions (or a rebate) at the national best bid or offer price ("NBBO") across the entire universe of listed options contracts.[7] Customers also go to the front of the line on customer priority exchanges, ahead of market professionals, with respect to execution priority at a given price.

---

4 *See* Letter from John. C. Nagel to Nancy M. Morris (July 15, 2008), available at http://www.sec.gov/rules/petitions/2008/petn4-562.pdf (the "Fee Cap Petition").

5 Similar observations have made by the CBOE regarding the Proposal's impact on long-term retail investors. See Letter from William J. Brodsky to Elizabeth M. Murphy (Nov. 18, 2009) (the "CBOE Comment Letter").

6 We understand that the Commission staff is currently considering the issue of access and access fees raised in our Fee Cap Petition. See Exchange Act Release No. 60711 (Sep. 23, 2009) at n. 49. In our view, the Proposal only serves to highlight the urgency of that issue, given its impact on retail investors.

7 Typically, this rebate is funded by transaction fees collected by the exchanges and paid by specialists to order routing firms for directing customer order flow to the exchange. This arrangement, commonly known as "payment for order flow," ultimately helps subsidize the low cost and high quality execution services provided by retail broker-dealers.

CITADEL

On customer priority exchanges, customers benefit from guaranteed liquidity on both sides of the market, even in periods of extreme stress and volatility. Customer priority exchanges ensure this liquidity for customers by requiring market makers to provide continuous two-sided markets within a maximum allowable quote width.

These steps to ensure liquidity are critical to the smooth functioning of the options markets. Nearly all listed options heavily depend on market makers for consistent liquidity. In the vast majority of options, there is not a consistent limit order book of coincident investor trading interest as there is in the cash equities markets. Currently, there are roughly 330,000 listed option series. On a typical day, a staggering 85% of listed option series do not trade at all, and 93% of listed option series trade three or fewer times. Market maker obligations fill this void for retail investors.

Recently, some options exchanges moved away from this customer priority model in favor of a maker-taker pricing structure.[8] Under this maker-taker model, market makers have minimal or no quoting obligations and public investors have no execution priority. In addition, these exchanges charge a fee to execute a customer order against the exchange's quotations ("taker fees"), and rebate a portion of that fee to the market participant whose quote was traded against (a "maker rebate"). On Arca, for example, in Penny Pilot option classes, taker fees are generally $0.45 per contract,[9] and maker rebates are $.25 or $0.30 per contract. Because retail customers tend to be net liquidity takers in options, taker fees disproportionately fall on retail customer orders and the rebates paid with a portion of those fees are disproportionately paid to market professionals.[10]

While the maker-taker model encourages aggressive quote competition in the most actively traded options, it generally does not promote meaningful liquidity outside of the most actively traded names. The lack of quoting obligations on maker-taker exchanges allows

---

8 The two options exchanges that currently have maker-taker pricing are NOM and ARCA. *See* Exchange Act Rel. Nos. 57599 (Apr. 1, 2008) (NOM), 55223 (Feb. 1, 2007) (ARCA) and 57585 (Mar. 31, 2008) (ARCA). In Penny Pilot options, ARCA charges $.45 per contract to take liquidity, ARCA pays market makers a $.30 per contract liquidity rebate, and ARCA pays all other participants a $.25 per contract liquidity rebate. In Penny Pilot options, NOM charges customers $.35 per contract to take liquidity, and market makers and other broker-dealers $.45 per contract to take liquidity. In penny pilot options, NOM pays all participants a $.25 per contract liquidity rebate to provide liquidity.

9 *See* ARCA Options Fees, available at http://www.nyse.com/futuresoptions/nysearcaoptions/1147128317287.html.

10 Based on our experience handling a substantial volume of retail options order flow, we estimate that retail investors take liquidity across all Penny Pilot option classes approximately 63% of the time, and this percentage is higher in the more actively traded option classes that account for most of the volume on maker-taker exchanges. Throughout this letter, we focus on Penny Pilot option classes because once the current phase of the Penny Pilot rollout is complete, options quoted in penny increments will account for approximately 84.5% of listed option trading volume.

professional traders to only quote the most active options and leave the retail customers to fend for themselves if they need liquidity in the less active options. For example, NOM only lists 15% of the over 3,000 currently listed option classes. In the classes NOM does list, it lists only 40% of the available options series in those classes. In addition, NOM trading volume is highly concentrated in the most active option classes. Fifty percent of NOM volume occurs in 5 option classes and 80% of NOM volume occurs in 40 option classes. Outside the handful of liquid option classes and series, the lack of meaningful market maker quoting obligations on maker-taker exchanges often results in little to no liquidity at or near the NBBO, particularly in times of market stress when customers need the liquidity most.

Citadel is an active participant on all options exchanges, including both customer priority exchanges and maker-taker exchanges. While we believe that customer priority exchanges generally better serve the interests of customers, particularly retail customers, we also compete aggressively on the maker-taker exchanges in the most actively traded options. We welcome competing market models, particularly those that attract new participants and make the options market more efficient.

II. Step-Up Mechanisms and an Access Fee Cap Should be Used to Prevent Excessive Market Access Fees

As described above, customer priority exchanges require market makers to make continuous two-sided markets across a wide range of options. The quotes produced by these market makers are immediately accessible by *any* market participant, whether retail, institutional or professional. To balance the risks and rewards inherent in these obligations, market makers are not always able to provide the most aggressive quote that they would otherwise provide exclusively to a retail customer. This could be because of risk constraints, exchange technology limitations or concerns of aggregate exposure in the market resulting from the sum of their required continuous quoting obligations. Additionally, in an anonymous marketplace, the width of the market represents the average expected market impact of all orders. The bid-ask spread of a market for purely retail customer orders would often be tighter. For these reasons, a market maker may be willing to "step-up" for a customer order and match the price of an away maker-taker exchange even though that market maker was not initially quoting at the NBBO.

Customer priority exchanges have implemented step-up mechanisms that offer this opportunity.[11] On these exchanges, when a customer order arrives and cannot execute because the receiving exchange is not quoting at the best price, before routing the order to another exchange displaying the best price, the receiving exchange will display the order to its participants for 1 second or less offering an opportunity to match, or improve on the best price and size displayed on other exchanges. When a market maker steps-up, the customer receives an

[11] All of these step-up mechanisms were adopted after prior review and approval by the Commission. See, e.g., Exchange Act Release Nos. 51544 (Apr. 14, 2005), 70 Fed. Reg. 20613 (Apr. 20, 2005) (Phlx); 53167 (Jan. 23, 2006) 71 Fed. Reg. 5094 (Jan.31, 2006) (CBOE); 57812 (May 12, 2008) 73 Fed. Reg. 28846 (May 19, 2008) (ISE).

CITADEL

execution at the NBBO or better, and the customer order avoids paying a substantial taker fee on a maker-taker exchange. Because step-up orders match or beat maker-taker exchange prices and allow customer orders to avoid maker-taker exchange fees, they result in a substantial price improvement opportunity for customer orders.[12] If step-up orders were eliminated, marketable retail customer option orders would have to be routed to the exchange displaying the best quoted price, even if that exchange is a maker-taker exchange that charges a substantial taker fee.

In the cash equities market, retail customer orders can be internalized by market makers at the NBBO, thereby avoiding substantial taker fees. Even with this market structure that allows for full internalization at the NBBO price, the Commission found it necessary to implement a stringent cap on the amount an equity market center may charge to access liquidity.

In the equities market, this access fee cap is \$0.003 per share, which today is equal to approximately .0176% of the average stock price for retail investors.[13] In the options markets, no such fee cap exists. Currently, ARCA imposes a take fee equivalent to \$0.0045 per share, or .266% of the average option price for retail investors.[14] ARCA's option access fee is thus approximately 15 times as large the equity market access fee on a relative basis.[15] Because retail customers are net takers of liquidity and market professionals are net liquidity providers, this represents a substantial wealth transfer from retail investors to proprietary trading firms.

In July 2008, Citadel filed the Fee Cap Petition urging the Commission to implement an access fee cap in the options market. We continue to believe that the Commission should adopt an access fee cap in the options market that is similar to the one the Commission imposed in the

---

12 The following example illustrates how step-up works in practice. Assume that CBOE's best offer is \$1.20 for 250 contracts, and ARCA is \$1.19 for 10 contracts and is alone at the national best offer. A customer market order to buy arrives at CBOE. CBOE will offer all CBOE market makers the opportunity to sell at \$1.19. If a CBOE market maker responds within 150 milliseconds and steps up to sell at \$1.19, CBOE executes the order with this market maker at no cost to the customer order, at the same price offered on ARCA. If no CBOE market maker steps up within 150 milliseconds, CBOE routes the order to ARCA, and ARCA will charge the customer order \$.45 per contract to buy at \$1.19.

13 In October 2009, Citadel estimates that the average stock execution price for retail investors was \$17.00.

14 In the second half of October 2009, Citadel estimates that the average option execution price for retail investors was \$1.69.

15 In other contexts, FINRA and the SEC have considered the fairness of fees as a percentage of the execution price. Currently, all broker-dealers are subject to the "fair pricing" requirement in effecting customer transactions (whether executed on an exchange or in the OTC market). See NASD Rules 2440 and IM-2440-1, FINRA Regulatory Notice 08-36 (July, 2008). In effect, FINRA's "5% Policy" on mark-ups represents a government-imposed cap on the pricing of securities transactions by broker-dealers when filling customer orders. This cap is determined as a percentage of the final price charged by the broker-dealer.

CITADEL

equity markets.[16] If the Commission decides to ban or limit the use of step-up mechanisms in the options markets, the need for a stringent access fee cap would become absolutely essential because step-up mechanisms are the primary tool available to allow customer orders to avoid high access fees.

The elimination of step-up orders would force retail customer orders to pay whatever taker fee a maker-taker exchange decides to impose. In the absence of a fee cap, at any time, with an effective upon filing rule change, a maker-taker exchange could impose a taker fee of just less than the minimum spread ($0.99 per contract or $.0099 per share). The exchange could then rebate a large portion of this fee to market professionals to subsidize a compressed artificial NBBO. Retail customer orders would then have to be routed to the maker-taker exchange and pay the outrageous fee. The exchange would then keep the spread between the taker fee it charged and the rebate it paid, the professional liquidity providers would enjoy the large rebate, and the retail customer would suffer the increased cost.

As customer order flow is forced to migrate to maker-taker exchanges, market makers would lose their incentives to undertake burdensome quoting obligations on customer priority exchanges, and would move to maker-taker exchanges that allow fair weather quoting. In time, maker-taker exchanges that allow fair weather quoting in the active options contracts of the day at opportune times will undermine the "customer priority" market structure that has served the best interests of retail customers for years.

With no step-up mechanism defense, there would be a race to the bottom as exchanges would have an overwhelming financial incentive to outdo each other and charge the maximum taker fee to fund maximum rebates that subsidize professional liquidity providers on the top of the book. Because retail customers are net takers of liquidity and market professionals are net liquidity providers, this would represent a substantial wealth transfer from retail investors to proprietary trading firms.[17]

Step-up mechanisms thus help ensure that customers have liquidity in less liquid option contracts. As discussed above, the number of listed option series traded is more than 30 times the number of listed equities traded, and most of the market volume in listed options is heavily concentrated in a small subset of series.

---

16 The fee cap for the cash equities market is a long-standing regulatory requirement. It is currently codified under Regulation NMS but was previously mandated under the so-called "ECN Display Alternative" no-action letters issued by the Commission staff. See Exchange Act Release No. 51808 (June 9, 2005), 70 Fed. Reg. 37496 (June 29, 2005); Instinet Corp, SEC No-Action Letter (public. Avail. Jan. 21, 1997).

17 Currently market makers and the customer priority exchanges cover any taker execution fees on behalf of retail investors, in large part due to their ability to control these costs via the step-up feature. The elimination of step-up would likely result in these fees being passed back directly to retail broker-dealers. Retail broker-dealers will likely be compelled to pass these fees to retail customers in the form of higher commissions.

CITADEL

Ensuring that market makers have an incentive to provide liquidity across all option series is thus critically important to customers. As discussed above, customer priority exchanges accomplish this goal by imposing substantial quoting obligations on market makers. Maker-taker exchanges, on the other hand, allow liquidity providers to be fair weather market makers who only quote if, when, and where they want.

If the Commission bans step-up orders, the customer priority exchanges would be forced to implement maker-taker fees and eliminate meaningful market maker quoting obligations.[18] Without step-up orders, market makers operating on maker-taker exchanges could cherry pick the most desirable orders in the market, in the most liquid options, at the most desirable times. Market makers would have little incentive to subject themselves to the substantial quoting obligations imposed by customer priority exchanges in good times and bad, only to have the most desirable orders siphoned off to maker-taker exchanges in good times.

We believe this end state would harm the retail customer experience in the options market—an experience that in recent years has been so positive that it has helped fuel the exponential growth of the market over the last few years.[19] With little quoting in less liquid options contracts, customers would have difficulty establishing positions in all but the most liquid options. Moreover, the liquidity of option contracts is not static and shifts over time and is based on market conditions. When a customer needs to close out an option position that is no longer in the small fraction of actively traded series, they will be hard pressed to find consistent liquidity and a fair price.[20]

---

18 *See* CBOE Comment Letter at p.9 (stating that banning step-up orders would "force" CBOE to take measures detrimental to "the many users who regularly get free executions and routing on [the CBOE]").

19 We applaud the SEC for taking steps in this decade to foster competition and to encourage the development of electronic markets, which have also fueled this growth.

20 Some have argued that maker-taker exchanges result in better prices for customers. These simplistic analyses assume that a maker-taker exchange always improves the market by $.01 per contract over customer priority exchanges. In our experience, in the current market structure, maker-taker exchanges improve the prevailing NBBO for a marketable retail customer order approximately 20% of the time across all penny classes. In addition, customer priority exchanges improve the prevailing NBBO approximately 5% of the time across all penny classes. As a result, on maker-taker exchanges, a retail customer order receives a better net price than on a customer priority exchange (better by $.01 minus the take fee) only 20% of the time. The remaining 80% of the time, the customer order receives a better net execution price on a traditional exchange (same or better price with no execution fee, compared to same price with a taker fee). The current market structure equilibrium allows customer orders to try to have their cake and eat it too—that is, a choice between higher fee maker-taker exchanges with subsidized aggressive fair weather quoting in actively traded options, and lower fee customer priority exchanges with mandated continuous quoting. As all exchanges migrate to a maker-taker model, however, liquidity will evaporate outside of the most active options series, and customer orders will pay higher fees all of the time because all exchanges will charge taker fees.

CITADEL

III. Option Step-Up Orders Do Not Raise the Same Concerns As Equity Flash Orders

The Proposal discusses several areas of potential concern implicated by the use of flash orders. We believe that these concerns do not apply with equal force in the options market because of the way step-up orders function in the options market.

A. Step-Up Orders Do Not Create a Two-Tiered Market; They Flatten Two-Tiered Pricing

According to the Proposal, the Commission is concerned that the public does not receive the information that an order has been flashed to some market participants, while only those with a market's individual data feed have "access to the improved price information."[21] The Commission is concerned that this creates a "two-tiered" market because users and respondents of flash orders engage in price discovery privately, away from the public at large.

Options step-up orders do not create a two-tiered market. Step-up orders are largely used to execute small retail customer orders on a customer priority exchange at the NBBO posted by a maker-taker exchange, without paying taker fees charged by the maker-taker exchange.[22] With respect to any given options exchange, the request for a market participant to step up and match the price of an away market is disseminated to members of that exchange pursuant to rules approved by the Commission, not to any select group of exchange data subscribers or professional traders.

To the extent a public customer order is filled on a customer priority exchange as a result of a step-up order, the customer is materially better off than if the order had been routed to the maker-taker exchange, and executed at the same price and incurred a taker fee.[23] The step-up order mechanism thereby provides for material "price improvement" for the benefit of the public customer order. Without a step-up mechanism, exchanges not quoting at the NBBO would be forced to route public customer orders to an exchange quoting at the NBBO, regardless of whether the quote includes an imbedded taker fee and regardless of the size of the taker fee.

B. Step-Up Orders Do Not Discourage Quote Competition; They Encourage Residual Liquidity at a Lower Cost

The Proposal explains that because flash orders facilitate executions away from the market initially displaying NBBO, they may "undermine the incentives to display limit orders

---

21 Proposal at 48,636.

22 If necessary, Citadel would support a requirement that step-up orders only be available to execute customer orders.

23 This scenario is what Commissioner Parades was referring to when he stated that "flash orders may be executed for lower fees than markets charged for executing against displayed liquidity." See Troy A. Paredes, Commissioner, Statement Before the Commission Open Meeting (Sept. 17, 2009), available at http://sec.gov/news/openmeetings.shtml.

CITADEL

and to quote competitively," to the detriment of the national market system.[24] In the listed options market, the concern that market participants would be less inclined to use limit orders because of step-up orders is a largely theoretical one. It simply does not reflect the reality of options trading as it exists today.

Unlike the cash equities market, in most options contracts there is no meaningful "book" of public customer limit orders resting at the "top of the book." Because options are a derivative of the underlying equity and accurate pricing of options requires complex pricing models and powerful technology, public customers are generally not in a position to maintain their limit orders at the top of the book in many options.

The Proposal also notes that market participants who respond to flash orders enjoy the so-called "last-mover" advantage.[25] The Commission is apparently concerned that rather than "displaying their orders or quotations in advance of incoming marketable order flow," some market participants may simply choose to wait and respond to flash orders.[26] This concern is muted in the options market because of the inherent quoting incentives that derive from the structure of the options market.

In the equity markets, market makers can consistently disseminate small and wide quotes and still trade with desirable customer orders by internalizing the orders off exchange. In the options market, because customer orders have to be routed to an exchange, market makers generally have to quote aggressively if they want to interact with desirable customer order flow. To help reinforce these incentives, Citadel would support a requirement that a market maker not be permitted to execute a step-up order unless the market maker is quoting at the exchange BBO at the time the order offered for step-up arrives at the exchange.

C. *Step-Up Orders Do Not Pose a Risk of Front Running; They Facilitate Order Interaction*

Finally, the Proposal expresses the concern that submitters of flash orders potentially face the risk of being front run by recipients of flash orders who seek to gain an "information advantage" during the brief time that the order is flashed.[27] In our view, there is simply no basis for this concern in the options market, because step-up orders contain no meaningful information that give rises to an opportunity for front running in the first place.

As discussed above, step-up orders are used primarily as a means of offering an opportunity for small retail customer orders to avoid access fees. Indeed, the median size of an

---

24 Proposal at 48,636.

25 *Id.*

26 *Id.*

27 *Id.* at 48,637.

CITADEL

order offered for step-up on CBOE is 8 contracts.[28] Because options are a derivative of the underlying equity and thus are priced primarily based on the current price of the equity, small retail orders do not reflect information that would cause someone to decide to trade ahead of these orders. Moreover, in the options market, market professionals compete to interact with customer orders, not avoid them. When a step-up is offered, market makers thus have no financial incentive to race ahead of the customer order and trade in front of it. In this regard, the step-up order process is similar to other price-improvement auctions and facilitation mechanisms in place today on various options exchanges.[29]

IV. The Commission Should Consider Less Drastic Alternatives to an Options Step-Up Order Ban

If the Commission is not convinced that the use of options step-up orders as they are currently designed is beneficial to public investors, the Commission should explore other alternatives to a total ban. First, the Commission could permit only step-up mechanisms that guarantee the customer a fill at the NBBO before an order is offered for step-up, thereby eliminating the risk of any missed trading opportunity by the customer.

Second, the Commission could explore ways of permitting dissemination of step-up orders to investors as quotes through the public market data. The traditional policy concerns about disruptive patterns of locked and crossed markets, as articulated under Regulation NMS and the Options Linkage Plan, should not apply to step-up orders because, by definition, they last no more than a second.[30]

Alternatively, because the majority of the public debate regarding flash orders has focused on the equity markets, and because of the many fundamental differences between the equity and options markets, the Commission might also consider acting on the Proposal to ban flash orders in the equity markets, and defer action on options step-up orders until the Commission has had time to more carefully study the impact of step-up orders in the options markets and take action on an options market fee cap.

V. Conclusion

The U.S. listed options market has grown substantially over the past several years because the options market is designed to focus on the needs of customers—and particularly retail customers. From 2003 through 2008, customer volume reported by the Options Clearing Corporation grew by more than 245%. In contrast, during the same period, volume in European equity options grew by just 23%.

---

28 CBOE Letter at 7-8.

29 *See* Proposal at 48,638.

30 *See* CBOE Comment Letter at 11-12.

CITADEL

Options step-up orders are an important pro-customer mechanism that has contributed to this growth of the U.S. options market. Step-up mechanisms allow customer orders to be executed at the best price and at a lower cost, while helping preserve a precarious balance between competing exchange pricing models. For these reasons, we urge the Commission to allow the continued use of options step-up mechanisms.

The Commission should also help preserve the current pro-customer options market structure by implementing a market access fee cap in the options market for the reasons described above and in our Fee Cap Petition. If the Commission decides to ban or limit the use of step-up mechanisms in the options markets, the need for a stringent access fee cap would become absolutely essential because step-up mechanisms are the primary tool available to allow customer orders to avoid high access fees.

If you have any questions, please do not hesitate to contact me at (312) 395-3115.

Sincerely,

John C. Nagel
Managing Director and Deputy General Counsel

cc: Hon. Mary Schapiro, Chairman
Hon. Luis A. Aguilar, Commissioner
Hon. Kathleen L. Casey, Commissioner
Hon. Troy A. Paredes, Commissioner
Hon. Elisse B. Walter, Commissioner
Robert W. Cook, Director, Trading and Markets
James Brigagliano, Deputy Director, Trading and Markets
David Shillman, Associate Director, Trading and Markets
Elizabeth King, Associate Director, Trading and Markets
Daniel Gray, Senior Special Counsel, Trading and Markets
Henry Hu, Director, Risk, Strategy and Financial Innovation