SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-64599; File No. SR-C2-2011-008)  
June 3, 2011

Self-Regulatory Organizations; C2 Options Exchange, Incorporated; Order Instituting Proceedings to Determine Whether to Approve or Disapprove a Proposed Rule Change to Allow the Listing and Trading of a P.M.-Settled S&P 500 Index Option Product

I. Introduction

On February 28, 2011, C2 Options Exchange, Incorporated (“C2” or “Exchange”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)1 and Rule 19b-4 thereunder,2 a proposed rule change to permit the listing and trading of p.m.-settled options on the Standard & Poor’s 500 (“S&P 500”) index on C2. The proposed rule change was published for comment in the Federal Register on March 8, 2011.3 The Commission received 7 comments on the proposal.4 C2 submitted a response to comments on April 20, 2011.5 The Commission extended the time period in which to either approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether to approve or disapprove the proposed rule change,

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5 See Letter to Elizabeth M. Murphy, Secretary, Commission, from Joanne Moffic-Silver, Secretary, C2, dated April 20, 2011 (“C2 Letter”).
to June 6, 2011.6 This order institutes proceedings to determine whether to approve or
disapprove the proposed rule change.

Institution of these proceedings, however, does not indicate that the Commission has
reached any conclusions with respect to the proposed rule change, nor does it mean that the
Commission will ultimately disapprove the proposed rule change. Rather, as addressed below,
the Commission desires to solicit additional input from interested parties, including relevant data
and analysis, on the issues presented by the proposed rule change. In particular, the Commission
is interested in receiving additional data and analysis relating to the potential effect that proposed
p.m.-settled index options could have on the underlying cash equities markets.

II. Description of the Proposal

In its filing, C2 proposed to permit the listing and trading of S&P 500 index options with
third-Friday-of-the-month (“Expiration Friday”) expiration dates for which the exercise
settlement value would be based on the index value derived from the closing prices of
component securities (“p.m.-settled”). The proposed contract would use a $100 multiplier, and
the minimum trading increment would be $0.05 for options trading below $3.00 and $0.10 for all
other series. Strike price intervals would be set no less than 5 points apart. Consistent with
existing rules for index options, the Exchange would allow up to twelve near-term expiration
months, as well as LEAPS. Expiration processing would occur on the Saturday following
Expiration Friday. The product would have European-style exercise, and, as proposed, would
not be subject to position limits, though trading would be subject to C2’s enhanced surveillance
and reporting requirements for index options.

2011).
The Exchange proposed that the proposed rule change be approved on a pilot basis for a period of 14 months. As part of a pilot program, the Exchange would submit a pilot program report to the Commission at least 2 months prior to the expiration date of the program (the “annual report”). The annual report would contain an analysis of volume, open interest, and trading patterns. The analysis would examine trading in the proposed option product as well as trading in the securities that comprise the S&P 500 index. In addition, for series that exceed certain minimum open interest parameters, the annual report would provide analysis of index price volatility and share trading activity. The annual report would be provided to the Commission on a confidential basis. In addition to the annual report, the Exchange would provide the Commission with periodic interim reports while the pilot is in effect.

III. Comment Letters

The Commission received 7 comment letters on this proposal addressing several issues, including the reintroduction of p.m. settlement; similarity with the Chicago Board Options Exchange’s (“CBOE”) options on the S&P 500 index that are a.m.-settled (“SPX options”); position limits; and exclusive product licensing.7

A. Reintroduction of P.M. Settlement

Two commenters raise concerns over the reintroduction of p.m. settlement on a potentially popular index derivative and the possible impact that doing so could have on the underlying cash equities markets.8 One commenter urges the Commission to consider why markets went to a.m. settlement in the early 1990s and opines that hindsight supports the

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7 See supra note 4.
8 See ISE Letter 1, supra note 4, at 4-5; ISE Letter 2, supra note 4, at 2-3; and Mayne Letter 1, supra note 4, at 1-2.
conclusion that a.m. settlement has been good for the markets. 9 While acknowledging that the answer is not clear, the commenter asks the Commission to consider whether it is now safe to return to the dominance of p.m.-settled index options and futures.10 However, this commenter submitted a subsequent letter in which he agrees with the Exchange that “conditions today are vastly different” from those that drove the transition to a.m. settlement.11 The commenter concludes that C2’s proposal should be approved on a pilot basis, which will allow the Commission to collect data to closely analyze the impact of the proposal.12

The other commenter raised concerns and described the history behind the transition to a.m. settlement and criticized C2 for trivializing that history.13 This commenter states that a mainstream return to “discredited” p.m. settlement for index options would “risk undermining the operation of fair and orderly financial markets.”14 In particular, the commenter notes that experience with the market events of May 6, 2010 demonstrates that the current market structure struggles to find price equilibriums, and that participants flock to the same liquidity centers in time of stress.15 The commenter believes that C2’s proposal would exacerbate liquidity strains and concludes that allowing S&P 500 index options to be based on closing settlement prices, even on a pilot basis, would threaten to undermine the Commission’s efforts to bolster national

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9 See Mayne Letter 1, supra note 4, at 1.
10 See id. at 2.
11 See Mayne Letter 2, supra note 4, at 1.
12 See id.
13 See ISE Letter 1, supra note 4, at 4.
14 Id.
15 See id.
market structure and would re-introduce the potential for additional market volatility at expiration.\(^{16}\)

Taking the opposite view, two commenters urge the Commission to approve the proposal on a pilot basis.\(^{17}\) One commenter asserts its belief that C2’s proposal will not cause greater volatility in the underlying securities of the S&P 500 index.\(^{18}\) This commenter opines that whether an options contract is p.m.-settled as opposed to a.m.-settled is not a contributing factor to volatility and noted that there is more liquidity in the securities underlying the S&P 500 index at the close compared to the opening.\(^{19}\) The commenter believes that exchanges are well equipped to handle end-of-day volume and that existing p.m.-settled products (e.g., OEX) do not, in and of themselves, contribute to increased volatility.\(^{20}\) The other commenter states that the reintroduction of p.m. settlement is long overdue and would attract liquidity from dark pools, crossing mechanisms, and the over-the-counter markets.\(^{21}\)

C2 submitted a response to comments.\(^{22}\) In its response, C2 argues that the concerns from 18 years ago that led to the transition to a.m. settlement for index derivatives have been largely mitigated.\(^{23}\) C2 argues that expiration pressure in the underlying cash markets at the close has been greatly reduced with the advent of multiple primary listing and unlisted trading

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16 See id. at 5. The commenter also noted that recently-imposed circuit breakers in the cash equities markets do not apply in the final 25 minutes of trading.
17 See IMC Letter, supra note 4, at 1-2 and JP Letter, supra note 4.
18 See IMC Letter, supra note 4, at 1.
19 See id.
20 See id. at 2.
22 See C2 Letter, supra note 5.
23 See id. at 4.
privilege markets, and that trading is now widely dispersed among many market centers.\textsuperscript{24} In particular, C2 argues that opening procedures in the 1990s were deemed acceptable to mitigate one-sided order flow driven by index option expiration and so today’s more sophisticated automated closing procedures should afford a similar, if not greater, level of comfort.\textsuperscript{25} Specifically, C2 notes that many markets, notably the Nasdaq Stock Market and the New York Stock Exchange (“NYSE”), now utilize automated closing cross procedures and have closing order types that facilitate orderly closings, and that these closing procedures are well-equipped to mitigate imbalance pressure at the close.\textsuperscript{26} In addition, C2 believes that after-hours trading now provides market participants with an alternative to help offset market-on-close imbalances.\textsuperscript{27} C2 also notes that for roughly 5 years (1987-1992) CBOE listed both a.m. and p.m.-settled options on the S&P 500 index and did not observe any related market disruptions during that period in connection with the dual a.m.-p.m. settlement.\textsuperscript{28} Finally, C2 believes that p.m.-settled options predominate in the over-the-counter (“OTC”) market, and C2 is not aware of any adverse effects in the underlying cash markets attributable to the considerable volume of OTC trading.\textsuperscript{29}

\textsuperscript{24} See id.
\textsuperscript{25} See id.
\textsuperscript{26} See id.
\textsuperscript{27} See id. at 2.
\textsuperscript{28} See Notice, supra note 3, at 12776.
\textsuperscript{29} See id.
B. Similarity with SPX

One commenter believes that separate a.m. and p.m.-settled S&P 500 index options could potentially bifurcate the market for CBOE’s existing a.m.-settled SPX contract.\textsuperscript{30} This commenter notes that the SPX, which trades only on CBOE, accounts for 60% of all index options trading, and argued that the sole difference in settlement between SPX on CBOE and the proposed S&P 500 index options on C2 (i.e., a.m. vs. p.m. settlement) is a “sham” that is intended to “keep them non-fungible,” which would “make a mockery of Section 11A of the Act.”\textsuperscript{31} The commenter states that the objectives of Section 11A are reflected in a national market system plan for options that requires exchanges to prevent trading through better priced quotations displayed on other options exchanges, and that making a p.m.-settled S&P 500 index option non-fungible with CBOE’s SPX would allow the CBOE group to establish two “monopolies” in S&P 500 options, one floor-based (CBOE) and one electronic (C2).\textsuperscript{32} The commenter also contends that the proposal is designed to protect CBOE’s floor-based SPX trading without having to accommodate the more narrow quotes that it believes would be likely to occur on C2 in an electronically-traded p.m.-settled product.\textsuperscript{33}

Another commenter offers a similar opinion and asserts that CBOE and C2 should trade a fungible S&P 500 index option in order to address what the commenter describes as “huge

\textsuperscript{30} See ISE Letter 1, supra note 4, at 4. In its comment letter, ISE also noted that, in 2010, the Division opposed an ISE proposal to list index options on both a full-size DAX and a mini-DAX, which could have created parallel markets for the same product. See id. at 3.

\textsuperscript{31} See id. at 2. See also ISE Letter 2, supra note 4, at 3-4.

\textsuperscript{32} See ISE Letter 1, supra note 4, at 3.

\textsuperscript{33} See id.
customer-unfriendly spreads” in SPX.\textsuperscript{34} The commenter also argues that if the CBOE group really believes p.m. settlement is superior to a.m. settlement, then CBOE should file to change SPX to p.m. settlement so that the product traded on CBOE would be fungible with that proposed to be traded on C2.\textsuperscript{35}

In response, C2 argues that the difference between a.m.-settled and p.m.-settled S&P 500 index options would be a material term and that it is indisputable that C2’s proposed S&P 500 index option could not be fungible with, nor could it be linked with, CBOE’s SPX option.\textsuperscript{36}

C. Position Limits

Under C2’s proposal, position limits would not apply to S&P 500 index options traded on its market. One commenter argues that position limits should apply to C2’s proposed p.m.-settled S&P 500 index options.\textsuperscript{37} The commenter notes that, since 2001 when the Commission approved a CBOE rule filing to remove all position limits for SPX options,\textsuperscript{38} the Commission has generally expected exchanges to apply a model, typically the Dutt-Harris model, to determine the appropriate position limits for new index options products.\textsuperscript{39} Because C2 claims

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  \item \textsuperscript{34} See Trader Letter, supra note 4, at 1; see also JP Letter, supra note 4, at 1.
  \item \textsuperscript{35} See Trader Letter, supra note 4, at 1.
  \item \textsuperscript{36} See C2 Letter, supra note 5, at 3.
  \item \textsuperscript{37} See ISE Letter 1, supra note 4, at 6.
  \item \textsuperscript{39} See ISE Letter 1, supra note 4, at 6. In a 2005 paper from Hans Dutt and Lawrence Harris, titled “Position Limits for Cash-Settled Derivative Contracts,” the authors developed a model to determine appropriate position limits for cash-settled index derivatives. The authors concluded that the then-prevailing position limits were lower than the model suggested and would be appropriate for many derivative contracts. The authors also concluded, however, that position limits are not as important for broad-based index derivative contracts that are cash settled because they are composed of highly
\end{itemize}
that the product is new and non-fungible, the commenter argues that the Commission should apply the Dutt-Harris model to require C2 to impose position limits on p.m.-settled S&P 500 index options.\textsuperscript{40}

In its response to comments, C2 notes that the Dutt-Harris paper acknowledges that S&P 500 options have, and should have, extraordinarily large position limits and Dutt-Harris observes that position limits are most useful when market surveillance is inadequate.\textsuperscript{41} C2 argues that position limits suggested by the Dutt-Harris model for an S&P 500 index option would be so large as to be irrelevant and that positions of such magnitude would attract scrutiny from surveillance systems that would, as a consequence, serve as an effective substitute for position limits.\textsuperscript{42} Further, C2 notes the circumstances and considerations relied upon by the Commission when it approved the elimination of position limits on SPX, including the enormous capitalization of the index and enhanced reporting and surveillance for the product.\textsuperscript{43} Thus, C2 argues that the absence of position limits on its proposed p.m.-settled S&P 500 index options would not be inconsistent with the Dutt-Harris paper.\textsuperscript{44}

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\textsuperscript{40} See ISE Letter 1, supra note 4, at 6.  \\
\textsuperscript{41} See C2 Letter, supra note 5, at 5.  \\
\textsuperscript{42} See id.  \\
\textsuperscript{43} See id. at 5-6.  C2 represents in its response letter that it would monitor trading in p.m. settled S&P 500 index options in the same manner as CBOE does for other broad-based index options with no position limits. See id. at 6.  \\
\textsuperscript{44} See id.  
\end{flushright}
D. CBOE’s Exclusive License with S&P

CBOE has an exclusive license agreement with S&P to list and trade index options on the S&P 500 index as well as the Dow Jones Industrial Average. One commenter reiterates its longstanding concern with CBOE’s exclusive licensing agreement for S&P 500 index options.\footnote{See ISE Letter 1, supra note 4, p. 6-7.} This commenter argues that ending exclusive licenses would spur competition, increase volume, and lower costs.\footnote{See id.} C2 responded by arguing that restricting the ability to license an index would hurt innovation and disincentivize the development of new indexes in the future.\footnote{See C2 Letter, supra note 5, at 6-7.} C2 also believes that this issue is best addressed by intellectual property law, not federal securities law.\footnote{See id.}

IV. Proceedings to Determine Whether to Approve or Disapprove SR-C2-2010-008 and Grounds for Disapproval under Consideration

In view of the issues raised by the proposal, the Commission has determined to institute proceedings pursuant to Section 19(b)(2) of the Act to determine whether to approve or disapprove C2’s proposed rule change.\footnote{15 U.S.C. 78s(b)(2).} Institution of such proceedings appears appropriate at this time in view of the legal and policy issues raised by the proposal. Institution of proceedings does not indicate that the Commission has reached any conclusions with respect to any of the issues involved. Rather, the Commission seeks and encourages interested persons to comment

\footnote{15 U.S.C. 78s(b)(2). Section 19(b)(2)(B) of the Act provides that proceedings to determine whether to disapprove a proposed rule change must be concluded within 180 days of the date of publication of notice of the filing of the proposed rule change. The time for conclusion of the proceedings may be extended for up to an additional 60 days if the Commission finds good cause for such extension and publishes its reasons for so finding or if the self-regulatory organization consents to the extension.}
on the proposed rule change and provide the Commission with data to support the Commission’s analysis as to whether to approve or disapprove the proposal.

Pursuant to Section 19(b)(2)(B) of the Act, the Commission is providing notice of the grounds for disapproval under consideration. In particular, Section 6(b)(5) of the Act requires that the rules of an exchange be designed, among other things, to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, to protect investors and the public interest.

C2’s proposal would reintroduce p.m. settlement for a cash-settled derivatives contract based on a broad-based index. When cash-settled index options were first introduced in the 1980s, they generally utilized p.m. settlement. However, as effects on the underlying cash equities markets became associated with the expiration of p.m.-settled index derivatives, concern was expressed with the potential impact of p.m.-settled index derivatives on the underlying cash equities markets. In particular, concentrated trading interest became associated with the potential for sharp price movements on Expiration Friday, particularly during the “triple-witching” hour on the third Friday of March, June, September and December when index options, index futures, and options on index futures expired concurrently. To mitigate these concerns, the Commission concluded that it was in the best of investors and the markets to require, generally,

that cash-settled index options be a.m.-settled in order to ameliorate the price effects associated with expirations of S&P 500 index options.\footnote{See Securities Exchange Act Release Nos. 24367 (April 17, 1987), 52 FR 13890 (April 27, 1987) (SR-CBOE-87-11) (order approving a proposal for S&P 500 index options with an exercise settlement value based on an index value derived from opening, rather than closing, prices) and 30944 (July 21, 1992), 57 FR 33376 (July 28, 1992) (SR-CBOE-92-09) (order approving CBOE’s proposal relating to position limits for SPX index options based on the opening price of component securities). In the 1992 order, the Commission identified several benefits to a.m. settlement for SPX index options. First, the Commission noted that a.m. settlement can help facilitate the development of contra-side interest to alleviate order imbalances. The Commission explained that, in contrast, with regard to p.m. settled options, firms providing contra-side interest will not necessarily assume overnight or weekend position risks because they have the rest of the day to liquidate or trade out of their positions. Second, the Commission explained that with regard to a.m. settled options, even if the opening price settlement results in a significant change in underlying stock prices, participants in the markets for those stocks have the remainder of the day to adjust to those price movements and to determine whether those movements reflect changes in fundamental values or short-term supply and demand conditions. Third, the Commission stated that a.m.-settled options allow corresponding stock positions associated with expiring SPX contracts to be subject to NYSE’s opening process, which provides for the orderly entry, dissemination, and matching of orders. \textit{See also} Securities Exchange Act Release No. 45956 (May 17, 2002), 67 FR 36740, 36742-43 (File No. S7-15-01) (adopting release concerning cash settlement and regulatory halt requirements for security futures products) (reaffirming the Commission’s view of the advantages of a.m. settlement).}

The Commission believes that the proposal to allow p.m. settlement of an option on the S&P 500 index raises questions as to the potential effects on the underlying cash equities markets, and thus as to whether it is consistent with the requirements of Section 6(b)(5) of the Act, including whether the proposal is designed to prevent manipulation, promote just and equitable principles of trade, perfect the mechanism of a free and open market and the national market system, and protect investors and the public interest.

Accordingly, the Commission solicits additional analysis and data concerning whether the Exchange’s proposal is consistent with the Act. Specifically, the Commission now seeks additional input to inform its evaluation of whether reintroducing p.m. settlement for C2’s proposed options on the S&P 500 index and establishing a precedent that could lead to the reintroduction of p.m. settlement on index futures, could impact volume and volatility on the underlying cash equities markets at the close of the trading day, and the potential consequences this might have for investors and the overall stability of the markets.57

Mercantile Exchange moved the S&P 500 futures contract’s settlement value to opening prices on the delivery date).


57 Data and analysis on p.m. settlement of index derivatives is somewhat dated since index derivatives, with few exceptions, have primarily been a.m. settled for some time. Despite its general preference for a.m. settlement for cash-settled index options, the Commission has, over the past few years, approved limited requests, initially on a pilot basis, for p.m. settlement for some cash-settled options. See, e.g., Securities Exchange Act Release No. 61439 (January 28, 2010), 75 FR 5831 (February 4, 2010) (SR-CBOE-2009-087) (order approving a pilot program to modify FLEX option exercise settlement values and minimum value sizes). In addition, index options based on the Standard & Poor’s 100 index (“OEX”) have been p.m.-settled since 1983, though no futures on that index trade at this time.
The Commission is asking that commenters address the merits of C2’s statements in support of its proposal as well as the comments received on the proposal, in addition to any other comments they may wish to submit about the proposed rule change. Specifically, the Commission is considering and requesting comment on the following issues:

1. What are commenters’ views with respect to the operation and structure of the markets today in comparison to the operation and structure at the time of the shift to a.m. settlement of cash-settled index options, and whether the current operation and structure of the markets support, or do not support, allowing S&P 500 index options on C2 to be p.m.-settled? Please be specific in your response.

2. In particular, what are commenters’ views on the ability of the closing procedures currently in place on national securities exchanges to manage a potential increase in volume, and potentially an increase in one-sided volume, at the close on Expiration Fridays if derivatives on the S&P 500 index were p.m.-settled?

3. Even if commenters believe that the current closing procedures would be sufficient, what are commenters’ views as to the incentives or inclination of market participants to offset liquidity imbalances at the close of trading on Expiration Friday?

4. What are commenters’ views on whether volatility or the potential for market disruptions would be more likely to be caused by or connected with p.m settlement of cash-settled index derivatives compared to a.m. settlement?

5. What are commenters’ views on the potential impact, if any, on the underlying cash equities markets, particularly at the close, if the futures markets introduce a p.m.-settled future subsequent to C2 introducing a p.m.-settled S&P 500 index option? If commenters
think there may be an impact, do changes in market structure mitigate or exacerbate that impact relative to the experience pre-1987 when p.m. settlement was standard? Please provide data in support of your conclusion.

6. How has trading and volatility on Expiration Fridays, in particular during the open and during the close, and particularly on the quarterly expiration cycle (i.e., December, March, June, and September) changed over the last 30 years? Please provide data to support your answer. How much of the change do commenters think is attributable to the transition to a.m. settlement for cash-settled index options?

7. If given the opportunity to trade both an a.m. and a p.m.-settled S&P 500 index option, how would market participants react and what might trading in each product look like?

8. To what extent do market participants currently trade S&P 500 index options OTC with p.m. settlement? To what extent would market participants currently trading S&P 500 index options in the OTC market consider switching to a p.m.-settled standardized option on the S&P 500 index?

9. Finally, the Commission requests any addition data or analysis that commenters think may be relevant to the Commission’s consideration of C2’s proposal for p.m.-settled options on the S&P 500 index.

V. Request for Written Comments

The Commission requests that interested persons provide written submissions of their views, data, and arguments with respect to the issues identified above, as well as any others they may have identified with the proposal. In particular, the Commission invites the written views of interested persons concerning whether the proposed rule change is inconsistent with Section
6(b)(5) or any other provision of the Act, or the rules and regulations thereunder. Although there do not appear to be any issues relevant to approval or disapproval which would be facilitated by an oral presentation of views, data, and arguments, the Commission will consider, pursuant to Rule 19b-4, any request for an opportunity to make an oral presentation. 58

Interested persons are invited to submit written data, views, and arguments regarding whether the proposed rule change should be approved or disapproved by [insert date 30 days from publication in the Federal Register]. Any person who wishes to file a rebuttal to any other person’s submission must file that rebuttal by [insert date 45 days from publication in the Federal Register]. Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission’s Internet comment form (http://www.sec.gov/rules/sro.shtml); or
- Send an e-mail to rule-comments@sec.gov. Please include File Number SR-C2-2011-008 on the subject line.

Paper comments:

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, Station Place, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-C2-2011-008. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your

comments more efficiently, please use only one method. The Commission will post all comments on the Commission’s Internet website (http://www.sec.gov/rules/sro.shtml). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission’s Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make publicly available. All submissions should refer to File Number SR-C2-2011-008 and should be submitted on or before [insert date 30 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.59

Cathy H. Ahn
Deputy Secretary

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