SECURITIES AND EXCHANGE COMMISSION (Release No. 34-67992; File No. SR-CBOE-2012-095)

October 5, 2012

Self-Regulatory Organizations; Chicago Board Options Exchange, Incorporated; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Relating to Closing Rotation Procedures for S&P 500 Index Options

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"), and Rule 19b-4 thereunder, notice is hereby given that on September 28, 2012, Chicago Board Options Exchange, Incorporated ("Exchange" or "CBOE") filed with the Securities and Exchange Commission (the "Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Exchange has designated the proposal as a "non-controversial" proposed rule change pursuant to Section 19(b)(3)(A) of the Act³ and Rule 19b-4(f)(6) thereunder. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. <u>Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed</u> <u>Rule Change</u>

The filing proposes to adopt Interpretation and Policy .06 under CBOE Rule 6.2B relating to closing rotation procedures to determine the month-end closing price for each series of S&P 500 Index options based on the theoretical fair value of such series. The text of the proposed rule change is available on the Exchange's website at http://www.cboe.com/AboutCBOE/CBOELegalRegulatoryHome.aspx, at the principal office of the Exchange, and at the Commission's Public Reference Room.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ 15 U.S.C. 78s(b)(3)(A)(iii).

⁴ 17 CFR 240.19b-4(f)(6).

II. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change</u>

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis</u> for, the Proposed Rule Change

1. Purpose

The purpose of the proposed rule change is to codify and formalize the process by which, at each month-end, the closing price of each series of S&P 500 Index ("SPX") options are aligned with the closing value of (i) the underlying stock index in the cash market, and (ii) the related SPX futures contracts traded on the Chicago Mercantile Exchange ("CME").

Background

Beginning in December 1999, the CME instituted a special settlement procedure to determine a fair value settlement price of its domestic stock index futures for the December month-end based on the closing value of the underlying stock index, rather than the actual closing price of the index futures contract.⁵ The fair value of each index futures contract is calculated based on the value of the underlying stock index as of the cash market close at 3:00 p.m.,⁶ even though futures trading continues until 3:15 p.m. For these month-end settlement days, this 3:00 p.m. theoretical fair value replaces the actual 3:15 p.m. final trading price as the

The CME originally instituted this practice for the December 31, 1999 year-end, but has adopted the practice for each month-end closing date since January 2001.

⁶ All times referred to herein are Chicago time.

settlement value of the stock index futures contract for all purposes—including account value reporting and end-of-day variation margin calls.⁷

The Exchange understands that the CME created this fair value settlement price at the request of certain institutional investors. These institutional investors require an independent third-party valuation of the fair value of their futures positions as of the 3:00 p.m. close of the underlying cash markets. Many market participants are active in both the futures and cash markets and want the values of their futures positions to align with the value of their underlying cash market positions. If the month-end settlement price in their stock index futures positions were based on the 3:15 p.m. close of futures trading, while the month-end closing price of their cash market positions in the stock index were based on the 3:00 p.m. cash market close, tracking error would likely occur as 3:15 p.m. futures prices reflect information that became available after the 3:00 p.m. cash market close. This tracking error due to the difference in closing time

Stock index products on the [CME] normally close and settle fifteen minutes after the daily close of trading in cash equities. The cash/futures basis may be affected to the extent that futures may fluctuate – sometimes sharply – during those final fifteen minutes. As such, this may become a difficulty for institutional traders practicing coordinated cash/futures strategies. Still, the opportunity to lay off equity market exposure during those fifteen minutes subsequent to the cash close has proven quite beneficial. The use of [fair value] settlement procedures is intended to address this so-called "tracking error" while still permitting trade to continue for fifteen minutes past the 3:00 p.m. cash close. Conceptually, the fair value settlement is determined when the cash market closes at 3:00 p.m., since any new information following 3:00 p.m. will not affect the closing price of the stocks and the indexes. However, information or events subsequent to the cash close may still impact futures prices. Market participants should be aware of the possibility that futures may trade at prices apart from fair value settlement prices between 3:00 p.m. and the close of the market at 3:15 p.m. on days on which [fair value] settlement procedures are applied.

See generally CME Group, Month-End Fair Value Procedures, <u>available at http://www.cmegroup.com/trading/equity-index/fairvaluefaq.html</u>.

The CME has explained the reason for maintaining its 3:00 p.m. fair value procedure as follows:

would cause these institutional investors' financial reporting to misrepresent their actual overall portfolio performance.

The market for SPX futures and the market for SPX options are highly interconnected. Many investors in SPX options traded on the Exchange are also active in SPX futures contracts traded on the CME, hedging positions in one with positions in the other. In fact, investors often calculate the value of SPX options with reference to the value of the related SPX futures. Since the CME began its month-end fair value procedure in December 1999, the Exchange determined that it would be disruptive to fair and orderly markets to allow the closing prices of SPX options at month-end (based on the actual 3:15 p.m. Exchange close) to significantly diverge from the settlement value of the related SPX futures (determined based on the fair value at the 3:00 p.m. cash market close). Such a divergence would cause numerous difficulties for investors active in both SPX options and SPX futures, including: (i) month-end portfolio reports would misrepresent an investor's overall positions because the value of the investor's SPX options and SPX futures positions would reflect different moments in time, falsely indicating tracking error or the level of offsetting hedges, and (ii) an investor that is perfectly hedged between its SPX options and its SPX futures positions could nonetheless (A) be called for additional unnecessary margin, or (B) have necessary margin returned to them, because the futures settlement value (and therefore margin calculation) was based on the 3:00 p.m. fair value, while the SPX options closing prices were based on the actual 3:15 p.m. Exchange close.

One potential approach to prevent this divergence would have been, on the last business day of each month, to end trading in SPX options series at 3:00 p.m. This would cause the closing prices on the Exchange to naturally align with the 3:00 p.m. fair value assigned to SPX

futures by the CME. However, the Exchange determined that this would itself be disruptive, as it would result in the market for SPX futures on the CME being open for trading at a time when the market for SPX options on the Exchange was closed. This misalignment would disrupt the trading activities of many market participants, leaving them unable to actively hedge their SPX futures positions in SPX options. The Exchange therefore adopted a practice to align the closing price of SPX options with the settlement value of SPX futures.

Current Procedures

Throughout each trading day, the Exchange disseminates bid and offer quotations in each series of SPX options traded on the Exchange. Upon receipt of the final quotations from the Exchange, the Options Clearing Corporation ("OCC") determines the final closing price of each series of SPX options by calculating the midpoint between the final bid and final offer quotations. Generally, the final quotations disseminated by the Exchange on each day reflect the final quotations as of 3:15 p.m. However, pursuant to Exchange Rules 6.2, 6.2A, 6.2B and 24.13, the Exchange determined to deviate from normal rotation policy and procedure in the interest of a fair and orderly markets on those month-end business days when the CME adopted a 3:00 p.m. fair value as the settlement price. On these days, the Exchange holds special non-trading closing rotations to determine the closing price of each SPX options series based on the theoretical fair value at the 3:00 p.m. cash market close. After the 3:15 p.m. Exchange close,

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The Exchange has kept the market informed of this procedure through frequent Regulatory Circulars. See CBOE Regulatory Circular RG99-233 (Dec. 21, 1999), available at https://www.cboe.org/publish/regcir/rg99-233.pdf; CBOE Regulatory Circular RG00-049 (Mar. 29, 2000), available at https://www.cboe.org/publish/regcir/rg00-049.pdf; CBOE Regulatory Circular RG01-014 (Jan. 25, 2001), available at http://www.cboe.com/publish/RegCir/RG01-014.pdf; CBOE Regulatory Circular RG01-040 (Mar. 29, 2001), available at https://www.cboe.org/publish/regcir/rg01-040.pdf; CBOE Regulatory Circular RG01-058 (Apr. 27, 2001), available at https://www.cboe.org/publish/regcir/rg01-058.pdf; CBOE

the Exchange, based on quotes provided by the Lead Market-Maker ("LMM"), conducts a non-trading closing rotation solely to determine the "fair value" closing prices of its SPX options based on all relevant inputs, including the settlement value for the related SPX futures contract announced by the CME and the views of any other market participants. Shortly after 3:15 p.m., the Exchange then disseminates non-tradable final bid and offer quotations, and their midpoint equals the fair value price. Upon receipt of these post-3:15 p.m. final quotations, the OCC calculates the closing price based on the midpoint, which equals to the 3:00 p.m. fair value.

Thus, unlike other trading days where the SPX options closing prices are based on the final actual quotes as of 3:15 p.m., for these month-end dates, the SPX options closing prices are based on the theoretical 3:00 p.m. fair value. As with the CME, on the days when this procedure is used, although no actual trades occur at these prices, these theoretical fair value closing prices

Regulatory Circular RG02-019 (Apr. 4, 2002), available at http://www.cboe.com/publish/RegCir/RG02-019.pdf; CBOE Regulatory Circular RG02-039 (June 12, 2002), available at http://www.cboe.com/publish/RegCir/RG02-039.pdf; CBOE Regulatory Circular RG02-073 (Sept. 17, 2002), available at http://www.cboe.com/publish/RegCir/RG02-073.pdf; CBOE Regulatory Circular RG02-118 (Dec. 19, 2002), available at http://www.cboe.org/publish/regcir/rg02-118.pdf; CBOE Regulatory Circular RG03-016 (Mar. 19, 2003), available at http://www.cboe.com/publish/RegCir/RG03-016.pdf; CBOE Regulatory Circular RG03-039 (June 11, 2003), available at http://www.cboe.com/publish/RegCir/RG03-039.pdf; CBOE Regulatory Circular RG03-075 (Sept. 10, 2003), available at http://www.cboe.com/publish/RegCir/RG03-075.pdf; CBOE Regulatory Circular RG03-082 (Sept. 22, 2003), available at http://www.cboe.com/publish/RegCir/RG03-082.pdf; CBOE Regulatory Circular RG03-110 (Dec. 17, 2003), available at http://www.cboe.com/publish/RegCir/RG03-110.pdf; CBOE Regulatory Circular RG04-132 (Dec. 30, 2004), available at http://www.cboe.com/publish/RegCir/RG04-132.pdf; CBOE Regulatory Circular RG05-130 (Dec. 29, 2005), available at http://www.cboe.com/publish/RegCir/RG05-130.pdf; CBOE Regulatory Circular RG06-130 (Dec. 19, 2006), available at http://www.cboe.org/publish/regcir/rg06-130.pdf; CBOE Regulatory Circular RG08-004 (Jan. 8, 2008), available at http://www.cboe.com/publish/RegCir/RG08-004.pdf; CBOE Regulatory Circular RG09-151 (Dec. 30, 2009), available at http://www.cboe.org/publish/regcir/rg09-151.pdf; and CBOE Regulatory Circular RG12-023 (Jan. 30, 2012), available at http://www.cboe.org/publish/regcir/rg12-023.pdf.

are treated as the closing prices for all purposes, including dissemination through the Options Price Reporting Authority ("OPRA") and OCC margin calculations.

Proposed Interpretation

The Exchange proposes to adopt Interpretation and Policy .06 to Rule 6.2B (the "Interpretation") to codify in its rulebook the Exchange's existing practice with respect to the end-of-month SPX options fair value procedures.

The Exchange continues to believe that it is integral to fair and orderly markets in SPX options that the closing price of each series of SPX options traded on the Exchange be based on the value as of the same time as the closing price of the related SPX futures traded on the CME. Because the CME has made a practice of determining the closing price of SPX futures on the last business day of each month based on the 3:00 p.m. fair value, the Exchange believes the closing price of each related SPX options series should similarly be based on the 3:00 p.m. price.

Investors active in both the options and futures markets would face numerous difficulties if the closing values of SPX options and SPX futures were allowed to significantly diverge. For example, as noted above, if the closing price of a series of SPX options was to be based on the 3:15 close of trading, while the related SPX futures settlement price was based on the 3:00 p.m. fair value, an investor that was perfectly hedged between the options and futures could nonetheless be subject to potentially significant margin calls due to market movements between 3:00 p.m. and 3:15 p.m.—even though such market movement would not actually impact the level of risk of the perfectly hedged portfolio.

As discussed above, on those days when the CME has instituted its 3:00 p.m. fair value settlement procedure, the Exchange determined to deviate from normal rotation policies and procedures in the interest of fair and orderly markets and conduct fair value closing rotations.

The Exchange has done so on a regular basis in response to changes in CME procedures, in order to prevent any disruption to fair and orderly markets that would occur from the closing price of SPX options being determined as of the 3:15 p.m. close and the settlement value of SPX futures being determined as of 3:00 p.m. fair value. However, the CME appears to have adopted its 3:00 p.m. fair value procedure on a permanent basis for each month-end trading date. Therefore, rather than continuing to rely on its authority to deviate from normal rotation policies and procedures, the Exchange has determined to adopt the Interpretation to codify the Exchange's existing practice in its rulebook.

The Interpretation codifies the Exchange's current procedures without material change. Specifically, on the last business day of each calendar month, following the 3:15 p.m. close of trading in SPX options, the Exchange will conduct special non-trading closing rotations for each series of SPX options in order to determine their theoretical fair value as of the 3:00 p.m. close of the cash market. The LMM for each of SPX options will be responsible for calculating the fair value of that series.

The "fair value" of a series of SPX options represents the price at which the series should theoretically trade in relation to cash values in the absence of transaction costs. It is typically calculated as a function of the underlying index value plus the financing cost of owning the underlying stock portfolio, less dividends paid up to the expiration of the option.

To reach this fair value, each LMM will consider various inputs, including the prevailing interest rates, expected dividends, and input from market participants. Additionally, because the fair value of the related futures contract reflects a similar calculation, the Exchange expects that

The Exchange notes, however, that the CME does not appear to maintain a specific rule in connection with its fair value procedure, and therefore may change its practice at any time.

particular weight will be given to the as-of 3:00 p.m. fair value of the related SPX futures contract disseminated by the CME. Upon determination of the fair value, the LMMs will calculate bid and offer quotations, the midpoint of which will equal the calculated fair value, and provide these non-tradable quotations to the Exchange.

The Exchange will disseminate these non-tradable fair value quotations via OPRA after the 3:15 close, within approximately three to five minutes of closing. The OCC will then determine the final closing price of each series of SPX options by calculating the midpoint between these final fair value bid and final fair value offer quotations, which will equal fair value. This fair value closing price will be used as the closing price for all purposes, including the OCC's calculation of variation margin requirements.

The Exchange recognizes that LMMs may have an interest in the outcome of the monthend value determination based on the composition of their own proprietary positions. For example, an LMM may have an incentive to lean their fair value determination in a direction that would minimize the potential variation margin the LMM would be called for by the OCC with respect to their proprietary holdings. However, the Exchange believes that this risk is limited because, as a mathematical formula, fair value can be generally approximated by third parties, allowing for independent checks on the LMMs' calculations. In addition, the Exchange does and will conduct robust surveillance and oversight of LMMs' fair value quotations activities to monitor for potential attempts at manipulation.

Finally, as described above, the need to disseminate after 3:15 p.m. the fair value closing quotations for SPX options based on the 3:00 p.m. fair value on the last business day of each month is due to the current CME procedures in place for SPX futures. However, the Exchange cannot predict whether the CME may determine to forego its special month-end fair value

procedure at any time in the future. The proposed interpretation therefore provides the Exchange with discretion not to disseminate the 3:00 p.m. fair value quotations as determined by the LMMs after the 3:15 p.m. close, if not doing so would be in the interest of fair and orderly markets. The Exchange anticipates that it would only not do so in the event that the CME determines not to apply its special month-end fair value settlement procedure for SPX futures, either on a particular month-end trading date or otherwise. In such an event, the Exchange anticipates allowing the actual 3:15 p.m. closing quotations to act as the final quotations, as occurs on other trading days, so that both the closing quotations of SPX options at such a monthend and the settlement value of the related SPX futures would each reflect the same end of trading time.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with the Securities Exchange Act of 1934 (the "Act")¹¹ and the rules and regulations thereunder and, in particular the requirement of Section 6(b) of the Act.¹² Specifically, the Exchange believes the proposed rule change furthers the objectives of Section 6(b)(5)¹³ in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, and to remove impediments to and perfect the mechanism of a free and open market and a national market system. In particular, the proposed rule change furthers the interest of fair and orderly markets by avoiding the artificial tracking error that could result if the underlying value of the closing price of SPX options were allowed to significantly diverge at month-end from the closing

^{11 15} U.S.C. 78a.

¹⁵ U.S.C. 78f(b).

¹⁵ U.S.C. 78f(b)(5).

value of the underlying stock index and the settlement value of the related SPX futures contract.

Additionally, the proposed rule change is designed to improve the Exchange's ability to prevent fraudulent and manipulative practices by adopting a surveillance program to monitor the LMMs' month-end fair value quoting activities.

B. <u>Self-Regulatory Organization's Statement on Burden on Competition</u>

CBOE does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

C. <u>Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others</u>

The Exchange neither solicited nor received comments on the proposed rule change.

- III. <u>Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action</u>Because the foregoing proposed rule change does not:
 - A. significantly affect the protection of investors or the public interest;
 - B. impose any significant burden on competition; and
 - C. become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate,

it has become effective pursuant to Section $19(b)(3)(A)^{14}$ of the Act and Rule $19b-4(f)(6)^{15}$ thereunder. ¹⁶

¹⁵ U.S.C. 78s(b)(3)(A).

¹⁵ 17 CFR 240.19b-4(f)(6).

In addition, Rule 19b-4(f)(6)(iii) requires a self-regulatory organization to provide the Commission with written notice of its intent to file the proposed rule change, along with a brief description and text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

At any time within 60 days of the filing of this proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. 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 <u>rule-comments@sec.gov</u>. Please include File Number SR-CBOE-2012-095 on the subject line.

Paper comments:

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

All submissions should refer to File Number SR-CBOE-2012-095. 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 available publicly. All submissions should refer

to File Number SR-CBOE-2012-095 and should be submitted on or before [insert date 21 days from publication in the <u>Federal Register</u>].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority. 17

Kevin M. O'Neill Deputy Secretary

¹⁷ 17 CFR 200.30-3(a)(12).