

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-57913; File No. SR-CBOE-2008-31)

June 3, 2008

Self-Regulatory Organizations; Chicago Board Options Exchange, Incorporated; Notice of Filing of Proposed Rule Change to List and Trade CBOE S&P 500 Three-Month Realized Variance Options and CBOE S&P 500 Three-Month Realized Volatility Options

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)¹ and Rule 19b-4 thereunder,² notice is hereby given that on May 23, 2008, the Chicago Board Options Exchange, Incorporated (“Exchange” or “CBOE”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change as described in Items I, II, and III below, which Items have been substantially prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend certain of its rules, including Rules 5.5, 24.1, and 24.9, to provide for the listing and trading of options that overlie two statistical measurements of market variability: realized variance and realized volatility of the S&P 500 Composite Stock Price Index (“S&P 500 Index”). CBOE S&P 500 Three-Month Realized Variance options and CBOE S&P 500 Three-Month Realized Volatility options would be cash-settled and have European-style exercise. The text of the rule proposal and proposed contract specifications for CBOE S&P 500 Three-Month Realized Variance options are available on the Exchange’s Web site (<http://www.cboe.org/legal>), at the Exchange’s Office of the Secretary and at the Commission.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

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

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. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of the proposed rule change is to permit the Exchange to list and trade cash-settled options having European-style exercise on two statistical measurements of market variability: realized variance and realized volatility of the S&P 500 Index. These statistical measurements are attributes of and based on a broad-based security index (i.e., S&P 500 Index). Three-month realized variance is a measure of the historical variability of the S&P 500 Index, based on actual prices that have been reported, or "realized," historically looking back over a three-month period. The calculation uses daily returns for the three-month period relative to an average (mean) daily price return of zero. Three-month realized volatility is the square root of three-month realized variance. The Exchange also proposes to make technical changes to some of the rules that would be amended in order to list and trade realized variance and realized volatility options.

Currently, the Exchange lists and trades options on the 30-day implied volatility of the S&P

500 Index (CBOE Volatility Index ("VIX") options).³ With the introduction of realized variance and realized volatility options, market participants would be able to trade options that settle to the actual or realized volatility of the S&P 500 Index that has accrued over a three-month time period. Different from VIX options, realized variance and realized volatility options would allow market participants to take a position on what they anticipate the actual volatility of the S&P 500 Index would be at expiration. In addition, the Exchange also notes that realized variance contracts are a popular and successful product in the over-the-counter ("OTC") market. By providing a listed and standardized market for realized variance and realized volatility options, the Exchange seeks to attract investors who desire to trade options on realized variance and realized volatility but at the same time prefer the certainty and safeguards of a regulated and standardized marketplace.

Calculation of Realized Variance and Realized Volatility

The formula for three-month realized variance and three-month realized volatility uses continuously compounded daily returns for a three-month period assuming a mean daily price return of zero. The calculated realized variance is then annualized assuming 252 business days per year.⁴ The exercise-settlement value for CBOE S&P 500 Three-Month Realized Variance options is 10,000 times the three-month realized variance of the S&P 500 Index, and the exercise-settlement value for CBOE S&P 500 Three-Month Realized Volatility options is 100

³ The Exchange also calculates the CBOE S&P 500 Three-Month Volatility Index ("VXV"), which measures implied volatility, but the Exchange currently does not list VXV options.

⁴ The annualization factor for realized volatility is the square root of 252.

times the three-month realized volatility of the S&P 500 Index, both of which are calculated using the following standardized formula:

REALIZED VARIANCE AND REALIZED VOLATILITY FORMULAS:

$$\text{Realized Variance} = 252 \times \left(\sum_{i=1}^{N_a-1} R_i^2 / (N_e - 1) \right)$$

$$\text{Realized Volatility} = \sqrt{\text{Realized Variance}} = \sqrt{252 \times \left(\sum_{i=1}^{N_a-1} R_i^2 / (N_e - 1) \right)}$$

Where:

$R_i = \ln(P_{i+1}/P_i)$ - Daily return of the S&P 500 Index from P_i to P_{i+1} .

P_{i+1} = The final value of the S&P 500 Index used to calculate the daily return.

P_i = The initial value of the S&P 500 Index used to calculate the daily return.

N_e = Number of expected S&P 500 Index values needed to calculate daily returns during the three-month period. The total number of daily returns expected during the three-month period is $N_e - 1$.

N_a = The actual number of S&P 500 Index values used to calculate daily returns during the three-month period. Generally, the actual number of S&P 500 Index values will equal the expected number of S&P 500 Index values (represented by N_e). However, if one or more "market disruption events" occurs during the three-month period, the actual number of S&P 500 Index values will be less than the expected number of S&P 500 Index values by an amount equal to the number of market disruption events that occurred during the three-month period. The total number of actual daily returns during the three-month period is $N_a - 1$.

For purposes of calculating the respective exercise-settlement value to which the options would settle, realized variance and realized volatility are calculated from a series of values of the S&P 500 Index beginning with the Special Opening Quotation ("SOQ") of the S&P 500 Index on the first day of the three-month period, and ending with the S&P 500 Index SOQ on the last

day of the three-month period.⁵ All other values in the series are closing values of the S&P 500 Index.

For example, the final exercise-settlement value to which a CBOE S&P 500 Three-Month Realized Variance option contract expiring on Friday, September 19, 2008 would settle would be calculated using the S&P 500 Index SOQ on Friday, June 20, 2008, the closing prices of the S&P 500 Index from Monday, June 23, 2008 through Thursday, September 18, 2008 and the S&P 500 Index SOQ on Friday, September 19, 2008.

As described above, three-month realized variance and three-month realized volatility would be calculated using actual daily values of the S&P 500 Index, which is a broad-based security index. By extension, products based on statistical measurements that are derived from S&P 500 Index values should similarly be treated as products based directly on S&P 500 Index values. For purposes of CBOE's rules, the indicative values for three-month realized variance and three-month realized volatility shall be treated as indexes.

Currently, CBOE calculates indicative values for implied and realized variance, and publishes those values daily after the close of trading. The CBOE S&P 500 Implied Variance indicator ("IUG") is a measure of the market's expectation of future variance of the S&P 500 Index that is implied by the daily settlement price of the front-month CBOE S&P 500 Three-Month Variance futures contract.⁶ The CBOE S&P 500 Realized Variance indicator ("RUG") is

⁵ The SOQ is calculated per normal index calculation procedures and uses the opening (first) reported sales price in the primary market of each component stock in the index on the last business day (usually a Friday) before the expiration date. If a stock in the index does not open on the day on which the exercise-settlement value is determined, the last reported sales price in the primary market is used to calculate the exercise-settlement value.

⁶ CBOE Futures Exchange, LLC ("CFE") currently lists CBOE S&P 500 Three-Month Realized Variance future contracts, which commenced trading on May 18, 2004.

a measure of the realized variance of the S&P 500 Index from the beginning of the three-month period to the current date. IUG and RUG are disseminated through the Options Price Reporting Authority ("OPRA") and are publicly available through most price quote vendors.⁷

Options Trading

The exercise-settlement value for CBOE S&P 500 Three-Month Realized Variance options would be 10,000 times the three-month realized variance of the S&P 500 Index. Realized variance would be quoted in variance points and fractions and one point would equal \$50. The minimum tick size for all series would be 0.10 point (\$5.00) and the minimum strike price interval would be \$5.00.⁸

The exercise-settlement value for CBOE S&P 500 Three-Month Realized Volatility options would be 100 times the three-month realized volatility of the S&P 500 Index. Realized volatility would be quoted in volatility points and fractions and one point would equal \$100. The minimum tick size for series trading below 3.00 would be 0.05 point (\$5.00) and the minimum tick for series trading at and above 3.00 would be 0.10 point (\$10.00). The minimum strike price interval would be \$1.00.

The Exchange proposes to list series at \$1 or greater strike price intervals on CBOE S&P 500 Three-Month Realized Volatility options. The Exchange believes that \$1 strike price intervals would provide investors with greater flexibility by allowing them to establish positions that are better tailored to meet their investment objectives. CBOE believes that traders would likely use the related CBOE S&P 500 Three-Month Variance futures contract price as a proxy

⁷ These values can be accessed by typing in the ticker symbol (IUG or RUG) at the following webpage : <http://cfe.cboe.com/DelayedQuote/SSFQuote.aspx>

⁸ See Rules 5.5 and 24.9.

for the "current index level." This is because the futures contract price reflects: (i) the realized variance of the S&P 500 Index experienced to date; and (ii) the market's expectation of the future variance of the S&P 500 Index at expiration of the respective contract. CBOE believes that using futures prices is an accurate and transparent method for determining the "current index level" used to center the range in which \$1 or greater strikes in CBOE S&P 500 Three-Month Realized Volatility options would be listed.⁹

Initially, the Exchange would list at least two strike prices above and two strike prices below the square root of the related CBOE S&P 500 Three-Month Variance futures contract price at or about the time a series is opened for trading on the Exchange. As part of this initial listing, the Exchange would list strike prices that are within 5 points from the square root of the related CBOE S&P 500 Three-Month Variance futures contract price on the preceding day.

As for additional series, the Exchange would be permitted to add additional series when the Exchange deems it necessary to maintain an orderly market, to meet customer demand or when the square root of the related CBOE S&P 500 Three-Month Variance futures contract price, moves substantially from the initial exercise price or prices. To the extent that any additional strike prices are listed by the Exchange, such additional strike prices shall be within thirty percent (30%) above or below the square root of the related CBOE S&P 500 Three-Month Variance futures contract price. The Exchange would also be permitted to open additional strike

⁹ The Commission has approved the listing of options and LEAPS in \$1 strike intervals, and the use of futures prices in setting those strike intervals, for all other implied volatility products approved for listing and trading on the Exchange. See Rule 24.9.01(e)(ii). See also Securities Exchange Act Release Nos. 54192 (July 21, 2006), 71 FR 43251 (July 31, 2006) (SR-CBOE-2006-27) (\$1 strikes for VIX options); 55425 (March 8, 2007), 72 FR 12238 (March 15, 2007) (SR-CBOE-2006-73) (\$1 strikes for RVX options); 56813 (November 19, 2007), 72 FR 66211 (November 27, 2007) (SR-CBOE-2007-52) (\$1 strikes for VXD and VXN options and \$1 strikes for RVX, VIX, VXD and VXN LEAPS).

prices that are more than 30% above or below the square root of the related CBOE S&P 500 Three-Month Variance futures contract price, provided that demonstrated customer interest exists for such series, as expressed by institutional, corporate or individual customers or their brokers. Market-makers trading for their own account would not be considered when determining customer interest. In addition to the initial listed series, the Exchange proposes to list up to sixty (60) additional series per expiration month for each series in CBOE S&P 500 Three-Month Realized Volatility options. Further, LEAPS on CBOE S&P 500 Three-Month Realized Volatility options would not be listed at intervals less than \$1.

The Exchange also proposes to set forth a delisting policy with respect to CBOE S&P 500 Three-Month Realized Volatility options. Specifically, the Exchange would, on a monthly basis, review series that are outside a range of five (5) strikes above and five (5) strikes below the square root of the related CBOE S&P 500 Three-Month Variance futures contract price and delist series with no open interest in both the put and the call series having a: (i) strike higher than the highest strike price with open interest in the put and/or call series for a given expiration month; and (ii) strike lower than the lowest strike price with open interest in the put and/or call series for a given expiration month.

Notwithstanding the proposed delisting policy, customer requests to add strikes and/or maintain strikes in CBOE S&P 500 Three-Month Realized Volatility option series eligible for delisting shall be granted.

The Exchange also proposes to add new Interpretation and Policy .11 to Rule 5.5, Series of Option Contracts Open for Trading, which would be an internal cross reference stating that the intervals between strike prices for CBOE S&P 500 Three-Month Realized Volatility options

series would be determined in accordance with proposed new Interpretation and Policy .01(g) to Rule 24.9.

Exercise and Settlement

The proposed options would expire on the Saturday following the third Friday of the expiring month. Trading in the expiring contract month would normally cease at 3:15 p.m. Chicago time on the business day preceding the last day of trading (ordinarily the Thursday before expiration Saturday, unless there is an intervening holiday). When the last trading day is moved because of an Exchange holiday (such as when CBOE is closed on the Friday before expiration), the last trading day for expiring options would be Thursday. As described above, the exercise-settlement value would be calculated from a series of values of the S&P 500 Index beginning with the SOQ of the S&P 500 Index on the first day of the three-month period, and ending with the S&P 500 Index SOQ on the last day of the three-month period. All other values in the series are closing values of the S&P 500 Index.

The exercise-settlement amount is equal to the difference between the exercise-settlement value and the exercise price of the option multiplied by \$50 for CBOE S&P 500 Three-Month Realized Variance options and multiplied by \$100 for CBOE S&P 500 Three-Month Realized Volatility options.

Surveillance

The Exchange would use the same surveillance procedures currently utilized for each of the Exchange's other index options to monitor trading in CBOE S&P 500 Three-Month Realized Variance options and CBOE S&P 500 Three-Month Realized Volatility options. The Exchange represents that these surveillance procedures are adequate to monitor trading in options on these option products. For surveillance purposes, the Exchange would have complete access to

information regarding trading activity in the pertinent underlying securities (i.e., S&P 500 Index component securities).

Position Limits

The Exchange is not proposing to establish any position limits for CBOE S&P 500 Three-Month Realized Variance options and CBOE S&P 500 Three-Month Realized Volatility options. Because realized variance and realized volatility are calculated using values of the S&P 500 Index, the Exchange believes that the position and exercise limits for these new products should be the same as those for broad-based index options (e.g., SPX, for which there are no position limits). CBOE S&P 500 Three-Month Realized Variance options and CBOE S&P 500 Three-Month Realized Volatility options would be subject to the same reporting and other requirements triggered for other options dealt in on the Exchange.¹⁰

Exchange Rules Applicable

As stated above, for purposes of CBOE's rules, the indicative values for three-month realized variance and three-month realized volatility shall be treated as indexes. Except as modified by this proposal, the rules in Chapters I through XIX, XXIV, XXIVA, and XXIVB would equally apply to CBOE S&P 500 Three-Month Realized Variance options and CBOE S&P 500 Three-Month Realized Volatility options.

CBOE S&P 500 Three-Month Realized Variance options and CBOE S&P 500 Three-Month Realized Volatility options would be margined as "broad-based index" options, and under CBOE rules, especially, Rule 12.3(c)(5)(A), the margin requirement for a short put or call shall be 100% of the current market value of the contract plus up to 15% of the respective underlying indicative value. Additional margin may be required pursuant to Exchange Rule 12.10.

¹⁰ See Rule 4.13, Reports Related to Position Limits.

The Exchange proposes that CBOE S&P 500 Three-Month Realized Variance options and CBOE S&P 500 Three-Month Realized Volatility options be eligible for trading as Flexible Exchange Options as provided for in Chapters XXIVA (Flexible Exchange Options) and XXIVB (FLEX Hybrid Trading System).

Capacity

CBOE has analyzed its capacity and represents that it believes the Exchange and the Options Price Reporting Authority have the necessary systems capacity to handle the additional traffic associated with the listing of new series that would result from the introduction of CBOE S&P 500 Three-Month Realized Variance options and CBOE S&P 500 Three-Month Realized Volatility options.

Technical Changes

The Exchange proposes to make technical changes to Rules 24.4.03, 24.4.04, and 24.5, Exercise Limits by adding "VIX, VXN and VXD" to the rule text.¹¹ The Exchange proposes to make technical changes to Rules 24A.7(b), 24A.8(a), 24B.7(b), and 24B.8(a), by adding the parenthetical phrase, "including reduced-value option contracts" to the rule text. These FLEX rules already contemplate reduced-value option contracts, and the proposed changes are consistent with the treatment of non-FLEX reduced-value option contracts.¹²

¹¹ The Exchange inadvertently neglected to request the Commission's approval to add "VIX, VXN and VXD" to the respective rule text when the position limits for these products were eliminated. See Securities Exchange Act Release No. 54019 (June 20, 2006), 71 FR 36569 (June 27, 2006) (SR-CBOE-2006-55).

¹² See Securities Exchange Act Release No. 56350 (September 4, 2007), 72 FR 51878 (September 11, 2007) (SR-CBOE-2007-79).

2. Statutory Basis

The proposed rule change is consistent with Section 6(b)¹³ of the Act in general and furthers the objectives of Section 6(b)(5)¹⁴ in particular in that it would permit trading in options based on the index pursuant to rules designed to prevent fraudulent and manipulative acts and practices and to promote just and equitable principles of trade, and thereby would provide investors with the ability to invest in options that provide statistical measurements of market variability.

B. Self-Regulatory Organization's Statement on Burden on Competition

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

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

The Exchange has not solicited, and does not intend to solicit, comments on this proposed rule change. The Exchange has not received any unsolicited written comments from members or other interested parties.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 35 days of the date of publication of this notice in the Federal Register or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which

¹³ 15 U.S.C. 78f(b).

¹⁴ 15 U.S.C. 78f(b)(5).

the self-regulatory organization consents, the Commission will:

A. by order approve such proposed rule change, or

B. institute proceedings to determine whether the proposed rule change should be disapproved.

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 rule-comments@sec.gov. Please include File No. SR-CBOE-2008-31 on the subject line.

Paper comments:

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

All submissions should refer to File Number SR-CBOE-2008-31. 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 Web site (<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 inspection and copying 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-2008-31 and should be submitted on or before [insert date 21 days from the date of publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁵

Florence E. Harmon
Acting Secretary

¹⁵ 17 CFR 200.30-3(a)(12).