

be cash-settled and will have European-style expiration. The text of the proposed rule change is available at the Office of the Secretary, CBOE, and at the Commission.

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 CBOE 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 CBOE 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, European-style options on the VIX, VXN, and VXD. The calculation of each index is based on a recently developed methodology that builds upon the calculation of the original CBOE Market Volatility Index, which is based on S&P 100⁴ Index option ("OEX") quotes. Introduced by CBOE in September 2003, the revised VIX is an index that uses the quotes of certain S&P 500 Index[®] ("SPX"[®]) option series to derive a measure of the volatility of the U.S. equity market. It provides investors with up-to-the-minute market estimates of expected volatility by extracting implied volatilities from real-time index option bid/ask quotes. The VIX is quoted in percentage points per annum. For example, an index level of 30.34 (the closing value from December 31, 2002) represents an annualized volatility of 30.34%. This new methodology will also be used to calculate VXN and VXD values.

Index Design and Calculation

Each index—VIX, VXN, and VXD—will be calculated using real-quotes of the nearby and second nearby index puts and calls of the SPX, the Nasdaq 100 Index ("NDX"), and the Dow Jones Industrial Index ("DJX"), respectively. For options on each respective volatility index, the nearby index option series are defined as the series with the shortest time to expiration, but with at least eight (8) calendar days to expiration. The second nearby index

option series are the series for the subsequent expiration month. Thus, with eight days left to expiration, an index will "roll" to the second and third contract months.

For each contract month, CBOE will determine the at-the-money strike price. It will then select the at-the-money and out-of-the-money series with non-zero bid prices and determine the midpoint of the bid-ask quote for each of these series. The midpoint quote of each series is then weighted so that the further away that series is from the at-the-money strike, the less weight that is accorded to the quote. Then, to compute the index level, CBOE will calculate a volatility measure for the nearby options and then for the second nearby options. This is done using the weighted midpoint of the prevailing bid-ask quotes for all included option series with the same expiration date. These volatility measures are then interpolated to arrive at a single, constant 30-day measure of volatility.

As described above, each volatility index option will be structured as an option on a group of securities, namely options on the SPX, NDX, or DJX indexes and by extension the stocks underlying each respective index. The CBOE will use the actual quotes of specific index options to derive each corresponding volatility index. The underlying index options themselves are securities and are based on an index of the broader number of underlying securities.⁴ Thus, the pricing components underlying the Index options will include the SPX, NDX, or DJX options and, by extension, the component stocks of each index. These pricing components will provide a measure of the volatility of price movements of the SPX, NDX, or DJX stock indexes. This structure is similar to the approach used by CBOE for its interest rate options.⁵ Those products use the quotes of debt securities to derive an interest rate yield, which is converted into a measure that serves as the underlying for options. In the case of Index options, quotes from index option securities, which reflect a measure of stock price movements of the SPX, NDX and DJX stocks, will be used to derive a measure of volatility that will be the underlying for the respective volatility index options.

The CBOE will compute each index on a real-time basis throughout each trading day, from 8:30 AM until 3:15

PM (Chicago Time) CST. CBOE has calculated historical index values for the new VIX back to January 2, 1990. As of December 31, 2002, the closing values for each respective index were as follows: (1) VIX: 30.34; (2) VXN: 46.94; and (3) VXD: 31.81. Volatility index levels will be calculated by CBOE and disseminated at 15-second intervals to market information vendors via the Options Price Reporting Authority ("OPRA").

Index Option Trading

Strike prices will be set to bracket the index in 2½ point increments; thus, the interval between strike prices will be no less than \$2.50.⁶ The minimum tick size for series trading below \$3 will be 0.05 and for series trading above \$3 the minimum tick will be 0.10. The trading hours for options on the volatility indexes will be from 8:30 a.m. to 3:15 p.m. (Chicago Time) CST.⁷

Exercise and Settlement

The proposed options on each index will expire 30 days prior to the expiration date of the options used in the calculation of that index. For example, September 2003 VIX options would expire on Wednesday, September 17, 2003, exactly 30 days prior to the expiration of the October 2003 SPX options, which would be the only options used in the VIX calculation on that date. Trading in the expiring contract month will normally cease at 3:15 PM (Chicago Time) (CST) on the last day of trading. Exercise will result in delivery of cash on the business day following expiration. VIX, VXN and VXD options will be A.M.-settled. The exercise settlement value will be determined by a Special Opening Quotation ("SOQ") of each respective volatility index calculated from the sequence of opening prices of the options that comprise that index. The opening price for any series in which there is no trade shall be the average of that option's bid price and ask price as determined at the opening of trading.

The exercise-settlement amount is equal to the difference between the exercise-settlement value and the exercise price of the option, multiplied by \$100. When the last trading day is moved because of Exchange holidays, the last trading day for expiring options

⁶ See *supra* note 3.

⁷ See Exhibit B to the proposed rule change filed by CBOE, presents proposed contract specifications for VIX options, Exhibit C presents proposed contract specifications for VXN options; and, Exhibit D presents proposed contract specifications for VXD options, of the proposed rule filing, which set out the contract specifications for each product.

⁴ 500 securities in the SPX, 100 securities in the NDX, etc.

⁵ See Securities Exchange Act Release Nos. 26938 (June 15, 1989), 54 FR 26285 (June 22, 1989); and 33106 (October 26, 1993), 54 FR 58358 (November 1, 1993).