

August 5, 2024

Christopher J. Kirkpatrick Secretary Commodity Futures Trading Commission Three Lafayette Centre 1155 21st Street, N.W. Washington, D.C. 20581

## Re: Cboe Futures Exchange, LLC Product and Rule Certification for Cboe S&P 500 Variance Futures Submission Number CFE-2024-014

Dear Mr. Kirkpatrick:

Pursuant to Section 5c(c)(1) of the Commodity Exchange Act, as amended ("Act"), and Regulation 40.2 and Regulation 40.6 of the regulations promulgated by the Commodity Futures Trading Commission ("CFTC" or "Commission") under the Act, Cboe Futures Exchange, LLC ("CFE" or "Exchange") hereby submits terms and conditions for Cboe S&P 500 Variance ("VA") futures ("Product") to be traded on CFE and accompanying rule amendments to incorporate the Product into CFE's rules ("Amendment").

The Amendment consists of amended Chapter 23 of the CFE Rulebook regarding the Product and related revisions to other CFE rule provisions. A summary Product specifications chart for VA futures is included in Exhibit 1 to this submission. Exhibit 2 to this submission sets forth the rule changes included in the Amendment.

The terms and conditions for the Product and the Amendment will become effective on August 19, 2024 ("Effective Date"). The Product may be listed for trading on CFE on or after the Effective Date on a date to be announced by the Exchange through the issuance of an Exchange notice. CFE currently plans to list VA futures for trading commencing on Monday, September 23, 2024. CFE will notify the Commission if this currently planned initial listing date were to change.

#### VA Futures

VA futures are cash-settled futures contracts based on the annualized realized variance of the S&P 500 Index.

VA futures will be listed for trading on CFE and will be cleared through The Options Clearing Corporation ("OCC").

Variance is a statistical measure of the variability of price returns. As further described below, the final settlement value of a VA futures contract is determined based on a formula for calculating the annualized realized variance of the S&P 500 Index measured from the initial listing date of the contract until the final settlement date of the contract.

CFE may list VA futures contract months that correspond to listed contract months for standard S&P 500 Index ("SPX") options listed on Cboe Exchange, Inc. ("Cboe Options") which are A.M. settled and generally expire on the third Friday of a month. The expiration date of standard SPX options that would normally expire on the third Friday of a month is the immediately preceding business day if that Friday falls on a Cboe Options holiday.

Each VA futures contract has no accrued realized variance at the time that it is initially listed for trading regardless of whether or not the SPX options with the same contract month were initially listed for trading prior to the initial listing date of that VA futures contract.

### Changes from Previous S&P 500 Variance Futures Product

CFE previously listed various iterations of S&P 500 Variance futures for trading on CFE beginning on May 18, 2004 and for a large portion of the time period between then and the present. The rules relating to the most recent iteration of S&P 500 Variance futures that was listed for trading on CFE are currently included in CFE's Rulebook. CFE delisted the last remaining contract expirations for that iteration of S&P 500 Variance futures on April 14, 2022 and has not listed any S&P Variance futures for trading since that date.

CFE is relaunching VA futures with a different product design than the prior iteration of S&P 500 Variance futures. The product design for VA futures is similar to the product design for previous iterations of S&P 500 Variance futures that CFE listed for trading before the most recent iteration of S&P 500 Variance futures. The Amendment updates and revises CFE's rules relating to S&P 500 Variance futures so that they are applicable to VA futures with the product design described in this submission.

The prior iteration of S&P 500 Variance futures was traded in prices that were expressed in volatility points and in sizes that were expressed in units of vega notional similar to the manner in which variance swaps are traded in the over-the-counter ("OTC") market. Vega notional represents the expected profit or loss of a variance swap for a 100 basis point change in volatility from the strike price. At the end of the trading day, trades in that iteration of S&P 500 Variance futures were restated and converted into trades with prices that were expressed in variance points and sizes that were expressed in variance units. The converted trade price was also calculated in a manner that took into account the closing value of the S&P 500 Index on that trading day. Because of the need to incorporate the closing value of the trading day. At that point, the trades were cleared in the restated units.

VA futures will be traded in prices that are expressed in variance points and sizes that are expressed in variance units. The number of variance units is equivalent to the number of futures contracts traded in that one VA futures contract traded equates to a trade size of one variance unit. Trades in VA futures will not be restated into different units at the end of the trading day and will not have a converted trade price that takes into account the closing value of the S&P 500 Index on that trading day. As a result, the clearing of VA futures trades will not be deferred until the end of the trading day. Additionally, the clearing of VA futures trades will take place in the same units in which the trades occurred.

Trading in the prior iteration of S&P 500 Variance futures presented various challenges for certain market participants and their systems and internal processes because the product was traded and cleared in different units and the clearing of trades in the product was deferred until the end of the trading day. In order to address these challenges and to reduce the complexity of the product, VA futures will have a product design that is similar to the product design of other CFE futures products in

that VA futures will trade and clear in the same units and the clearing of trades in the product will not be deferred until the end of the trading day.

#### Final Settlement Value Calculation

The final settlement value of a VA futures contract is based on a calculation of the annualized realized variance of the S&P 500 Index. The realized variance is calculated from a series of values of the S&P 500 Index beginning with the closing value of the S&P 500 Index on the first day that a VA futures contract is listed for trading and ending with the special opening quotation ("SOQ") of the S&P 500 Index on the final settlement date of that contract ("covered time period"). The calculation uses daily log returns of the S&P 500 Index for the covered time period assuming a mean daily price return of zero. The calculated variance is annualized assuming 252 trading days per year. The final settlement value is the calculated annualized realized variance rounded to the nearest 0.01.

The term "daily return" refers to a calculation that uses two reference values, a current value  $(P_i)$  and a previous value  $(P_{i-1})$ , as formulated below.

The current value for the first daily return in the covered time period for a VA futures contract is the closing value of the S&P 500 Index on the trading day immediately following the initial listing date of that VA futures contract. The previous value for the first daily return is the closing value of the S&P 500 Index on the initial listing date of that VA futures contract.

The current value for the last daily return in the covered time period for a VA futures contract is the S&P 500 Index SOQ on the final settlement date of the contact that is also used as the exercise settlement value for the corresponding expiring SPX options series listed on Cboe Options. The previous value for the last daily return is the closing value of the S&P 500 Index on the trading day immediately preceding the final settlement date of that VA futures contract.

For all other daily returns during the covered time period for that VA futures contract, the current and previous values are the closing values of the S&P 500 Index on consecutive trading days.

If the index calculator subsequently adjusts an S&P 500 Index value used in the calculation of realized variance, the Exchange will not adjust the realized variance determined for the applicable day unless the Exchange determines otherwise.

The final settlement value of a VA futures contract is equal to the realized variance value determined utilizing the following formula and then rounded to the nearest 0.01:

Realized Variance = 
$$\frac{252}{N} \left( \sum_{i=1}^{N} R_i^2 \right)$$

The components of this formula include:

 $R_i = 100 * \ln(P_i/P_{i-1})$  – The daily return of the S&P 500 Index from  $P_{i-1}$  to  $P_i$  in percentage points.

 $P_{i-1}$  – The previous value of the S&P 500 Index used to calculate the daily return.

 $P_i$  – The current value of the S&P 500 Index used to calculate the daily return.

N- The number of daily return values determined on the listing date of the VA futures contract needed to calculate the annualized realized variance during the covered time period for the VA futures contract.

#### S&P 500 Index

The S&P 500 Index is a stock index that measures the performance of 500 of the largest companies listed on stock exchanges in the United States.

S&P Dow Jones Indices LLC (collectively referred to along with its affiliates in this submission as "S&P DJI") owns, compiles, and publishes the S&P 500 Index. S&P DJI is a subsidiary of S&P Global Inc., which is a leading provider of transparent and independent ratings, benchmarks, analytics, and data to the capital and commodity markets worldwide.

The constituents of the S&P 500 Index are weighted by float-adjusted market capitalization.

Among the eligibility criteria for the inclusion of a stock in the S&P 500 Index are that the stock is issued by a U.S.-domiciled company; the company satisfies periodic reporting obligations under the Securities Exchange Act of 1934, as amended; the stock has a primary listing on an eligible U.S. national securities exchange as designated by S&P DJI; the company is a corporation; and the stock is common stock. S&P DJI also applies various market capitalization, liquidity, public float, financial viability and earnings, and sector balance criteria in determining the constituents of the S&P 500 Index.

An Index Committee of S&P DJI maintains the S&P 500 Index. All Index Committee members are full-time professional members of S&P DJI staff. Constituent selection for the S&P 500 Index is at the discretion of the Index Committee and is based on the eligibility criteria for the S&P 500 Index.

The S&P 500 Index is reflective of the underlying cash market for large capitalization U.S. stocks. The sectors of the U.S. stock market represented in the S&P 500 Index include information technology, health care, financials, consumer discretionary, communication services, industrials, consumer staples, energy, utilities, real estate, and materials.

The S&P 500 Index is one of the most commonly followed stock indices in the world. The S&P 500 Index is widely considered to be a gauge of the U.S. large-cap equity market and to be an accurate and reliable index of large capitalization U.S. stocks. For example, the S&P 500 Index is a component of the list of Leading Indicators utilized by the U.S. Commerce Department to track key sectors of the U.S. economy. Additionally, many of the largest exchange-traded funds and mutual funds in the world track the S&P 500 Index, and the S&P 500 Index supports a large and robust trading ecosystem that includes index futures and options.

The S&P 500 Index included approximately 84.7% of the total market capitalization of U.S. public companies and had an aggregate market capitalization of more than \$46.5 trillion as of May 31, 2024.

The S&P 500 Index is timely and publicly available. The S&P 500 Index is disseminated every 15 seconds throughout the trading day for U.S. stocks and is widely available from market information services.

The above description is intended to be a high-level summary of the S&P 500 Index as of the date of this filing. The following index methodology may be referenced for additional detail and further information regarding the S&P 500 Index and its methodology:

• S&P U.S. Indices Methodology, as of August 2024, which may be accessed at <a href="https://www.spglobal.com/spdji/en/documents/methodologies/methodology-sp-us-indices.pdf">https://www.spglobal.com/spdji/en/documents/methodologies/methodology-sp-us-indices.pdf</a>.

CFE believes that the S&P 500 Index is not a narrow-based index under Section 1a(35) of the Act and thus qualifies as a broad-based security index. In particular, CFE believes that the S&P 500 Index satisfies the exclusion from the definition of a narrow-based security index based on CFE's analysis and belief that the S&P 500 Index satisfies all of the following conditions.

(i) The index has more than 9 component securities. As of July 31, 2024, the number of component securities in the S&P 500 Index was 503.

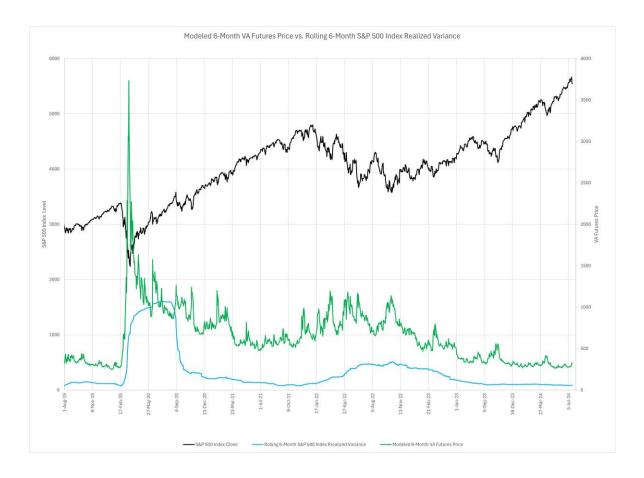
(ii) No component security comprises more than 30% of the index's weighting. As of July 31, 2024, the highest weighted component security in the S&P 500 Index was the common stock of Apple Inc. and that component security comprised 6.90% of the weighting of the S&P 500 Index.

(iii) The five highest weighted component securities in the aggregate do not comprise more than 60% of the index's weighting. As of July 31, 2024, the five highest weighted component securities of the S&P 500 Index were the common stocks of Apple Inc., Microsoft Corporation, Nvidia Corporation, Amazon.com Inc., and Meta Platforms, Inc. (Class A) and those component securities comprised in the aggregate 25.75% of the weighting of the S&P 500 Index.

(iv) The lowest weighted component securities comprising, in the aggregate, 25% of the index's weighting have an aggregate dollar value of average daily trading volume of at least \$30 million for an index with 15 or more component securities. As of July 31, 2024, the lowest weighted component securities comprising, in the aggregate, 25% of the weighting of the S&P 500 Index had an aggregate dollar value of average daily trading volume during the preceding 6 full calendar months of \$92.78 billion.

# Graphical Comparison

The graph below illustrates an estimate of the variance risk premium that exists between the implied variance and realized variance of the S&P 500 Index over the previous 6 months during the time period from August 1, 2019 through July 31, 2024. The implied variance of the S&P 500 Index is represented in the graph by the modeled price of VA futures with approximately 6 months to expiration. The realized variance of the S&P 500 Index in the graph is represented by the sum of the squared daily returns of the S&P 500 Index over the previous 6 months. The graph reflects how both the implied and realized variance of the S&P 500 Index generally tend to be inversely correlated to the S&P 500 Index level.



# Contract Specifications

As further described in the attached summary product specifications chart for VA futures and in amended Chapter 23 of the CFE Rulebook, the contract specifications for VA futures include the following:

The Exchange may list VA futures contract months that correspond to listed contract months for standard SPX options listed on Cboe Options. The final settlement date for a VA futures contract is the third Friday of the contract month for that contract. If the third Friday of the contract month is a CFE holiday, the final settlement date for the expiring VA futures contract shall be the CFE business day immediately preceding the third Friday of the contract month.

The trading hours in VA futures are regular trading hours on business days Monday through Friday from 8:30 a.m. to 3:15 p.m. All times referenced in this submission are in Chicago time.

Trading in an expiring VA futures contract ends at the close of trading hours in VA futures on the day immediately prior to the final settlement date of the contract. If that day is a CFE holiday, trading in the expiring VA futures contract ends at the close of trading hours on the CFE business day immediately preceding that day.

The contract size of a VA futures contract is one variance unit. Orders, quotes, and trades in VA futures are made in trading units of 1 variance unit, including Block Trades and Exchange of Contract for Related Position ("ECRP") transactions. Accordingly, the minimum order, quote, and

trade size for VA futures is 1 contract (equivalent to 1 variance unit) and VA futures may not trade in fractional contracts or fractional variance units.

Prices of VA futures are expressed in variance points. The contract multiplier for VA futures is \$1.00 per variance point. Prices in VA futures may be in increments of 0.50 variance points (equal to a dollar value per minimum increment of \$0.50 per contract). VA futures prices are stated in decimal format out to two decimal places.

The allocation method for the trading of VA futures on CFE's trading system ("CFE System") is price-time priority.

Good-'til-Canceled Orders and Good-'til-Date Orders are not permitted in VA futures. Spread Orders are not permitted in VA futures except for spread transactions that are processed as Block Trades and ECRP transactions.

Block Trades are permitted in VA futures provided that they satisfy the requirements of CFE Rule 415 (Block Trades). The minimum Block Trade quantity for VA futures is 1,500 contracts if there is only one leg involved in the trade. If the Block Trade is executed as a spread transaction with multiple legs, each leg must meet the minimum Block Trade quantity for VA futures. A Block Trade may not be executed in VA futures as a strip. The minimum price increment for a Block Trade in VA futures is 0.10 variance points.

Derived Block Trades, as set forth in Rule 415(s), may be entered into in VA futures. A Derived Block Trade in VA futures may be executed as either a single leg transaction or a spread transaction. As further described in Rule 415(s), a Derived Block Trade is a Block Trade in which the trade price and contract quantity of the Block Trade are dependent upon one or more hedging transactions conducted by one of the parties to the Block Trade that take place after the Block Trade has been consummated between the parties but prior to the submission of the Block Trade to the Exchange.

ECRP transactions are also be permitted in VA futures provided that they satisfy the requirements of CFE Rule 414 (Exchange of Contract for Related Position). These requirements include, among others, the requirement under Rule 414(b) that the related position must have a high degree of price correlation to the underlying of the futures transaction so that the futures transaction would serve as an appropriate hedge for the related position. The minimum price increment for an ECRP transaction in VA futures is 0.10 variance points.

The daily settlement price of a VA futures contract is the average of the bid and the offer from the last best two-sided market in the contract during that business day which simultaneously includes both a pending bid with a non-zero value and a pending offer with a non-zero value. The Exchange may in its sole discretion establish a daily settlement price for a VA futures contract that it deems to be a fair and reasonable reflection of the market under certain conditions. In particular, the Exchange may exercise this authority if it determines in its sole discretion that the daily settlement price established by the above parameters is not a fair and reasonable reflection of the market or if there is a trading halt in the contract or other unusual circumstance at or around the scheduled close of trading hours for the contract on the applicable business day.

The Exchange may consider one or more of a number of different factors in determining whether a daily settlement price established by the above parameters is not a fair and reasonable reflection of the market. One factor that may be considered in this regard is the no-bust range for VA futures. For purposes of Policy and Procedure III (Resolution of Error Trades) of the Policies and Procedures Section of the CFE Rulebook, the no-bust range for a VA futures contract is 10% on either side of the volatility implied by the true market price of the contract as determined by the CFE Trade Desk. Prior to its expiration date, the fair value of a VA futures contract is the time-weighted sum of the current realized variance and an estimate of forward variance using a measure of the market implied volatility. This is what is meant by the volatility implied by a VA futures price. How this and other factors may be applied in determining whether to exercise discretion to determine the daily settlement price, and what that daily settlement price will be in any particular instance if discretion is applied, may vary depending on applicable market conditions.

Like other securities-related products, VA futures are subject to market-wide circuit breaker trading halt provisions under CFE Rule 417A (Market-Wide Trading Halts Due to Extraordinary Market Volatility). Rule 417A provides that CFE will halt trading in all CFE contracts subject to Rule 417A and not reopen trading in those contracts for specified time frames if there is a Level 1 (7%), Level 2 (13%), or Level 3 (20%) Market Decline. A Market Decline is a decline in the price of the S&P 500 Index between 8:30 a.m. and 3:00 p.m. on a trading day as compared to the closing price of the S&P 500 Index for the immediately preceding trading day.

Amended Chapter 23 no longer includes provisions relating to the trading of S&P 500 Variance future stub positions. Stub positions existed with the prior iteration of S&P 500 Variance futures since orders, quotes, and trades in that iteration of S&P 500 Variance futures were made in trading units of multiples of 1 notional equivalent of 1,000 vega notional. A stub position was a position that equated to an amount that was less than 1 notional equivalent of 1,000 vega notional. Stub positions resulted from variance units or number of futures contracts to units of vega notional. Stub positions resulted from vega decay in S&P 500 Variance futures positions after they were established. Because the minimum order, quote, and trade size for the prior iteration of S&P 500 Variance futures was 1 notional equivalent of 1,000 vega notional, stub positions could not be traded in the order book for those futures because their size was too small. Instead, stub positions were separately traded in an order book that the Exchange established solely for the trading of stub positions. The concept of stub positions no longer exists with VA futures because VA futures do not trade in units of vega notional and instead trade in variance units which are equivalent to the number of futures contracts traded. Accordingly, the Exchange has deleted the provisions relating to stub positions from Chapter 23.

Amended Chapter 23 also no longer includes provisions relating to the appointment of a designated primary market maker ("DPM") for VA futures and relating to a DPM participation right in transactions that take place in VA futures. The Exchange appointed a DPM for the prior iteration of S&P 500 Variance futures. CFE plans to put in place a lead market maker program for VA futures instead of appointing a DPM for the product. CFE plans to establish this lead market maker program through the submission to the Commission of a separate rule certification filing. Therefore, the Exchange has deleted the DPM provisions from Chapter 23.

#### **Contingencies**

The summary product specifications for VA futures and amended Rule 2303 set forth procedures for addressing a market disruption event that occurs between the initial listing date of a VA futures contract and its final settlement date as well as a situation in which the final settlement value is not available or the normal settlement procedure cannot be utilized.

A "market disruption event" with respect to a VA futures contract and as determined by CFE, means (i) the occurrence or existence, on any trading day during the one-half hour period that ends at the Scheduled Close of Trading, of any suspension of, or limitation imposed on, trading on one or more of the primary exchange(s) of the companies comprising the S&P 500 Index in one or more securities

that comprise 20% or more of the level of the S&P 500 Index; (ii) if on any trading day one or more of the primary exchange(s) determines to change the Scheduled Close of Trading by reducing the time for trading on that day, and either no public announcement of that reduction is made by that exchange or the public announcement of that change is made less than one hour prior to the Scheduled Close of Trading; (iii) if on any trading day one or more of the primary exchange(s) fails to open; or (iv) if one or more the primary exchange(s) declares a holiday or other non-trading date that was not declared prior to the listing date of the applicable VA futures contract; and if in the case of either (i) or (ii) above, in the determination of CFE, such suspension, limitation, or reduction is deemed material. "Scheduled Close of Trading" means the time scheduled by each applicable exchange, as of the opening for trading in the applicable equity security, as the closing time for the trading of that equity security on the trading day.

A "market disruption trading day" refers to a trading day on which a market disruption event has occurred, and a "non-disruption trading day" refers to a trading day without a market disruption event. CFE shall endeavor to disseminate notice of the occurrence of a market disruption trading day as soon as practical under the circumstances. Failure to provide that notice will have no effect on the determination by CFE that a market disruption trading day has occurred.

Generally, if CFE determines that a market disruption trading day has occurred, then the closing value of the S&P 500 Index on that trading day will be treated as unchanged from the closing value of the S&P 500 Index on the most recent previous non-disruption trading day. The result of treating a market disruption trading day in this manner is zero accrued variance on a market disruption trading day.

Generally, the daily return calculation on a non-disruption trading day that follows one or more consecutive market disruption trading days will use the closing value of the S&P 500 Index on the most recent previous non-disruption trading day as the initial value of the S&P 500 Index used to calculate that daily return.

Once the calculation period for realized variance begins for a VA futures contract, the value represented by N (i.e., the number of daily return values determined on the listing date of the VA futures contract needed to calculate the annualized realized variance during the covered time period for the VA futures contract) will not change regardless of the number of market disruption trading days that occur during the period, even if the final settlement date of that contract is postponed.

If a market disruption event occurs on the final settlement date of a VA futures contract, or if the final settlement value is not available or the normal settlement procedure cannot be utilized for a VA futures contract due to a trading disruption or other unusual circumstance, the final settlement value for that VA futures contract will be determined in accordance with the OCC Rules and By-Laws. The OCC Rules and By-Laws list actions that may be taken if a final settlement value is unavailable or the normal settlement procedures cannot be utilized. These actions include, but are not limited to, postponing the final settlement date for that VA futures contract until the first succeeding trading day in which a market disruption event has not occurred. It is intended that the value of the S&P 500 Index on the final day of the time period which is used in the calculation of realized variance for that VA futures contract will equal the exercise settlement value for the corresponding expiring SPX options series listed on Cboe Options.

#### Related Rule and Policy and Procedure Updates

In addition to the updated contract specification rules for VA futures in amended Chapter 23, the Amendment makes updates to two other CFE rules and to two Policies and Procedures in the Policies and Procedures Section of the CFE Rulebook.

CFE Rule 406A (Trading of Spread Orders) describes how spread orders are processed by the CFE System. The Amendment updates Rule 406A to reflect that spreads are not permitted in VA futures other than spreads that are processed as Block Trades and ECRP transactions.

CFE Rule 513A (Risk Controls) describes risk control mechanisms within the CFE System. The Amendment revises Rule 513A to delete reference to S&P 500 Variance future stub orders and stub positions since they will no longer exist with VA futures. The Amendment also revises Rule 513A to reflect that risk control thresholds are no longer measured in vega notional for S&P 500 Variance futures (since VA futures will not be traded in units of vega notional).

Policy and Procedure III (Resolution of Error Trades) ("P&P III") addresses how the Exchange handles potential error trades. The Amendment deletes a provision from P&P III that permits the CFE Trade Desk to bust or adjust a trade in an S&P 500 Variance futures contract if it determines that there has been an error in the calculation of the number of variance units or the futures converted contract price for the trade (referred to as a standard formula input error). This provision is no longer needed because the calculation referenced in this provision was used for the prior iteration of S&P 500 Variance futures in connection with the conversion of trades in those futures into different units at the end of the trading day as that conversion will not be occurring with VA futures.

Policy and Procedure X (DPM Market Performance Benchmarks Program) ("P&P X") currently includes provisions relating to a DPM program for VA futures that previously expired. The Amendment deletes the current provisions of P&P X because CFE will not have a DPM for VA futures and the prior iteration of S&P 500 Variance futures were the only product under the DPM program described in P&P X.

## Potential Uses of VA Futures

CFE believes that VA futures could be used by a number of different groups for commercial purposes and thus serve a legitimate economic purpose. Among the groups that may find VA futures to be useful in connection with their investment and trading activities are institutional investors, portfolio managers, OTC variance swap market participants, hedge funds, volatility traders, and liquidity providers as well as market participants that are unable to trade in the OTC market. For example: Institutional investors and portfolio managers may find VA futures to be useful in managing exposure to U.S. equity market volatility risk and enhancing diversification. OTC variance swap market participants, hedge funds, and volatility traders may find VA futures to be useful in implementing trading strategies that express directional views relating to U.S. equity market volatility, in capturing risk premia, and in replicating and hedging OTC variance swap exposures. Liquidity providers may make markets in VA futures in order to capture bid-ask spreads. All of these market participants, as well as market participants that do not have relationships and agreements in place that are necessary in order to trade in the OTC market, may find VA futures to be a transparent, capital efficient, and centrally cleared alternative to OTC variance swaps for trading strategies and hedging activities relating to exposure to U.S. equity market volatility.

#### Legal Conditions

VA futures are cash-settled futures contracts on a commodity which is also an excluded commodity under the Act. The definition of the term "commodity" under Section 1a(9) of the Act

includes, in addition to enumerated products (except onions and motion picture box office receipts) "all other goods and articles . . . and all services, rights, and interests . . . in which contracts for future delivery are presently or in the future dealt in."

Variance is a statistical measure of the variability of price returns of an underlier. S&P 500 Variance futures were previously offered for trading on CFE for many years. Accordingly, variance is a "right" or "interest" that qualifies as a "commodity" under the Act.

Additionally, variance is an "excluded commodity" under Section 1a(19) of the Act in that, among other things, it is an "occurrence, extent of an occurrence, or contingency . . . that is (I) beyond the control of the parties to the relevant contract, agreement, or transaction; and (II) is associated with a financial, commercial, or economic consequence."

Specifically, VA futures are based on the realized (historical) variance of the S&P 500 Index, measured from the initial listing date of a VA futures contract until its final settlement date. Settlement values for VA futures are based on a formula that determines the annualized realized variance of the S&P 500 Index by using daily log returns of the S&P 500 Index during the covered time period assuming a mean daily price return of zero.

S&P Dow Jones Indices LLC ("S&P DJI") has granted a license to Cboe Exchange, Inc. ("Cboe Options") and its affiliated exchanges, including CFE, which permits CFE to list VA futures for trading.

In particular, the license granted by S&P DJI allows for the use of the S&P 500 Index for the purposes of creating a Cboe S&P 500 Variance Indicator. Under this license, "Variance Indicator" means a series over time of realized or implied variance values, which series uses as input for its calculation, among other values, one or more of the following values: the value of one or more Standardized Options Contracts based on an Underlying S&P Index, the value of another financial interest based on an Underlying S&P Index, or the value of an Underlying S&P Index. In the case of VA futures, the inputs to the calculation of the Variance Indicator are values of an Underlying S&P Index and that Underlying S&P Index is the S&P 500 Index. The Cboe S&P 500 Variance Indicator refers to the calculation of the annualized realized variance of the S&P 500 Index for VA futures contracts and to which VA futures contracts settle.

CFE has undertaken a due diligence review of the legal conditions, including conditions that relate to contractual and intellectual property rights, which may materially affect the trading of the Product.

CFE believes that the Product and Amendment are consistent with the Designated Contract Market ("DCM") Core Principles under Section 5 of the Act, including for the reasons described below. In particular, CFE believes that the Amendment is consistent with:

# DCM Core Principles

(i) DCM Core Principle 2 (Compliance with Rules) because CFE rules include prohibitions against market manipulation and fraudulent, non-competitive, and disruptive trading practices that will apply to trading activity in VA futures and CFE will conduct monitoring and surveillance of trading in VA futures for compliance with CFE rules;

(ii) DCM Core Principle 3 (Contracts Not Readily Susceptible to Manipulation) because, among other things:

- The test under Section 1a(35) of the Act for the exclusion from the definition of narrow-based security index includes satisfaction of requirements relating to minimum number of constituents, maximum weightings, and minimum aggregate dollar value of average daily trading volume of lower weighted constituents. CFE believes that the S&P 500 Index satisfies this test and that satisfaction of this test, coupled with the large number of constituents included in the S&P 500 Index and the significant aggregate market capitalization of the stocks included in the S&P 500 Index, contribute to making VA futures not readily susceptible to manipulation.
- As of May 31, 2024, the 503 component stocks in the S&P 500 Index had an aggregate market capitalization of more than \$46.5 trillion which represented approximately 84.7% of the total market capitalization of U.S. public companies.
- VA futures are subject to position accountability and position aggregation under CFE Rule 412A (Position Accountability) and amended CFE Rule 2302(h). Specifically, the position accountability level for VA futures is ownership or control at any time of more than 250,000 contracts net long or net short in all VA futures contract months combined.
- CFE has rules that prohibit fraudulent, manipulative, and disruptive trading practices that will apply to trading in VA futures, including among others, CFE Rule 601 (Fraudulent Acts), CFE Rule 603 (Market Manipulation), CFE Rule 604 (Adherence to Law), CFE Rule 620 (Disruptive Practices), and Policy and Procedure XVIII (Disruptive Trading Practices) of the Policies and Procedures Section of the CFE Rulebook. Activity encompassed by these rules includes prohibited activity that occurs directly through any trading, practice, or conduct in a CFE product or indirectly through any trading, practice, or conduct in the market of any commodity, security, index, or benchmark underlying a CFE product, regardless of the exchange on or market in which the underlying is transacted. Accordingly, these rules will apply to any prohibited activity under those rules that could occur directly through activity in VA futures and to any prohibited activity under those rules that could occur indirectly in transactions utilized in the calculation of the S&P 500 Index.
- CFE Regulation will surveil for potential manipulation of VA futures.
- CFE also represents that, to ensure the usefulness of VA futures, CFE, among other things: (i) conducted market research so that the design of VA futures meets the risk management needs of prospective users and promotes price discovery and (ii) consulted with market users and obtained their views and opinions during the contract design process to ensure that:
  - the terms and conditions of VA futures reflect the realized variance of an index which is a gauge for the market for large capitalization U.S. stocks; and
  - VA futures will perform the intended risk management and/or price discovery functions.

(iii) DCM Core Principle 4 (Prevention of Market Disruption) in that the trading halt provisions applicable to VA futures, which will halt trading in VA futures during a market-wide circuit

breaker trading halt, will contribute toward reducing the potential risk of price distortions and market disruptions in the VA futures;

(iv) DCM Core Principle 5 (Position Limitations or Accountability) because, among other things:

- VA futures are subject to position accountability and position aggregation under Rule 412A and amended Rule 2302(h). Specifically, the position accountability level for VA futures is ownership or control at any time of more than 250,000 contracts net long or net short in all VA futures contract months combined.
- Rule 412A (in conjunction with CFE Rule 308 (Consent to Exchange Jurisdiction)) provide, among other things, that market participants are required to provide notice to the Exchange prior to, or within one business day of exceeding, an all-expirations-combined position accountability level and that the Exchange may, in its sole discretion, require the party (i) not to further increase any positions that are above that position accountability level, (ii) to reduce any positions that are above that position accountability level, (ii) to comply with any prospective levels or limits prescribed by the Exchange which equal or exceed that position accountability level or the size of the positions controlled by that party.
- Accordingly, the Amendment establishes an appropriate initial position accountability • level for VA futures that will serve to reduce the potential for market manipulation in VA futures in light of, among other things, the broad-based nature of the S&P 500 Index and the aggregate notional volatility exposure of SPX options, Cboe Volatility Index ("VX") futures, and Cboe Volatility Index ("VIX") options. The VIX Index is a financial benchmark designed to be an up-to-the-minute market estimate of expected volatility of the S&P 500 Index. A position equivalent to 250,000 VA futures contracts would equate to approximately \$10 million in vega notional, assuming an implied volatility level of 20%, which is near the historical average closing VIX Index level of 19.42. This exposure is a small (1.0%) percentage of the aggregate average daily vega notional amount of approximately \$973.8 million traded through SPX options, VX futures, VIX options, and options on the SPDR S&P 500 ETF Trust year-to-date through July 31, 2024. Additionally, this percentage does not take into account the additional significant average daily vega notional traded through options on E-mini S&P 500 Index futures if included.

(v) DCM Core Principle 6 (Emergency Authority) in that CFE has rule provisions, including CFE Rule 418 (Emergencies), that provide CFE with the ability to exercise emergency authority as necessary and appropriate which will apply to trading in VA futures;

(vi) DCM Core Principle 7 (Availability of General Information) because the chart that summarizes the product specifications for VA futures will be posted and maintained on CFE's website;

(vii) DCM Core Principle 8 (Daily Publication of Trading Information) in that volume, open interest, daily settlement prices, final settlement prices, and other price information for VA futures will be made available publicly on a daily basis on CFE's website consistent with CFTC Regulation 16.01;

(viii) DCM Core Principle 9 (Execution of Transactions) because CFE will make VA futures available for trading on CFE's trading system which provides for a competitive, open, and efficient

market and mechanism for executing transactions that protects the price discovery process of trading on CFE's centralized market;

(ix) DCM Core Principle 10 (Trade Information) in that CFE will maintain trade information for VA futures as part of its audit trail and this information will be accessible to CFE Regulation for regulatory surveillance and enforcement purposes;

(x) DCM Core Principle 11 (Financial Integrity of Transactions) because VA futures will be cleared by OCC, which is registered with the Commission as a Derivatives Clearing Organization ("DCO") and is subject to the provisions of the Act and CFTC regulations relating to DCOs;

(xi) DCM Core Principle 12 (Protection of Markets and Market Participants) in that CFE rules include prohibitions against abusive practices, including abusive practices committed by a party acting as an agent for a participant, that will apply in relation to VA futures;

(xii) DCM Core Principle 13 (Disciplinary Procedures) because CFE maintains disciplinary procedures and rules that authorize the Exchange to discipline market participants that commit CFE rule violations, including any rule violations relating to VA futures;

(xiii) DCM Core Principle 14 (Dispute Resolution) in that Chapter 8 (Arbitration) of the CFE Rulebook provides a mechanism for market participants to arbitrate disputes that arise out of transactions executed on or subject to the rules of the Exchange, including transactions in VA futures;

(xiv) DCM Core Principle 18 (Recordkeeping) because CFE's recordkeeping procedures, established pursuant to CFTC Regulation 1.31, will apply with respect to Exchange records relating to VA futures, including trade records and investigatory and disciplinary files;

(xv) DCM Core Principle 19 (Antitrust Considerations) in that the listing of VA futures will promote competition with other financial products relating to equity market volatility, including financial instruments traded in the OTC market; and

(xvi) DCM Core Principle 20 (System Safeguards) in that CFE maintains system safeguards controls and procedures for its operations and automated systems that will be utilized to facilitate trading in VA futures.

CFE believes that the impact of the Product and Amendment will be beneficial to the public and market participants. CFE is not aware of any substantive opposing views to the Product and Amendment. CFE hereby certifies that the Product and Amendment comply with the Act and the regulations thereunder. CFE further certifies that CFE has posted a notice of pending certification with Commission the and а copy of this submission on CFE's website (http://www.cboe.com/us/futures/regulation/rule filings/cfe/) concurrent with the filing of this submission with the Commission.

# Contact Information

Questions regarding this submission may be directed to Arthur Reinstein at (312) 786-7570 and Shane Wilkerson at (484) 798-9350. Please reference our submission number CFE-2024-014 in

any related correspondence.

Cboe Futures Exchange, LLC

/s/ Laura Fuson

By: Laura Fuson Managing Director

# **EXHIBIT 1**

# Summary Product Specifications Chart for Cboe S&P 500 Variance Futures

CONTRACT NAME:	Cboe S&P 500 Variance ("VA") Futures
LISTING DATE:	
DESCRIPTION:	VA futures are cash-settled futures contracts based on the annualized realized variance of the S&P 500 Index.
	Variance is a statistical measure of the variability of price returns. As further described below, the final settlement value of a VA futures contract is determined based on a formula for calculating the annualized realized variance of the S&P 500 Index measured from the initial listing date of the
<b>T</b>	contract until the final settlement date of the contract.
TICKER SYMBOL:	VA
CONTRACT MONTHS:	The Exchange may list VA futures contract months that correspond to listed contract months for standard S&P 500 Index ("SPX") options listed
	on Cboe Exchange, Inc. ("Cboe Options") which are A.M. settled and generally expire on the third Friday of a month.
<b>CONTRACT SIZE:</b>	The contract size of a VA futures contract is one variance unit.
TRADING UNIT:	Orders, quotes, and trades in VA futures are made in trading units of 1
	variance unit, including Block Trades and Exchange of Contract for
	Related Position ("ECRP") transactions. Accordingly, the minimum
	order, quote, and trade size for VA futures is 1 contract (equivalent to 1
	variance unit) and VA futures may not trade in fractional contracts or
	fractional variance units.
CONTRACT	The contract multiplier for VA futures is \$1.00 per variance point.
MULTIPLIER	
PRICING	Prices of VA futures are expressed in variance points.
<b>CONVENTIONS:</b>	
Marian and a Data data	VA futures prices are stated in decimal format out to two decimal places.
MINIMUM PRICE	Prices in VA futures may be in increments of 0.50 variance points (equal $1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 $
INTERVALS:	to a dollar value per minimum increment of \$0.50 per contract).
<b>TRADING HOURS:</b>	Type of Trading Hours Monday – Friday
	Regular         8:30 a.m. to 3:15 p.m.
	All times referenced are Chicago time
TRADING	All times referenced are Chicago time. CFE System
I RADING PLATFORM	OPE System
TRADE AT	Trade at Settlement ("TAS") transactions are not permitted in VA futures.
SETTLEMENT	The at Settlement ( 1715 ) transactions are not permitted in VA futures.
TRANSACTIONS:	
CROSSING:	The eligible size for an original Order that may be entered for a cross trade
	with one or more other original Orders pursuant to Rule 407 is a Contract
	amount equal to one contract. The Trading Privilege Holder or Authorized
	Trader, as applicable, must expose to the market for at least five seconds
	under Rule $407(a)$ at least one of the original Orders that it intends to cross.
<b>PRE-EXECUTION</b>	The Order Exposure Period under Policy and Procedure IV before an
<b>DISCUSSIONS:</b>	

	to which there has been pre-execution discussions is five seconds after the
	first Order was entered into the CFE System.
EXCHANGE OF	ECRP transactions may be entered into in VA futures. Any ECRP
CONTRACT FOR	transaction must satisfy the requirements of Rule 414.
<b>RELATED POSITION</b>	
<b>TRANSACTIONS:</b>	The minimum price increment for an ECRP transaction involving VA
	futures is 0.10 variance points.
BLOCK TRADES:	Block Trades may be entered into in VA futures. Any Block Trade must satisfy the requirements of Rule 415.
	The minimum Block Trade quantity for VA futures is 1,500 contracts if there is only one leg involved in the trade. If the Block Trade is executed as a spread transaction with multiple legs, each leg must meet the minimum Block Trade quantity for VA futures.
	A Block Trade may not be executed in VA futures as a strip.
	The minimum price increment for a Block Trade in VA futures is 0.10 variance points.
	Derived Block Trades may be entered into in VA futures. A Derived Block Trade in VA futures may be executed as either a single leg transaction or a spread transaction.
NO BUST RANGE:	The CFE error trade policy may only be invoked for a trade price if the volatility implied by that trade price is greater than 10% on either side of the volatility implied by the true market price of the applicable VA futures contract. In accordance with Policy and Procedure III, the Trade Desk will determine what the true market price for the relevant contract was immediately before the potential error trade occurred in order to determine the volatility implied by the true market price. In making that determination, the Trade Desk may consider all relevant factors, including the last trade price for such contract, a better bid or offer price, a more recent price in a different contract expiration, and the prices of related contracts trading on the Exchange or other markets.
POSITION	VA futures are subject to position accountability and position aggregation
ACCOUNTABILITY:	under Rule 412A.
	The position accountability level for VA futures is ownership or control at any time of more than 250,000 contracts net long or net short in all VA futures contract months combined.
REPORTABLE	25 contracts
<b>POSITION LEVEL:</b>	
TERMINATION OF	Trading in an expiring VA futures contract ends at the close of trading
TRADING:	hours in VA futures on the day immediately prior to the final settlement
	date of the contract. If that day is a CFE holiday, trading in the expiring
	VA futures contract ends at the close of trading hours on the CFE business
	day immediately preceding that day.
FINAL SETTLEMENT	The final settlement date for a VA futures contract is the third Friday of
DATE:	the contract month for that contract. If the third Friday of the contract
DAID.	month is a CFE holiday, the final settlement date for the expiring VA

	futures contract shall be the CFE business day immediately preceding the
	third Friday of the contract month.
FINAL SETTLEMENT VALUE	The final settlement value of a VA futures contract is based on a calculation of the annualized realized variance of the S&P 500 Index. The realized variance is calculated from a series of values of the S&P 500 Index beginning with the closing value of the S&P 500 Index on the first day that a VA futures contract is listed for trading and ending with the special opening quotation ("SOQ") of the S&P 500 Index on the final settlement date of that contract ("covered time period"). The calculation uses daily log returns of the S&P 500 Index for the covered time period assuming a mean daily price return of zero. The calculated variance is annualized assuming 252 trading days per year. The final settlement value is the calculated annualized realized variance rounded to the nearest 0.01.
	The term "daily return" refers to a calculation that uses two reference values, a current value $(P_i)$ and a previous value $(P_{i-1})$ , as formulated below.
	The current value for the first daily return in the covered time period for a VA futures contract is the closing value of the S&P 500 Index on the trading day immediately following the initial listing date. The previous value for the first daily return is the closing value of the S&P 500 Index on the initial listing date.
	The current value for the last daily return in the covered time period for a VA futures contract is the S&P 500 Index SOQ on the final settlement date of the contact that is also used as the exercise settlement value for the corresponding expiring SPX options series listed on Cboe Options. The previous value for the last daily return is the closing value of the S&P 500 Index on the trading day immediately preceding the final settlement date.
	For all other daily returns during the covered time period for that VA futures contract, the current and previous values are the closing values of the S&P 500 Index on consecutive trading days.
	If the index calculator subsequently adjusts an S&P 500 Index value used in the calculation of realized variance, the Exchange will not adjust the realized variance determined for the applicable day unless the Exchange determines otherwise.
	Final Settlement Value Formula:
	The final settlement value of a VA futures contract is equal to the realized variance value determined utilizing following formula and then rounded to the nearest 0.01:
	Realized Variance = $\frac{252}{N} \left( \sum_{i=1}^{N} R_i^2 \right)$
	The components of this formula include:

	$R_i = 100 * \ln(P_i/P_{i-1})$ – The daily return of the S&P 500 Index from P <sub>i-1</sub> to P <sub>i</sub> in percentage points.
	$P_{i-1}$ – The previous value of the S&P 500 Index used to calculate the daily return.
	$P_i$ – The current value of the S&P 500 Index used to calculate the daily return.
	N – The number of daily return values determined on the listing date of the VA futures contract needed to calculate the annualized realized variance during the covered time period for the VA futures contract.
MARKET DISRUPTION EVENTS:	<ul> <li>Variatee during the covered time period for the VA futures contract.</li> <li>A "market disruption event" with respect to a VA futures contract and as determined by CFE, means (i) the occurrence or existence, on any trading day during the one-half hour period that ends at the Scheduled Close of Trading, of any suspension of, or limitation imposed on, trading on one or more of the primary exchange(s) of the companies comprising the S&amp;P 500 Index in one or more securities that comprise 20% or more of the level of the S&amp;P 500 Index; (ii) if on any trading day one or more of the primary exchange(s) determines to change the Scheduled Close of Trading by reducing the time for trading on that day, and either no public announcement of that reduction is made by that exchange or the public announcement of that change is made less than one hour prior to the Scheduled Close of Trading; (iii) if on any trading day one or more of the primary exchange(s) fails to open; or (iv) if one or more the primary exchange(s) declares a holiday or other non-trading date that was not declared prior to the listing date of the applicable VA futures contract; and if in the case of either (i) or (ii) above, in the determination of CFE, such suspension, limitation, or reduction is deemed material. "Scheduled Close of Trading in the applicable equity security, as the closing time for the trading of that equity security on the trading day.</li> <li>A "market disruption trading day" refers to a trading day on which a market disruption event has occurred, and a "non-disruption trading day" refers to a trading day and without a market disruption trading day as soon as practical under the circumstances. Failure to</li> </ul>
	provide that notice will have no effect on the determination by CFE that a market disruption trading day has occurred.
	Generally, if CFE determines that a market disruption trading day has occurred, then the closing value of the S&P 500 Index on that trading day will be treated as unchanged from the closing value of the S&P 500 Index on the most recent previous non-disruption trading day. The result of treating a market disruption trading day in this manner is zero accrued variance on a market disruption trading day.
	Generally, the daily return calculation on a non-disruption trading day that follows one or more consecutive market disruption trading days will use

	<ul><li>the closing value of the S&amp;P 500 Index on the most recent previous non- disruption trading day as the initial value of the S&amp;P 500 Index used to calculate that daily return.</li><li>Once the calculation period for realized variance begins for a VA futures</li></ul>
	contract, the value represented by N will not change regardless of the number of market disruption trading days that occur during the period, even if the final settlement date of that contract is postponed.
	If a market disruption event occurs on the final settlement date of a VA futures contract, or if the final settlement value is not available or the normal settlement procedure cannot be utilized for a VA futures contract due to a trading disruption or other unusual circumstance, the final settlement value for that VA futures contract will be determined in accordance with the Rules and By-Laws of The Options Clearing Corporation. These Rules and By-Laws list actions that may be taken if a final settlement value is unavailable or the normal settlement procedures cannot be utilized. These actions include, but are not limited to, postponing the final settlement date for that VA futures contract until the first succeeding trading day in which a market disruption event has not occurred. It is intended that the value of the S&P 500 Index on the final day of the time period which is used in the calculation of realized variance for that VA futures contract will equal the exercise settlement value for the corresponding expiring SPX options series listed on Cboe Options.
DELIVERY:	Settlement of a VA futures contract will result in the delivery of a cash settlement amount on the business day immediately following the final settlement date of that contract. The cash settlement amount on the final settlement date shall be the final mark to market amount against the final settlement value of that VA futures contract multiplied by \$1.00.

#### EXHIBIT 2

The Amendment, marked to show additions in <u>underlined</u> text and deletions in <del>stricken</del> text, consists of the following:

\* \* \* \* \*

#### Cboe Futures Exchange, LLC Rulebook

\* \* \* \* \*

#### 406A. Trading of Spread Orders

(a) Spread Order Processing.

(i) Futures spreads are created in the following manner and are subject to the following parameters:

(A) The Trade Desk determines which Futures spreads to create and make available to be traded in the CFE System in its sole discretion. Trading Privilege Holders do not have the capability to create Futures spreads within the CFE System. If a Trading Privilege Holder would like a Futures spread with a permissible ratio and permissible Futures spread type to be created that is not already available to be traded in the CFE System, the Trading Privilege Holder should contact the Trade Desk in a form and manner prescribed by the Exchange to request creation of the Futures spread. The Trade Desk may determine whether or not to make that Futures spread available for trading in its sole discretion.

(B) Futures spreads, other than Futures spreads that are processed as Block Trades and Exchange of Contract for Related Position transactions, are required to have the following permissible ratios:

(1) two-legged spreads where the ratio of the number of Contracts in one leg to the number of Contracts in the other leg is 1:1, 1:2 and 2:1;

(2) three-legged spreads where the ratio is 1:1:1 or 1:2:1;

(3) four-legged spreads where the ratio is 1:1:1:1; and

(4) any other spread type from time to time approved by the Exchange.

(C) Futures Spreads that are processed as Block Trades and Exchange of Contract for Related Position transactions are not required to satisfy the permissible ratios in Rule 406A(a)(i)(B).

(D) Futures spreads that are processed as TAS transactions and spread transactions in S&P 500 Variance futures are required to be two-legged spreads that are not strips where the ratio of the number of Contracts in one leg to the number of Contracts in the other leg is 1:1.

(E) Spreads are not permitted in VA futures other than spreads that are processed as Block Trades and Exchange of Contract for Related Position transactions.

(a)(ii) - (a)(xi) No changes.

(b) No changes.

\* \* \* \* \*

# 513A. Risk Controls

#### (a) *General Provisions.*

(i) The Exchange shall implement, and make available to Clearing Members and Trading Privilege Holders, risk control mechanisms as described in this Rule 513A in a form and manner prescribed and provided by the Exchange. The provisions of this Rule 513A relating to each risk control mechanism describe whether that risk control mechanism may be utilized for Futures products, Options products or both Futures and Options products.

(ii) Risk control mechanisms may be set by EFID, product and/or match capacity allocation depending upon the applicable risk control. Risk control settings applicable to a product apply to all contract expirations or series, as applicable, in that product (except that TAS Orders and S&P 500 Variance future stub Orders each have separate product level settings that apply only to those that Order types type).

(iii) The risk control mechanisms made available to Clearing Members shall enable a Clearing Member to set risk control parameters for Trading Privilege Holders in relation to Orders submitted to the CFE System with EFIDs that are linked to a clearing number for that Clearing Member. Clearing Members may also be able to set EFID risk control parameters by groups of EFIDs depending upon the applicable risk control. Additionally, a Clearing Member will have the ability to utilize the risk control mechanisms made available to Trading Privilege Holders in relation to that Clearing Member's own access to the CFE System.

(iv) Risk control thresholds are measured in vega notional for S&P 500 Variance futures and in variance units for S&P 500 Variance future stub positions rather than in contract size.

(b) - (o)

No changes.

\* \* \* \* \*

### CHAPTER 23 <u>CBOE</u> S&P 500 VARIANCE FUTURES CONTRACT SPECIFICATIONS

#### 2301. Scope of Chapter

This chapter applies to trading in <u>Cboe</u> S&P 500 Variance futures <del>contracts</del> <u>(Futures Symbol: VA)</u>. The procedures for trading, clearing, settlement, and any other matters not specifically covered herein shall be in this chapter are governed by the generally applicable rules of the Exchange. The S&P 500 Variance <u>VA</u> futures <del>contract was</del> were first listed for trading on the Exchange on September 27, 2012 \_\_\_\_\_\_.

## 2302. Contract Specifications

(a) *Contract Size*. The contract size of a VA futures Contract is one variance unit.

(b) Trading Unit. Orders, quotes and trades in VA futures are made in trading units of 1 variance unit, including Block Trades and Exchange of Contract for Related Position transactions. Accordingly, the minimum order, quote and trade size for VA futures is 1 contract (equivalent to 1 variance unit) and VA futures may not trade in fractional contracts or fractional variance units.

(ac) <u>Contract</u> Multiplier. The contract multiplier for the S&P 500 Variance <u>VA</u> futures contract is \$1 \$1.00 per variance unit.

(d) *Pricing Conventions*. Prices of VA futures are expressed in variance points. VA futures prices are stated in decimal format out to two decimal places.

(e) Minimum Price Intervals. Single leg prices in VA futures may be in increments of 0.50 variance points (equal to a dollar value per minimum increment of \$0.50 per contract).

(bf) Schedule and Prohibited Order Types. The Exchange may list <u>VA futures</u> contract months for S&P 500 Variance futures that correspond to the listed contract months for options on the S&P 500 Composite Stock Price Index standard S&P 500 Index ("SPX") options listed and traded on Cboe Options which are A.M. settled and generally expire on the third Friday of a month.

The final settlement date for an S&P 500 Variance <u>a VA</u> futures Contract shall be on <u>is</u> the third Friday of the <u>expiring futures</u> contract month <u>for that Contract</u>. If the third Friday of the <u>expiring contract</u> month is a CFE holiday, the <u>Final Settlement Date final</u> <u>settlement date</u> for the expiring <u>contract VA futures Contract</u> shall be the CFE <del>business</del> <del>day</del> <u>Business Day</u> immediately preceding the third Friday <u>of the contract month</u>.

The trading days for S&P 500 Variance futures contracts shall be the same trading days of options on the S&P 500 Composite Stock Price Index, as those days are determined

by Choe Options. The trading days for VA futures are any Business Days the Exchange is open for trading.

The trading hours for the S&P 500 Variance <u>VA</u> futures contract are regular trading hours from 8:30 a.m. Chicago time to 3:15 p.m. Chicago time.

Good-'til-Canceled Orders and Good-'til-Date Orders are not permitted in S&P 500 Variance VA futures. Spread Orders are not permitted in VA futures except for spread transactions that are processed as Block Trades and Exchange of Contract for Related Position transactions.

(c) *Minimum Increments and Minimum Order Sizes*. The minimum fluctuation of the S&P 500 Variance futures contract is 0.05 volatility index points.

The individual legs and net prices of spread trades in the S&P 500 Variance futures contract is 0.01 volatility index points.

The minimum Order size for the S&P 500 Variance futures contract is 1,000 vega notional and all Orders must be in multiples of 1,000 vega notional, except as provided for in subparagraph (s) below.

The sizes of Orders and trades in S&P 500 Variance futures are expressed and displayed in notional equivalent units of 1,000 vega notional. For example, an Order or trade size of 1 has a size of 1,000 vega notional, and an Order or trade size of 3 has a size of 3,000 vega notional. Order and trade expression and display in notional equivalent units of 1,000 applies to all trading in S&P 500 Variance futures, including Block Trades and Exchange of Contract for Related Position transactions.

(g) Termination of Trading. Trading in an expiring VA futures Contract ends at the close of trading hours in VA futures on the day immediately prior to the final settlement date of the Contract. If that day is a CFE holiday, trading in the expiring VA futures Contract ends at the close of trading hours on the CFE Business Day immediately preceding that day.

(d) <u>Position Limits</u>. S&P 500 Variance futures are subject to position limits under Rule 412.

A person may not own or control contracts exceeding 125,000 units of variance notional net long or net short in all contract months of an S&P 500 Variance futures contract combined.

For the purposes of this Rule, positions shall be aggregated in accordance with Rule 412(e).

The foregoing position limit shall not apply to positions that are subject to a position limit exemption meeting the requirements of Commission Regulations and CFE Rules.

(e) *Termination of Trading*. Trading in S&P 500 Variance futures contracts terminates on the business day immediately preceding the final settlement date of the S&P 500 Variance futures contract for the relevant spot month. When the last trading

day is moved because of a CFE holiday, the last trading day for an expiring S&P 500 Variance futures contract will be the day immediately preceding the last regularly-scheduled trading day.

(h) *Position Accountability*. VA futures are subject to position accountability and position aggregation under Rule 412A.

The position accountability level for VA futures is ownership or control at any time of more than 250,000 contracts net long or net short in all VA futures contract months combined.

(fi) Contract Modifications. Specifications are fixed as of the first day of trading of a contract Contract. If any U.S. government agency or body issues an order, ruling, directive or law that conflicts with the requirements of these rules, such order, ruling, directive or law shall be construed to take precedence and become part of these rules, and all open and new contracts Contracts shall be subject to such government orders.

(gj) *Execution Priorities.* Pursuant to Rule 406(a)(i), the base allocation method of price-time priority shall apply to trading in <u>S&P 500 Variance VA</u> futures contracts, including S&P 500 Variance future stub positions (defined below in subparagraph (s)).

 $(\underline{hk})$  Crossing Two or More Original Orders. The eligible size for an original Order that may be entered for a cross trade with one or more other original Orders pursuant to Rule 407 is a Contract amount equal to 1,000 vega notional of one contract. The Trading Privilege Holder or Authorized Trader, as applicable, must expose to the market for at least five seconds under Rule 407(a) at least one of the original Orders that it intends to cross.

(i<u>1</u>) Price Limits and Circuit Breaker Halts. Pursuant to Rule 413, S&P 500 Variance VA futures contracts are not subject to price limits pursuant to Rule 413.

Trading in S&P 500 Variance VA futures contracts shall be halted pursuant to Rule 417A if there is a Level 1, 2 or 3 Market Decline, except that the halt period provided for under Rule 417A(c)(i) following a Level 1 or Level 2 Market Decline shall be 10 minutes instead of 15 minutes and the Exchange may resume trading in S&P 500 Variance VA futures contracts any time after the 10-minute halt period.

( $\underline{jm}$ ) Exchange of Contract for Related Position. Exchange of Contract for Related Position transactions, as set forth in Rule 414, may be entered into with respect to  $\underline{S\&P}$  500 Variance  $\underline{VA}$  futures contracts. Any Exchange of Contract for Related Position transaction must satisfy the requirements of Rule 414 and must be for a minimum Order size of 1,000 vega notional.

The minimum price increment for an Exchange of Contract for Related Position  $\frac{\text{transaction}}{\text{involving the S&P 500 Variance VA}}$  futures contract is 0.01 volatility index 0.10 variance points.

Exchange of Contract for Related Position transactions in S&P 500 Variance future stub positions are not permitted.

(kn) Block Trades. Pursuant to Rule 415(a)(i), the minimum Block Trade quantity for the S&P 500 Variance VA futures contract is a contract amount equaling 50,000 vega notional 1,500 contracts if there is only one leg involved in the trade. If the Block Trade is executed as a spread transaction that is not a strip, one leg of the spread is required to have a contract amount with a minimum size of 50,000 vega notional and the other leg of the spread is required to have a contract amount with a minimum size of 25,000 vega notional with multiple legs, each leg must meet the minimum Block Trade quantity for VA futures. A Block Trade may not be executed in S&P 500 Variance VA futures as a strip.

The minimum price increment for a Block Trade in the S&P 500 Variance futures contract <u>VA futures</u> is 0.01 volatility index 0.10 variance points.

Derived Block Trades, as set forth in Rule 415(s), may be entered into in VA futures. A Derived Block Trade in VA futures may be executed as a single leg transaction and not as a spread transaction.

#### Block Trades in S&P 500 Variance future stub positions are not permitted.

No-Bust Range. Pursuant to Rule 416, the Exchange error trade policy may (10)only be invoked for: (i) a trade price if the volatility implied by that trade price is greater than 10% on either side of the volatility implied by the true market price, quoted in volatility points, of the applicable S&P 500 Variance VA futures Contract contract (referred to as trade price errors), and (ii) an error in the calculation of the number of variance units or the futures converted contract price for the trade (referred to as a standard formula input error). In accordance with Policy and Procedure III, for trade price errors, the Trade Desk will determine what the true market price for the relevant Contract was immediately before the potential error trade occurred in order to determine the volatility implied by the true market price. For stub and non-stub positions in S&P 500 Variance futures, the "true market price" will be determined by reference to non-stub positions in S&P Variance futures and not by reference to S&P 500 Variance stub positions. In making that determination, the Trade Desk may consider all relevant factors, including the last trade price for such Contract, a better bid or offer price, a more recent price in a different contract month expiration and the prices of related contracts trading on the Exchange and other markets.

In accordance with Policy and Procedure III: (i) the determination of whether a standard formula input error occurred is solely within the Trade Desk's discretion and (ii) the busting or adjustment of a trade by the Trade Desk due to a standard formula input error may only occur on the same calendar or Business Day that the trade occurred.

(mp) *Pre-execution Discussions*. The Order Exposure Period under Policy and Procedure IV before an Order may be entered to take the other side of another Order with respect to which there has been pre-execution discussions is five seconds after the first Order was entered into the CFE System.

(nq) *Reportable Position and Trading Volume.* 

(i) *Reportable Position.* Pursuant to Commission Regulation §15.03 and Commission Regulation Part 17, the position level that is required to be reported to the Commission is any open position in <u>S&P 500 Variance</u> <u>VA</u> futures contracts at the close of trading on any trading day equal to or in excess of 25 variance units <u>contracts</u> on either side of the market.

(ii) Reportable Trading Volume. Pursuant to Commission Regulation \$15.04 and Commission Regulation Part 17, the reportable trading volume that triggers the requirement to report a volume threshold account to the Commission is 50 or more S&P 500 Variance VA futures contracts during a single trading day or such other reportable trading volume threshold as may be designated by the Commission.

(or) Threshold Widths. For purposes of Rule 513A(e) and Rule 513A(f), 10% is the percentage used to determine the percentage of the mid-point between the highest bid and lowest offer in an S&P 500 Variance a VA futures contract Contract for purposes of calculating the Threshold Width in that S&P 500 Variance VA futures contract Contract.

The minimum size of bids and offers that establish a Threshold Width is a contract amount equal to 1,000 vega notional.

Whether a Threshold Width exists with respect to S&P 500 Variance future stub positions is determined separately based upon the prevailing Orders for those positions. There is no minimum size of bids and offers needed to establish a Threshold Width in S&P 500 Variance future stub positions.

(ps) Daily Settlement Price. The daily settlement price for an S&P 500 Variance a VA futures Contract is calculated in the following manner for each Business Day:

(i) The daily settlement price for a VA futures Contract is the average of the bid and the offer from the last best two-sided market in that VA futures Contract during the applicable Business Day which simultaneously includes both a pending bid with a non-zero value and a pending offer with a non-zero value. If a two-sided market includes either no bid or no offer, the bid or offer would be considered to have a zero value and that two-sided market would not be used for this purpose.

(ii) If there is no two sided market in the S&P 500 Variance futures Contract during the applicable Business Day prior to the close of trading hours on that Business Day which simultaneously includes both a pending bid with a non zero value and a pending offer with a non-zero value, the daily settlement price for the S&P 500 Variance futures Contract will be the daily settlement price of the S&P 500 Variance futures Contract with the nearest expiration date in calendar days to the expiration date of the S&P 500 Variance futures Contract for which the daily settlement price is being determined. If there is an S&P 500 Variance futures Contract with a later expiration date and an S&P 500 Variance futures Contract with a later expiration date that each meet this criterion, the daily settlement price of the S&P 500 Variance futures Contract with the earlier expiration date will be utilized.

(iiii) The daily settlement price may go out to four decimal places and may be a price that is not at a minimum increment for the S&P 500 Variance VA futures Contract.

(iviii) The Exchange may in its sole discretion establish a daily settlement price for an S&P 500 Variance <u>VA</u> futures Contract that it deems to be a fair and reasonable reflection of the market if:

(A) the Exchange determines in its sole discretion that the daily settlement price determined by the parameters set forth in paragraphs paragraph (ps)(i) - (p)(ii) above is not a fair and reasonable reflection of the market; or

(B) there is a trading halt in the <u>S&P 500 Variance VA</u> futures Contract or other unusual circumstance at <u>or around</u> the scheduled close of trading hours for the <u>S&P 500 Variance VA</u> futures Contract on the applicable Business Day.

(qt) Trade at Settlement Transactions. Trade at Settlement ("TAS") transactions pursuant to Rule 404A are not permitted in S&P 500 Variance VA futures.

(Fu) Price Reasonability Checks. The Limit Order price reasonability percentage parameters designated by the Exchange for S&P 500 Variance VA futures pursuant to Rule 513A(d) and the Market Order price reasonability percentage parameters designated by the Exchange for S&P 500 Variance VA futures pursuant to Rule 513A(e) shall each be 10%

The prevailing best offer and prevailing best bid are calculated separately for S&P 500 Variance future stub positions based upon the prevailing Orders for those positions.

(s) Trading S&P 500 Variance Future Stub Positions. A stub position in the S&P 500 Variance futures contract is a position that when converted from variance units (number of contracts) to vega notional is equal to an amount that is less than 1 notional equivalent of 1,000 vega notional.

Except to the extent modified by this paragraph (s), the provisions of the other paragraphs of this Rule shall continue to be applicable in relation to trading in S&P 500 Variance future stub positions.

The sizes of Orders and trades in S&P 500 Variance future stub positions are expressed and displayed variance units (number of contracts). Upon receipt of an Order for an S&P 500 Variance stub position, the Exchange will convert the number of variance units (number of contracts) to vega notional and if that amount exceeds 1 notional equivalent of 1,000 vega notional, the Order will be automatically rejected or canceled back to the sender. Orders for S&P 500 Variance future stub positions will only interact with other Orders for S&P 500 Variance future stub positions and will not interact with non-stub positions in the S&P 500 Variance futures contract.

Good-'til-Canceled Orders, Good-'til-Date Orders and spread trades are not permitted in S&P 500 Variance future stub positions.

Market Orders for S&P 500 Variance future stub positions will not be accepted by the Exchange outside of trading hours for the S&P 500 Variance futures contract. Any Market Orders for S&P 500 Variance future stub positions received by the Exchange outside of trading hours for the S&P 500 Variance futures contract will be automatically rejected or canceled back to the sender.

#### 2303. Settlement

Settlement of S&P 500 Variance <u>VA</u> futures contracts <u>Contracts</u> will result in the delivery of a cash settlement amount on the business day immediately following the settlement date. The cash settlement amount on the final settlement date shall be the final mark to market amount against the final settlement price of the <u>S&P 500 Variance VA</u> futures contract <u>Contract</u> multiplied by \$1.00. The final settlement price of the <u>S&P 500 Variance VA</u> futures futures contract <u>Contract</u> will be rounded to the nearest <u>\$0.0001 §0.01</u>.

Clearing Members holding open positions in  $\frac{8 \times P}{200}$  Variance <u>a VA</u> futures contracts <u>Contract</u> at the termination of trading in that Contract shall make payment to or receive payment from the Clearing Corporation in accordance with normal variation and performance bond procedures based on the final settlement amount.

If the settlement value is not available or the normal settlement procedure cannot be utilized due to a trading disruption or other unusual circumstance, the settlement value will be determined in accordance with the Rules and By-Laws of The Clearing Corporation.

#### 2304. DPM Provisions

(a) *DPM Appointment*. A Trading Privilege Holder will be appointed to act as a DPM for S&P 500 Variance futures contracts pursuant to Rule 515.

(b) *DPM Participation Right.* There is no DPM participation right percentage under Rule 406(b) for the S&P 500 Variance futures contract.

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**Cboe Futures Exchange, LLC Policies and Procedures Section of Rulebook** 

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#### III. Resolution of Error Trades (Rule 416)

A. - E.

No changes.

# F. Busting or Adjusting Trades in the S&P 500 Variance Futures Contract

In its sole discretion, the Trade Desk is authorized to bust or adjust a trade in the S&P 500 Variance futures contract if it determines that there has been an error in the calculation of the number of variance units or the futures converted contract price for the trade (referred to as a standard formula input error). The determination as to whether a standard formula input error occurred is solely within the Trade Desk's discretion. The busting or adjustment of a trade by the Trade Desk due to a standard formula input error may only occur on the same calendar or Business Day that the trade occurred.

# **GF.** Busting or Adjusting Block Trades and the Contract Leg of Exchange of Contract for Related Position Transactions Inputted with Mistake, Inaccuracy or Error

The Trade Desk is authorized to bust or adjust a Block Trade or the Contract leg of an Exchange of Contract for Related Position transaction if both (i) there was a mistake, inaccuracy or error in the information that was inputted into the CFE System for the Block Trade or the Contract leg of the Exchange of Contract for Related Position transaction and (ii) an Authorized Reporter or party on each side of the transaction agree upon the mistake, inaccuracy or error that occurred and notify the Trade Desk of the mistake, inaccuracy or error in a form and manner prescribed by the Exchange by no later than 4:00 p.m. Chicago time on the Business Day of the transaction.

# **HG.** Busting or Adjusting Trades Not Correctly Processed Due to System Malfunction

The Trade Desk is authorized to bust or adjust any trade that is not correctly processed by the CFE System due to a system malfunction.

# **<u>HH</u>**. Busting or Adjusting Trades to Mitigate Market Disrupting Events

The Trade Desk, in consultation with an Exchange officer, is authorized to bust or adjust any trade (i) when necessary to mitigate market disrupting events caused by malfunctions in the CFE System or errors in Orders submitted by Trading Privilege Holders and market participants or (ii) if the Trade Desk believes that allowing the trade to stand as executed could have a material adverse effect on the integrity of the market.

# JI. Busting Trades Rejected by the Clearing Corporation

The Trade Desk is authorized to bust any trade that is not accepted for clearing by the Clearing Corporation.

# **K.J.** Busting Leg Components of Block Trade and Exchange of Contract for Related Position Spread Transactions

Upon the request of one of the parties to the transaction, the Trade Desk is authorized to bust the Contract leg components of a Block Trade or Exchange of Contract for Related position transaction that are part of a spread or strip if the submission of one of the Contract leg components of the transaction is rejected by the CFE System because it would cause a net long (short) risk control pursuant to Rule 513A(c) to be exceeded.

# **<u>LK.</u>** Notice of Trade Busts and Adjustments

The Exchange shall disseminate notice of any bust of a trade pursuant to this Policy and Procedure III through Exchange Market Data. The Exchange shall provide notice of any adjustment of a trade pursuant to this Policy and Procedure III to the parties to that trade.

# **<u>ML</u>**. Cancellation of Orders Due to System Malfunction

The Trade Desk is authorized to cancel Orders as it deems necessary to maintain a fair and orderly market if a technical or systems issue or malfunction occurs with the CFE System. The Trade Desk shall disseminate notice to impacted Trading Privilege Holders of any cancellation of Orders pursuant to this Part  $\underline{ML}$ .

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## X. DPM Market Performance Benchmarks Program RESERVED

Each DPM that is allocated a Contract as a DPM shall comply with the requirements and product specific DPM market performance benchmarks set forth below. In addition, if product specific DPM benefits are set forth below with respect to a particular Contract and if a DPM participation right is provided for in the rules governing the relevant Contract, the DPM that is allocated that Contract shall receive the applicable benefits.

The Exchange may terminate, place conditions upon or otherwise limit a Trading Privilege Holder's approval to act as a DPM or a DPM's allocation of Contracts in accordance with Rule 515 if the DPM fails to satisfy the market performance benchmarks under this Policy and Procedure. For example, the Exchange may reduce a monthly benefit to a DPM under this Policy and Procedure through a proration that takes into consideration the extent to which the DPM does not satisfy the applicable market performance benchmarks during the applicable calendar month. However, failure by a DPM to satisfy the market performance benchmarks under this Policy and Procedure shall not be deemed a violation of Exchange rules.

The DPM Market Performance Benchmarks Program ("Program") under this Policy and Procedure will expire on December 31, 2022. The Exchange may determine to extend the term of the Program, allow the Program to expire, terminate the Program at any time, or amend or replace the Program with a different program at any time.

# **Requirements**

- Each DPM shall identify in advance to the Exchange a single EFID for each product allocated to the DPM through which the DPM will provide Orders to satisfy the market performance benchmarks applicable to the DPM for that product under this Policy and Procedure ("DPM Program EFID"). The DPM Program EFID designated by a DPM must be an EFID assigned to the DPM and may not be an EFID of another Trading Privilege Holder.
- Each DPM is required to utilize Exchange match trade prevention functionality under Rule 406B with respect to trading in allocated product through its DPM Program EFID for that product.

#### **Product Specific DPM Market Performance Benchmarks**

# <u>S&P 500 Variance Futures</u>

• The DPM shall provide Orders in S&P 500 Variance futures in conformity with specified criteria relating to minimum two-sided quote size and maximum quote width.

## **Product Specific DPM Benefits**

## S&P 500 Variance Futures

• The DPM is eligible to receive specified benefits in connection with acting as the DPM in S&P 500 Variance futures under the Program.

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