



July 19, 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 Rule Certification
Submission Number CFE-2024-013

Dear Mr. Kirkpatrick:

Pursuant to Section 5c(c)(1) of the Commodity Exchange Act, as amended (“Act”), and Regulation 40.6(a) promulgated by the Commodity Futures Trading Commission (“CFTC” or “Commission”) under the Act, Cboe Futures Exchange, LLC (“CFE” or “Exchange”) hereby submits a CFE rule amendment (“Amendment”) to revise the manner which in daily settlement prices for Cboe Volatility Index (“VX”) futures are determined. Exhibit 1 to this submission sets forth the rule changes included in the Amendment. The Amendment will become effective on or after August 2, 2024, on a date to be announced by the Exchange through the issuance of an Exchange notice.

Current VX Futures Daily Settlement Price Determination Process

CFE Rule 1202(p) (Daily Settlement Price) currently provides for the following four step hierarchy for determining the daily settlement price of a VX futures contract.

- Under the first step of the hierarchy, the daily settlement price of a VX futures contract is determined by using a volume weighted average price (“VWAP”) if specified conditions are satisfied.
- If the specified conditions for utilizing a VWAP as the daily settlement price are not satisfied, the second step of the hierarchy is utilized. Under the second step of the hierarchy, the daily settlement price is the average of the bid and the offer from the last best two-sided market in the VX futures contract prior to the daily settlement time 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 there is not a two-sided market meeting the criteria of the second step in the hierarchy, the third step of the hierarchy provides that the daily settlement price utilized for the VX futures contract is the daily settlement price of the VX futures contract with the nearest expiration date in calendar days to the expiration date of the contract for which the daily settlement price is being determined. In that event and if there are two VX futures contracts equidistant in calendar days to the contract for which the daily settlement price is being determined, the daily settlement price of the contract with the earlier expiration date is

utilized.

- Under the fourth step of the hierarchy, the Exchange may in its sole discretion establish a daily settlement price for a 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 daily settlement time.

Updated VX Futures Daily Settlement Price Determination Process

CFE is making the following updates to Rule 1202(p) to the current process for determining the daily settlement price for a VX futures contract:

- CFE is revising the provisions relating to the determination of a VWAP in the first step of the hierarchy for determining the daily settlement price for a VX futures contract.
 - Currently, in order for a VWAP to be used as the daily settlement price for a VX futures contract, there must be the equivalent of at least 1 contract traded in that VX futures contract during the 30 seconds prior to the daily settlement time.
 - The daily settlement time (referred to as the Daily Settlement Time) is generally at the close of regular trading hours in VX futures, which generally is at 3:00 p.m. Chicago time. The Daily Settlement Time will remain the same under the Amendment.
 - Under the Amendment, the measurement interval (which is currently called the VWAP Interval and will now be called the Measurement Interval) will be increased from 30 seconds prior to the Daily Settlement Time to 60 seconds prior to the Daily Settlement Time.
 - Additionally, there will now need to be at least one Qualifying Transaction and at least 50 Qualifying Contracts Traded in the VX futures contract during the Measurement Interval in order for a VWAP to be used as the daily settlement price for the contract.
 - The executions that will qualify as Qualifying Transactions and Qualifying Contracts Traded will be the same types of executions that are included in the current VWAP calculation. Specifically, only executions of simple orders are included in the VWAP calculation and count as Qualifying Transactions and Qualifying Contracts Traded, including simple order transactions that occur when simple orders execute against spread orders. Executions of spread orders against other spread orders, Trade at Settlement (“TAS”) transactions, block trades, and exchange of contract for related position (“ECRP”) transactions are excluded from the VWAP calculation and do not count as Qualifying Transactions and Qualifying Contracts Traded.
 - Currently, the VWAP calculation for a VX futures contract takes into account qualifying executions in Mini Cboe Volatility Index (“VXM”) futures and gives those executions one-tenth of the weight of qualifying executions in VX futures. VX futures and VXM futures are both based on the same index, except that VXM futures are one-tenth of the contract size of VX futures. Under the Amendment, the VWAP calculation for VX futures will only take into account qualifying executions in VX futures and will no longer take into account qualifying executions in VXM futures.

- CFE is adding a new second step in the hierarchy for determining the daily settlement price for a VX futures contract if the requirements for using the VWAP as the daily settlement price are not satisfied.
 - Under this new second step in the hierarchy, the daily settlement price for a VX futures contract will be the time weighted average price (“TWAP”) of best bid and best offer midpoint values in the VX futures contract during the Measurement Interval, provided that the requirement in second bullet point below is satisfied.
 - The TWAP for a VX futures contract will be calculated using only subsegments of the Measurement Interval during which there is both a two-sided market in the VX futures contract and the spread between the best bid and best offer in the VX futures contract is 0.10 index points or less. All other subsegments of the Measurement Interval will be ignored for the purpose of the TWAP calculation. The midpoint values during qualifying subsegments will be weighted in calculating the TWAP by the amount of time during those subsegments that each midpoint value existed.
 - In order for the TWAP described above to be used as the daily settlement price for a VX futures contract, the total length of the qualifying subsegments must be at least 50% of the Measurement Interval.
 - For purposes of determining the daily settlement price of a VX futures contract, a two-sided market refers to a market in a VX futures contract that 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, it is not a two-sided market for these purposes.
- CFE is maintaining the current second step in the hierarchy for determining the daily settlement price for a VX futures contract as the now third step in the hierarchy.
 - This step in the hierarchy will apply if the requirements above for using the VWAP and for using the TWAP of best bid and offer midpoints as the daily settlement price for a VX futures contract are not satisfied.
 - Under this step in the hierarchy, the daily settlement price for the VX futures contract will be the average of the bid and the offer from the last best two-sided market in that VX futures contract during the applicable business day prior to the daily settlement time.
- CFE is also maintaining the current third step in the hierarchy for determining the daily settlement price for a VX futures contract as the now fourth step in the hierarchy.
 - This step in the hierarchy will apply if the requirements above for using the VWAP and for using the TWAP of best bid and offer midpoints as the daily settlement price for a VX futures contract are not satisfied and the midpoint of the last two-sided best bid and offer is not utilized as the daily settlement price because there is no two-sided market in the VX futures contract during the applicable business day prior to the daily settlement time which simultaneously includes both a pending bid with a non-zero value and a pending offer with a non-zero value.

- Under this step in the hierarchy, the daily settlement price for the VX futures contract will be the daily settlement price of the VX futures contract with the nearest expiration date in calendar days to the expiration date of the VX futures contract for which the daily settlement price is being determined.
- If there is a VX futures contract with an earlier expiration date and a VX futures contract with a later expiration date that each meet this criterion, the daily settlement price of the VX futures contract with the earlier expiration date will be utilized.
- Finally, CFE is also maintaining the current fourth step in the hierarchy for determining the daily settlement price for a VX futures contract as the now fifth step in the hierarchy.
 - Under this step of the hierarchy, the Exchange may in its sole discretion establish a daily settlement price for a 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 daily settlement time.

Other Uses of VX Futures Daily Settlement Price

The daily settlement price of a VX futures contract is currently used in other contexts in addition to being used as the daily settlement price for a VX futures contract. Two notable contexts in this regard include the following:

- First, CFE Rule 1702(p) (Daily Settlement Price) currently provides that the daily settlement price for a VXM futures contract is the daily settlement price of the VX futures contract that has the same final settlement date as the VXM futures contract.
 - The Amendment is not changing Rule 1702(p). Accordingly, the daily settlement price of a VXM futures contract will continue to be the daily settlement price of the VX futures contract that has the same final settlement date as the VXM futures contract. However, the process for determining that daily settlement price will be different in the manner described above.
 - CFE believes that it is appropriate to apply the revised manner for determining the daily settlement prices of VX futures contracts to VXM futures contracts as well since VX futures and VXM futures are both based on the same index, to provide for consistency between the daily settlement price values for those market participants that hold positions in or hedge between both products, and because VX futures are more actively traded than VXM futures.
- Second, TAS transactions in VX futures and in VXM futures are based on the daily settlement prices for VX futures contracts.
 - As is further described in CFE Rule 404A (Trade at Settlement Transactions), a TAS transaction is a transaction in a contract at a price equal to the daily settlement price, or a specified differential above or below the daily settlement price, for the contract on

a business day.

- The Amendment is not changing Rule 404A. TAS transactions in VX futures will continue to be based on the daily settlement prices in VX futures and TAS transactions in VXM futures will continue to be based on the daily settlement prices in VXM futures (which in turn are based on the daily settlement prices in VX futures). However, the process for determining those daily settlement prices will be different in the manner described above.

CFE is also planning to list physically settled Weekly Options on VX Futures (“VX Options”) through a separate product and rule certification to the Commission. Each VX Options contract will be on the front month VX futures contract relative to the expiration date of the VX Options contract. As will be further described in that submission to Commission, CFE plans to use the daily settlement price of a front month VX future as the exercise settlement value of the VX Option on that front month VX future.

Statutory Basis

CFE believes that the Amendment is consistent with the Designated Contract Market (“DCM”) Core Principles under Section 5 of the Act. In particular, CFE believes that the Amendment is consistent with:

- DCM Core Principle 7 (Availability of General Information) because the Amendment describes in CFE’s rules the manner in which daily settlement prices are determined for VX futures and CFE’s rules describe how daily settlement prices for VX futures are used in other contexts, such as the daily settlement prices for VXM futures and to determine the prices of TAS transactions in VX futures and VXM futures;
- DCM Core Principle 8 (Daily Publication of Trading Information) in that daily settlement prices for all CFE products, including VX futures and VXM futures, will continue to be provided to the Commission and made available publicly on a daily basis on CFE’s website consistent with Commission Regulation 16.01;
- DCM Core Principle 9 (Execution of Transactions) in that the Amendment enhances the process for determining daily settlement prices for VX futures by, among other things:
 - expanding the measurement time period for transactions included in the VWAP component of the daily settlement price determination process for VX futures which allows for additional transactions to be included in the VWAP calculation;
 - increasing the minimum number of contracts which qualify for inclusion in the VWAP calculation that need to be traded during the measurement time period in order for the VWAP component of the daily settlement price determination process to be used;
 - introducing a new TWAP component into the daily settlement price determination process for VX futures which will be the next step in the process in the event that the VWAP component is not used and which utilizes the average of best bid and best offer midpoints in the calculation; and
 - including criteria for a maximum two-sided market spread for a specified percentage of the measurement time period in order for the TWAP component of the daily

settlement price determination process to be used;

and thus the Amendment contributes to the provision by CFE of a competitive, open, and efficient market and mechanism for executing transactions that protects the price discovery process of trading on CFE's centralized market; and

- DCM Core Principle 12 (Protection of Markets and Market Participants) because CFE has rules that include prohibitions against market manipulation and fraudulent, non-competitive, and disruptive trading practices that apply to trading activities on CFE and related conduct, including during a closing period when a daily settlement price is being determined.

CFE believes that the impact of the Amendment will be beneficial to the public and market participants. CFE is not aware of any substantive opposing views to the Amendment. CFE hereby certifies that the Amendment complies with the Act and the regulations thereunder. CFE further certifies that CFE has posted a notice of pending certification with the Commission and a 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.

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-2024-013 in any related correspondence.

Cboe Futures Exchange, LLC

/s/ Laura Fuson

By: Laura Fuson
Managing Director

EXHIBIT 1

The Amendment, marked to show additions in underlined text and deletions in ~~stricken~~ text, consists of the following:

Cboe Futures Exchange, LLC Rulebook

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1202. Contract Specifications

(a) - (o) No changes.

(p) *Daily Settlement Price.* The daily settlement price for a VX futures Contract is calculated in the following manner for each Business Day:

(i) *Daily Settlement Time.*

(A) The Daily Settlement Time for VX futures is the point in time in relation to which the daily settlement price of a VX futures Contract is calculated.

(B) The Daily Settlement Time for VX futures is at the close of regular trading hours in VX futures on a Business Day (except that the Daily Settlement Time for VX futures on a Business Day that ends at 12:15 p.m. Chicago time is at 12:00 p.m. Chicago time). Accordingly, on a normal Business Day, the Daily Settlement Time for VX futures is 3:00 p.m. Chicago time.

(ii) *VWAP.*

(A) The daily settlement price for a VX futures Contract will be the volume weighted average price (“VWAP”) during the ~~VWAP~~ Measurement Interval if:

(1) the number of Qualifying Transactions during the Measurement Interval is greater than or equal to the VWAP Transaction Minimum; and

(2) the number of Qualifying Contracts Traded during the ~~VWAP~~ Measurement Interval is greater than or equal to the VWAP Contract Minimum.

(~~iii~~B) The VWAP for a VX futures Contract is calculated in the following manner:

(~~A1~~) For each Qualifying Transaction in the VX futures Contract that occurs during the ~~VWAP~~ Measurement Interval, the execution price is multiplied by the number of contracts traded ~~and then multiplied by the VX futures contract multiplier of 1,000~~ to determine a Weighted Price for the Qualifying Transaction.

(2) The Weighted Prices of all Qualifying Transactions in the VX futures Contract during the VWAP Measurement Interval are summed to determine a Gross Weighted Price.

~~(B) For each Qualifying Transaction in the Corollary VXM Future that occurs during the VWAP Interval, the execution price is multiplied by the number of contracts traded and then multiplied by the VXM futures contract multiplier of 100 to determine a Weighted Price for the Qualifying Transaction. The Weighted Prices of all Qualifying Transactions in the Corollary VXM Future during the VWAP Interval are summed to determine a Gross Weighted Price.~~

~~(C3) The Gross Weighted Price for Qualifying Transactions in the VX futures Contract during the VWAP Interval and the Gross Weighted Price for Qualifying Transactions in the Corollary VXM Future during the VWAP Interval are summed to determine a Total Gross Weighted Price. The Total Gross Weighted Price is divided by the Weighted Qualifying Contracts Traded during the VWAP Measurement Interval to determine the VWAP.~~

~~(ivC) For purposes of determining a VWAP daily settlement price for a VX futures Contract:~~

~~(A1) The VWAP Interval is the period of time during which the VWAP is calculated. For a VX futures Contract and a Corollary VXM Future, the VWAP The Measurement Interval is the final ~~30~~ 60 seconds prior to the Daily Settlement Time for VX futures.~~

~~(B) The Corollary VXM Future for a VX futures Contract is the VXM futures Contract that has the same final settlement date as the VX futures Contract. A VX futures contract may not have a Corollary VXM Future, in which case there will be no Qualifying Transactions in a Corollary VXM Future for purposes of the VWAP calculation.~~

~~(C) The Weighted Qualifying Contracts Traded during the VWAP Interval for a VX futures Contract is the sum of (the number of contracts executed in that VX futures Contract during the VWAP Interval resulting from Qualifying Transactions multiplied by the VX futures contract multiplier of 1,000) and (the number of contracts executed in the Corollary VXM Future during the VWAP Interval resulting from Qualifying Transactions multiplied by the VXM futures contract multiplier of 100).~~

~~(D) The Qualifying Contracts Traded during the VWAP Interval for a VX futures Contract is the Weighted Qualifying Contracts Traded during the VWAP Interval divided by the VX futures contract multiplier of 1,000.~~

(2) The VWAP Transaction Minimum is 1 Qualifying Transaction.

~~(E3) The VWAP Contract Minimum is the minimum~~

~~number of Qualifying Contracts Traded that must be executed in a VX futures Contract and/or the Corollary VXM Future during the VWAP Interval in order for the VWAP to be used as the daily settlement price. For a VX futures Contract, the VWAP Contract Minimum is a Qualifying Contracts Traded of 1 50 Qualifying Contracts Traded.~~

(F4) The following describes the types of transactions that constitute Qualifying Transactions and Qualifying Contracts Traded:

(~~1~~aa) Only transactions resulting from the execution of simple Orders, including simple Order transactions that occur when simple Orders execute against a Spread Order, **are included in the VWAP calculation** and are counted for purposes of determining whether the VWAP Transaction Minimum and the VWAP Contract Minimum ~~has~~ have been satisfied.

(~~2~~bb) Transactions involving the execution of a Spread Order against another Spread Order, Trade at Settlement transactions, Exchange of Contract for Related Position transactions and Block Trades are not included in the VWAP calculation and are not counted for purposes of determining whether the VWAP Transaction Minimum and the VWAP Contract Minimum ~~has~~ have been satisfied.

(~~3~~D) Trade busts and adjustments pursuant to Policy and Procedure III are addressed in the following manner:

(~~aa~~1) If a Qualifying Transaction occurs during the VWAP Measurement Interval and is busted or adjusted during the VWAP Measurement Interval, the bust or adjustment is accounted for in the VWAP calculation and for purposes of determining whether the VWAP Transaction Minimum and the VWAP Contract Minimum ~~has~~ have been satisfied.

(~~bb~~2) If a Qualifying Transaction occurs outside of the VWAP Measurement Interval and is busted or adjusted during the VWAP Measurement Interval, the bust or adjustment is not taken into consideration for purposes of the VWAP calculation or determining whether the VWAP Transaction Minimum and the VWAP Contract Minimum ~~has~~ have been satisfied.

(~~ee~~3) If a Qualifying Transaction occurs during the VWAP Measurement Interval and is busted or adjusted after the VWAP Measurement Interval, the original transaction is included the VWAP calculation and for purposes of determining whether the VWAP Transaction Minimum and the VWAP Contract Minimum ~~has~~ have been satisfied. In this event, the Exchange may, in its sole discretion, take the bust or adjustment into consideration in determining whether to exercise its authority under paragraph (p)(~~viii~~vi) below and in connection with making any determination

under that paragraph.

(viii) TWAP of Best Bid and Best Offer Midpoints.

(A) If the number of Qualifying Transactions during the Measurement Interval is less than the VWAP Transaction Minimum or the number of Qualifying Contracts Traded during the VWAP Measurement Interval is less than the VWAP Contract Minimum:

(1) The daily settlement price for a VX futures Contract is the time weighted average price (“TWAP”) of best bid and best offer midpoint values in the VX futures Contract during the Measurement Interval, provided that the requirement in paragraph (p)(iii)(A)(3) below is satisfied.

(2) The TWAP for a VX futures Contract is calculated using only subsegments of the Measurement Interval during which there is both a two-sided market in the VX futures Contract and the spread between the best bid and best offer in the VX futures Contract is 0.10 index points or less. All other subsegments of the Measurement Interval are ignored for the purpose of the TWAP calculation. The midpoint values during qualifying subsegments are weighted in calculating the TWAP by the amount of time during those subsegments that each midpoint value existed.

(3) In order for the TWAP described above to be used as the daily settlement price for a VX futures Contract, the total length of the qualifying subsegments must be at least 50% of the Measurement Interval.

(4) For purposes of determining the daily settlement price of a VX futures Contract, a two-sided market refers to a market in a VX futures Contract that 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, it is not a two-sided market for these purposes.

(iv) Midpoint of Last Two-Sided Best Bid and Best Offer.

(A) If the requirements above for using the VWAP and for using the TWAP of best bid and offer midpoints as the daily settlement price for a VX futures Contract are not satisfied:

(1) The daily settlement price for the VX futures Contract will be the average of the bid and the offer from the last best two-sided market in that VX futures Contract during the applicable Business Day prior to the Daily Settlement Time ~~which simultaneously includes both a pending bid with a non-zero value and a pending offer with a non-zero value.~~

(2) 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~~ that market would not be used for this purpose.

~~(vii)~~ Daily Settlement Price of Nearest Expiration.

(A) If the requirements above for using the VWAP and for using the TWAP of best bid and offer midpoints as the daily settlement price for a VX futures Contract are not satisfied and the midpoint of the last two-sided best bid and offer is not utilized as the daily settlement price because ~~If the Qualifying Contracts Traded during the VWAP Interval is less than the VWAP Contract Minimum and~~ there is no two-sided market in the VX futures Contract during the applicable Business Day prior to the Daily Settlement Time which simultaneously includes both a pending bid with a non-zero value and a pending offer with a non-zero value:

(1) The daily settlement price for the VX futures Contract will be the daily settlement price of the VX futures Contract with the nearest expiration date in calendar days to the expiration date of the VX futures Contract for which the daily settlement price is being determined.

(2) If there is a VX futures Contract with an earlier expiration date and a VX futures Contract with a later expiration date that each meet this criterion, the daily settlement price of the VX futures Contract with the earlier expiration date will be utilized.

~~(vii) — 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 VX futures Contract.~~

~~(viii)~~ Exchange Determination.

(A) The Exchange may in its sole discretion establish a daily settlement price for a VX futures Contract that it deems to be a fair and reasonable reflection of the market if:

(A1) the Exchange determines in its sole discretion that the daily settlement price determined by the parameters set forth in paragraphs (p)(ii) - ~~(p)(vii)~~ above is not a fair and reasonable reflection of the market; or

(B2) there is a trading halt in the VX futures Contract or other unusual circumstance at or around the Daily Settlement Time.

(B) The Exchange may exercise the authority in this paragraph ~~(p)(vii)~~ either before or after a daily settlement price determined by the parameters set forth in paragraphs (p)(ii) - ~~(p)(vii)~~ has initially been determined and disseminated.

(vii) Decimal Places.

(A) 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 VX futures Contract.

(q) - (r) No changes.

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