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## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-88281; File No. SR-CBOE-2020-013]

### **Self-Regulatory Organizations; Cboe Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Amend Rules 4.13 and 5.31 Concerning the Modified Opening Auction Process**

February 25, 2020.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the “Act”),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on February 11, 2020, Cboe Exchange, Inc. Inc. (the “Exchange” or “Cboe Options”) filed with the Securities and Exchange Commission (the “Commission”) the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Exchange filed the proposal as a “non-controversial” proposed rule change pursuant to Section 19(b)(3)(A)(iii) of the Act<sup>3</sup> and Rule 19b-4(f)(6) thereunder.<sup>4</sup> The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

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

Cboe Exchange, Inc. (the “Exchange” or “Cboe Options”) proposes to amend Rules 4.13 and 5.31. The text of the proposed rule change is provided below.

(additions are italicized; deletions are [bracketed])

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<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> 15 U.S.C. 78s(b)(3)(A)(iii).

<sup>4</sup> 17 CFR 240.19b-4(f)(6).

Rules of Cboe Exchange, Inc.

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**Rule 4.13. Series of Index Options**

(a) General.

(1) – (4) No change.

(5) Method of Determining Day that Exercise Settlement Value will be Calculated, Special Opening Quotation and Expiration Date and Last Trading Day for Options on Volatility Indexes that Measure a 30-Day Volatility Period (“Volatility Index options”).

(A) No change.

(B) Special Opening Quotation. The exercise settlement value of a Volatility Index option for such purposes shall be calculated by the Exchange as a Special Opening Quotation (SOQ) of the applicable Volatility Index using the sequence of opening prices of the options that comprise the Volatility Index[ ]. The opening price for any series in which there is no trade shall be the average of that option’s bid price and ask price (which ask price equals \$0.05 if the series opens with unexecuted sell market orders) as determined at the opening of trading.

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**Rule 5.31. Opening Auction Process**

(a) Definitions. For purposes of the opening auction process in this Rule 5.31, the following terms have the meaning below. A term defined elsewhere in the Rules has the same meaning with respect to this Rule 5.31, unless otherwise defined below.

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**Opening Auction Updates**

The term “opening auction updates” means Exchange-disseminated messages that contain information regarding the expected opening of a series based on orders and quotes in the Queuing Book for the applicable trading session and, if applicable, the GTH Book, including the expected opening price, the then-current cumulative size on each side at or more aggressive than the expected opening price, and whether the series would open (and any reason it would not open pursuant to paragraphs (e) and (j)([5]6) below).

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(b) – (i) No change.

(j) Modified Opening Auction Process. All provisions set forth above in this Rule 5.31 apply to the opening of SPX constituent option series for Regular Trading Hours on exercise settlement value determination days, except as otherwise provided in this paragraph (j) (“modified opening auction process”). The Exchange uses the opening trade prices of SPX series that comprise the settlement strip (or the average of a series’ opening bid and ask (which ask price equals \$0.05 if the series opens with unexecuted sell market orders) if there is no opening trade in that series) established by the modified opening auction process to calculate the exercise or final settlement value, as applicable, of expiring VIX derivatives.

(1) – (4) No change.

(5) SPX Option Series Opening Sequence. On exercise settlement value determination days, following the opening trigger as set forth in subparagraph (d)(1)(B), the System initiates the opening rotation process for SPX option series in the following sequence:

(i) at-the-money (“ATM”) (including series 5.00 above or below, as applicable, the then-current index level) and out-of-the-money (“OTM”) constituent series in order from closest to furthest away from the ATM strike (if a put and call are the same distance away from the ATM strike, the System opens them randomly);

(ii) all other constituent series (i.e., in-the-money constituent series) in order from closest to furthest away from the ATM strike (if a put and call are the same distance away from the ATM strike, the System opens them randomly); and

(iii) all non-constituent series in a random order.

(6) Opening Rotation. On exercise settlement value determination days, the opening rotation process occurs as set forth in paragraph (e) above, except the System performs the Maximum Composite Width Check and determines the Opening Trade Price pursuant to this subparagraph ([5]6), in lieu of subparagraphs (e)(1) and (2), respectively.

(A) No change.

(B) Opening Trade Price Determination. After a series satisfies the Maximum Composite Width Check in subparagraph (A), if there are orders and quotes marketable against each other at a price not outside the Opening Collar, the System determines the Opening Trade Price for the series. If there are no such orders or quotes, there is no Opening Trade Price.

(i) No change.

(ii) If (a) the VMIM price is not outside the Opening Collar, (b) there would be no unexecuted buy market orders (or remaining portions), and (c) there would be no unexecuted sell market orders (or remaining portions) unless the low end of the Opening Collar equals \$0.05, [it]the VMIM price is the Opening Trade Price, and the System opens the series pursuant to subparagraph (e)(3) above.

(iii) If (a) the VMIM price is outside the Opening Collar, [or] (b) there would be unexecuted buy market orders (or remaining portions), or (c) there would be unexecuted sell market orders (or remaining portions) and the low end of the Opening Collar is greater than \$0.05, the series does not open. The Queuing Period for the series continues (including the dissemination of opening auction updates) until [the VMIM price is not outside the Opening Collar]none of the conditions in clauses (a) through (c) are present, or the Exchange opens the series pursuant to paragraph (h).

[(6)7] Opening Rotation Self-Trades. A User may submit multiple orders and quotes in accordance with subparagraph (3) above. If, during the opening rotation, the System executes an order or quote of that User against another order or quote of that User, the Exchange does not deem that fact alone to cause these executions to be considered violations of Section 9(a)(1) of the Exchange Act, and instead will evaluate other facts and circumstances. The Exchange reviews all activity, including these executions, during the modified opening auction process for compliance with [the Rules and] the Exchange Act and the Rules, including Rule [10]8.6 (which prohibits manipulation).

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The text of the proposed rule change is also available on the Exchange's website (<http://www.cboe.com/AboutCBOE/CBOELegalRegulatoryHome.aspx>), at the Exchange's Office of the Secretary, and at the Commission's Public Reference Room.

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

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

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

1. Purpose

The Exchange proposes to amend its Rules regarding the modified opening auction process in no-bid series. Rule 5.31(j) describes the opening auction process for S&P 500 options ("SPX")

that are constituent option series<sup>5</sup> on exercise settlement value determination days.<sup>6</sup> All provisions set forth in Rule 5.31 apply to the opening of SPX constituent option series for Regular Trading Hours on exercise settlement value determination days, except as otherwise provided in Rule 5.31(j) (the “modified opening auction process”), which the Exchange uses in connection with calculating exercise or final settlement values for VIX derivatives. The Exchange uses the opening trade prices of SPX option series that comprise the settlement strip<sup>7</sup> (or the average of a series’ opening bid and ask if there is not opening trade in that series) established by the modified opening auction process to calculate the exercise or final settlement value, as applicable, of expiring VIX derivatives.

Current Rule 5.31(j)(5) (proposed Rule 5.31(j)(6)) describes the opening rotation process for the modified opening auction process. Specifically, on exercise settlement value determination days, the opening rotation process occurs in the same manner it does on all other days (as set forth in Rule 5.31(e)), except for the Maximum Composite Width Check and Opening Trade Price,<sup>8</sup> which the System performs pursuant to current Rule 5.31(j)(5)(A) and (B), respectively. Currently,

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<sup>5</sup> The term “constituent option series” means all SPX (including SPXW) option series listed on the Exchange with the expirations the Exchange uses to calculate the exercise or final settlement value of the expiring VIX derivative on exercise settlement value determination days. The term “VIX derivatives” means VIX options listed for trading on the Exchange, VIX futures listed for trading on an affiliated designated contract market, or over-the-counter derivatives overlying VIX whose exercise or final settlement values, as applicable, are calculated pursuant to, or by reference to, as applicable, the modified opening auction process. See Rule 5.31(j)(1).

<sup>6</sup> The term “exercise settlement value determination day” means a day on which the Exchange determines the exercise or final settlement value, as applicable, of expiring VIX derivatives. See Rule 5.31(j)(1).

<sup>7</sup> The term “settlement strip” means the constituent option series used to calculate the exercise or final settlement value, as applicable, of expiring VIX derivatives. See Rule 5.31(j)(1).

<sup>8</sup> See Rule 5.31(e)(1) and (2) for descriptions of the Maximum Composite Width Check and Opening Trade Price determination on non-exercise settlement value determination days.

after the opening trigger for SPX options, once a series satisfies the Maximum Composite Width<sup>9</sup> Check in current Rule 5.31(j)(5)(A), if there are orders and quotes marketable against each other at a price not outside the Opening Collar,<sup>10</sup> the System determines the Opening Trade Price for the series. If there are no such orders or quotes, there is no Opening Trade Price for the series.

If there will be an opening trade, in order to determine the Opening Trade Price, the System determines the volume-maximizing, imbalance-minimizing (“VMIM”) price pursuant to Rule 5.31(e)(2)(A) through (C) (in the same manner it determines the VMIM price on non-exercise settlement value determination days). If the VMIM price is not outside the Opening Collar, it is the Opening Trade Price, and the System opens the series.<sup>11</sup> If (a) the VMIM price is outside the Opening Collar or (b) there would be unexecuted market orders (or remaining portions), the series does not open.<sup>12</sup>

The proposed rule change first adopts a sequence in which the System will open SPX option series on exercise settlement value determination days. Currently, the System initiates the opening

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<sup>9</sup> The term “Maximum Composite Width” means the amount that the width of the Composite Market (which is the market for a series comprised of (1) the higher of the then-current best appointed Market-Maker bulk message bid on the Exchange and the away best bid (“ABB”) (if there is an ABB) and (2) the lower of the then-current best appointed Market-Maker bulk message offer on the Exchange and the away best offer (“ABO”) (if there is an ABO)) of a series may generally not be greater than for the series to open, subject to certain exceptions. See Rule 5.31(a) and (j)(1).

<sup>10</sup> The term “Opening Collar” means the price range that establishes limits at or inside of which the System determines the Opening Trade Price (which is the price at which the System executes opening trades in a series during the opening rotation) for a series. See Rule 5.31(a) and (j)(1).

<sup>11</sup> Rule 5.31(e)(3) describes how the System opens a series on all days.

<sup>12</sup> In this case, the Queuing Period (the time period prior to the initiation of an opening rotation during which the System accepts orders and quotes in the electronic book for participation in the opening rotation) for the series continues (including the dissemination of opening auction updates) until the VMIM price is not outside the Opening Collar, or the Exchange opens the series pursuant to Rule 5.31(h) (which permits the Exchange to deviate from the standard manner of the opening auction process when it believes it is necessary in the interests of a fair and orderly market).

rotation process in all classes each day in no particular order.<sup>13</sup> Prior to the Exchange's System migration, which was effective on October 7, 2019, the System opened series in a specific sequence. While the System opened series in all classes in accordance with that sequence on all trading days, the purpose of opening series in that order was to enhance the modified opening auction process on exercise settlement value determination days.<sup>14</sup> In connection with the System migration, the Exchange determined to not maintain this functionality due to other enhancements implemented at the time of migration.<sup>15</sup> The Exchange believes those enhancements have had a positive impact on the modified opening auction process on exercise settlement value determination days. However, the Exchange has determined reimplementing of the functionality to open constituent series on exercise settlement value determination days in a specified sequence (in a slightly different manner) may further enhance the modified opening auction process.

Specifically, the proposed rule change adopts Rule 5.31(j)(5),<sup>16</sup> which provides that on exercise settlement value determination days, following the opening trigger as set forth in Rule 5.31(d)(1)(B),<sup>17</sup> the System initiates the opening rotation process for SPX option series in the following sequence:

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<sup>13</sup> See Securities Exchange Act Release No. 86387 (July 16, 2019), 84 FR 35147, 35152 (July 22, 2019) (SR-CBOE-2019-034) (notice of filing of proposed rule change to amend the Exchange's opening process).

<sup>14</sup> See Securities Exchange Act Release No. 83505 (June 25, 2018), 83 FR 30787, 30790 (June 29, 2018) (SR-CBOE-2018-046) (notice of filing and immediate effectiveness of proposed rule change to amend the hybrid opening process, which was the name of the former opening auction process on the Exchange).

<sup>15</sup> See supra note 14.

<sup>16</sup> The proposed rule change renumbers current subparagraphs (j)(5) and (6) to be subparagraphs (j)(6) and (7), respectively. There are no substantive changes to current subparagraph (j)(6) (proposed subparagraph (j)(7)). Proposed changes to current subparagraph (j)(5) (proposed subparagraph (j)(6)) are described below.

<sup>17</sup> Rule 5.31(d)(1)(B) provides that for index options (including SPX options, but excluding VIX options), the System initiates the opening rotation after a time period (which the

(i) at-the-money (“ATM”) (including series 5.00 above or below, as applicable, the then-current index level) and out-of-the-money (“OTM”) constituent series in order from closest to furthest away from the ATM strike (if a put and call are the same distance away from the ATM strike, the System opens them randomly);

(ii) all other constituent series (*i.e.*, in-the-money constituent series) in order from closest to furthest away from the ATM strike (if a put and call are the same distance away from the ATM strike, the System opens them randomly); and

(iii) all non-constituent series in a random order.

For purposes of this proposed rule change, a series is ATM if its strike price equals the last disseminated index value on the same trading day. The proposed 5.00 buffer ensures that the ATM series at the time the opening rotation process is initiated is included in the first grouping of series to be opened. For example, assume for an exercise settlement value determination day that the ATM strike value for SPX series is 3300. The System will first initiate the opening rotation for SPX constituent series with strike prices equal to 3300, and then any series with strike prices of 3305 and 3295.<sup>18</sup> The System then initiates the opening rotation for OTM SPX constituent series (which would consist of any SPX constituent put series with strike prices below 3300 and SPX constituent call series with strike prices above 3300) in order from series with strike prices closest to 3300 to those with strike prices further away from 3300 until there are no more OTM constituent series. For example, if there were constituent series puts with strike prices of 3290, 3285, 3275, and 3270, and constituent series calls with strike prices of 3310, 3315, 3320, and 3330, the System would initiate the opening rotation process first for the 3290 put and 3310 call (in a random order), then the 3285 put and 3315 call (in a random order), then the 3320 call, then the 3275 put, and finally the 3270 put

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Exchange determines for all classes) following the System’s observation after 9:30 a.m. Eastern time of the first disseminated index value for the index underlying an index option. This applies on exercise settlement value determination days.

<sup>18</sup> If there is a put series and call series with strike prices the same distance away from the ATM strike, the System opens them randomly. In other words, sometimes the put will open first, and other times the call will open first.

and 3330 call (in a random order). The System then initiates the opening rotation for ITM SPX constituent series in order from series with strike prices closest to 3300 to those with strike prices further away from 3300 until there are no more constituent series (in other words, in the same manner it initiated the opening rotation for the OTM SPX constituent series). After the System has initiated the opening rotation process for all constituent series, the System initiates the opening rotation process for all other SPX series (*i.e.*, SPX non-constituent series) in no particular order (as they are opened today).

The order in which the System initiates the opening rotation process for trading is generally immaterial; however, on exercise settlement value determination days, certain ATM and OTM constituent series comprise the settlement strip, and thus their the opening trade prices are used to calculate the exercise or settlement value, as applicable, of expiring VIX derivatives. The Exchange has observed enhanced liquidity in the modified opening auction process since enhancements were implemented in connection with the System migration. At this time, the Exchange believes opening these series first may further enhance liquidity in constituent series on exercise settlement value determination days.

Specifically, Market-Makers are the primary liquidity providers in the Exchange's market, and, pursuant to Rule 5.31, Market-Maker quotes on the Exchange comprise the Composite Market for a class exclusively listed on the Exchange (such as SPX options). The Exchange provides Users, including Market-Makers, with a tool, the Risk Monitor Mechanism ("RMM"), they use to control risk of multiple, automatic executions. An RMM event in a class will cause a Market-Makers' quotes in all series in the class to be rejected or cancelled (certain events may cause a User's quotes in all classes to be cancelled).<sup>19</sup> As a result, a Market-Maker's opening transactions

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<sup>19</sup> See Rule 5.34(c)(5).

in series not used to calculate an exercise or settlement value, as applicable, may cause an RMM event, cancelling the Market-Makers' orders or quotes in all other series in the class, including series used to calculate an exercise settlement value. This reduces liquidity in constituent series, and may contribute to delayed openings of these series, which could ultimately delay calculation of the exercise or settlement value, as applicable, of expiring VIX derivatives. Additionally, the Exchange has observed larger Market-Maker quote sizes in further OTM puts and calls compared to sizes in less OTM puts and calls and ATM puts and calls, which have higher weightings in the formula used to determine the exercise or final settlement value, as applicable, of expiring VIX derivatives in accordance with the VIX Index methodology.<sup>20</sup> If the further OTM puts and calls open prior to the less OTM puts and calls and ATM puts and calls, similarly reduced liquidity in those ATM and less OTM puts and calls from RMM events may occur. The Exchange believes the proposed rule change may increase liquidity in constituent series, which is desirable to ensure these series open at competitive prices on exercise settlement value determination days. While liquidity is important to open all series on the Exchange, given the potential impact on the exercise settlement value determined for expiring VIX derivatives, the Exchange believes it is appropriate to ensure a fair and orderly opening of the series used to calculate the exercise settlement value.

The proposed rule change clarifies in proposed Rule 5.31(j)(6)(B)(ii) and (iii) that having no unexecuted market orders (or remaining portions) is a condition for a series to open, as implied by current Rule 5.31(j)(5)(B)(iii), which states a series does not open if there would be unexecuted market orders (or remaining portions). The Exchange believes this proposed clarification enhances the description of when a series is eligible to open pursuant to the modified opening auction process by listing the complete list of opening criteria in all relevant provisions within the rule.

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<sup>20</sup> See, e.g., the VIX methodology at <http://www.cboe.com/vix/>.

The proposed rule change also amends the modified opening auction process to permit a series to open when there would be unexecuted sell market orders<sup>21</sup> (or remaining portions) if the low end of the Opening Collar equals \$0.05.<sup>22</sup> A sell market order may only fully execute during the opening rotation (at the Opening Trade Price) if there is sufficient buy interest to satisfy the size of the market order. Currently, if there is a sell market order but no buy interest, or insufficient buy interest to satisfy the size of the sell market order, the series would not open pursuant to current Rule 5.31(j)(5)(B)(iii).

The proposed rule change will permit series to open with unexecuted sell market orders (or remaining portions) if the lower end of the Opening Collar equals \$0.05 (the minimum increment for the series). If a series opens with any unexecuted sell market orders (or remaining portions), the System will handle those orders as it would any other orders that are unexecuted at the open.<sup>23</sup> The current prohibition on opening a series if there would be unexecuted sell market orders is intended to protect those orders from executing at potentially erroneous prices following the conclusion of the opening rotation in series that may not be truly zero-bid options. The Exchange does not believe a low-value series should not open because there is no (or minimal) interest from investors purchase contracts in that series, as that is consistent with the value (or lack of value) of the series. The

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<sup>21</sup> A market order is an order to buy or sell a stated number of option contracts at the best price available at the time of execution. See Rule 5.6(b).

<sup>22</sup> The minimum increment applicable to SPX options is \$0.05 if the series trading price is lower than \$3.00 and \$0.10 if the series trading price is \$3.00 or higher. See Rule 5.4(a). A series will continue to not be eligible to open if there would be unexecuted buy market orders (or remaining portions) or unexecuted sell market orders (or remaining portions) if the low end of the Opening Collar equals anything other than \$0.05.

<sup>23</sup> Pursuant to Rule 5.31(f), following the conclusion of the opening rotation, the System enters any unexecuted orders and quotes (or remaining portions) from the Queuing Book into the Book in time sequence (subject to a User's instructions), where they may be processed in accordance with Rule 5.32. The System cancels any unexecuted opening only orders (or remaining portions) following the conclusion of the opening rotation.

Exchange believes series for which the lower end of the Opening Collar equals \$0.05 are likely true no-bid series, or series with minimal value. The following table demonstrates that when the Composite Market is no-bid<sup>24</sup> with an offer of 0.40 or less, the lower end of the Opening Collar is \$0.05 (which is the minimum increment in SPX series trading less than \$3.00).<sup>25</sup> The lower end of the Opening Collar will be greater than \$0.05 in a series with a Composite Market offer greater than 0.40.

<u>Composite Market</u> <u>(CM)</u>	<u>CM</u> <u>Midpoint</u>	<u>OC</u> <u>Width</u>	<u>Opening Collar</u> <u>(OC)<sup>26</sup></u>
0 – .05	.025	.25	.05 – .15
0 – .10	.05	.25	.05 – .20
0 – .15	.075	.25	.05 – .20
0 – .20	.10	.25	.05 – .25
0 – .25	.125	.25	.05 – .25
0 – .30	.15	.25	.05 – .30
0 – .35	.175	.25	.05 – .30
0 – .40	.20	.25	.05 – .35
0 – .45	.225	.25	.10 – .35

The Exchange believes it will contribute to a fair and orderly opening and settlement process to open lower-value constituent series on exercise settlement value determination days even if there would be unexecuted sell market order interest. In order for the Exchange to calculate the exercise or settlement value for expiring VIX derivatives, in its role as index calculator for the VIX Index, all constituent series that comprise the settlement strip must be open (with or without an opening trade) on exercise settlement value determination days. As set forth in Rules 4.13(a)(5)(B) and 5.31(j), the

<sup>24</sup> While it is possible for the lower end of the Opening Collar to equal \$0.05 in a series with a Composite Market bid of 0.05, if a series will open with unexecuted sell market orders, that means it would open with no Market-Maker bid in the series. Therefore, the proposed rule change focuses on no-bid Composite Markets.

<sup>25</sup> See Rule 5.4(a).

<sup>26</sup> Because the Opening Collar establishes the limits for the opening trade price, the minimum amount for the lower end of the range collar is 0.05 in a nickel class, as that is the lowest eligible opening trade price.

Exchange uses the opening trade prices of SPX constituent series that comprise the settlement strip (or the average of a series' opening bid and ask if there is no opening trade in that series) established by the modified opening auction process to calculate the exercise or final settlement value, as applicable, of expiring VIX derivatives. This will permit these constituent series (which may be truly no-bid series) that may be part of the settlement strip to open sooner, and thus permit calculation of the exercise or settlement value, as applicable, for VIX derivatives sooner. This may also provide unexecuted sell market orders in low-value series with additional execution opportunities, which may be limited in such series. The Exchange believes the benefit of opening these series earlier to permit calculation of the exercise or settlement value of expiring VIX derivatives outweighs the minimal risk (if any) of executing sell market orders at anomalous execution prices following the opening rotation given the low-value of these series.

If an option series has a larger offer, it is less likely to be worthless but may just not have any bids for a brief time.<sup>27</sup> The Exchange believes options in series with a Composite Market bid of zero but a larger Composite Market offer<sup>28</sup> are less likely to be worthless, and therefore believes it is appropriate to not open such a series if there would be unexecuted sell market orders to prevent a potentially anomalous execution price, since the next bid entered in that series is likely to be much higher than \$0.05. It would be unfair to an investor to let its sell market order trade at a price of \$0.05 because, for example, the firm submitted its order during the Queuing Period on a day when

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<sup>27</sup> For similar reasons, the System currently converts a sell market order to a limit order with a price equal to the minimum trading increment for the series if it is no-bid and the national best offer is less than or equal to \$0.50, but will cancel the order if the national best offer is greater than \$0.50. See Rule 5.34(a)(1)(A).

<sup>28</sup> The Composite Market threshold of \$0.40 is similar to the threshold the Exchange currently has in place to protect sell market orders in no-bid series after the opening of trading. See id.

there was insufficient buy interest to satisfy all sell market orders, even though the bids present during that Queuing Period were significantly higher than \$0.05.

As noted above, the Exchange uses the average of a series' opening bid and ask if there is no opening trade in that series when calculating the exercise or final settlement value, as applicable, of expiring VIX derivatives on exercise settlement value determination days. If a series opens with unexecuted sell market orders, that could only occur if there was an opening bid of zero.<sup>29</sup> In connection with the proposed rule change that creates the possibility that a series may open with no opening bid and unexecuted sell market orders, the proposed rule change amends Rules 4.13(a)(5)(B) and 5.31(j) to provide that, in series in which there is no opening trade, the ask price will equal \$0.05 (the minimum increment of the series) if the series opens with unexecuted sell market orders. The Exchange believes it is reasonable to use such an ask price, as it is consistent with currently functionality that converts a sell market order to a limit order with a price equal to the minimum trading increment for the series if it is no-bid and the national best offer is less than or equal to \$0.50.<sup>30</sup>

The proposed rule change also amends proposed Rule 5.31(j)(7) (current Rule 5.31(j)(6)) to make a clarifying change and correct a cross-reference. Currently, that subparagraph regarding self-trades that may occur during an opening rotation states that the Exchange reviews all activity, including these types of executions, during the modified opening auction process for compliance with the Rules and the Exchange Act, including Rule 10.6 (which prohibits manipulation). First, the proposed rule change rephrases this sentence so that it references the

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<sup>29</sup> As set forth in Rule 5.31(e)(3)(A), market orders have first priority to trade at the Opening Trade Price. Therefore, if there are unexecuted sell market orders (or remaining portions) at the open, there was either no buy interest or any buy interest executed against part of the sell market orders but there was an insufficient amount to satisfy the size of the sell market order interest.

<sup>30</sup> See Rule 5.34(a)(1)(A).

Exchange Act and the Rules, including Rule 10.6, to make clear that the rule cross-reference refers to an Exchange Rule rather than a Rule under the Exchange Act. Second, the proposed rule change corrects to the rule cross-reference to say Rule 8.6, rather than Rule 10.6. Rule 8.6 describes the Exchange's prohibition on manipulative activity.

## 2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the "Act") and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.<sup>31</sup> Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)<sup>32</sup> requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)<sup>33</sup> requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

In particular, the Exchange believes the proposed rule change will remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, protect investors and the public interest, as it may permit an earlier opening of constituent series on exercise settlement value determination days. As a result, the Exchange

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<sup>31</sup> 15 U.S.C. 78f(b).

<sup>32</sup> 15 U.S.C. 78f(b)(5).

<sup>33</sup> Id.

may be able to calculate the exercise or settlement value, as applicable, of expiring VIX derivatives, at an earlier time.

The proposed rule change regarding the sequence in which constituent series will open merely modifies the order in which the System opens select series in one class for trading on the Exchange on certain days. The System will continue to open all non-constituent series on all trading days, and all constituent series on non-exercise settlement value determination days, in no particular order. With respect to constituent series, the proposed rule change will permit the System to initiate the opening rotation process for series with higher weightings in the formula used to determine the exercise or final settlement value prior to the series with lower weightings (or not SPX option series that are not part of the exercise settlement value calculation). While the order in which the System opens series is generally immaterial (and thus why the Exchange has opened them in no particular order, and will continue to do so for all non-constituent series on all trading days, and for constituent series on all trading days other than exercise settlement value determination days), the Exchange believes opening ATM and OTM constituent series prior to all other series on expiration settlement value determination days will permit series used to calculate exercise or final settlement values, as applicable, for expiring VIX Index derivatives to open at an earlier time. As discussed above, the Exchange also believes this proposed rule change may enhance liquidity in these series on exercise settlement value determination days, which benefits investors that hold expiring VIX derivatives.

The proposed rule change regarding the opening of constituent series when there are unexecuted sell market orders in certain circumstances will further remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, protect investors and the public interest. This proposed rule change will permit these constituent

series (which may be truly no-bid series) that may be part of the settlement strip to open sooner, and thus permit calculation of the settlement value for VIX derivatives sooner. This may also provide unexecuted sell market orders in low-value series with additional execution opportunities, which may be limited in such series, and may be individuals seeking to close out a worthless position. The Exchange believes the benefit of opening these series earlier to permit calculation of the exercise or settlement value of expiring VIX derivatives outweighs the minimal risk (if any) of executing sell market orders at anomalous execution prices following the opening rotation given the low-value of these series. By continuing to not open series with higher offers if there would be unexecuted sell market orders, the Exchange believes the modified opening auction process will continue to protect these orders from executing at potentially erroneous prices following the opening rotation in series that are not truly low-value/no-bid.

The Exchange believes the proposed threshold of series for which the lower end of the Opening Collar is \$0.05 (and thus has a Composite Market offer of no more than \$0.40) appropriately reflects the interests of investors, as options in series with offers higher than \$0.40 are less likely to be worthless, and not permitting a series to open in these conditions may prevent execution of these orders at unfavorable prices. The Exchange also believes the threshold promotes fair and orderly markets, because sell market orders in low-bid/no-bid series with offers of \$0.40 or less are likely to be individuals seeking to close out worthless positions. The proposed rule change provides these orders with additional execution opportunities by making these series eligible to open earlier. The Exchange notes the proposed rule change is consistent with other current functionality that converts sell market orders in no-bid series to limit orders with a price equal to the minimum increment in the series if the offer is \$0.50 or

less.<sup>34</sup> Additionally, other options exchanges will open series if there are unexecuted sell market orders.<sup>35</sup>

The Exchange believes the proposed rule change to clarify opening conditions on exercise settlement value determination days enhances the description of when a series is eligible to open pursuant to the modified opening auction process, which promotes transparency in the Exchange's Rules and ultimately benefits investors. As noted above, this is not a change in the modified opening auction process, but merely a clarification.

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

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange does not believe the proposed rule change will impose any burden on intramarket competition, because it will apply in the same manner to all constituent series on exercise settlement value determination days. The proposed rule change regarding the opening sequence of constituent series only modified the order in which the System will open these series for trading, and only those days. The proposed rule change has no impact on the sequence in which the System will open non-constituent series on all trading days, or constituent series on all trading days other than exercise settlement value determination days. The proposed rule change regarding opening constituent series with unexecuted sell market orders will only impact low-value constituent series in a narrow set of circumstances. The proposed rule change has no impact on constituent series in which there would be unexecuted sell market orders and the lower end of the Opening Collar is greater than \$0.05, which series will continue to not be eligible to open until that condition is resolved.

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<sup>34</sup> See Rule 5.34(a)(1)(A).

<sup>35</sup> See, e.g., NYSE Arca, Inc. ("Arca") Rule 6.64-O.

The Exchange does not believe the proposed rule change will impose any burden on intermarket competition, as it solely impacts the timing of the opening of certain series in one class listed for trading on the Exchange on certain days. The proposed rule change will permit constituent series with higher weightings in the calculation of the exercise or settlement value, as applicable, of expiring VIX derivatives, as well as low-value/no-bid constituent series that may be part of the settlement strip, to open sooner, and thus permit an earlier calculation of the exercise or settlement value, as applicable, for VIX derivatives. As discussed above, the Exchange believes the proposed rule change regarding the opening sequence of constituent series may enhance liquidity in these series on exercise settlement value determination days. Additionally, the proposed rule change regarding opening constituent series with unexecuted sell market orders may also provide unexecuted sell market orders in low-value series with additional execution opportunities, which may be limited in such series. The Exchange believes the benefit of opening these series earlier to permit calculation of the exercise or settlement value, as applicable, of expiring VIX derivatives outweighs the minimal risk (if any) of executing sell market orders at anomalous execution prices following the opening rotation given the low-value of these series. By continuing to not open series with higher Composite Market offers if there would be unexecuted sell market orders, the Exchange believes the modified opening auction process will continue to protect these orders from executing at potentially erroneous prices following the opening rotation in series that are not truly low-value/no-bid. As noted above, the proposed rule change is consistent with current Exchange functionality regarding the handling of

sell market orders in no-bid series.<sup>36</sup> Additionally, other options exchanges will open series if there are unexecuted sell market orders.<sup>37</sup>

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

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

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

Because the proposed rule change does not: (i) significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A) of the Act<sup>38</sup> and subparagraph (f)(6) of Rule 19b-4 thereunder.<sup>39</sup>

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission will institute proceedings to determine whether the proposed rule change should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning

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<sup>36</sup> See Rule 5.34(a)(1)(A).

<sup>37</sup> See, e.g., Arca Rule 6.64-O.

<sup>38</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>39</sup> 17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6)(iii) requires a self-regulatory organization to give the Commission written notice of its intent to file the proposed rule change, along with a brief description and text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-CBOE-2020-013 on the subject line.

Paper comments:

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

All submissions should refer to File Number SR-CBOE-2020-013. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, D.C. 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change.

Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to

make available publicly. All submissions should refer to File Number SR-CBOE-2020-013 and should be submitted on or before **[INSERT DATE 21 DAYS FROM PUBLICATION IN THE FEDERAL REGISTER]**.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>40</sup>

**J. Matthew DeLesDernier,**

*Assistant Secretary.*

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<sup>40</sup> 17 CFR 200.30-3(a)(12).

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