

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-88076; File No. SR-CboeBZX-2020-012)

January 29, 2020

Self-Regulatory Organizations; Cboe BZX Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Relating to Amend the Exchange’s Opening Process to Allow for an Opening Auction, Similar to that Available on Cboe Exchange, Inc. (“Cboe Options”) and Cboe EDGX Exchange, Inc. (“EDGX Options”), and make other conforming changes to Rules 16.1 and 21.17

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on January 22, 2020, Cboe BZX Exchange, Inc. (“BZX” or “Exchange”) filed with the Securities and Exchange Commission (“SEC” or “Commission”) the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

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

Cboe BZX Exchange, Inc. (the “Exchange” or “BZX”) proposes to amend the Exchange’s opening process to allow for an opening auction, similar to that available on Cboe Exchange, Inc. (“Cboe Options”) and Cboe EDGX Exchange, Inc. (“EDGX Options”), and make other conforming changes to Rules 16.1 and 21.17. The text of the proposed rule changes are provided in Exhibit 5.

The text of the proposed rule change is also available on the Exchange’s website ([http://markets.cboe.com/us/equities/regulation/rule\\_filings/bzx/](http://markets.cboe.com/us/equities/regulation/rule_filings/bzx/)), at the Exchange’s Office of the Secretary, and at the Commission’s Public Reference Room.

---

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

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

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

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

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

1. Purpose

Exchange Rule 21.7 sets forth the opening process the Exchange uses to open series on the Exchange at the market open each trading day (and after trading halts). Pursuant to the current opening process, the System determines an opening price for a series based on the National Best Bid and Offer ("NBBO")<sup>3</sup> and crosses any interest on the book that is marketable at that price. The proposed rule change adopts an opening auction process, substantially similar to the Cboe Options and EDGX Options opening auction process.<sup>4</sup> The Exchange believes an opening auction process will enhance the openings of series on the Exchange by providing an opportunity for price discovery based on then-current market conditions. Pursuant to the proposed opening auction process, the Exchange will have a Queuing Period, during which the System will accept orders and quotes and disseminate expected opening information; will initiate an opening rotation upon the occurrence of certain triggers; will conduct an opening rotation

---

<sup>3</sup> The opening price (if not outside the NBBO and no more than a specified minimum amount away from the NBBO) is either the midpoint of the NBBO, the last disseminated transaction price after 9:30 a.m., or the last transaction price from the previous trading day. See current Rule 21.7(b).

<sup>4</sup> See Cboe Options Rule 5.31 and EDGX Options Rule 21.7.

during which the System matches and executes orders and quotes against each other in order to establish an opening Exchange best bid and offer and trade price, if any, for each series, subject to certain price protections; and will open series for trading.<sup>5</sup>

Proposed Rule 21.7(a) sets forth the definitions of the following terms for purposes of the opening auction process in proposed Rule 21.7:<sup>6</sup>

- Composite Market: The term “Composite Market” means the market for a series comprised of (1) the higher of the then-current best appointed Market-Maker bulk message bid on the Queuing Book and the away best bid (“ABB”)<sup>7</sup> (if there is an ABB) and (2) the lower of the then-current best appointed Market-Maker bulk message offer on the Queuing Book and the away best offer (“ABO”)<sup>8</sup> (if there is an ABO). The term “Composite Bid (Offer)” means the bid (offer) used to determine the Composite Market.<sup>9</sup>
- Composite Width: The term “Composite Width” means the width of the Composite Market (i.e., the width between the Composite Bid and the Composite Offer) of a series.
- Maximum Composite Width: The term “Maximum Composite Width” means the amount that the Composite Width of a series may generally not be greater than for the series to open (subject to certain exceptions, as described below). The Exchange determines this

---

<sup>5</sup> The order of events that comprise this proposed opening auction process corresponds to the opening auction process on Cboe Options and EDGX Options. See Cboe Options Rule 5.31 and EDGX Options Rule 21.7.

<sup>6</sup> A term defined elsewhere in the Rules has the same meaning with respect to Rule 21.7, unless otherwise defined in Rule 21.7. See Cboe Options Rule 5.31(a) and EDGX Options Rule 21.7(a).

<sup>7</sup> See the definition of “ABBO” included in proposed Rule 16.1.

<sup>8</sup> Id.

<sup>9</sup> Cboe Options and EDGX Options similarly consider the Exchange’s best quote bid and best quote offer when determining whether the Exchange’s market is too wide.

amount on a class and Composite Bid basis, which amount the Exchange may modify during the opening auction process (which modifications the Exchange disseminates to all subscribers to the Exchange’s data feeds that deliver opening auction updates).

- 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, 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 why a series would not open).
- Opening Collar: The term “Opening Collar” means the price range that establishes limits at or inside of which the System determines the Opening Trade Price for a series. The Exchange determines the width of this price range on a class and Composite Bid basis, which range the Exchange may modify during the opening auction process (which modifications the Exchange disseminates to all subscribers to the Exchange’s data feeds that deliver opening auction updates).
- Opening Trade Price: The term “Opening Trade Price” means the price at which the System executes opening trades in a series during the opening rotation.<sup>10</sup>
  - Queuing Book: The term “Queuing Book” means the book into which Users may submit orders and quotes during the Queuing Period for participation in the application opening rotation. Orders and quotes on the Queuing Book may not execute until the opening rotation.
  - Queuing Period: The term “Queuing Period” means the time period prior to the

---

<sup>10</sup> See current Rule 21.7(d).

initiation of an opening rotation during which the System accepts orders and quotes for participation in the opening rotation for the applicable trading session.<sup>11</sup>

Proposed paragraph (b) describes the Queuing Period. The Queuing Period begins at 7:30 a.m. for all classes.<sup>12</sup> This is the same time at which the System begins accepting orders and quotes today. Therefore, Users will have the same amount of time to submit orders and quotes prior to the opening. Proposed subparagraph (b)(2) clarifies that orders and quotes on the Queuing Book are not eligible for execution until the opening rotation pursuant to proposed paragraph (e), as described below. This is consistent with current order entry period, pursuant to which orders and quotes entered for inclusion in the opening process do not execute until the opening trade pursuant to current paragraph (d). The System accepts all orders and quotes that are available for a class and trading session pursuant to Rule 21.1 during the Queuing Period, which are eligible for execution during the opening rotation, except as follows:

- the System rejects Immediate-or-Cancel (“IOC”) and Fill-or-Kill (“FOK”) orders during the Queuing Period;<sup>13</sup>
- the System accepts orders and quotes with Match Trade Prevention (“MTP”) Modifiers during the Queuing Period, but does not enforce them during the

---

<sup>11</sup> See current Rule 21.7(a)(1) (the current rule does not use the term “Queuing Period”; however, it does provide for an order entry period prior to the opening of a series during which the System accepts orders and quotes). The proposed rule change moves the rule provisions regarding the opening process following a halt to proposed paragraph (g), with no substantive changes.

<sup>12</sup> See proposed Rule 21.7(b)(1).

<sup>13</sup> See current paragraph (a) and proposed subparagraph (b)(2)(A); see also Cboe Options Rule 5.31(b)(2)(A) and EDGX Options Rule 21.7(b)(2)(A).

opening rotation;<sup>14</sup>

- the System accepts Stop and Stop Limit Orders<sup>15</sup> during the Queuing Period, but they do not participate during the opening rotation. The System enters any of these orders it receives during the Queuing Period into the Book following completion of the opening rotation (in time priority);<sup>16</sup> and
- the System converts all Intermarket Sweep Orders (“ISOs”) received prior to the completion of the opening rotation into non-ISOs.<sup>17</sup>

Proposed paragraph (c) describes the opening auction updates the Exchange will disseminate as part of the opening auction process. As noted above, opening auction updates contain information regarding the expected opening of a series. These messages provide market participants with information that may contribute to enhanced liquidity and price discovery during the opening auction process. Beginning at a time (determined by the Exchange) no earlier than one hour prior to the expected initiation of the opening rotation and until the conclusion of the opening rotation for a series, the Exchange disseminates opening auction updates for the series. The Exchange disseminates opening auction updates at regular intervals of time (the

---

<sup>14</sup> See proposed subparagraph (b)(2)(B). This is consistent with current functionality, and the detail is being added to the Rules. See also Cboe Options Rule 5.31(b)(2)(B) and EDGX Options Rule 21.7(b)(2)(B).

<sup>15</sup> Pursuant to Exchange Rule 21.1(d)(11) and (12), Stop and Stop Limit Orders are triggered based on the consolidated last sale price. Not participating in the opening process is consistent with this requirement, as the Exchange needs to be open (and thus have an opening trade occur) in order for there to be a consolidated last sale price that can trigger these orders. See also Cboe Options Rule 5.31(b)(2)(C) and EDGX Options Rule 21.7(b)(2)(C).

<sup>16</sup> This is consistent with current functionality, and the proposed rule change is adding this detail to the Rules.

<sup>17</sup> See current paragraph (a) and proposed subparagraph (b)(2)(D); see also Cboe Options Rule 5.31(b)(2)(D) and EDGX Options Rule 21.7(b)(2)(D) (which does not permit ISOs to be entered during the Cboe Options pre-opening period).

length of which the Exchange determines for each trading session), or less frequently if there are no updates to the opening information since the previously disseminated update, to all subscribers to the Exchange's data feeds that deliver these messages until a series opens. If there have been no changes since the previous update, the Exchange does not believe it is necessary to disseminate duplicate updates to market participants at the next interval of time.<sup>18</sup>

Proposed paragraph (d) describes the events that will trigger the opening rotation for a class. Pursuant to current paragraph (b), the System will automatically open a related equity option series after the first transaction on the primary listing market after 9:30 a.m. Eastern Time in the securities underlying the options as reported on the first print disseminated pursuant to an effective national market system plan (with respect to equity options). Pursuant to current paragraph (c), the System automatically opens a related index option series after an away options exchange(s) disseminates a quote in an index option series (with respect to index options).

The Exchange proposes to adopt opening rotation triggers applicable to both equity options and index options. As it pertains to equity options, the Exchange proposes to include the System's observation of the first disseminated quote<sup>19</sup> and transaction on the primary market in the security underlying the equity options as an opening trigger for equity options.<sup>20</sup> Specifically, as proposed, the System will initiate the opening rotation after an Exchange-determined time period (which the Exchange determines for all classes) upon the earlier of (A) the passage of two minutes (or such shorter time as determined by the Exchange) after the System's observation after 9:30 a.m. Eastern Time of either the first disseminated transaction or the first disseminated

---

<sup>18</sup> See Cboe Options Rule 5.31(c) and EDGX Options Rule 21.7(c).

<sup>19</sup> The quote must be a two-sided quote.

<sup>20</sup> See Cboe Options Rule 5.31(d)(1)(A)(i)-(ii) and EDGX Options Rule 21.7(d)(1)(A)(i)-(ii).

quote on the primary listing market in the security underlying an equity option; or (B) the System's observation after 9:30 a.m. Eastern Time of both the first disseminated transaction and the first disseminated quote on the primary listing market in the security underlying an equity option. The Exchange notes that the proposed triggers are intended to tie the Exchange's opening process to quoting and/or trading in the underlying security. The Exchange believes that quoting activity in the underlying market is a trigger that generally indicates the presence of post-open price discovery and liquidity in the primary market for the underlying, and, therefore, that the market for the underlying is adequately situated for the commencement of options trading the underlying.

The proposed timing steps in connection with the equity option opening triggers are intended to ensure that the market for the underlying security has had sufficient time to open prior to the initiation of the opening rotation where there is not both a two-sided quote and an execution in the underlying security. By waiting a requisite amount of time after the System observes one of the opening triggers, the proposed process pursuant to proposed Rule 21.7(d)(1)(A) is intended to permit post-opening price discovery to occur in the underlying security prior to the opening of options on the security. Similarly, by initiating the opening rotation upon the System's observation of both opening triggers prior to the passage of two minutes, proposed Rule 21.7(d)(1)(B) ties the Exchange's opening process to specific market conditions in the underlying security that generally indicate that sufficient post-opening price discovery has occurred prior to the opening of options on the security. To illustrate, if the System were to observe a disseminated quote (or transaction) in the primary market for the underlying security, it would begin the two-minute (or shorter) timer pursuant to proposed Rule 21.7(d)(1)(A). If two minutes then passed without the System's observation of a disseminated

transaction (or quote) on the primary market for the underlying security (which would cause the scenario in Rule 21.7(d)(1)(B) to occur) then it would initiate the opening rotation after a time period determined by the Exchange. Conversely, if the System were to observe a disseminated quote (or transaction) in the primary listing market and begin the two minute (or shorter) timer, but then observe a disseminated transaction (or quote) in the primary listing market before the passage of two minutes (or shorter), it would then, at the time it observed the disseminated transaction (or quote) prior to the passage of two minutes (or shorter), initiate the opening rotation after a period of time determined by the Exchange.

As it pertains to index options, the Exchange proposes to initiate the opening rotation after a time period (which the 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.<sup>21</sup> The Exchange notes that the proposed trigger is intended to tie the Exchange's opening process to the disseminated index value of the underlying index.

Proposed paragraph (e) describes the opening rotation process, during which the System will determine whether the Composite Market for a series is not wider than a maximum width, will determine the opening price, and open the series.<sup>22</sup> The Maximum Composite Width Check and Opening Collar are intended to ensure that series open in a fair and orderly manner and at prices consistent with the current market conditions for the series and not at extreme prices, while taking into consideration prices disseminated from other options exchanges that may be

---

<sup>21</sup> See Cboe Options Rule 5.31(d)(2) and EDGX Options Rule 21.7(d)(2).

<sup>22</sup> See Cboe Options Rule 5.31(e), EDGX Options Rule 21.7(e), and Cboe C2 Exchange Inc. ("C2 Options") Rule 5.31(e) (pursuant to which Cboe Options/EDGX Options will generally not open a series if the width is wider than an acceptable price range or if the opening trade price is outside of an acceptable price range). The Exchange will similarly have a maximum quote width and acceptable opening price range, however, they may be calculated differently.

better than the Exchange's at the open.

Proposed subparagraph (e)(1) describes the Maximum Composite Width Check.

- If the Composite Market of a series is not crossed, and the Composite Width of the series is less than or equal to the Maximum Composite Width, the series is eligible to open (and the System determines the Opening Price as described below).
- If the Composite Market of a series is not crossed, and the Composite Width of the series is greater than the Maximum Composite Width, but there are no non-M Capacity<sup>23</sup> market orders or buy (sell) limit orders with prices higher (lower) than the Composite Market midpoint and there are no locked or crossed orders or quotes, the series is eligible to open (and the System determines the Opening Price as described below).<sup>24</sup>
- If neither of the conditions above are satisfied for a series, or if the Composite Market of a series is crossed, the series is ineligible to open. The Queuing Period for the series will continue (including the dissemination of opening auction updates) until one of the above conditions for the series is satisfied, or the

---

<sup>23</sup> Capacity M is used for orders for the account of a Market-Maker (with an appointment in the class). See U.S. Options Binary Order Entry Specifications, at 28 (definition of Capacity), available at [http://cdn.cboe.com/resources/membership/US\\_Options\\_BOE\\_Specification.pdf](http://cdn.cboe.com/resources/membership/US_Options_BOE_Specification.pdf).

<sup>24</sup> The Exchange notes that Cboe Options and EDGX Options recently amended subparagraph (e)(1)(B) to identically state that if the Composite Market of a series is not crossed, and the Composite Width of the series is greater than the Maximum Composite Width, but there are no non-M Capacity market orders or buy (sell) limit orders with prices higher (lower) than the *Composite Market midpoint* and there are orders or quotes marketable against each other, the series is eligible to open. See Securities Exchange Act Release Nos. 87707 (filed December 4, 2019) (SR-CboeEDGX-2019-072) and 87706 (filed December 4, 2019) (SR-CBOE-2019-115).

Exchange opens the series pursuant to paragraph (h).<sup>25</sup>

The Exchange will use the Maximum Composite Width Check as a price protection measure to prevent orders from executing at extreme prices at the open. If the width of the Composite Market (which represents the best market, as it is comprised of the better of Market-Maker bulk messages on the Exchange or any away market quotes) is no greater than the Maximum Composite Width, the Exchange believes it is appropriate to open a series under these circumstances and provide marketable orders with an opportunity to execute at a reasonable opening price (as discussed below), because there is minimal risk of execution at an extreme price.

Similarly, if the Composite Width is greater than the Maximum Composite Width but there are no non-M Capacity bids (offers)<sup>26</sup> that are higher (lower) than the Composite Market midpoint (and thus not marketable at a price at which the Exchange would open, as described below), there is similarly limited risk of an order executing at an extreme price on the open. While it is possible for Market-Makers to submit orders to the Exchange at an extreme price, the Exchange believes there is less risk of a Market-Maker inputting an order at an extreme price

---

<sup>25</sup> See Cboe Options Rule 5.31(e)(1)(C) and EDGX Options Rule 21.7(e)(1)(C). The proposed rule change moves the provision regarding the Exchange's ability to deviate from the standard manner of the opening process from current paragraph (f) to proposed paragraph (h). Pursuant to the proposed rule change, the Exchange will make and maintain records to document all determinations to deviate from the standard manner of the opening auction process, and periodically review these determinations for consistency with the interests of a fair and orderly market (which, while not specified in the current Rules, the Exchange does today). See proposed Rule 21.7(h).

<sup>26</sup> Market-Maker bulk messages are considered when determining the Composite Market. The Exchange believes it is appropriate to consider Market-Maker bulk messages when determining an opening quote to ensure there will be liquidity in a series when it opens. Additionally, while Market-Makers may submit M capacity orders, the Exchange believes there is less risk of a Market-Maker inputting an order at an extreme price given that Market-Makers are generally responsible for pricing the market.

given that Market-Makers are generally responsible for pricing the market. Given this, the Exchange believes it is appropriate to open a series under certain circumstances if M capacity bids and offers set the Composite Market when the Composite Width is wider than the Maximum Composite Market. Nonetheless, the Exchange also recognizes there may be circumstances under which a non-M capacity order may improve the Composite Market when the Composite Width is greater than the Maximum Composite Width. As such, the Exchange proposes to open a series if the Composite Width is greater than the Maximum Composite Width and there are non-M Capacity limit orders at a price better than the Composite Bid (Offer) in certain circumstances. Specifically, the proposed amendment will allow the Exchange to open a series if the Composite Width of a series is greater than the Maximum Composite Width, but there are no non-M Capacity market orders or buy (sell) limit orders with prices higher (lower) than the Composite Market midpoint and there are no locked or crossed orders or quotes. The Exchange believes the proposed provision under proposed subparagraph (e)(1)(B) strikes a reasonable balance between protecting non-M capacity orders from executing at extreme prices and encouraging the submission of non-M capacity orders at prices that improve the Composite Market, as illustrated in examples two and three below.

The following examples show the application of the Maximum Composite Width Check:

Example #1

Suppose the Maximum Composite Width for a class is 1.00, and the Composite Market is 7.00 x 5.00, comprised of an appointed Market-Maker bulk message bid of 7.00 and an appointed Market-Maker bulk message offer of 5.00. There is no other interest in the Queuing Book. The fact that the Composite Market is greater than the Maximum Composite Width does not cause ineligibility to open as there are no non-M capacity market orders or buy (sell) limit

orders with prices higher (lower) than the Composite Market midpoint. The series is not eligible to open because there are crossed orders or quotes in the series. The Queuing Period for the series will continue until the series satisfies the Maximum Composite Width Check.

Example #2

Suppose the Maximum Composite Width for a class is 1.00, and the Composite Market is 5.00 x 7.00, comprised of an appointed Market-Maker bulk message bid of 5.00 and an appointed Market-Maker bulk message offer of 7.00. There is a non-M capacity limit order to buy for 5.75 in the Queuing Book. Prior to the open, the Exchange does not know the market value of the option series; however, assume that the intrinsic value of the option series is 5.75. In this case, the series would be eligible to open because the width of the Composite Market is greater than the Maximum Composite Width and the non-M Capacity order is at a price less than the Composite Market midpoint. The System will then determine the Opening Trade Price.

Example #3

Suppose the Maximum Composite Width for a class is 1.00, and the Composite Market is 5.00 x 20.00, comprised of an appointed Market-Maker bulk message bid of 5.00 and an appointed Market-Maker bulk message offer of 20.00. There is a non-M Capacity limit order to buy for 18.00 in the Queuing Book. Prior to the open, the Exchange does not know the market value of the option series; however, assume that the intrinsic value of the option series is 6.00. In this case, the series is not eligible to open because the width of the Composite Market is greater than the Maximum Composite Width, and there is a non-M Capacity bid at a price higher than the Composite Market midpoint of 12.50. The Queuing Period for the series will continue until the series satisfies the Maximum Composite Width Check.

As proposed, subparagraph (e)(1)(B) will allow the Exchange to open a series if the

Composite Market of a series is greater than the Maximum Composite Width, but there are no non-M Capacity market orders or buy (sell) limit orders with prices higher (lower) than the Composite Market midpoint and there are no locked or crossed orders or quotes. Thus, under proposed subparagraph (e)(1)(B), the Exchange would allow the option series to open in Example #2 above as the non-M capacity limit bid was entered at a price lower than the Composite Market midpoint. However, the proposed amendment would limit the risk of a non-M capacity order executing at an extreme price such as that in Example #3 as the non-M capacity limit bid was entered at a price higher than the Composite Market midpoint.

Proposed subparagraph (e)(2) describes how the System determines the Opening Trade Price for a series after it satisfies the Maximum Composite Width Check described above.

- The Opening Trade Price is the price that is not outside the Opening Collar and is the volume-maximizing, imbalance minimizing price (“VMIM price”):
  - the price at which the largest number of contracts can execute (*i.e.*, the volume-maximizing price);
  - if there are multiple volume-maximizing prices, the price at which the fewest number of contracts remain unexecuted (*i.e.*, the imbalance-minimizing price); or
  - if there are multiple volume-maximizing, imbalance-minimizing prices, (1) the highest (lowest) price, if there is a buy (sell) imbalance, or (2) the price at or nearest to the midpoint of the Opening Collar, if there is no imbalance.
- There is no Opening Trade Price if there are no locked or crossed orders or quotes

at a price not outside the Opening Collar.<sup>27</sup>

The Exchange believes the proposed volume-maximizing, imbalance-minimizing procedure is reasonable, as it will provide for the largest number of contracts in the Queuing Book that can execute, leaving as few as possible bids and offers in the Book that cannot execute. The Exchange will use the Opening Collar as a price protection measure to prevent orders from executing at extreme prices at the open. If the Opening Trade Price is not outside the Opening Collar (which will be based on the best then-current market), the Exchange believes it is appropriate to open a series at that price, because there is minimal risk of execution at an extreme price. However, if the Opening Trade Price would be outside of the Opening Collar, the Exchange believes there may be risk that orders would execute at an extreme price if the series opens, and therefore the Exchange will not open a series.

Pursuant to proposed subparagraph (e)(3), if the System establishes an Opening Trade Price, the System will execute orders and quotes in the Queuing Book at the Opening Trade Price. The System will prioritize orders and quotes in the following order: market orders, limit orders and quotes with prices better than the Opening Trade Price, and orders and quotes at the Opening Trade Price.<sup>28</sup> If there is no Opening Trade Price, the System opens a series without a trade. As set forth in Exchange Rule 21.8, the Exchange's execution algorithm executes trading interest in price/time priority. However, for purposes of the Opening Auction Process, the Exchange's execution algorithm will execute trading interest in a pro-rata fashion, similar to that

---

<sup>27</sup> See current Rule 21.7(e).

<sup>28</sup> See current Rule 21.7(d) (which states the System matches (in accordance with Rule 21.8) orders and quotes in the System priced equal to or more aggressively than the Opening Price). See also Cboe Options Rule 5.31(e)(3)(A)(i) and EDGX Options Rule 21.7(e)(3)(A)(i). The Exchange believes it is appropriate to prioritize orders with the most aggressive prices, as it provides market participants with incentive to submit their best-priced orders.

provided on EDGX Options and Cboe Options.<sup>29</sup> With pro-rata allocation, if there are two or more orders or quotes at the best price then the contracts are allocated proportionally according to size. The executable quantity is allocated to the nearest whole number, with fractions 1/2 or greater rounded up and fractions less than 1/2 rounded down. The primary reason for pro-rata allocation in the Opening Auction Process is that all orders will execute at the same price, thus priority would only be given on the time at which the orders were entered. Given that these orders would be entered during the during a [sic] Queuing Period and waiting for execution at the same time, there is no reason to provide a benefit for the speed of entry. Pursuant to proposed subparagraph (f), as is the case today, following the conclusion of the opening rotation, the System enters any unexecuted orders and quotes (or remaining portions) from the Queuing Book into the BZX Options Book in time sequence (subject to a User's instructions – for example, a User may cancel an order), where they may be processed in accordance with Rule 21.8.<sup>30</sup> Consistent with the OPG<sup>31</sup> contingency (and current functionality), the System cancels any unexecuted OPG orders (or remaining portions) following the conclusion of the opening rotation.

The proposed rule change adds paragraph (i), which provides if the underlying security for a class is in a limit up-limit down state when the opening rotation begins for that class, then the System cancels or rejects all market orders. In addition, if the opening rotation has already

---

<sup>29</sup> EDGX Options and Cboe Options allocate orders and quotes at the same price pursuant to the allocation algorithm that applies to a class intraday (in accordance with EDGX Options Rule 21.8/Cboe Options Rule 5.32), unless the relevant exchange determines to apply a different allocation algorithm to a class during the opening rotation. Currently, both EDGX Options and Cboe Options use pro-rata allocation for the Opening Auction Process.

<sup>30</sup> The proposed rule change corrects an error in the current Rule, which references Rule 21.9 rather than Rule 21.8.

<sup>31</sup> See Exchange Rule 21.1(f)(6).

begun for a class when a limit up-limit down state initiates for the underlying security of that class, market and limit orders will continue through the end of the opening rotation.<sup>32</sup>

Currently, if an order enters the Book following the Opening Process (which would include any Good Til Cancelled (“GTC”) or Good Til Date (“GTD”) orders that reenter the Book from the prior trading day) and become subject to the drill-through protection pursuant to Rule 21.17(d), the NBO (NBB) that existed at the time it enters (or reenters) the Book would be used when determining the drill-through price. Proposed Rule 21.17(d)(1) provides that if an order that enters the BZX Options Book following the Opening Auction Process and becomes subject to the drill-through protection, the bid (offer) limit of the Opening Collar plus (minus) the buffer amount will be the drill-through price. As discussed above, the Opening Collar is a price protection, and the Exchange would execute orders at the open at prices at or within the Opening Collar (as it would execute orders at or within the NBBO). Therefore, the Exchange believes the Opening Collar limit price points are reasonable to use when determining the drill-through price for orders that are unable to execute during the opening rotation.

The Exchange notes that certain provisions of Cboe Options Rule 5.31 and EDGX Options Rule 21.7 are not proposed for inclusion in Exchange Rule 21.7. Specifically, subparagraph (b)(2)(C) of Cboe Options and EDGX Options provides that all-or-none orders are not eligible for execution during the opening rotation. However, because the Exchange does not support all-or-none orders, such a provision is not included in the proposed Rule. Similarly, subparagraph (b)(2)(E) of Cboe Options Rule 5.31 and EDGX Options Rule 21.7 provides that complex orders do not participate in the opening auction process, which is also not applicable to BZX Options as the Exchange does not support a complex options book. Paragraph (d) of Cboe

---

<sup>32</sup> This is consistent with the definition of market orders in Rule 21.1(d)(5).

Options Rule 5.31 and EDGX Options Rule 21.7 provides for opening rotation triggers during both Regular Trading Hours and Global Trading Hours; however, as the Exchange does not support Global Trading Hours no such applicable provision is proposed. Lastly, paragraph (j) of Cboe Options Rule 5.31 provides a modified opening process for volatility settlements which is not applicable to BZX Options as such products are not traded on the Exchange.

The proposed amendments to Rule 16.1 include the clarification and addition of definitions to conform with existing Cboe Options and EDGX Options rules. Such proposed amendments involve no substantive changes.

## 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>33</sup> Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)<sup>34</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

---

<sup>33</sup> 15 U.S.C. 78f(b).

<sup>34</sup> 15 U.S.C. 78f(b)(5).

is consistent with the Section 6(b)(5)<sup>35</sup> requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

The Exchange believes the proposed rule change to adopt an opening auction will protect investors, because it will enhance the openings of series on the Exchange by providing an opportunity for price discovery based on then-current market conditions. The proposed Queuing Period is substantively the same as the current Order Entry Period on the Exchange. The proposed detail regarding the Queuing Period provides additional transparency regarding the handling of orders and quotes submitted during that time, and will thus benefit investors. The proposed rule change, including orders that are not permitted during the Queuing Period or orders that are not eligible to trade during the opening rotation, is also similar to the pre-opening period on Cboe Options and EDGX Options.<sup>36</sup>

The proposed rule change will protect investors by ensuring they have access to information regarding the opening of a series, which will provide them with transparency that will permit them to participate in the opening auction process and contribute to, and benefit from, the price discovery the auction may provide. The proposed opening auction updates are not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers, as all market participants may subscribe to the Exchange's data feeds that deliver these message, and thus all market participants may have access to this information.

The proposed opening rotation triggers are substantially similar to the current events that will trigger series openings on the Cboe Options and EDGX Options. The proposed trigger events will remove impediments to and perfect the mechanism of a free and open market and a

---

<sup>35</sup> Id.

<sup>36</sup> See Cboe Options Rule 5.31(a) and EDGX Options Rule 21.7(a).

national market system, as they ensure that the underlying securities will have begun trading, or the underlying index values will have begun being disseminated, before the System opens a series for trading.

The proposed Maximum Composite Width Check and Opening Collar will protect investors by providing price protection measures to prevent orders from executing at extreme prices at the open. The Exchange believes it is appropriate to open a series under the proposed circumstances and provide marketable orders with an opportunity to execute at a reasonable opening price (as discussed below), because there is minimal risk of execution at an extreme price. Furthermore, the Exchange believes proposed Rule 21.7(e)(1)(B) will benefit market participants as it may encourage the submission of orders at prices that improve the Composite Market in the Opening Auction Process on the Exchange, and allow the Exchange to open series earlier, which may also allow for more trading opportunities on the Exchange throughout the trading day. The proposed price protections incorporate all available pricing information, including Market-Maker bulk messages (which are generally used to price markets for series) and any quotes disseminated from away markets, and thus may lead to a more accurate Opening Trade Price based on then-current market conditions. As noted above, Cboe Options and EDGX Options apply similar price protections during its opening rotation. Cboe Options and EDGX Options similarly consider Market-Maker quotes (the equivalent of Market-Maker bulk message on EDGX Options and the Exchange), and in certain classes, quotes of away exchanges, and whether there are crossing orders or quotes when determining whether the opening width and trade price are reasonable.

The proposed priority with respect to trades during the opening rotation are consistent with current priority principles that protect investors, which are to provide priority to more

aggressively priced orders and quotes. Orders and quotes will be subject to the same allocation algorithms that the Exchange may apply during the trading day. The proposed priority and allocation of orders and quotes at the opening trade is substantially similar to the priority and allocation of orders and quotes at the opening of Cboe Options and EDGX Options.<sup>37</sup>

The Exchange believes the proposed opening auction process is designed to ensure sufficient liquidity in a series when it opens and ensure series open at prices consistent with then-current market conditions, and thus will ensure a fair and orderly opening process. Additionally, as noted above, the proposed opening auction process is substantially similar to the opening auction process of Cboe Options and EDGX Options.<sup>38</sup> The differences between proposed Rule 21.7 and Cboe Options Rule 5.31 and EDGX Options Rule 21.7 primarily relate to differences between the exchanges, including functionality Cboe Options and EDGX Options offer that the Exchange does not and products Cboe Options and EDGX Options list for trading that the Exchange does not.

The proposed rule change is generally intended to align system functionality currently offered by the Exchange with Cboe Options and EDGX Options functionality in order to provide a consistent technology offering for the Cboe Affiliated Exchanges. A consistent technology offering, in turn, will simplify the technology changes and maintenance by Users of the Exchange that are also participants on Cboe Affiliated Exchanges. The Exchange believes this consistency will promote a fair and orderly national options market system. Users of the Exchange and other Cboe Affiliated Exchanges have access to similar functionality on all Cboe Affiliated Exchanges. As such, the proposed rule change would foster cooperation and

---

<sup>37</sup> See Cboe Options Rule 5.31(e)(3)(A) and EDGX Options Rule 21.7(e)(3)(A).

<sup>38</sup> See Cboe Options Rule 5.31 and EDGX Options Rule 21.7.

coordination with persons engaged in facilitating transactions in securities and would remove impediments to and perfect the mechanism of a free and open market and a national market system.

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 that the proposed rule change to adopt an opening auction process will impose any burden on intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act, because it will apply to orders and quotes of all market participants in the same manner. The same order types that are not currently accepted prior to the opening, and that do not participate in the opening process, will similarly not be accepted during the Queuing Period or be eligible for trading during the opening rotation.

The Exchange does not believe that the proposed rule change to adopt an opening auction process will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act, because it is designed to open series on the Exchange in a fair and orderly manner. The Exchange believes an opening auction process will enhance the openings of series on the Exchange by providing an opportunity for price discovery based on then-current market conditions. The proposed auction process will provide an opportunity for price discovery when a series opens, ensure there sufficient liquidity in a series when it opens, and ensure series open at prices consistent with then-current market conditions (at the Exchange and other exchanges) rather than extreme prices that could result in unfavorable executions to market participants. Additionally, as discussed above, the proposed opening auction process is

substantially similar to the Cboe Options and EDGX Options opening auction process.<sup>39</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

The Exchange has filed the proposed rule change pursuant to Section 19(b)(3)(A)(iii) of the Act<sup>40</sup> and Rule 19b-4(f)(6) thereunder.<sup>41</sup> 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, if consistent with the protection of investors and the public interest, the proposed rule change has become effective pursuant to Section 19(b)(3)(A) of the Act<sup>42</sup> and Rule 19b-4(f)(6) thereunder.<sup>43</sup>

A proposed rule change filed under Rule 19b-4(f)(6)<sup>44</sup> normally does not become operative for 30 days after the date of the filing. However, pursuant to Rule 19b-4(f)(6)(iii),<sup>45</sup> the Commission may designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has asked the Commission to waive the 30-day

---

<sup>39</sup> See Cboe Options Rule 5.31 and EDGX Options Rule 21.7.

<sup>40</sup> 15 U.S.C. 78s(b)(3)(A)(iii).

<sup>41</sup> 17 CFR 240.19b-4(f)(6).

<sup>42</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>43</sup> 17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6)(iii) requires the Exchange to give the Commission written notice of the Exchange’s 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.

<sup>44</sup> 17 CFR 240.19b-4(f)(6).

<sup>45</sup> 17 CFR 240.19b-4(f)(6)(iii).

operative delay so that the proposed rule change may become operative immediately. The Exchange represents that the functionality of the proposed auction process is scheduled to become available on January 30, 2020. Furthermore, the Exchange states that the proposed auction process is virtually identical to the one used on the Cboe Affiliated Exchanges, and that waiver of the operative delay would enable the Exchange to continue its efforts to provide a technology offering consistent with those of the Cboe Affiliated Exchanges as promptly as possible. The Exchange believes that such consistency will simplify the technology changes and maintenance by Options Members of the Exchange that are also participants on Cboe Affiliated Exchanges. For these reasons, the Commission believes that waiver of the 30-day operative delay is consistent with the protection of investors and the public interest. Accordingly, the Commission hereby waives the 30-day operative delay and designates the proposal operative upon filing.<sup>46</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 shall institute proceedings to determine whether the proposed rule change should be approved or disapproved.

---

<sup>46</sup> For purposes only of waiving the 30-day operative delay, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

#### IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

##### Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-CboeBZX-2020-012 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-CboeBZX-2020-012. 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, DC 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-CboeBZX-2020-012, 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>47</sup>

J. Matthew DeLesDernier  
Assistant Secretary

---

<sup>47</sup> 17 CFR 200.30-3(a)(12), (59).