| OMB APPROVAL |
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| OMB Number: 3235-0045<br>Estimated average burden<br>hours per response...........38 |

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SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
Form 19b-4

File No.* SR - 2020 - * 012
Amendment No. (req. for Amendments *)

Filing by Cboe BZX Exchange, Inc.

Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934

| Initial * | Amendment * | Withdrawal | Section 19(b)(2) * | Section 19(b)(3)(A) * | Section 19(b)(3)(B) * |
|---|---|---|---|---|---|
| ☑ | ☐ | ☐ | ☐ | ☑ | ☐ |

Pilot ☐

Extension of Time Period for Commission Action * ☐

Date Expires *

Rule

| | |
|---|---|
| ☐ 19b-4(f)(1) | ☐ 19b-4(f)(4) |
| ☐ 19b-4(f)(2) | ☐ 19b-4(f)(5) |
| ☐ 19b-4(f)(3) | ☑ 19b-4(f)(6) |

Notice of proposed change pursuant to the Payment, Clearing, and Settlement Act of 2010

Section 806(e)(1) * ☐

Section 806(e)(2) * ☐

Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934

Section 3C(b)(2) * ☐

Exhibit 2 Sent As Paper Document ☐

Exhibit 3 Sent As Paper Document ☐

**Description**

Provide a brief description of the action (limit 250 characters, required when Initial is checked *).

The Exchange 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.

**Contact Information**

Provide the name, telephone number, and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the action.


First Name * Sarah    Last Name * Tadtman

Title * Counsel

E-mail * stadtman@cboe.com

Telephone * (913) 815-7203    Fax


**Signature**

Pursuant to the requirements of the Securities Exchange Act of 1934,

has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.

Date 01/22/2020

By Adrian Griffiths

(Name *)

(Title *)

Assistant General Counsel

NOTE: Clicking the button at right will digitally sign and lock this form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.

agriffiths@cboe.com

*Required fields are shown with yellow backgrounds and asterisks.*

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

For complete Form 19b-4 instructions please refer to the EFFS website.

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|---|---|
| **Form 19b-4 Information *** <br> Add Remove View | The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act. |
| **Exhibit 1 - Notice of Proposed Rule Change *** <br> Add Remove View | The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO] -xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3) |
| **Exhibit 1A- Notice of Proposed Rule Change, Security-Based Swap Submission, or Advance Notice by Clearing Agencies *** <br> Add Remove View | The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO] -xx-xx). A material failure to comply with these guidelines will result in the proposed rule change, security-based swap submission, or advance notice being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3) |
| **Exhibit 2 - Notices, Written Comments, Transcripts, Other Communications** <br> Add Remove View <br> Exhibit Sent As Paper Document ☐ | Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G. |
| **Exhibit 3 - Form, Report, or Questionnaire** <br> Add Remove View <br> Exhibit Sent As Paper Document ☐ | Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change. |
| **Exhibit 4 - Marked Copies** <br> Add Remove View | The full text shall be marked, in any convenient manner, to indicate additions to and deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit the staff to identify immediately the changes made from the text of the rule with which it has been working. |
| **Exhibit 5 - Proposed Rule Text** <br> Add Remove View | The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change. |
| **Partial Amendment** <br> Add Remove View | If the self-regulatory organization is amending only part of the text of a lengthy proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions. |

**Item 1.** **Text of the Proposed Rule Change**

(a) 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.

(b) Not applicable.

(c) Not applicable.

**Item 2.** **Procedures of the Self-Regulatory Organization**

(a) The Exchange's President (or designee) pursuant to delegated authority approved the proposed rule change on January 6, 2020. The Exchange will announce the proposed amendment to Members by Exchange notice. The Exchange plans to implement the proposed amendment effective January 30, 2020.

(b) Please refer questions and comments on the proposed rule change to Pat Sexton, Executive Vice President, General Counsel, and Corporate Secretary, (312) 786-7467, or Sarah Tadtman, Counsel, (913) 815-7203.

**Item 3.** **Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change**

(a) 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")[1] 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.[2] 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 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.[3]

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:[4]

- 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

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1 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).

2 See Cboe Options Rule 5.31 and EDGX Options Rule 21.7.

3 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.

4 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).

message bid on the Queuing Book and the away best bid ("ABB")[5] (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")[6] (if there is an ABO). The term "Composite Bid (Offer)" means the bid (offer) used to determine the Composite Market.[7]

- 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 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

5 See the definition of "ABBO" included in proposed Rule 16.1.

6 Id.

7 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.

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.[8]
- 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 "Queueing Period" means the time period prior to the initiation of an opening rotation during which the System accepts orders and quotes for participation in the opening rotation for the applicable trading session.[9]

Proposed paragraph (b) describes the Queuing Period. The Queuing Period begins at 7:30 a.m. for all classes.[10] This is the same time at which the System begins accepting

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8 See current Rule 21.7(d).

9 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.

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;[11]
- the System accepts orders and quotes with Match Trade Prevention ("MTP") Modifiers during the Queuing Period, but does not enforce them during the opening rotation;[12]
- the System accepts Stop and Stop Limit Orders[13] during the Queuing Period, but they do not participate during the opening rotation. The System enters

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10 See proposed Rule 21.7(b)(1).

11 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).

12 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).

13 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).

any of these orders it receives during the Queuing Period into the Book following completion of the opening rotation (in time priority);[14] and

- the System converts all Intermarket Sweep Orders ("ISOs") received prior to the completion of the opening rotation into non-ISOs.[15]

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 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.[16]

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14 This is consistent with current functionality, and the proposed rule change is adding this detail to the Rules.

15 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).

16 See Cboe Options Rule 5.31(c) and EDGX Options Rule 21.7(c).

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[17] and transaction on the primary market in the security underlying the equity options as an opening trigger for equity options.[18] 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 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

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17 The quote must be a two-sided quote.

18 See Cboe Options Rule 5.31(d)(1)(A)(i)-(ii) and EDGX Options Rule 21.7(d)(1)(A)(i)-(ii).

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.[19] 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.[20] 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 better than the Exchange's at the open.

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

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19 See Cboe Options Rule 5.31(d)(2) and EDGX Options Rule 21.7(d)(2).

20 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.

- 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[21] 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).[22]
- 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

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21 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.

22 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).

opening auction updates) until one of the above conditions for the series is satisfied, or the Exchange opens the series pursuant to paragraph (h).[23]

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)[24] 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

23 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).

24 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.

extreme price, 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 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.[25]

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

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25 See current Rule 21.7(e).

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.[26] 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 provided on EDGX Options and Cboe Options.[27] 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 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

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[26] 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.

[27] 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.

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.[28] Consistent with the OPG[29] 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 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.[30]

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

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28 The proposed rule change corrects an error in the current Rule, which references Rule 21.9 rather than Rule 21.8.

29 See Exchange Rule 21.1(f)(6).

30 This is consistent with the definition of market orders in Rule 21.1(d)(5).

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 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.

(b) 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.[31] Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[32] 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)[33] 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

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31 15 U.S.C. 78f(b).

32 15 U.S.C. 78f(b)(5).

33 Id.

opening rotation, is also similar to the pre-opening period on Cboe Options and EDGX Options.[34]

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 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

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34 See Cboe Options Rule 5.31(a) and EDGX Options Rule 21.7(a).

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.[35]

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

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35 See Cboe Options Rule 5.31(e)(3)(A) and EDGX Options Rule 21.7(e)(3)(A).

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.[36] 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 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.

**Item 4. 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

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[36] See Cboe Options Rule 5.31 and EDGX Options Rule 21.7.

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.[37]

**Item 5. <u>Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others</u>**

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[37] <u>See</u> Cboe Options Rule 5.31 and EDGX Options Rule 21.7.

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

**Item 6. <u>Extension of Time Period for Commission Action</u>**

Not applicable.

**Item 7. <u>Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2) or Section 19(b)(7)(D)</u>**

(a) The proposed rule change is filed for immediate effectiveness pursuant to Section 19(b)(3)(A) of Act[38] and Rule 19b-4(f)(6)[39] thereunder.

(b) The Exchange designates that the proposed rule change effects a change that (i) does not significantly affect the protection of investors or the public interest; (ii) does not impose any significant burden on competition; and (iii) by its terms, does not become operative for 30 days after the date of the filing, or such shorter time as the Commission may designate if consistent with the protection of investors and the public interest. Additionally, the Exchange has given 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 believes the proposed rule change to adopt an opening auction process will not significantly affect the protection of investors or the public interest. The proposed opening auction process 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

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38 15 U.S.C. 78s(b)(3)(A).

39 17 CFR 240.19b-4(f)(6).

on then-current market conditions. 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 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. 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 Exchange believes the proposed rule change to adopt an opening auction process will not impose any significant burden on competition. The proposed opening auction process will apply to orders and quotes of all market participants in the same manner. 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 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 proposed auction process will 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.

As described above, the proposed rule change in general is substantially similar to rules of Cboe Options and EDGX Options. [40] While the proposed rule change retains certain differences between the Cboe Affiliated Exchanges, the proposed functionality is more similar to functionality offered by Cboe Options and EDGX Options in order to ultimately provide a consistent technology offering for market participants who interact with the Cboe Affiliated Exchanges. Although the Exchange intentionally offers certain features that differ from those offered by its affiliates and will continue to do so, the Exchange believes that offering similar functionality to the extent practicable will reduce potential confusion for Users. "Copycat" filings may generally be filed as an immediately effective rule if they share basic similarities. The Commission has previously recognized that rules need not be "virtually identical," and that each self-regulatory organization is unique and has modified its rulebook over time to reflects it particular structure and terminology.[41]

The proposed rule change is generally intended to add certain system functionality to the Exchange's System 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 Options Members of the Exchange that are also participants on Cboe Affiliated Exchanges.

For the foregoing reasons, this rule filing qualifies as a "non-controversial" rule change under Rule 19b-4(f)(6). The Exchange respectfully requests that the Commission

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40 See Cboe Options Rule 5.31 and EDGX Options Rule 27.1.

41 See Securities Exchange Act Release No. 58092 (July 11, 2008) at 19 (Commission Guidance and Amendment to the Rules Relating to Organization and Program Management Concerning Proposed Rule changes Filed by Self-Regulatory Organizations).

waive the 30-day operative delay period after which a proposed rule change under Rule 19b-4(f)(6) becomes effective. The Exchange notes that the proposed auction process functionality is scheduled to become available on January 30, 2020. The Exchange will issue a notice to market participants and give sufficient notice of the implementation date. Waiver of the operative delay would allow the proposed functionality, which the Exchange believes will enhance the openings of series on the Exchange by providing an opportunity for price discovery based on then-current market conditions, to be implemented as soon as its available. Additionally, as described above and below, the proposed opening auction process is virtually identical to the one used on the Cboe Affiliated Exchanges, and waiver of the operative delay will permit the Exchange to continue its efforts to provide a consistent technology offering as that of the Cboe Affiliated Exchanges as promptly as possible.

(c) Not applicable.

(d) Not applicable.

**Item 8. <u>Proposed Rule Change Based on Rules of Another Self-Regulatory Organization or of the Commission</u>**

The proposed rule change is substantially similar to Cboe Options Rule 5.31 and EDGX Options Rule 21.7, and the functionality offered on those exchanges. Specifically, Cboe Options and EDGX Options rules allow for an opening auction process which enhances the openings of series on the Exchange by providing an opportunity for price discovery based on then-current market conditions. 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 order functionality. Paragraph (d) of Cboe 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.

**Item 9. Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act**

Not applicable.

**Item 10. Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing and Settlement Supervision Act**

Not applicable.

**Item 11. Exhibits**

Exhibit 1. Completed Notice of Proposed Rule Change for publication in the Federal Register.

Exhibit 5. Proposed rule text.

EXHIBIT 1

**SECURITIES AND EXCHANGE COMMISSION**

[Release No. 34-        ; File No. SR-CboeBZX-2020-012]

[Insert date]

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 (the "Act"),[1] and Rule 19b-4 thereunder,[2] notice is hereby given that on [insert date], Cboe BZX Exchange, Inc. (the "Exchange" or "BZX") filed with the Securities and Exchange Commission (the "Commission") the proposed rule change as described in Items I, II, and III 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[3] and Rule 19b-4(f)(6) thereunder.[4] 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

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1 15 U.S.C. 78s(b)(1).

2 17 CFR 240.19b-4.

3 15 U.S.C. 78s(b)(3)(A)(iii).

4 17 CFR 240.19b-4(f)(6).

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/), 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

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")[5] 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.[6] The

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5 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).

6 See Cboe Options Rule 5.31 and EDGX Options Rule 21.7.

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 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.[7]

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:[8]

- 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")[9] (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")[10] (if there is

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7 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.

8 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).

9 See the definition of "ABBO" included in proposed Rule 16.1.

10 Id.

an ABO). The term "Composite Bid (Offer)" means the bid (offer) used to determine the Composite Market.[11]

- 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 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

[11] 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.

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.[12]
- 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 "Queueing Period" means the time period prior to the initiation of an opening rotation during which the System accepts orders and quotes for participation in the opening rotation for the applicable trading session.[13]

Proposed paragraph (b) describes the Queuing Period. The Queuing Period begins at 7:30 a.m. for all classes.[14] 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

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12 See current Rule 21.7(d).

13 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.

14 See proposed Rule 21.7(b)(1).

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;[15]
- the System accepts orders and quotes with Match Trade Prevention ("MTP") Modifiers during the Queuing Period, but does not enforce them during the opening rotation;[16]
- the System accepts Stop and Stop Limit Orders[17] 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);[18] and

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15 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).

16 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).

17 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).

18 This is consistent with current functionality, and the proposed rule change is adding this detail to the Rules.

- the System converts all Intermarket Sweep Orders ("ISOs") received prior to the completion of the opening rotation into non-ISOs.[19]

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 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.[20]

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

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19 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).

20 See Cboe Options Rule 5.31(c) and EDGX Options Rule 21.7(c).

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[21] and transaction on the primary market in the security underlying the equity options as an opening trigger for equity options.[22] 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 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.

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21 The quote must be a two-sided quote.

22 See Cboe Options Rule 5.31(d)(1)(A)(i)-(ii) and EDGX Options Rule 21.7(d)(1)(A)(i)-(ii).

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.[23] 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.[24] 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 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).

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23 See Cboe Options Rule 5.31(d)(2) and EDGX Options Rule 21.7(d)(2).

24 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.

- 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[25] 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).[26]
- 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 Exchange opens the series pursuant to paragraph (h).[27]

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25 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.

26 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).

27 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).

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)[28] 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 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

28 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.

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.[29]

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.[30] If there is no Opening Trade Price, the System

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29 See current Rule 21.7(e).

30 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

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 provided on EDGX Options and Cboe Options.[31] 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 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.[32] Consistent with the

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prioritize orders with the most aggressive prices, as it provides market participants with incentive to submit their best-priced orders.

31 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.

32 The proposed rule change corrects an error in the current Rule, which references Rule 21.9 rather than Rule 21.8.

OPG[33] 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 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.[34]

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.

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33 See Exchange Rule 21.1(f)(6).

34 This is consistent with the definition of market orders in Rule 21.1(d)(5).

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 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.[35] Specifically, the Exchange believes the proposed rule change is consistent with the

[35] 15 U.S.C. 78f(b).

Section 6(b)(5)[36] 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)[37] 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.[38]

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

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36 15 U.S.C. 78f(b)(5).

37 Id.

38 See Cboe Options Rule 5.31(a) and EDGX Options Rule 21.7(a).

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 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.[39]

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.[40] 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,

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[39] See Cboe Options Rule 5.31(e)(3)(A) and EDGX Options Rule 21.7(e)(3)(A).

[40] See Cboe Options Rule 5.31 and EDGX Options Rule 21.7.

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 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.[41]

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 foregoing proposed rule change does not:

A. significantly affect the protection of investors or the public interest;

B. impose any significant burden on competition; and

C. 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

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[41] See Cboe Options Rule 5.31 and EDGX Options Rule 21.7.

Section 19(b)(3)(A) of the Act[42] and Rule 19b-4(f)(6)[43] thereunder. 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 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. 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

42 15 U.S.C. 78s(b)(3)(A).

43 17 CFR 240.19b-4(f)(6).

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; the Commission does not edit personal identifying information from 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.[44]

Secretary

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[44] 17 CFR 200.30-3(a)(12).

EXHIBIT 5

(additions are underlined; deletions are [bracketed])

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Rules of Cboe BZX Exchange, Inc.

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Rule 16.1. Definitions

With respect to the Rules contained in Chapters XVI to XXIX below, relating to the trading of options contracts on the Exchange, the following terms shall have the meanings specified in this Rule. A term defined elsewhere in the Exchange Rules shall have the same meaning with respect to this Chapter XVI, unless otherwise defined below.

**ABBO**

The term "ABBO" means the best bid(s) or offer(s) disseminated by other Eligible Exchanges (as defined in Rule 27.1) and calculated by the Exchange based on market information the Exchange receives from OPRA.

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**Associated Person and Person Associated with an Options Member**

The terms "associated person" [or] and "person associated with an Options Member" mean any partner, officer, director, or branch manager of an Options Member (or any person occupying a similar status or performing similar functions), any person directly or indirectly controlling, controlled by, or under common control with an Options Member or any employee of an Options Member.

**[Bulk Message**

The term "bulk message" means a bid or offer included in a single electronic message a User submits to the Exchange in which the User may enter, modify, or cancel up to an Exchange-specified number of bids and offers (which number the Exchange announces via Exchange notice or publicly available technical specifications). A User may submit a bulk message through a bulk port as set forth in Rule 21.1(l)(3). The System handles a bulk message in the same manner as it handles an order or quote, unless the Rules specify otherwise.]

**Bid**

The term "bid" means a limit order to buy one or more options contracts.

**Board**

The term "Board" means the Board of Directors of the Cboe BZX Exchange, Inc.

**Bulk Message**

The term "bulk message" means a bid or offer included in a single electronic message a User submits to the Exchange in which the User may enter, modify, or cancel up to an Exchange-specified number of bids and offers (which number the Exchange announces via Exchange notice or publicly available technical specifications). A User may submit a bulk message through a bulk port as set forth in Rule 21.1(l)(3). The System handles a bulk message in the same manner as it handles an order or quote, unless the Rules specify otherwise.

**[Cboe] BZX Exchange and Exchange**

The terms "[Cboe] BZX Exchange" [or] and "Exchange" mean the Cboe BZX Exchange, Inc.

**BZX Exchange Rules and Exchange Rules**

The terms "BZX Exchange Rules" [or] and "Exchange Rules" mean the rules of the Exchange, including those for equities and options.

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**Capacity**

The term "Capacity" means the capacity in which a User submits an order, which the User specifies by applying the corresponding code to the order, and includes:

| Code | Capacity Type |
|---|---|
| B | For the account of a broker or dealer, including a foreign broker dealer |
| C | For the account of a Priority Customer |
| F | For an OCC clearing member firm proprietary account |
| J | For a joint back office account |
| M | For the account of a registered Market-Maker |
| N | For the account of a market-maker on another options exchange (i.e. an Away Market-Maker) |
| U | For the account of a Professional |

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**Clearing Corporation and OCC**

The terms "Clearing Corporation" [or] and "OCC" mean The Options Clearing Corporation.

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**He, Him, and His**

The terms “he,” “him” [or] and “his” [shall be] are deemed to refer to persons of female as well as male gender, and to include organizations, as well as individuals, when the context so requires.

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**OPRA**

The term “OPRA” means the Options Price Reporting Authority.

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**Options Market Close and Market Close**

The terms “options market close” [or] and “market close” mean the time [specified by BZX Options] the Exchange specifies for the [cessation] end of a trading session on the Exchange [in contracts on BZX Options for options] on that [market] trading day.

**Options Market-Maker and Market-Maker**

The terms “Options Market-Maker” [or] and “Market-Maker” mean an Options Member registered with the Exchange for the purpose of making markets in options contracts traded on the Exchange and that is vested with the rights and responsibilities specified in Chapter XXII of these Rules.

**Options Market Open and Market Open**

The terms “options market open” [or] and “market open” mean the time [specified by BZX Options] the Exchange specifies for the [commencement] beginning of a trading session on the Exchange [in contracts on BZX Options for options] on that [market] trading day.

**Options Member**

The term “Options Member” means a firm, or organization that is registered with the Exchange pursuant to Chapter XVII of these Rules for purposes of participating in options trading on BZX Options as an “Options Order Entry Firm” or “Options Market-Maker.”

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**Options Order Entry Firm, Order Entry Firm, and OEF**

The terms “Options Order Entry Firm” [or] and “Order Entry Firm” or “OEF” mean those Options Members representing as agent Customer Orders on BZX Options and those non-Market-Maker Members conducting proprietary trading.

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**[OPRA**

The term “OPRA” means the Options Price Reporting Authority.]

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**Quote and Quotation**

The terms "quote" [or] <u>and</u> "quotation" mean a bid or offer entered by a Market<u>-</u>Maker as a firm order that updates the Market<u>-</u>Maker's previous bid or offer, if any.

**Responsible Person**

The term "Responsible Person" [shall] mean<u>s</u> a [United States]<u>U.S.</u>-based officer, director<u>,</u> or management-level employee of an Options Member, who is registered with the Exchange as an Options Principal, responsible for the direct supervision and control of associated persons of that Options Member.

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**Rules of the Clearing Corporation and Rules of the OCC**

The terms "Rules of the Clearing Corporation" [or] <u>and</u> "Rules of the OCC" mean the Certificate of Incorporation, the By-Laws and the Rules of the Clearing Corporation, and all written interpretations thereof, as may be in effect from time to time.

**SEC and Commission**

The terms "SEC" [or] <u>and</u> "Commission" mean the United States Securities and Exchange Commission.

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**Trading System and System**

The terms "Trading System" [or] <u>and</u> "System" mean the automated trading system used by BZX Options for the trading of options contracts.

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*Interpretations and Policies*

.01 No change.

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Rule 21.7. [Market Opening Procedures]<u> Opening Auction Process</u>

[(a) *Order Entry Period.* The Exchange will accept market and limit orders and quotes for inclusion in the opening process (the "Opening Process") beginning at 7:30 am Eastern Time or immediately when the Exchange halts trading in a class, and will continue to accept market and limit orders and quotes until such time as the Opening Process is initiated in that option series (the "Order Entry Period"). The Exchange will not accept IOC or FOK orders for queuing prior to the completion of the Opening Process. The Exchange will convert all ISOs entered for queuing prior to the completion of the Opening Process into non-ISOs. If a User has orders or quotes resting on the Book at the time of a trading halt, the System queues those orders and quotes for participation in the Opening Process following the trading halt, unless the User entered instructions to cancel its resting orders and quotes. Orders entered during the Order Entry Period will not be eligible for execution until the Opening Process occurs.

(b) *Opening Price for Equity Options.* 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 ("First Listing Market Transaction") or upon the Exchange's determination to resume trading pursuant to Rule 20.4, the related equity option series will be opened automatically as follows:

(1) Determining the Opening Price. The System will determine a single price at which a particular equity option series will be opened (the "Opening Price") as calculated by the System within 30 seconds of the First Listing Market Transaction or the trading halt being lifted. Where there are no contracts in a particular series that would execute at any price, the System shall open such options for trading without determining an Opening Price. The Opening Price of a series must be a Valid Price, as determined in subparagraph (b)(2) below, and will be:

(A) the midpoint of the NBBO (the "NBBO Midpoint");

(B) where there is no NBBO Midpoint at a Valid Price, the last regular way print disseminated pursuant to the OPRA Plan after 9:30 a.m. Eastern Time (the "Print");

(C) where there is both no NBBO Midpoint and no Print at a Valid Price, the last regular way transaction from the previous trading day as disseminated pursuant to the OPRA Plan (the "Previous Close"); or

(D) where there is no NBBO Midpoint, no Print, and no Previous Close at a Valid Price, the Order Entry Period may be extended by 30 seconds or less or the series may be opened for trading at the discretion of the Exchange.

(2) Validating the Opening Price. For purposes of paragraph (b), a NBBO Midpoint, a Print, and a Previous Close will be at a Valid Price:

(A) Where there is no NBB and no NBO;

(B) Where there is either a NBB and no NBO or a NBO and no NBB and the price is equal to or greater than the NBB or equal to or less than the NBO; or

(C) Where there is both a NBB and NBO, the price is equal to or within the NBBO, and the price is less than the following Minimum Amount away from the NBB or NBO for the series:

| NBB | Minimum Amount |
|---|---|
| Below $2.00 | $0.25 |
| $2.00 to $5.00 | $0.40 |
| Above $5.00 to $10.00 | $0.50 |
| Above $10.00 to $20.00 | $0.80 |
| Above $20.00 to $50.00 | $1.00 |
| Above $50.00 to $100.00 | $1.50 |
| Above $100.00 | $2.00 |

(c) Opening Price for Index Options. After an away options exchange(s) disseminates a quote in an index option series, or upon the Exchange's determination to resume trading pursuant to Rule 20.4, the related index option series will be opened automatically as follows:

(1) Determining the Opening Price. The System determines an Opening Price for a particular index option series within 30 seconds of an away options exchange(s) disseminating a quote in a series. Following an away options exchange's dissemination of a quote in a series, if there are no contracts in a particular series that would execute at any price, the System opens the series for trading without determining an Opening Price. The Opening Price, if valid pursuant to subparagraph (c)(2), of a series will be the NBBO Midpoint. If the NBBO Midpoint is not valid, the Exchange in its discretion may extend the Order Entry Period by up to 30 seconds or open the series for trading.

(2) Validating the Opening Price. For purposes of paragraph (c), the NBBO Midpoint is a valid price if it is no more than the Minimum Amount set forth in the table in subparagraph (b)(2)(C) away from the NBB or NBO for the series.

(d) *Opening Trades.* After establishing an Opening Price that is also a Valid Price, the System matches (in accordance with Rule 21.8) orders and quotes in the System that are priced equal to or more aggressively than the Opening Price. Matches occur until there is no remaining volume or an imbalance of orders. All orders and quotes (or unexecuted portions) matched during the Opening Process execute at the Opening Price. The System enters any non-executed orders and quotes (or unexecuted portions) into the BZX Options Book, where they may be processed in accordance with Rule 21.9. The System cancels any OPG orders (or unexecuted portions) that do not execute during the Opening Process.

(e) *Contingent Open.* If the Exchange opens a series for trading pursuant to paragraph (b)(1)(D) or (c)(1) above, the System enters non-executed orders and quotes (or unexecuted portions) into the BZX Options Book in time sequence, where they may be processed in accordance with Rule 21.9.

(f) The Exchange may deviate from the standard manner of the Opening Process, including adjusting the timing of the Opening Process in any option class, when it believes it is necessary in the interests of a fair and orderly market.]

(a) *Definitions.* For purposes of the opening auction process in this Rule 21.7, the following terms have the meaning below. A term defined elsewhere in the Rules has the same meaning with respect to this Rule 21.7, unless otherwise defined below.

**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 Exchange and the 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 ABO (if there is an ABO). The term "Composite Bid (Offer)" means the bid (offer) used to determine the Composite Market.

**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 set forth in subparagraph (e)(1)). The Exchange determines this 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 it 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.

**Queuing Book**

The term "Queuing Book" means the book into which Users may submit orders and quotes (and onto which GTC and GTD orders remaining on the Book from the previous trading session or trading day, as applicable, are entered) during the Queuing Period for participation in the applicable 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 initiation of an opening rotation during which the System accepts orders and quotes in the Queuing Book for participation in the opening rotation for the applicable trading session.

(b) *Queuing Period.*

(1) *Time.* The Queuing Period begins at 7:30 am Eastern Time for all classes.

(2) *Orders and Quotes.* Orders and quotes on the Queuing Book are not eligible for execution until the opening rotation pursuant to paragraph (e) below. During the Queuing Period, the System accepts all orders and quotes that are available for a class and trading session pursuant to Rule 21.8, and they are all eligible for execution during the opening rotation, except as follows:

(A) The System rejects IOC and FOK orders during the Queuing Period;

(B) the System accepts orders and quotes with MTP Modifiers during the Queuing Period, but does not enforce them during the opening rotation;

(C) the System accepts Stop and Stop Limit orders during the Queuing Period, but they do not participate in 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); and

(D) the System converts all ISOs received prior to the completion of the opening rotation into non-ISOs.

(c) *Opening Auction Updates.* 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 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.

(d) *Opening Rotation Triggers*. Upon the occurrence of one of the following triggers for a class, the System initiates the opening rotation for the series in that class, and the Exchange disseminates a message to market participants indicating the initiation of the opening rotation. The System initiates the opening rotation as follows:

(1) *Equity Options*. For equity options, the System initiates the opening rotation after a 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. of either the first disseminated transaction or the first disseminated quote on the primary listing market in the security underlying an equity option; or

(B) the System's observation after 9:30 a.m. of both the first disseminated transaction and the first disseminated quote on the primary listing market in the security underlying an equity option; or

(2) *Index Options*. For index options, the System initiates the opening rotation after a time period (which the Exchange determines for all classes) following the System's observation after 9:30 a.m. of the first disseminated index value for the index underlying an index option.

(e) *Opening Rotation.* After the System initiates the opening rotation for a series pursuant to paragraph (d) above, the System conducts the opening rotation as follows.

(1) *Maximum Composite Width Check.*

(A) 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 Trade Price pursuant to subparagraph (2) below).

(B) 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 (i) no non-M Capacity (a) market orders or (b) buy (sell) limit orders with prices higher (lower) than the Composite Market midpoint and (ii) no orders or quotes marketable against each other, the series is eligible to open (and the System determines the Opening Trade Price pursuant to subparagraph (2) below).

(C) If the conditions in neither subparagraph (A) nor (B) are satisfied for a series, the series is ineligible to open. The Queuing Period for the series continues (including the dissemination of opening auction updates) until one of the conditions in subparagraph (A) or (B) for the series is satisfied, or the Exchange opens the series pursuant to paragraph (h).

(2) *Opening Trade Price Determination.* After a series satisfies the Maximum Composite Width Check in subparagraph (1), 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. The Opening Trade Price is the volume-maximizing, imbalance minimizing price ("VMIM price") that is not outside the Opening Collar. The VMIM price is:

(A) the price at which the largest number of contracts can execute (i.e., the volume-maximizing price);

(B) 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

(C) if there are multiple volume-maximizing, imbalance-minimizing prices, (i) the highest (lowest) price, if there is a buy (sell) imbalance, or (ii) the price at or nearest to the midpoint of the Opening Collar, if there is no imbalance.

(3) *Opening of a Series.*

(A) *Opening Trade.* If the System establishes an Opening Trade Price, the System executes orders and quotes in the Queuing Book at the Opening Trade Price.

(i) The System prioritizes 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.

(ii) The System allocates orders and quotes at the same price pursuant to a pro-rata allocation algorithm, unless the Exchange determines to apply a different allocation algorithm to a class during the opening rotation.

(B) *No Opening Trade.* If there is no Opening Trade Price, the System opens a series without a trade.

(f) *Unexecuted Orders and Quotes.* 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), where they may be processed in accordance with Rule 21.8. The System cancels any unexecuted OPG orders (or remaining portions) following the conclusion of the opening rotation.

(g) *Opening Auction Process Following Trading Halts.* The Exchange opens series using the same opening auction process described in this Rule following a trading halt in the class declared by the Exchange pursuant to Rule 20.3, except:

(1) *Queuing Period.* The Queuing Period begins immediately when the Exchange halts trading in the class.

(2) *Open Orders.* If a User has orders or quotes resting on the Book at the time of a trading halt, the System queues those orders and quotes in the Queuing Book for participation in the opening rotation following the trading halt, unless the User entered instructions to cancel its resting orders and quotes.

(3) *Opening Time.* The System initiates the opening rotation for a class upon the Exchange's determination to resume trading pursuant to Rule 20.4.

(h) *Deviation from Standard Opening Auction Process.* The Exchange may deviate from the standard manner of the opening auction process described in this Rule 21.7, including adjusting the timing of the opening rotation in any option class, modifying any time periods described in this Rule 21.7, and delaying or compelling the opening of a series if the opening width is wider than the Maximum Width, when it believes it is necessary in the interests of a fair and orderly market. The Exchange makes and maintains records to document all determinations to deviate from the standard manner of the opening auction process, and periodically reviews these determinations for consistency with the interests of a fair and orderly market.

(i) *Limit Up-Limit Down States.* 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 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.

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Rule 21.17. Additional Price Protection Mechanisms and Risk Controls

The System's acceptance and execution of orders, quotes, and bulk messages, as applicable, are subject to the price protection mechanisms and risk controls in Rule 21.16, this Rule 21.17 and as otherwise set forth in the Rules. All numeric values established by the Exchange pursuant to this Rule will be maintained by the Exchange in publicly available specifications and/or published in a Regulatory Circular. Unless otherwise specified the price protections set forth in this Rule, including the numeric values established by the Exchange, may not be disabled or adjusted. The Exchange may share any of a User's risk settings with the Clearing Member that clears transactions on behalf of the User.

(a)-(c) No change.

(d) *Drill-Through Price Protection*. [The Drill-Through Price Protection feature is a price protection mechanism applicable to all orders under which a buy (sell) order will not be executed at a price that is higher (lower) than the NBO (NBB) at the time of order entry plus (minus) a buffer amount established by the Exchange (the "Drill-Through Price").]

(1) If a buy (sell) order enters the BZX Options Book at the conclusion of the opening auction process, the System executes the order up to a buffer amount (established by the Exchange) above (below) the offer (bid) limit of the Opening Collar (the "Drill-Through Price").

(2) If a buy (sell) order would execute or post to the BZX Options Book at the time of order entry, the System executes the order up to a buffer amount (established by the Exchange) above (below) the NBO (NBB) that existed at the time of order entry (the "Drill-Through Price").

If a buy (sell) order would execute or post to the BZX Options Book at a price higher (lower) than the Drill-Through Price, the System will instead post the order to the BZX Options Book at the Drill-Through Price, unless the terms of the order instruct otherwise. Any order (or unexecuted portion thereof) will rest in the BZX Options Book (based on the time at which it enters the book for priority purposes) for a time period in milliseconds that may not exceed three seconds with a price equal to the Drill-Through Price. If the order (or unexecuted portion thereof) does not execute during that time period, the System will cancel it. This protection does not apply to bulk messages.

(e)-(g) No change.

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