

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-93888; SR-CboeBZX-2021-086)

December 30, 2021

Self-Regulatory Organizations; Cboe BZX Exchange, Inc.; Notice of Filing of a Proposed Rule Change to Amend the Opening Auction Process Provided Under Rule 11.23(b)(2)(B)

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 December 21, 2021, 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 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

The Exchange proposes a rule change to amend the Opening Auction process provided under Rule 11.23(b)(2)(B) to better align the Opening Auction Process with current market conditions, and, where certain market conditions are not optimal, to delay the Opening Auction from occurring until those market conditions have improved.

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

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

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

1. Purpose

The Exchange proposes to amend Rule 11.23(b)(2)(B) to make the Opening Auction process more dynamic by, under certain circumstances delaying the Opening Auction in order to incorporate additional information into the determination of the Opening Auction price. Specifically, as proposed the Rule would provide that when there is no Valid NBBO³ in a BZX-listed security and there is an Indicative Price⁴ that is not within the Collar Price Range,⁵ the Opening Auction will be delayed until there is a Valid NBBO or the delay period has lapsed, as further described below. The Exchange believes that the proposal will make the Opening Auction price in less liquid securities more representative of current market conditions making the Opening Auction process a more meaningful price formation event in such BZX-listed securities.

Background

³ As provided in Rule 11.23(a)(23), an NBBO is a Valid NBBO where: (i) there is both a NBB and NBO for the security; (ii) the NBBO is not crossed; and (iii) the midpoint of the NBBO is less than the Maximum Percentage away from both the NBB and the NBO. See Exchange Rule 11.23(a)(23).

⁴ The term “Indicative Price” shall mean the price at which the most shares from the Auction Book and the Continuous Book would match. In the event of a volume based tie at multiple price levels, the Indicative Price will be the price which results in the minimum total imbalance. In the event of a volume based tie and a tie in minimum total imbalance at multiple price levels, the Indicative Price will be the price closest to the Volume Based Tie Breaker. See Exchange Rule 11.23(a)(10).

⁵ See Exchange Rule 11.23(a)(6).

Rule 11.23(b)(2)(B) sets forth the process by which the BZX Official Opening Price⁶ is determined for BZX-listed securities during the Opening Auction Process. Specifically, as provided in Rule 11.23(b)(2)(B), the Opening Auction price will be the price level within the Collar Price Range that maximizes the number of shares executed between the Continuous Book⁷ and Auction Book⁸ in the Opening Auction. In the event of a volume based tie at multiple price levels, the Opening Auction price will be the price which results in the minimum total imbalance. In the event of a volume based tie and a tie in minimum total imbalance at multiple price levels, the Opening Auction price will be the price closest to the Volume Based Tie Breaker.⁹

The Volume Based Tie Breaker for an Opening Auction will be the midpoint of the NBBO where there is a Valid NBBO. Where there is no Valid NBBO, the FLSET will be used as the Volume Based Tie Breaker. Because the FLSET is typically based on the most recent execution in a security during Regular Trading Hours, its value may be significantly away from the Indicative Price at the time of the Opening Auction process, especially in more thinly traded securities. As a result, the Exchange has observed instances where auction eligible orders priced in-line with the Indicative Price were not executed in the Opening Auction because they were outside the Collar Price Range established using the FLSET. Based on analysis by the Exchange and feedback from market participants, certain of these instances resulted in orders not receiving executions in the Opening Auction that would have otherwise occurred at prices that would have been acceptable to

⁶ See Exchange Rule 11.23(a)(5).

⁷ See Exchange Rule 11.23(a)(7).

⁸ See Exchange Rule 11.23(a)(1).

⁹ The Volume Based Tie Breaker is the midpoint of the NBBO for a particular security where the NBBO is a Valid NBBO. Where the NBBO is not a Valid NBBO, the price of the FLSET is used as the Volume Based Tie Breaker, which for the Opening Auction process is the previous BZX Official Closing Price. See Exchange Rule 11.23(a)(23).

both parties to the execution. To illustrate this point, the Exchange presents the following example: consider a security with a prevailing NBBO at 9:30:00 a.m. of \$27.10 x \$29.54 and an Indicative Price of \$27.90. Because the midpoint of the NBBO (i.e., \$28.32) is more than the Maximum Percentage away from both the NBB and NBO, the NBBO is not a Valid NBBO. Accordingly, the FLSET would be used as the Volume Based Tie Breaker, which would by definition be the BZX Official Closing Price from the previous business day. For purposes of this example, that price is \$26.52. Using the FLSET as the Collar Midpoint, the Collar Price Range would be \$25.19 x \$27.85. Because the Indicative Price is outside of the Collar Price Range, the auction would occur at the upper most price that is included in the Collar Price Range (i.e., \$27.85) even though more shares could have executed at \$27.90. Because the Opening Auction was forced into the Collar Price Range and occurred at \$27.85, a contingent of auction eligible orders that would have executed at \$27.90 that were priced equally to or more aggressive than the Indicative Price and within the NBBO (i.e., sell orders priced between \$27.86 and \$27.90) would be canceled without execution.¹⁰

Proposal

Based on the scenario described above, the Exchange is proposing to amend its Opening Auction process such that rather than immediately forcing the Opening Auction to occur at either the lowest or highest end of the Collar Price Range and cancelling auction eligible orders that were willing to execute at the Indicative Price but outside of the Collar Price Range, the System would instead wait for the first of a Valid NBBO, the Indicative Price to be within the Collar Price Range, or the passage of a certain amount of time before initiating the Opening Auction process, as described in additional detail below. Proposed Rule 11.23(b)(2)(B)(i) would set forth the “Standard Opening Process”, which mirrors the current process described in Rule 11.23(b)(2)(B). Proposed

¹⁰ See Exchange Rule 11.23(b)(3)(C)

Rule 11.23(b)(2)(B)(ii) would provide that if there is no Valid NBBO and the Indicative Price is within the Collar Price Range, the Opening Auction price will be established pursuant to the Standard Opening Process. Proposed Rule 11.23(b)(2)(B)(iii) would delay and set forth an alternative Opening Auction Process in the event there is no Valid NBBO and the Indicative Price is not within the Collar Price Range. The proposal is designed to prevent the cancellation of auction eligible orders priced equally or more aggressively than the Indicative Price which the Exchange believes will facilitate the presence of sufficient liquidity and information to make the Opening Auction a meaningful price formation event in BZX-listed securities.

Proposed Rule 11.23(b)(2)(B)(iii) would provide that the Opening Auction price will be delayed as set forth in subparagraphs (a) and (b) as follows:

- (a) If after the one-second delay there is a Valid NBBO or the Indicative Price is within the Collar Price Range, the Opening Auction price will be established pursuant to the Standard Opening Auction Process. If there is no Valid NBBO and the Indicative Price is not within the Collar Price Range after the one-second delay, the Opening Auction will be delayed by one additional second, at which point if there is a Valid NBBO or the Indicative Price is within the Collar Price Range, the Opening Auction price will be established pursuant to the Standard Opening Process. If after the additional one-second delay there is a Valid NBBO or the Indicative Price is not within the Collar Price Range, the process described in this paragraph (a) will continue to be applied in one-second increments until either the Opening Auction occurs or until five seconds has lapsed (i.e., 9:30:05 a.m.).
- (b) If the Opening Auction has not occurred by 9:30:05, the System will widen the Collar Price Range in the direction of the auction imbalance by 5% of the Final Last

Sale Eligible Trade as of 9:30:05 a.m. (the “Widening Amount”). If the Indicative Price is within the widened Collar Price Range, the Opening Auction price will be established pursuant to the Standard Opening Auction Process. If the Indicative Price is not within the widened Collar Price Range, the Opening Auction will be further delayed, as discussed below.

Proposed Rules 11.23(b)(2)(B)(iii)(b)(1) through (4) would set forth the delay of the Opening Auction if no auction has occurred between 9:30:05 and 9:34:30. Specifically, the proposed Rules would provide:

- (1) The System will check to see whether the Indicative Price is inside the widened Collar Price Range every second between 9:30:05 and 9:30:30 a.m. If an Indicative Price is inside the widened Collar Price Range during a check, the Opening Auction price will be established pursuant to the Standard Opening Auction Process.
- (2) If by 9:30:30 a.m. the Indicative Price is not within the widened Collar Price Range, the Collar Price Range will again widen by the Widening Amount. The System will check to see whether the Indicative Price is inside the widened Collar Price Range every second between 9:30:30 and 9:31:30 a.m. If an Indicative Price is inside the widened Collar Price Range during a check, the Opening Auction price will be established pursuant to the Standard Opening Auction Process.
- (3) If by 9:31:30 a.m. the Indicative Price is not within the widened Collar Price Range, the System will check to see whether the Indicative Price is inside the widened Collar Price Range every second between 9:31:30 and 9:34:30 a.m. If an Indicative Price is inside the widened Collar Price Range during a check, the Opening Auction price will be established pursuant to the Standard Opening Auction Process. Unless the Opening Auction has

occurred, the Collar Price Range will widen in the direction of the auction imbalance by the Widening Amount each minute from 9:31:30 to 9:34:30.

- (4) If no Opening Auction has occurred by 9:34:30 a.m., the Opening Auction will occur pursuant to the Standard Opening Auction Process using the expanded Collar Price Range as of 9:34:30.

The Exchange also proposes to move the last two sentences of existing Rule 11.23(b)(2)(B) to proposed Rules 11.23(b)(2)(B)(iv) and (v), respectively. Specifically, proposed Rule 11.23(b)(2)(B)(iv) would provide that the Opening Auction Price will be the BZX Official Opening Price. Proposed Rule 11.23(b)(2)(B)(v) would provide that in the event that there is no Opening Auction for an issue, the BZX Official Opening Price will be the price of the FLSET.

Based on the above proposed amendments, the Exchange proposes to amend Rules 11.23(b)(1)(A) and (B) to reflect that the Opening Auction may occur at a time other than 9:30 a.m. Specifically, the Exchange proposes to amend paragraph (A) to provide the following: Users may submit orders to the Exchange as set forth in Rule 11.1. Any Eligible Auction Orders¹¹ designated for the Opening Auction will be queued for participation in the Opening Auction. Users may submit limit-on-open (“LOO”) and market-on-open (“MOO”) orders until 9:28 a.m., at which point any additional LOO and MOO orders submitted to the Exchange will be rejected. Regular Hours Only¹² (“RHO”) market orders will also be rejected from 9:28 a.m. until the Opening Auction has concluded. Users may submit late-limit-on-open¹³ (“LLOO”) orders from 9:28 a.m. until the Opening Auction has concluded. Any LLOO orders submitted before 9:28 a.m. or after the Opening

¹¹ See Exchange Rule 11.23(a)(8).

¹² See Exchange Rule 11.9(b)(7).

¹³ See Exchange Rule 11.23(a)(12).

Auction has concluded will be rejected. RHO limit orders submitted from 9:28 a.m. until the Opening Auction has concluded will be treated as LLOO orders.

The Exchange proposes to amend Rule 11.23(b)(1)(B) to provide that Eligible Auction Orders designated for the Opening Auction may not be cancelled or modified from 9:28 a.m. until the Opening Auction has concluded except that RHO limit orders designated for the Opening Auction may be modified, but not cancelled, from 9:28 a.m. until the time the Opening Auction has concluded. Any such RHO limit orders modified from 9:28 a.m. until the Opening Auction has concluded will be treated as LLOO orders.

Applying the example discussed above, the Opening Auction would be delayed at 9:30:00 as there was no Valid NBBO and the Indicative Price was outside of the Collar Price Range. Under the proposal, the Opening Auction would be delayed until either 1) the NBBO becomes a Valid NBBO, 2) the Indicative Price is within the Collar Price Range (i.e., if the Opening Auction occurred between 9:30:01 and 9:30:05) or within the widened Collar Price Range (i.e., if the Opening Auction occurred between 9:30:06 and 9:34:30), or 3) the delay period of four minutes and 30 seconds lapsed. While the proposal does not guarantee that certain order priced equally or more aggressive to the Indicative Price will execute in the Opening Auction, it provides for additional time for the market to develop at the beginning of the trading day before conducting the Opening Auction.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act.¹⁴ Specifically, the proposed change is consistent with Section 6(b)(5) of the Act,¹⁵

¹⁴ 15 U.S.C. 78f(b).

¹⁵ 15 U.S.C. 78f(b)(5).

because it would promote just and equitable principles of trade, remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, protect investors and the public interest. Generally, the Exchange believes that the proposed changes will improve the price discovery process in the Opening Auction for securities listed on the Exchange along with additional benefits set forth below.

First, the Exchange believes proposed Rules 11.23(b)(2)(B)(i) and (ii) will contribute to the protection of investors and the public interest by memorializing the circumstances under which the Exchange will continue to operate the Opening Auction in the same way that it does today. Second, the Exchange believes proposed Rule 11.23(b)(2)(B)(iii) would promote just and equitable principles of trade, remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, protect investors and the public interest. The proposal is designed to increase the likelihood that auction eligible orders that are priced equally or more aggressive than the Indicative Value of the security are able to participate in the Opening Auction instead of being canceled because they are priced outside the Collar Price Range established using the FLSET. As stated above, current Rule 11.23(b)(2)(B) provides that in the event there is no Valid NBBO, the FLSET will be used as the Volume Based Tie Breaker and basis for calculating the Collar Price Range. Because the current Opening Auction process occurs at 9:30:00 a.m., such a Collar Price Range is based on an FLSET that may not have occurred recently or may not otherwise be reflective of current market conditions. As a result, the Exchange has observed instances where auction eligible orders priced equally or more aggressive than the Indicative Price were canceled without execution because they were outside the Collar Price Range established using the FLSET. The Exchange believes that the proposed approach would maximize the execution of auction eligible orders priced equally or more

aggressive than the Indicative Price of the security while still [sic]. As such, the Exchange believes that the proposal would promote just and equitable principles of trade, remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, protect investors and the public interest by allowing the execution of orders in the Opening Auction with limit prices reflect current market conditions.

The Exchange notes that the concept of delaying an auction and widening the Collar Price Range is similar to the Twelfth Amendment of the Plan to Address Extraordinary Market Volatility¹⁶ (the “Plan”). Specifically, Amendment 12 was created to improve re-openings following a trading pause,¹⁷ with an eye towards carefully balancing halt auction price quality and the speed with which continuous trading can be resumed. Amendment 12 provided that auction halt periods would be extended if either the auction price at which the most shares would be traded is outside the range of the pre-defined price threshold collars (the “price threshold collars”) or there is a market order share imbalance. Further, Amendment 12 provided that the price threshold collars would be widened in the event that the auction’s halt period is extended. In its approval of Amendment 12, the Commission stated that it is appropriate in the public interest, for the protection of investors and the maintenance of a fair and orderly market to provide that a trading pause continue until the primary listing exchange has reopened trading using its established reopening procedures, even if such reopening is more than 10 minutes after the beginning of a trading pause, and to require that

¹⁶ See Securities and Exchange Act no. 79410 (November 28, 2016) 81 FR 87114 (December 2, 2016) (Notice of Filing of the Twelfth Amendment to the National Market System Plan To Address Extraordinary Market Volatility (“Amendment 12”).

¹⁷ A “trading pause” refers to a function of the Limit Up-Limit Down (“LULD”) mechanism provided under the Plan. Specifically, the Plan sets for procedures that provide for market-wide LULD requirements that prevent trades in individual NMS stocks from occurring outside of the specified price bands and provides for trading pauses to accommodate more fundamental price moves.

trading centers may not resume trading in an NMS Stock following a trading pause without Price Bands in such NMS Stock. The Commission believes that these two provisions together support a more standardized process for reopening trading after a trading pause has been declared. Further, these provisions ensure that trading would not resume after a trading pause without Price Bands. Given the similarity of the proposal to Amendment 12, the Exchange believes the proposal is appropriate, in the public interest, for the protection of investors and the maintenance of a fair and orderly market

Finally, the Exchange believes its proposed clarifications to Rules 11.23(b)(1)(A) and (B) to reflect that the Opening Auction may occur at a time other than 9:30 a.m. will contribute to the protection of investors and the public interest. Specifically, the Exchange believes the proposed amendments to Rules 11.23(b)(1)(A) and (B) will add clarity, transparency and internal consistency to Exchange rules making them easier to navigate, in light of the other proposed Rule changes described herein.

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 not necessary or appropriate in furtherance of the purposes of the Act. To the contrary, allowing the Exchange to make the above proposed modifications will allow the Exchange to better compete with other exchanges as a listing venue by improving the Exchange's auction process by allowing more executions to occur at more reasonable prices that are based on the current value of the security. As mentioned above, the Exchange has received feedback from market participants regarding the issue under the current process, and the proposed amendments will both address this feedback and improve the Exchange's auction process, allowing it to better compete as both a listing and execution venue.

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

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the Exchange consents, the Commission will:

- A. by order approve or disapprove such proposed rule change, or
- B. institute proceedings to determine whether the proposed rule change should be 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-2021-086 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-2021-086. This file number should be included on the subject line if e-mail is used. To help the Commission process and

review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>).

Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly.

All submissions should refer to File Number SR-CboeBZX-2021-086 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.¹⁸

Eduardo A. Aleman
Deputy Secretary

¹⁸ 17 CFR 200.30-3(a)(12).