For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[11]

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Assistant Secretary.

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–91423; File No. SR–CboeBYX–2020–021]

Self-Regulatory Organizations; Cboe BYX Exchange, Inc.; Notice of Filing of Amendments No. 3 and No. 4, and Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendments No. 3 and No. 4, To Introduce Periodic Auctions for the Trading of U.S. Equity Securities

March 26, 2021.

I. Introduction

On July 17, 2020, Cboe BYX Exchange, Inc. (''Exchange'' or ''BYX'') filed with the Securities and Exchange Commission (''Commission''), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Act'' or ''Exchange Act'')[1] and Rule 19b–4 thereunder,[2] a proposed rule change to introduce periodic auctions in U.S. equity securities. The proposed rule change was published for comment in the **Federal Register** on August 4, 2020.[3]

On September 10, 2020, pursuant to Section 19(b)(2) of the Exchange Act,[4] the Commission designated a longer period within which to approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether to disapprove the proposed rule change.[5] On October 27, 2020, the Exchange filed Amendment No. 1 to the proposed rule change, and on October 28, 2020 the Exchange filed Amendment No. 2 to the proposed rule change, which replaced in its entirety the proposed rule change as modified by Amendment No. 1. On October 30, 2020, the Commission noticed the filing of Amendment No. 2 and instituted proceedings under Section 19(b)(2)(B) of the Exchange Act[6] to determine whether to approve or disapprove the proposed rule change.[7] On January 26, 2021, the Commission designated a longer period for Commission action on the proposed rule change.[8] On February 10, 2021, the Exchange filed Amendment No. 3 to the proposed rule change, which amended and superseded the proposed rule change as modified by Amendment No. 2. On March 18, 2021, the Exchange filed Amendment No. 4 to the proposed rule change, which amended the proposed rule change as modified by Amendment No. 3.[9] The Commission has received comment letters on the proposed rule change, including a response by the Exchange.[10] The Commission is publishing this notice to solicit comments on Amendments No. 3 and No. 4 from interested persons and is approving the proposed rule change, as modified by Amendments No. 3 and No. 4, on an accelerated basis.

II. The Exchange's Description of the Proposed Rule Change, as Modified by Amendments No. 3 and No. 4

In its filing with the Commission and subsequent letter responding to comments, 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

Amendment No. 3 to SR–CboeBYX–2020–021 amends and replaces in its entirety the proposal as originally submitted on July 17, 2020 and amended pursuant to Amendment No. 1 on October 27, 2020 and Amendment No. 2 on October 28, 2020. Amendment No. 4 to SR–CboeBYX–2020–021 partially amends the proposal as modified by Amendment No. 3.

The purpose of the proposed rule change is to introduce periodic auctions for the trading of U.S. equity securities (''Periodic Auctions'').[11] As proposed, Periodic Auctions of one hundred milliseconds would be conducted throughout the course of the trading day when there are matching buy and sell Periodic Auction Orders, as defined below, that are available to trade in such an auction. Periodic Auctions would not interrupt trading in the continuous market, and would be price forming auctions that are executed at the price level that maximizes the total number of shares in both the auction book and the continuous market that are executed in the auction. The Exchange's parent company, Cboe Global Markets, Inc. (''Cboe''), has been a global leader in the implementation of periodic auctions, and currently runs the largest periodic auction book for the trading of European equities. The proposed Periodic Auctions that the Exchange would implement are based on the model that Cboe offers to clients in Europe, with targeted changes to adapt this model for the U.S. equities market. The Exchange believes that its implementation of Periodic Auctions would enhance the ability for investors to source liquidity in all equity securities traded on the Exchange. As discussed below, this includes both equity securities that trade in lower volume (*i.e.,* ''thinly-traded securities'') where liquidity is naturally more scarce, but also more actively traded securities, including where available liquidity may be diminished due to increased volatility or other market conditions.[12]

Today, U.S. equities market participants are largely limited to two significant liquidity events where orders are pooled and executed at a single point in time—*i.e.,* the opening and closing auctions. During the rest of the trading day, liquidity may be more limited, particularly for market participants that are seeking to trade larger orders. As proposed, Periodic Auctions would offer a new price forming auction that could be utilized

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

2 17 CFR 240.19b–4.

3 *See* Securities Exchange Act Release No. 89424 (July 29, 2020), 85 FR 47262.

4 15 U.S.C. 78s(b)(2).

5 *See* Securities Exchange Act Release No. 89820, 85 FR 57891 (September 16, 2020). The Commission designated November 2, 2020 as the date by which the Commission shall approve or disapprove, or institute proceedings to determine whether to disapprove, the proposed rule change.

6 15 U.S.C. 78s(b)(2)(B).

7 *See* Securities Exchange Act Release No. 90288, 85 FR 70678 (November 5, 2020).

8 *See* Securities Exchange Act Release No. 90993, 86 FR 7753 (February 1, 2021) (designating April 1, 2021 as the date by which the Commission shall approve or disapprove the proposal).

9 All of the amendments to the proposed rule change, including Amendments No. 3 and No. 4, can be can be found on the Commission's website at: *https://www.sec.gov/comments/sr-cboebyx-2020-021/srcboebyx2020021.htm.*

10 Comments on the proposed rule change, including the Exchange's response, can be found on the Commission's website at: *https://www.sec.gov/comments/sr-cboebyx-2020-021/srcboebyx2020021.htm.*

11 The term ''Periodic Auction'' shall mean an auction conducted pursuant to Proposed Rule 11.25. *See* Proposed Rule 11.25(a)(4).

12 As discussed in the following section, while Periodic Auctions would be available in all securities traded on the Exchange, the Exchange believes that this trading mechanism would be particularly valuable for securities that trade in lower volume and consequently suffer from wider spreads and less liquidity displayed in the public markets.

by investors seeking liquidity, including block-size liquidity, during the course of the trading day. The Exchange believes that concentrating available liquidity in Periodic Auctions that would take place when the Exchange has received matching auctionable buy and sell orders would assist investors in obtaining needed liquidity, particularly in the case of investors seeking to execute larger orders that would be difficult to execute without market impact in the continuous market. In addition, since the proposed Periodic Auctions would be price forming, these auctions would perform a valuable price discovery function, which may be particularly helpful for investors when trading securities that typically trade with wider spreads, including thinly-traded securities.

a. Commission Statement on Thinly-Traded Securities

On October 17, 2019, the Commission issued a Statement on Market Structure Innovation for Thinly Traded Securities (''Statement'').[13] The Statement requested comment on potential innovations that could improve market quality in thinly-traded securities, and sought further feedback on the regulatory changes that may be needed to facilitate such innovation. Cboe submitted a comment letter in response to the Statement on December 20, 2019.[14] As expressed in that comment letter, Cboe shares the Commission's interest in improving market quality in this segment of the U.S. equities market, and believes that the best way to accomplish this goal is through innovation and targeted approaches that invite investor choice.[15] At that time, Cboe suggested a handful of different approaches that national securities exchanges could take to improve market quality in thinly-traded securities, without requiring anti-competitive and ultimately harmful changes to U.S. equities market structure.[16] Following the submission of that comment letter, Cboe has continued to work on the design of potential market structure innovations that it could implement to improve market quality in thinly-traded and other securities that suffer from diminished market quality, consistent with the Commission's request. As a result of those efforts, the Exchange is now proposing to implement Periodic Auctions.

As discussed above, Periodic Auctions would be available in all securities traded on the Exchange, where it may benefit market participants and investors by providing a deeper pool of liquidity with which to trade, as well as providing important price discovery and other benefits. At the same time, the Exchange believes that the proposed introduction of Periodic Auctions would be particularly valuable in thinly-traded securities that currently suffer from diminished market quality compared to their more actively-traded counterparts. As expressed in Cboe's comment letter on the Commission's Statement, Cboe continues to believe that a successful approach to improving market quality in thinly-traded securities should focus on the difficulties that market participants face in trading these securities in the public markets today. In that letter, Cboe discussed three difficulties that market participants currently face in trading thinly traded securities: (1) Sourcing liquidity, (2) the availability of price improvement opportunities, and (3) the potential for significant market impact in securities that are less liquid and trade infrequently. As discussed later in this proposed rule change, the Exchange believes that Periodic Auctions would provide an effective means of addressing each of these issues, and may therefore serve to improve market quality in this currently underserved segment of the U.S. equities market. Further, the Exchange believes that Periodic Auctions, as designed, would provide a competitive mechanism for the execution of orders in thinly-traded securities, and may therefore bring order flow in such securities back into the public market, subject to fair access and pursuant to transparent exchange rules.

b. Order Entry and Cancellation

The Exchange would offer Periodic Auction Only Orders and Periodic Auction Eligible Orders,[17] both of which indicate a member's desire to initiate a Periodic Auction, if possible, as well as Continuous Book Orders that would not initiate a Periodic Auction but would be eligible to participate in such an auction when it is executed.[18] Thus, as provided in Proposed Rule 11.25(b), Users[19] may enter Periodic Auction Orders, *i.e.,* Periodic Auction Only Orders or Periodic Auction Eligible Orders,[20] that are eligible to initiate Periodic Auctions pursuant to Proposed Rule 11.25(c), as discussed later in this proposed rule change, and Continuous Book Orders that may participate in such Periodic Auctions if present on the Continuous Book at the time a Periodic Auction is completed. As explained in more detail below, the ability to choose between Periodic Auction Only Orders, Periodic Auction Eligible Orders, and Continuous Book Orders would allow members to control how their orders are handled in Periodic Auctions—*e.g.,* whether the order is able to initiate a Periodic Auction, or not, and whether the order participates on the Continuous Book, or not. The choice of different methods of participating in Periodic Auctions would therefore provide flexibility to members based on their individual business needs, or the needs of their customers. Regardless of the type of order submitted, orders entered on the Exchange that are present when a Periodic Auction is completed would generally be eligible to participate in that execution. The proposed introduction of Periodic Auctions would therefore benefit both Users explicitly seeking to use this functionality, as well as other Users that may benefit from any increased liquidity routed to the Exchange in order to participate in such Periodic Auctions.

General Requirements for Order Entry and Cancellation. Periodic Auction Orders and Continuous Book Orders may be modified and/or cancelled at any time, including during the Periodic Auction Period,[21] at the discretion of

[13] *See* Securities Exchange Act Release No. 87327 (October 17, 2019), 84 FR 56956 (October 24, 2019) (File No. S7–18–19).

[14] *See* Letter from Adrian Griffiths, Assistant General Counsel, Cboe to Vanessa Countryman, Secretary, Commission dated December 20, 2019, *available at https://www.sec.gov/comments/s7-18-19/s71819-6574727-201085.pdf.*

[15] *Id.*

[16] *Id.*

[17] A ''Periodic Auction Only Order'' is a Non-Displayed Limit Order entered with an instruction to participate solely in Periodic Auctions pursuant to Proposed Rule 11.25. A ''Periodic Auction Eligible Order'' is a Non-Displayed Limit Order eligible to trade on the Continuous Book that is entered with an instruction to also initiate a Periodic Auction, if possible, pursuant to Proposed Rule 11.25. *See* Proposed Rule 11.25(b)(1)–(2).

[18] The term ''Continuous Book Order'' shall mean an order on the BYX Book that is not a Periodic Auction Order, and the term ''Continuous Book'' shall mean System's electronic file of such Continuous Book Orders. *See* Proposed Rule 11.25(a)(2).

[19] The term ''User'' means any Member or Sponsored Participant who is authorized to obtain access to the System pursuant to Rule 11.3. *See* BYX Rule 1.5(cc).

[20] The term ''Periodic Auction Order'' shall mean a ''Periodic Auction Only Order'' or ''Periodic Auction Eligible Order'' as those terms are defined in Proposed Rules 11.25(b)(1)–(2), and the term ''Periodic Auction Book'' shall mean the System's electronic file of such Periodic Auction Orders. *See* Proposed Rule 11.25(a)(6).

[21] The term ''Periodic Auction Period'' would be defined in Proposed Rule 11.25(a)(8) as the fixed time period of 100 milliseconds for conducting a Periodic Auction. The Exchange would permit cancellations of Periodic Auction Orders while a Periodic Auction Period is ongoing in the security. During the ordinary course of trading, market

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the User. Periodic Auctions are designed to allow seamless participation in a price forming auction process without impacting continuous trading, and market participants would therefore remain able to manage orders that they have entered to participate in such auctions during the course of the trading day. Since some Users may not wish to cancel Periodic Auction Orders inadvertently during the course of an ongoing Periodic Auction, however, the Exchange would provide an optional instruction that would allow such Users to instruct the Exchange not to cancel a Periodic Auction Order during a Periodic Auction Period if it is marketable at the Periodic Auction Book Price.[22]

Given that Periodic Auctions are designed, in part, to facilitate the sourcing of larger blocks of liquidity that may not be available in continuous trading, the Exchange would also implement certain size restrictions that would be applicable to Periodic Auction Orders. Specifically, Periodic Auction Orders would have to be for a size of 100 shares or more in securities priced below $500 based on the consolidated last sale price, *i.e.,* the last sale price that is disseminated by the securities information processor, or if no consolidated last sale price is available, the previous day's closing price.[23] The Exchange would not implement similar size restrictions for higher-priced securities, where such a size requirement would generally require a higher minimum notional value to participate in a Periodic Auction. For example, Amazon.com, Inc. (''AMZN'') closed at $ 3,292.23 on January 22, 2021. Requiring that a Periodic Auction Order in AMZN be for at least 100 shares would require that the User be willing to trade a notional value of $329,223. Given the large notional associated with such high-priced securities, the Exchange would not apply the proposed size requirement to securities priced at or above $500. Based on the Exchange's analysis of trading activity from January 4–22, 2021, only 61 U.S. equity securities traded at prices of $500 or more, accounting for 0.53% of total traded volume during that period. As such, the Exchange believes that the proposed $500 threshold would exclude only the highest priced securities from the Exchange's proposed minimum size requirements.

Periodic Auction Only Orders. A ''Periodic Auction Only Order'' would be defined in proposed Rule 11.25(b)(1) as a Non-Displayed Limit Order entered with an instruction to participate solely in Periodic Auctions pursuant to Proposed Rule 11.25. The Periodic Auction Only Order is an optional order type that is designed for market participants that want to access liquidity that is available in one or more Periodic Auctions and do not wish to participate in the continuous market. As such, a Periodic Auction Only Order would not be eligible for execution on the Continuous Book. Instead, such orders would remain on the Periodic Auction Book for participation in Periodic Auctions until executed or cancelled.

Periodic Auction Only Orders would only be accepted with a time-in-force of Regular Hours Only (''RHO'') or immediate-or-cancel (''IOC''). Specifically, Periodic Auction Only Orders entered outside of Regular Trading Hours must include a time-in-force of RHO as the Exchange would conduct Periodic Auctions only during Regular Trading Hours,[24] and not during the Early Trading,[25] Pre-Opening,[26] or After Hours Trading Sessions.[27] Orders entered with a time-in-force of RHO are cancelled at the end of Regular Trading Hours on the trading day in which the order is entered, and do not persist to the next trading day. Periodic Auction Only Orders entered during Regular Trading Hours may be either RHO or IOC. If entered with a time-in-force of IOC, the order must include an instruction pursuant to Proposed Rule 11.25(b) not to cancel the order during a Periodic Auction Period if it is marketable at the Periodic Auction Book Price.[28] As previously discussed, with the inclusion of this instruction, an order that initiates a Periodic Auction would be considered ''locked-in'' and would not be cancellable by the entering User during the course of an ongoing Periodic Auction Period unless it is not marketable at the Periodic Auction Book Price. An IOC order entered with this instruction would therefore be able to immediately initiate a Periodic Auction on entry. And, if it does so, it would not be cancelled for the duration of the Periodic Auction Period, except in circumstances where the Periodic Auction Book Price indicates that the order might not be executable, thereby ensuring that Periodic Auction Only Orders entered with these attributes would ordinarily be eligible to participate in Periodic Auctions that they initiate.

The Exchange believes that the Periodic Auction Only Order may be particularly valuable for market participants that are seeking to execute larger orders that they may not be willing to expose for trading on the Continuous Book. Thus, the Exchange would permit Users to specify a minimum execution quantity for their Periodic Auction Only Orders. A Periodic Auction Only Order entered with a minimum execution quantity would be executed in a Periodic Auction only if the minimum size specified can be executed against one or

participants often work orders simultaneously in multiple venues. In fact, a number of Exchange members, including global trading firms that currently use the periodic auction product offered by the Exchange's affiliate, Cboe Europe, have indicated that they plan to incorporate Periodic Auctions into their normal workflow as a potential source of additional liquidity. As discussed, these firms would generally continue to work their orders across other venues, and the Exchange has therefore proposed to allow cancellations of Periodic Auction Orders, including in cases where a Periodic Auction has already been initiated. This handling would minimize potential overfills or related workflow issues that could otherwise be experienced by firms, thereby allowing them to use Periodic Auctions in the manner intended while seeking liquidity across other venues. As a self-regulatory organization, the Exchange would conduct surveillance to detect potential misuse of Periodic Auctions, including a pattern or practice of entering and cancelling Periodic Auction Orders to gain information about other Periodic Auction Orders resting on the Periodic Auction Book. While the Proposal would allow members to freely enter and cancel Periodic Auction Orders, the Exchange believes its regulatory program is appropriately designed to detect and deter use of Periodic Auction Orders that is inconsistent with applicable Exchange rules. Periodic Auction Orders must be entered with the intent to participate in Periodic Auctions. *See* Interpretations and Policies .04 to BYX Proposed Rule 11.25. A pattern or practice of submitting orders for the purpose of disrupting or manipulating Periodic Auctions, including entering and immediately cancelling Periodic Auction Orders, will be deemed conduct inconsistent with just and equitable principles of trade. *Id.*

[22] The Periodic Auction Book Price is an indicative price that is designed to provide information about the price where a Periodic Auction may ultimately be executed. *See infra* note 42. The instruction to ''lock-in'' a Periodic Auction Order would be included as a port setting that a User can use to flag any orders entered through a particular port. Users that wish to use this feature must use the port setting and would not be able to flag individual orders on an order-by-order basis.

[23] Periodic Auction Only Orders that do not meet applicable size requirements would be rejected. Periodic Auction Eligible Orders would be converted to Continuous Book Orders, and would be eligible to trade on the Continuous Book based on User instructions.

[24] The term ''Regular Trading Hours'' means the time between 9:30 a.m. and 4:00 p.m. Eastern Time. *See* BYX Rule 1.5(w).

[25] The term ''Early Trading Session'' means the time between 7:00 a.m. and 8:00 a.m. Eastern Time. *See* BYX Rule 1.5(ee).

[26] The term ''Pre-Opening Session'' means the time between 8:00 a.m. and 9:30 a.m. Eastern Time. *See* BYX Rule 1.5(r).

[27] The term ''After Hours Trading Session'' means the time between 4:00 p.m. and 8:00 p.m. Eastern Time. *See* BYX Rule 1.5(c).

[28] Periodic Auction Only Orders will be rejected if they are entered with a time-in-force of IOC but do not contain an ''lock-in'' instruction pursuant to Proposed Rule 11.25(b).

more contra-side Periodic Auction Orders or Continuous Book Orders. The Exchange offers Minimum Quantity Orders to Users that trade on the Continuous Book today.[29] The proposed instruction that could be attached to a Periodic Auction Only Order is similar to the current Minimum Quantity Orders used for trading on the Continuous Book but would only permit the default handling of that order type, and would not allow a member to alternatively specify that the minimum quantity condition be satisfied by each individual contra-side order. Periodic Auction Eligible Orders and Continuous Book Orders entered as Minimum Quantity Orders would be subject to similar restrictions.

In addition, the Exchange believes that some Users may wish to use Periodic Auctions to seek liquidity at or better than a pegged price that is based on the applicable national best bid and offer (''NBBO''). The Exchange would therefore allow a User to optionally include an instruction on its Periodic Auction Only Orders to peg such orders to either the midpoint of the NBBO (''midpoint peg''), or the same side of the NBBO (''primary peg''). Similar to pegging instructions offered for Continuous Book Orders today,[30] Periodic Auction Only Orders entered with a primary peg instruction could be pegged to the NBB or NBO, or a certain amount above the NBB or below the NBO (''offset'').[31] The inclusion of a pegging instruction for Periodic Auction Only Orders would ensure that Users have the opportunity to specify that these orders are only executed at prices defined in relation to the market for the particular security, including midpoint executions that offer price improvement compared to the applicable NBBO.

Periodic Auction Eligible Orders. A ''Periodic Auction Eligible Order'' would be defined in Proposed Rule 11.25(b)(2) as a Non-Displayed Limit Order eligible to trade on the Continuous Book that is entered with an instruction to also initiate a Periodic Auction, if possible, pursuant to Proposed Rule 11.25. The Periodic Auction Eligible Order would allow market participants to trade in the continuous market during the course of the trading day, with the ability to also initiate Periodic Auctions when there is contra-side liquidity available to trade.

The Exchange notes that there may be situations where an incoming Periodic Auction Eligible Order would be able to either initiate a Periodic Auction, or alternatively trade immediately with one or more orders resting on the Continuous Book. In such instances the Periodic Auction Eligible Order would trade immediately with the Continuous Book, thereby securing a guaranteed execution for the order. However, since Periodic Auction Eligible Orders are geared towards participation in Periodic Auctions, with attendant price discovery benefits and potential price improvement opportunities, such orders would not trade on the Continuous Book during a Periodic Auction Period in the security. Although the Exchange would not halt or otherwise suspend trading on the Continuous Book while conducting a Periodic Auction, the Exchange believes that Periodic Auction Eligible Orders that are designed for use in Periodic Auctions should generally preference trading in ongoing auctions over trading on the Continuous Book.

The time-in-force included on a Periodic Auction Eligible Order would also need to allow the order to be entered and remain on the Periodic Auction Book during the course of a Periodic Auction. As a result, there would be certain limitations on the entry of Periodic Auction Eligible Orders with a time-in- IOC or fill-or-kill (''FOK''). An IOC order is defined in BYX Rule 11.9(b)(1) as a limit order that is to be executed in whole or in part as soon as such order is received. Thus, under the ordinary terms of an IOC order, if such an order were to initiate a Periodic Auction, it would generally not be available for later execution at the end of any Periodic Auction Period. To ensure that IOC orders that initiate a Periodic Auction are eligible to participate in the auction's eventual execution, the Exchange therefore proposes that Periodic Auction Eligible Orders entered with a time-in-force of IOC must include an instruction pursuant to Proposed Rule 11.25(b) not to cancel the order during a Periodic Auction Period if it is marketable at the Periodic Auction Book Price.[32] Such Periodic Auction Eligible Orders would be handled in a manner consistent with that described above with respect to Periodic Auction Only Orders. Similarly, an FOK order is defined in BYX Rule 11.9(b)(6) as a limit order that is to be executed in its entirety as soon as it is received and, if not so executed, cancelled. The Exchange is not proposing to support the use of FOK orders in Periodic Auctions, and therefore Periodic Auction Eligible Orders would not be able to be entered with a time-in-force of FOK.[33]

As previously explained, the Exchange believes that Users seeking liquidity in Periodic Auctions may wish to use such auctions to receive an execution at prices at or better than the midpoint of the NBBO. The Exchange currently offers functionality that allows members entering Mid-Point Peg Orders on the Continuous Book to forgo an execution in situations where the NBBO is locked.[34] However, in order to avoid a Periodic Auction from being initiated that may not ultimately result in an execution during a locked market, Mid-Point Peg Orders that are entered with an instruction to not execute when the NBBO is locked would not be eligible to be entered as Periodic Auction Eligible Orders.[35] This handling would mirror the handling of Periodic Auction Orders, which as proposed could be entered with a midpoint peg instruction, but would not include any further instructions that would allow the User to elect not to trade during a locked market.

Since the Exchange believes that Periodic Auctions may be beneficial to market participants trading larger orders that they may not want to be executed unless a specified minimum size can be satisfied, the Exchange would also allow for Minimum Quantity Orders to be entered as Periodic Auction Eligible Orders. As previously discussed, the Exchange currently offers two variants of this order type. By default, a Minimum Quantity Order would execute upon entry against a single order or multiple aggregated orders simultaneously. Alternatively, such orders may be entered with an instruction that the order not trade with multiple aggregated orders simultaneously, and that the minimum quantity condition instead be satisfied by each individual order resting on the Continuous Book. As proposed, Minimum Quantity Orders, as defined in Rule 11.9(c)(5), may be entered as

[29] *See* BYX Rule 11.9(c)(5).

[30] *See* BYX Rule 11.9(c)(8)(A).

[31] Since Periodic Auctions are restricted from trading outside of the applicable Protected NBBO, the offset included on such orders would have to result in the order being more aggressive than the NBBO—*i.e.*, priced higher for buy orders or lower for sell orders.

[32] Periodic Auction Eligible Orders will be rejected if they are entered with a time-in-force of IOC but do not contain an ''lock-in'' instruction pursuant to Proposed Rule 11.25(b).

[33] Although the Exchange is not proposing any special handling for IOC or FOK orders that are entered as Continuous Book Orders, the Exchange notes that such orders would not participate in Periodic Auctions as they would never be posted to the Continuous Book.

[34] *See* BYX Rule 11.9(c)(9).

[35] This restriction would not apply to Continuous Book Orders. Since Continuous Book Orders do not initiate Periodic Auctions, a Continuous Book Order entered with these instructions would be able to participate in the eventual execution of Periodic Auctions if such execution can take place in accordance with the terms of the order.

Periodic Auction Eligible Orders only if the order includes the default instruction that allows the minimum size specified to be executed against one or more contra-side orders—*i.e.,* similar to the proposed handling of Periodic Auction Only Orders entered with a minimum execution quantity instruction. Orders entered with the alternative instruction that requires the minimum size specified to be satisfied by each individual contra-side order would not be eligible to be entered as Periodic Auction Eligible Orders. As discussed later in this proposed rule change, similar restrictions would also apply to Continuous Book Orders, which would not participate in Periodic Auctions if entered with this alternative instruction.

Finally, similar to the opening process used to begin trading in a security pursuant to BYX Rule 11.23: (1) Discretionary Orders, as defined in rule 11.9(c)(10), would be eligible to participate only up to their ranked price for buy orders or down to their ranked price for sell orders; [36] and (2) all Pegged Orders and Mid-Point Peg Orders, as defined in BYX Rule 11.9(c)(8) and (9), would be eligible for execution in Periodic Auctions based on their pegged prices. The Exchange believes that this proposed handling is equally relevant to Periodic Auctions, and would ensure, where appropriate, that the order handling experienced in such Periodic Auctions is familiar to members and investors.

Continuous Book Orders. A ''Continuous Book Order'' would be defined in Proposed Rule 11.25(a)(2) as an order on the BYX Book that is not a Periodic Auction Order. Continuous Book Orders, which may participate in the eventual execution of a Periodic Auction but would not be able to initiate such an auction, would be handled in the same manner as Periodic Auction Eligible Orders solely with respect to handling of (1) Discretionary Orders, and (2) Pegged Orders and Mid-Point Peg Orders, each as discussed in the preceding paragraph. Continuous Book Orders would also be subject to the handling discussed for Periodic Auction Eligible Orders entered as Minimum Quantity Orders, with the caveat that this handling would only apply to Continuous Book Orders entered with the default instruction that permits the execution of such orders against one or more contra-side orders. As proposed, similar to the treatment of Periodic Auction Orders—including both Periodic Auction Only Orders and Periodic Auction Eligible Orders—Continuous Book Orders entered with the alternative instruction that requires the minimum size specified to be satisfied by each individual contra-side order would not be included in Periodic Auctions. However, rather than prohibiting Users from entering Minimum Quantity Orders with this instruction on the Continuous Book, where this instruction may still be valuable for investors, the Exchange would simply prohibit any orders entered with that instruction from participating in the execution of any Periodic Auctions. Finally, Continuous Book Orders that are entered as Reserve Orders, as defined in Rule 11.9(c)(1), would be eligible to participate in Periodic Auctions to the full extent of their displayed size and Reserve Quantity.[37]

c. Initiation and Publication of Periodic Auction Information

The Exchange would conduct Periodic Auctions during Regular Trading Hours to give market participants an opportunity to obtain liquidity during the course of the trading day. Instead of initiating such auctions on a set schedule, the Exchange would wait until it has executable interest that is eligible to initiate a Periodic Auction, thereby ensuring that Periodic Auctions are only performed when it may be possible for interested market participants to obtain an execution at the end of the Periodic Auction Period. Specifically, as provided in Proposed Rule 11.25(c), a Periodic Auction would be initiated in a security during Regular Trading Hours when one or more Periodic Auction Orders to buy become executable against one or more Periodic Auction Orders to sell pursuant to Proposed Rule 11.25.[38] This would begin a Periodic Auction Period of 100 milliseconds where the Exchange would match buy and sell orders for potential execution.[39]

Once the Periodic Auction Period has begun, the Exchange would consolidate any additional Periodic Auction Orders that it receives, which would be used to calculate the information disseminated at a randomized time thereafter in a Periodic Auction Message.[40] Specifically, at a randomized time in one millisecond intervals after a Periodic Auction has been initiated and before the end of the Periodic Auction,[41] the Exchange would disseminate via electronic means an initial Periodic Auction Message that includes two important pieces of information about the Periodic Auction: (1) The Periodic Auction Book Price,[42] and (2) and the total number of shares of Periodic Auction Orders that are matched at the Periodic Auction Book Price.[43] With

[36] The discretionary range of such orders would not be considered in Periodic Auctions.

[37] There are no similar requirements applicable to Periodic Auction Eligible Orders since Reserve Orders include a displayed portion and therefore would not be eligible for entry as Periodic Auction Eligible Orders. As discussed, Periodic Auction Eligible Orders, as defined, would include only Non-Displayed Limit Orders.

[38] As proposed, Periodic Auctions would operate alongside trading on the Continuous Book. The Exchange has therefore developed its system for processing Periodic Auctions with the goal of minimizing interference with trading in the continuous market. Thus, in rare circumstances where a number of Periodic Auctions could potentially be triggered at or around the same time, the Exchange may throttle the initiation of such Periodic Auctions if needed to maintain appropriate system performance and latency. Specifically, the throttle would limit the rate at which new auctions are initiated by the System by imposing configurable limits for both: (1) A sustained rate that controls the number of Periodic Auctions that can be initiated on a continuous basis, calculated by looking at System load during high utilization periods and the time it takes to initiate an auction to determine a safe maximum for the number of auctions that can be initiated each second; and (2) a burst rate that would allow the System to initiate a larger number of Periodic Auctions when either no or few auctions have been initiated for a specified time period.

[39] One relevant exception to this would be for Periodic Auctions that would otherwise end after the Regular Trading Session. As previously discussed, Periodic Auctions would only be conducted during Regular Trading Hours. As a result, such Periodic Auctions would be performed at the end of the Regular Trading Session.

[40] The ''Periodic Auction Message'' would be defined in Proposed Rule 11.25(a)(7) as a message disseminated by electronic means that includes information about any matched Periodic Auction Orders on the Periodic Auction Book, as described in Rule 11.25(c).

[41] With the randomization of sending the message, the initial Periodic Auction Message would be disseminated between 0 and 99 milliseconds following the initiation of the Periodic Auction—*e.g.,* immediately upon initiation, at the one millisecond mark, two millisecond mark, three millisecond mark, or so forth until the 99 millisecond mark. The specific time chosen would be entirely random for each Periodic Auction. As discussed in the paragraph that follows, revised Periodic Auction Messages would thereafter be disseminated in five millisecond intervals following the Exchange's dissemination of the initial Periodic Auction Message.

[42] The ''Periodic Auction Book Price'' would be defined in Proposed Rule 11.25(a)(5) as the price within the Collar Price Range at which the most shares from the Periodic Auction Book would match. In the event of a volume-based tie at multiple price levels, the Periodic Auction Book Price would be the price that 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 Periodic Auction Book Price would be the price closest to the Volume Based Tie Breaker. As calculated, the Periodic Auction Book Price would be expressed in the minimum increment for the security unless the midpoint of the NBBO establishes the Periodic Auction Book Price.

[43] Similar to the auction information disseminated by the Exchange's affiliate, BZX, for its opening and closing auctions, the Periodic Auction Message would be disseminated to market participants over the Exchange's proprietary depth-of-book market data feeds.

these two pieces of information, interested market participants would be informed of both the price at which Periodic Auction Orders would match based on current market conditions,[44] and the number of shares of such orders that would be matched. Although the Exchange does not believe that all Users will want or need access to this information to participate in Periodic Auctions,[45] making such information available may encourage further participation from market participants.

The calculation of the Periodic Auction Book Price would exclude Continuous Book Orders. Although Continuous Book Orders are eligible to trade in a Periodic Auction at the end of the Periodic Auction Period, they are potentially subject to execution on the Continuous Book prior to the execution of the Periodic Auction. As a result, similar to certain information disseminated by other national securities exchanges in advance of their auctions,[46] Continuous Book Orders would not be used to calculate the data elements included in the Periodic Auction Message. After its initial dissemination, a revised Periodic Auction Message would be disseminated in five millisecond intervals for the remaining duration of the auction, thereby ensuring that market participants maintain a current view of the market with which to make appropriate trading decisions throughout the Periodic Auction Period.

d. Determination of Periodic Auction Price

Periodic Auctions are designed to facilitate meaningful price discovery in securities traded on the Exchange throughout the course of the trading day. Similar to the operation of opening and closing auctions in securities listed on the Exchange's affiliate, Cboe BZX Exchange, Inc. (''BZX''),[47] as well as similar auctions conducted on other national securities exchanges, Periodic Auctions would therefore be executed at a price that maximizes the number of shares traded in the auction within designated auction collars (''Collar Price Range'').[48] Specifically, as provided in Proposed Rule 11.25(d), the Periodic Auction Price would be established by determining the price level within the Collar Price Range that maximizes the number of shares executed from the Continuous Book and Periodic Auction Book in the Periodic Auction.[49]

The Exchange would also implement certain ''tie-breakers'' that would be used to determine the applicable Periodic Auction Price if multiple price levels would satisfy the requirement to maximize the number of shares executed in the auction. These tie-breakers would be the same as the tie-breakers currently used for opening and closing auctions on BZX for that exchange's listed securities. Specifically, in the event of a volume-based tie at multiple price levels, the Periodic Auction Price would be the price that results in the minimum total imbalance—*i.e.,* the price at which the number of any executable shares to buy or sell that do not participate in the Periodic Auction is minimized.[50] In the event of a volume-based tie and a tie in minimum total imbalance at multiple price levels, the Periodic Auction Price would be the price closest to the Volume Based Tie Breaker, which would be defined in Proposed Rule 11.25(a)(9) as the midpoint of the NBBO for a particular security where the NBBO is a Valid NBBO.[51]

e. Determination of Collar Price Range

As discussed, the Periodic Auction Price would be constrained by auction collars that are designed to ensure that the execution of a Periodic Auction takes place at a price that is reasonably related to the market for the security and consistent with applicable regulatory requirements. While Periodic Auctions are designed to balance supply and demand through a competitive auction process, the Collar Price Range would restrict trading from occurring at prices that are far away from the market. Specifically, as proposed, the term ''Collar Price Range'' would be defined in Proposed Rule 11.25(a)(1) as the more restrictive of the Midpoint Collar Price Range and the Protected NBBO.[52] The Collar Price Range would be similar to the auction collars used today for BZX's opening and closing processes, with important differences to account for the fact that Periodic Auctions would be subject to the requirements of the Rule 611 of Regulation NMS (''Order Protection Rule'') and the Plan to Address Extraordinary Market Volatility (the ''Limit Up-Limit Down'' or ''LULD'' Plan). Specifically, Periodic Auctions would be subject to a Collar Price Range that is the more restrictive of the Midpoint Collar Price Range (described below) and the Protected NBBO. This implementation would therefore ensure that such Periodic Auctions are executed at a price that is consistent with the requirements of the Order Protection Rule as well as the additional protections provided by auction collars that are similar to those currently used by the Exchanges' affiliate, BZX, for opening and closing auctions in that

[44] The Exchange would consider any relevant instructions included on Periodic Auction Orders in calculating the information included in the Periodic Auction Message. For example, the pegged price of a Periodic Auction Order that includes a pegging instruction would be used in determining the Periodic Auction Book Price, as well as the number of shares available at that price, as disseminated in the Periodic Auction Message.

[45] Periodic Auction Orders would not be tied in any way to a particular Periodic Auction. As a result, Users may freely enter Periodic Auction Orders, and such orders would be eligible to initiate a Periodic Auction, either on entry or after being posted to the Periodic Auction Book, or participate in an ongoing periodic Auction. A User's ability to participate effectively in the Periodic Auctions would therefore not be tied to their use of the Periodic Auction Message, and the Exchange believes that Periodic Auctions would be a valuable tool for such Users irrespective of whether they choose to use such information.

[46] For example, the ''Current Reference Price'' disseminated ahead of Nasdaq's closing cross is defined as the single price that is at or within the current Nasdaq Market Center best bid and offer at which the maximum number of shares of MOC, LOC, and IO orders can be paired, subject to certain tie-breakers. *See* Nasdaq Rule 4754(a)(7)(A). Nasdaq does not include ''Close Eligible Interest'' entered on its continuous book in determining the Current Reference Price pursuant to Nasdaq Rule 4754(a)(7)(A), nor does it include such orders in its dissemination of the number of shares represented by MOC, LOC, and IO orders that are paired at the Current Reference Price. *See* Nasdaq Rule 4754(a)(7)(B).

[47] *See* BZX Rule 11.23(b)(2)(B); (c)(2)(B).

[48] The term ''Collar Price Range'' shall mean the more restrictive of the Midpoint Collar Price Range, as defined in Proposed Rule 11.25(a)(1), and the Protected NBBO. *See* Proposed Rule 11.25(a)(1). Notwithstanding the foregoing, if the Collar Price Range calculated by the Exchange would be outside of the applicable Price Bands established pursuant to the Limit Up-Limit Down Plan, the Collar Price Range will be capped at such Price Bands. *Id.*

[49] The calculation of Collar Price Range, as defined in the Proposed Rule, is described in more detail in Section V of this proposed rule change. As calculated, the Periodic Auction Price would be expressed in the minimum increment for the security unless the midpoint of the NBBO establishes the Periodic Auction Price.

[50] Selecting a price that would minimize the imbalance best reflects the value of the security based on the auction's price discovery process because it is the price level where the amount of buy and sell interest is closest to equal.

[51] As is the case on the Exchange's affiliate, BZX, for opening and closing auctions for BZX-listed securities, a NBBO would be considered 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 as determined by the Exchange and published in a circular distributed to Members with reasonable advance notice prior to initial implementation and any change thereto. *See* BZX Rule 11.23(b)(23). Where the NBBO is not a Valid NBBO, the consolidated last sale price would be used. *Id.*

[52] The term ''Midpoint Collar Price Range'' shall mean the range from a set percentage below the Collar Midpoint (as defined below) to above the Collar Midpoint, such set percentage being dependent on the value of the Collar Midpoint at the time of the auction, as described below. *See* Proposed Rule 11.25(a)(3). The ''Protected NBBO'' is the national best bid or offer that is a Protected Quotation. *See* BYX Rule 1.5(s).

exchange's listed securities. For all Periodic Auctions, the Exchange would calculate a Midpoint Collar Price Range to establish an upper and lower bound for the execution of such auctions. The Midpoint Collar Price Range would mirror the collars currently established for use in BZX auctions,[53] and would be defined in Proposed Rule 11.25(a)(3) as the range from a set percentage below the Collar Midpoint to above the Collar Midpoint,[54] such set percentage being dependent on the value of the Collar Midpoint at the time of the auction. Specifically, the Collar Price Range would be determined as follows: (1) Where the Collar Midpoint is $25.00 or less, the Collar Price Range would be the range from 10% below the Collar Midpoint to 10% above the Collar Midpoint; (2) where the Collar Midpoint is greater than $25.00 but less than or equal to $50.00, the Collar Price Range would be the range from 5% below the Collar Midpoint to 5% above the Collar Midpoint; and (3) where the Collar Midpoint is greater than $50.00, the Collar Price Range would be the range from 3% below the Collar Midpoint to 3% above the Collar Midpoint.

Finally, all Periodic Auctions would be conducted during Regular Trading Hours and therefore would be subject to the requirements of the LULD Plan. Generally, the LULD Plan sets forth procedures that provide for market-wide limit up-limit down requirements to prevent trades in individual NMS Stocks from occurring outside of specified Price Bands.[55] Consistent with the requirements of the LULD Plan, the Exchange would not execute Periodic Auctions at a price that is outside of the applicable Price Bands. Thus, if the Collar Price Range calculated by the Exchange would be outside of the applicable Price Bands established pursuant to the LULD Plan, the Collar Price Range would be capped at such Price Bands.

f. Priority and Execution of Orders

As discussed, Periodic Auction Orders and Continuous Book Orders that are executable at the end of the Periodic Auction Period would be executed at the Periodic Auction Price determined pursuant to Proposed Rule 11.25(d). Such orders would be executed in accordance with Proposed Rule 11.25(e), which describes the allocation model for Periodic Auctions. Generally, the allocation model described in this rule is intended to encourage active participation of Periodic Auction Orders, including participation of larger orders, while ensuring that Continuous Book Orders are also able to participate in resulting executions, as appropriate, in order to encourage continued liquidity on the Continuous Book. First, any displayed Continuous Book Orders that are executable at the Periodic Auction Price would be executed in price/time priority, thereby encouraging the continued submission of displayed orders. Second, after any displayed Continuous Book Orders have been executed, the Exchange would execute any Periodic Auction Orders that are executable at the Periodic Auction Price. Since Periodic Auctions are designed, in part, to facilitate the execution of larger orders, such Periodic Auction Orders would be executed in size/time priority, beginning with the largest order. Finally, any non-displayed Continuous Book Orders that are executable at the Periodic Auction Price would be executed pursuant the normal price-time priority allocation used for the execution of orders on the Continuous Book, as provided in BYX Rule 11.9(a)(2)(B). All Match Trade Prevention modifiers, as defined in BYX Rule 11.9(f), would be ignored as it relates to executions occurring during a Periodic Auction.[56]

The Exchange intends to reflect executions that occur during a Periodic Auction as auction executions on its proprietary market data feeds as happens today for other auctions conducted by the Exchange and its affiliated U.S. equities exchanges. There is no similar indicator disseminated by the securities information processors (''SIPs'') for intraday auction executions, *i.e.,* excluding opening and closing prints, and the Exchange is not able to unilaterally propose the introduction of such an indicator through a proposed rule change submitted to the Commission pursuant to Section 19(b) of the Exchange Act. Rather, pursuant to Regulation NMS, the dissemination of such information by the SIPs is governed by the operating committee(s) of the national market system (''NMS'') plan(s) that govern the dissemination of this information. In the interest of facilitating additional transparency about the nature of executions on the Exchange to subscribers of the SIP feeds, the Exchange will submit a request to the operating committee(s) of the NMS plan(s) and make best efforts to have similar information included on those feeds as soon as practicable. If approved by applicable operating committee(s), the Exchange represents that it will submit a trade modifier on executions that result from Periodic Auctions to the SIPs for dissemination to investors, similar to the manner in which it would mark such auction executions on its own proprietary feeds.

Finally, the Exchange notes that, in certain rare circumstances, the inclusion of a minimum execution quantity on one or more Periodic Auction Orders and/or Continuous Book Orders could potentially result in the Exchange being unable to process a Periodic Auction in a timely manner. Thus, as provided in Proposed Rule 11.25(f), to prevent potential capacity and/or performance issues that may impact both the execution of the auction, as well as trading on Continuous Book, in such an event the Exchange would cancel the auction after a specified number of attempts. Specifically, to prevent potential capacity and/or performance issues, the Exchange will cancel a Periodic Auction at the end of the Periodic Auction Period if it is unable to successfully process such Periodic Auction according to Rule 11.25 after a specified number of attempts determined by the Exchange and published in a circular distributed to members.

g. Regulatory and Other Considerations

The Exchange would also adopt rule language in the Interpretations and Policies to the proposed rule that describes how Periodic Auctions would be processed consistent with certain other regulatory obligations, including obligations related to member conduct, or otherwise to ensure transparent handling in certain specified circumstances. These rules would provide additional clarity and transparency to members and investors with respect to how the Exchange would process Periodic Auctions consistent with relevant obligations under the Exchange Act, or as otherwise necessary or appropriate to maintain a fair and orderly market on the Exchange.

First, as explained in Interpretations and Policies .01 to Proposed Rule 11.25, the Exchange would not conduct Periodic Auctions during a trading halt when such trading is prohibited. If a symbol is halted prior to the execution of a Periodic Auction that has already

[53] *See* BZX Rule 11.23(c).

[54] The Collar Midpoint would be the Volume Based Tie Breaker for all Periodic Auctions. As discussed later in this proposed rule change, the Volume Based Tie Breaker would generally be the midpoint of the NBBO, except where there is no Valid NBBO.

[55] *See e.g.,* LULD Plan, Preamble, *available at https://www.luldplan.com/plans.*

[56] The Exchange notes that its Match Trade Prevention features are designed for use on the Continuous Book, and may complicate the execution of an auction that requires the pooling and matching of multiple orders against other orders at a market clearing price.

been initiated pursuant to Proposed Rule 11.25(c), the Periodic Auction would be immediately cancelled without execution, consistent with applicable limitations on trading during a halt.

Second, as explained in Interpretations and Policies .02 to Proposed Rule 11.25, a Periodic Auction would not be initiated during a Crossed Market. If the market becomes crossed during a Periodic Auction that has already been initiated pursuant to Proposed Rule 11.25(c), and remains crossed at the end of the Periodic Auction Period, the Periodic Auction would be cancelled without execution.[57] If the market subsequently becomes uncrossed, resting Periodic Auction Orders may trigger a Periodic Auction pursuant to Rule 11.25(c).

Third, Interpretations and Policies .03 to Proposed Rule 11.25 would detail the proposed handling of orders consistent with Regulation SHO. As proposed, all short sale orders designated for participation in the Periodic Auction would have to be identified as ''short'' or ''short exempt'' pursuant to Rule 11.10(a)(5). Rules 201(b)(1)(i) and (ii) of Regulation SHO generally requires that trading centers such as the Exchange establish, maintain, and enforce written policies and procedures reasonably designed to: (i) Prevent the execution or display of a short sale order of a covered security at a price that is less than or equal to the current national best bid (''NBB'') if the price of that covered security decreases by 10% or more from the covered security's closing price; and (ii) impose this price restriction for the remainder of the day and the following day.

So as to maintain compliance with Rule 201 of Regulation SHO, Periodic Auction Eligible Orders and Continuous Book Orders marked ''short'' would be subject to the Exchange's current short sale price sliding process described in BYX Rule 11.9(g)(5). BYX Rule 11.9(g)(5) establishes the Exchange's price sliding process for orders entered on the Continuous Book, and is designed to ensure that in the event a security is in a short sale circuit breaker, short sale orders entered on the Continuous Book are re-priced to a price that is above the NBB, as needed to comply with Rule 201 of Regulation SHO. Since Periodic Auction Eligible Orders and Continuous Book Orders are available for trading on the Continuous Book they would be subject to the same price sliding process as all orders that trade in the continuous market. For example, pursuant to BYX Rule 11.9(g)(5)(A), a short sale order that, at the time of entry, could not be executed or displayed in compliance with Rule 201 of Regulation SHO will be re-priced by the System at one minimum price variation above the current NBB (''Permitted Price''). Thus, a short sale order that is a Periodic Auction Eligible Order or Continuous Book Order would be re-priced upon entry to a Permitted Price that is consistent with the requirements of Regulation SHO. Such orders may also be further adjusted to reflect declines in the NBB, depending on the instructions of the Users.[58] In addition, pursuant to BYX Rule 11.9(g)(5)(B), the System may execute a displayed short sale order at a price below the Permitted Price if, at the time of initial display of the short sale order, the order was at a price above the then current NBB.[59]

Periodic Auction Only Orders, however, are designed solely for use in Periodic Auctions and do not trade on the Continuous Book. Therefore, such Periodic Auction Orders would not be managed pursuant to the price sliding process described in BYX Rule 11.9(g)(5), which is for managing orders that trade in the continuous market, as opposed to orders that would be entered in an auction mechanism, such as the proposed Periodic Auctions. As such, the Exchange would reject or cancel Periodic Auction Only Orders marked ''short'' during a short sale circuit breaker. Specifically, Periodic Auction Only Orders marked ''short'' will be cancelled when a short sale circuit breaker has been triggered pursuant to Rule 201(b)(1)(i) of Regulation SHO, and subsequently entered Periodic Auction Only Orders marked ''short'' will be rejected while the short sale circuit breaker remains in effect pursuant to Rule 201(b)(1)(ii) of Regulation SHO. This will ensure that Periodic Auction Only Orders, which as discussed would not be handled pursuant to the Exchange's price sliding process, would not trade in a Periodic Auction that could potentially be executed at an impermissible price under Regulation SHO.

Further, consistent with Rule 201(b)(iii)(B) of Regulation SHO, the Exchange's policies and procedures would be designed to permit the execution or display of a short sale order of a covered security marked ''short exempt'' without regard to whether the order is at a price that is less than or equal to the current NBB. As a result, the restrictions described in proposed Supplementary Material .03 to Rule 11.25 would not apply to orders marked ''short exempt.'' Such orders would instead be processed in the same manner as long sale orders, and may be executed in a Periodic Auction without being subject to either the Exchange's short sale price sliding process, or subject to rejection or cancellation, as appropriate.

Finally, Interpretations and Policies .04 to Proposed Rule 11.25 would describe member conduct obligations with respect to the entry of Periodic Auction Orders. As proposed, Periodic Auction Orders must be entered with the intent to participate in Periodic Auctions. A pattern or practice of submitting orders for the purpose of disrupting or manipulating Periodic Auctions, including entering and immediately cancelling Periodic Auction Orders, would be deemed conduct inconsistent with just and equitable principles of trade. The Exchange would conduct surveillance to ensure that Users do not inappropriately enter Periodic Auction Orders for impermissible purposes, such as to gain information about other Periodic Auction Orders that are resting on the Periodic Auction Book, or otherwise disrupting or manipulating Periodic Auctions.

h. Examples

The following examples illustrate the proposed operation of Periodic Auctions:

Periodic Auction Initiation

Example 1:

NBBO: $10.00 × $10.10

Order 1: Buy 100 shares @ $10.05 Midpoint Peg—Periodic Auction Only/Eligible

Order 2: Sell 100 shares @ $10.05 Midpoint Peg—Periodic Auction Only/Eligible

Periodic Auctions are initiated when one or more Periodic Auction Orders to buy are matched with one or more Periodic Auction Orders to sell. Therefore, a Periodic Auction is initiated when Order 2 matches with Order 1.

Example 2:

NBBO: $10.00 × $10.10

[57] The Exchange would not immediately cancel the auction as crossed markets are typically short-lived and the market may no longer be crossed at the end of the Periodic Auction Period, in which case the Exchange could successfully execute the auction.

[58] Pursuant to BYX Rule 11.9(g)(5)(A), the Exchange's default short sale sliding only re-prices an order upon entry. *See* BYX Rule 11.9(g)(5)(A). However, Users may to elect to have a short sale order at the Permitted Price re-priced down to the order's original limit price to reflect declines in the NBB. *Id.*

[59] This handling would only be available for Continuous Book Orders as all Periodic Auction Eligible Orders are, by definition, non-displayed.

Order 1: Buy 100 shares @ 10.05 Midpoint Peg—Continuous Book Order
Order 2: Sell 100 shares @ 10.05 Midpoint Peg—Periodic Auction Eligible

A Periodic Auction is not initiated as Order 1 is a Continuous Book Order. Instead, Order 2, which is a Periodic Auction Eligible Order, would trade immediately with the Continuous Book and execute 100 shares against Order 1 at $10.05.

Example 3:

NBBO: $10.00 × $10.10
Order 1: Buy 100 shares @ 10.05 Midpoint Peg—Periodic Auction Only
Order 2: Buy 100 shares @ 10.05 Midpoint Peg—Continuous Book Order
Order 3: Sell 100 shares @ 10.05 Midpoint Peg—Periodic Auction Eligible

A Periodic Auction is not initiated. Instead, Order 3, which is a Periodic Auction Eligible Order, would trade immediately with the Continuous Book and execute 100 shares against Order 2 at $10.05. Although Order 1 is available to initiate a Periodic Auction, a Periodic Auction Eligible Order would trade immediately with Continuous Book Orders on entry if it can do so instead of initiating a Periodic Auction.

Periodic Auction Initiation and Execution

Example 4:

NBBO: $10.00 × $10.10
Order 1: Buy 150 shares @ $10.05 Midpoint Peg—Periodic Auction Only
Order 2: Sell 100 shares @ $10.05 Midpoint Peg—Continuous Book Order
Order 3: Sell 100 shares @ $10.05 Midpoint Peg—Periodic Auction Eligible

Auction Initiation: Order 1 is a Periodic Auction Only Order and Order 2 is a Continuous Book Order. As a result, when Order 2 is entered into the Exchange, it will not initiate a Periodic Auction or trade with Order 1 immediately. Instead, a Periodic Auction is initiated when Order 3 matches with Order 1.

Execution: After 100 milliseconds the Periodic Auction would end, and orders would be executed in the auction at a price of $10.05, which is the price at which the maximum number of shares can be executed. Order 1 is the only order to buy and would trade its full size of 150 shares. Between the available sell orders, Order 3, which is a Periodic Auction Eligible Order, would have priority over Order 2, which is a Non-Displayed Continuous Book Order. As a result, Order 3 would trade its full size of 100 shares, and Order 2 would receive a partial execution for 50 shares.

Example 5:

NBBO: $10.00 × $10.01
Order 1: Buy 5,000 shares @ $10.01—Periodic Auction Only
Order 2: Sell 1,000 shares @ $10.01—Displayed Continuous Book Order
Order 3: Sell 2,000 @ $10.01—Non-Displayed Continuous Book Order
Order 4: Sell 3,000 @ $10.01—Periodic Auction Eligible

Auction Initiation: Order 1 is a Periodic Auction Only Order and Orders 2 and 3 are Continuous Book Orders. As a result, when Order 2 and 3 are entered into the Exchange, those orders will not initiate a Periodic Auction or trade with Order 1 immediately. Instead, a Periodic Auction would be initiated when Order 4 matches with Order 1.

Execution: After 100 milliseconds the Periodic Auction would end, and orders would be executed in the auction at a price of $10.01, which is the price at which the maximum number of shares can be executed. Order 1 is the only order to buy and would trade its full size of 5,000 shares. Between the available sell orders, Order 2, which is a Displayed Continuous Book Order, would have priority over Order 4, which is a Periodic Auction Eligible Order that in turn has priority over Order 3, which is a Non-Displayed Continuous Book Order. As a result, Order 2 and Order 4 would each trade their full size of 1,000 shares and 3,000 shares respectively, and Order 3 would receive a partial execution for 1,000 shares.

Periodic Auction Price Calculation

Example 6:

NBBO: $10.00 × $10.10
Order 1: Buy 500 shares @ $10.05 Non-Displayed—Periodic Auction Only
Order 2: Buy 300 shares @ $10.04 Non-Displayed—Continuous Book Order
Order 3: Sell 100 shares @ $10.04 Non-Displayed—Periodic Auction Only
Order 4: Sell 200 shares @ $10.04 Non-Displayed—Periodic Auction Only

Auction Initiation: A Periodic Auction would be initiated when Order 3 is entered into the Exchange and matches with Order 1.

Execution: After 100 milliseconds the Periodic Auction would end, and orders would be executed in the auction at a price of $10.05. In this example, there are two prices at which the maximum number of shares can be executed, i.e., $10.04 or $10.05. However, an execution at $10.04 would leave a 500 share buy-side imbalance, whereas an execution at $10.05 would leave a smaller 200 share buy-side imbalance due to the fact that Order 2 cannot participate at that price. As a result, the Periodic Auction Price would be $10.05, i.e., the price that minimizes the imbalance. Orders 3 and 4 would trade their full size of 100 shares and 200 shares, respectively, with Order 1.

Example 7:

NBBO: $10.00 × $10.10
Order 1: Buy 500 shares @ $10.05 Non-Displayed—Periodic Auction Only
Order 2: Sell 200 shares @ $10.04 Non-Displayed—Periodic Auction Only

Auction Initiation: A Periodic Auction would be initiated when Order 1 and Order 2, which are both Periodic Auction Only Orders, match with each other.

Execution: After 100 milliseconds the Periodic Auction would end, and orders would be executed in the auction at a price of $10.05. In this example, there are two prices at which the maximum number of shares can be executed, i.e., $10.04 or $10.05, and in both cases there would be a buy-side imbalance of 300 shares. As a result, the Periodic Auction Price would be the price closest to the Volume Based Tie Breaker, *i.e.,* the midpoint price of $10.05. Order 1 would trade 200 shares with Order 2.

Periodic Auction Message

Example 8:

NBBO: $10.00 × $10.10
Order 1: Buy 500 shares @ $10.05 Midpoint—Periodic Auction Only
Order 2: Buy 300 shares @ $10.06 Midpoint—Periodic Auction Eligible
Order 3: Sell 800 shares @ $10.05 Midpoint—Periodic Auction Eligible
New NBBO: $10.02 × $10.10

Auction Initiation: A Periodic Auction would be initiated when Order 3 matches with Orders 1 and 2.

Auction Message: A Periodic Auction Message would be disseminated at a randomized time after the initiation of the auction, showing 800 shares matched at a price of $10.05. After a new NBBO is established, the midpoint orders would be re-priced to the new midpoint of $10.06, subject to their limit prices. As a result, Orders 2 and 3 would be re-priced to $10.06, while Order 1 would remain priced at $10.05 due to its lower limit price. The next Auction Message would therefore indicate 300 shares matched at a price of $10.06 due to the exclusion of Order 1 at the new midpoint.

i. Implementation

The implementation of Periodic Auctions after any Commission approval of the proposed functionality would follow the Exchange's rigorous software development process for significant trading system enhancements. This will include: (1) Unit testing by the development team and systemwide integration testing by an independent quality assurance team, both of which will be incorporated into the Exchange's automated test framework; (2) at least two weeks of internal testing in the Exchange's certification environment using an automated system to generate and send orders as well as manual testing by the Exchange's trade desk; and (3) at least four weeks of customer testing in the certification environment. Each of these steps would be completed and reviewed before Periodic Auctions would be made available to customers in the Exchange's production trading system. The Exchange's certification environment would also remain available alongside the production release of Periodic Auctions for customers that want to test Periodic Auction functionality in that environment following its initial rollout.

2. Statutory Basis

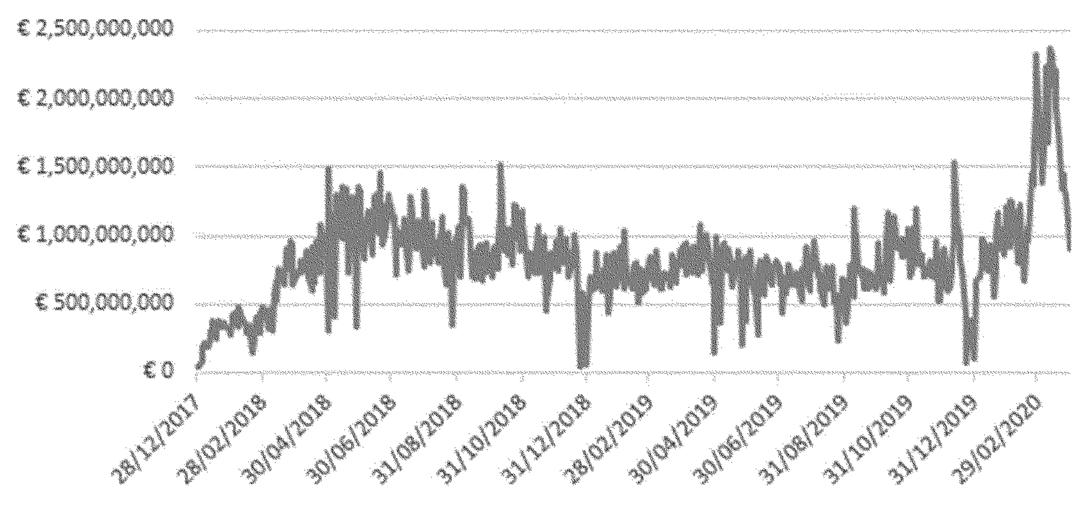
The Exchange believes the proposed rule change is consistent with the requirements of Section 6(b) of the Act,[60] in general, and Section 6(b)(5) of the Act,[61] in particular, in that it is designed to remove impediments to and perfect the mechanism of a free and open market and a national market system, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest and not to permit unfair discrimination between customers, issuers, brokers, or dealers. Specifically, the Exchange believes that the proposed rule change is consistent with the protection of investors and the public interest as it would facilitate improved price formation and provide additional execution opportunities for investors, particularly in securities that may suffer from limited liquidity, including thinly-traded securities.

Periodic Auctions would supplement existing opening and closing auctions by consolidating buy and sell interest in a price forming auction when investors seek liquidity during the course of the trading day. Although liquidity is frequently available in size around the open and close of trading, liquidity may be more limited intraday. Thus, investors looking to trade in size may have issues getting their orders filled during the trading day, or may receive inferior execution quality due to the market impact of trading larger blocks of equity securities in a market with limited liquidity. As proposed, Periodic Auctions would allow the Exchange to consolidate volume from market participants, thereby increasing the liquidity available to investors. By creating a deeper pool of liquidity for the intraday execution of orders, including block-sized liquidity, the Exchange believes that members and investors would be able to secure better quality executions. In addition, Periodic Auctions would perform an important price discovery function, which the Exchange believes may be particularly valuable in thinly-traded securities that often trade with significantly wider spreads that negatively impact the ability for investors to ascertain market value,[62] as well as high-priced or other securities that may also trade with wider spreads today. The proposed introduction of Periodic Auctions would therefore contribute to a fair and orderly market in equity securities traded on the Exchange.

a. Periodic Auctions in Europe

The Exchange's affiliate, Cboe Europe, has had a successful history with periodic auctions in the European equities market, and the proposed introduction of Periodic Auctions for the trading of U.S. equity securities is based, in part, on the successful implementation of a similar product offered by Cboe Europe. As illustrated in Chart A, Cboe Europe's periodic auction book has grown to about 2%–2.5% of notional value traded on European equities exchanges since its introduction in October 2015. Indeed, such periodic auctions now account for an average daily value traded (''ADVT'') of about €1 billion, with two months in Q1 2020 actually exceeding this threshold, reflecting the value that this offering has provided to market participants that trade European equities.

Chart A: Average Daily Value Traded in Cboe Europe Periodic Auctions



[60] 15 U.S.C. 78f(b).

[61] 15 U.S.C. 78f(b)(5).

[62] *See* Letter from Adrian Griffiths, *supra* note 14, which illustrates the wider spreads that often impact trading in thinly traded securities. The Exchange believes that Periodic Auctions would improve price discovery in securities that tend to trade with wider spreads. As explained in that letter, volume in thinly traded securities often migrates to off-exchange venues where market participants can trade without publicly displaying their orders and while potentially minimizing market impact.

CHART B—CBOE EUROPE PERIODIC AUCTION STATISTICS

Month	Periodic auction value traded		Periodic auction market share % notional value traded on exchanges in EU
	Total monthly	Average daily	
Jan-20	€ 19,266,389,823	€ 875,883,628	2.42
Feb-20	24,377,313,487	1,218,865,674	2.52
Mar-20	36,933,642,050	1,678,801,911	2.46
Apr-20	18,370,457,305	918,522,865	2.33
May-20	15,993,488,255	761,594,679	2.13
Jun-20	18,221,339,811	828,242,719	1.91

This growth in Cboe Europe's periodic auction offering has promoted price improvement opportunities, with an analysis of periodic auctions conducted by Cboe Europe for Q1 2020 showing such periodic auctions trading about 85% of value traded at the midpoint. Although the Exchange recognizes that there are important differences in market structure between the U.S. and European equities markets, as well as relevant design differences between the two products, the Exchange believes that U.S. investors may receive similar benefits from its proposed introduction of Periodic Auctions. Moreover, the Exchange believes that such innovation should take preference over other regulatory approaches that may impede future innovation.

b. Periodic Auction Proposal

As discussed in detail in the paragraphs that follow, Periodic Auctions are designed to improve the investor experience for market participants that trade U.S. equities, and the Exchange believes that this product may therefore contribute to a free and open market and national market system. Specifically, Periodic Auctions, as designed, would provide investors with an innovative mechanism with which to secure liquidity intraday, providing additional price improvement opportunities, and allowing market participants to reduce risks that may be associated with displaying orders on a traditional limit order book. As such, Periodic Auctions may improve market quality in U.S. equity securities traded on the Exchange, and these benefits may be even more pronounced in securities that currently trade with diminished market quality. The paragraphs that follow addresses each aspect of the Periodic Auction proposal in turn.

The Exchange believes that it is consistent with the protection of investors and the public interest to introduce Periodic Auction Only Orders and Periodic Auction Eligible Orders to facilitate trading in the Periodic Auctions. Use of these order types would be voluntary, and market participants would be able to determine whether and how to participate in Periodic Auctions using these order types. Specifically, while both forms of Periodic Auction Orders would be eligible to initiate Periodic Auctions, Periodic Auction Only Orders would allow firms to indicate that they are seeking liquidity solely in Periodic Auctions, while Periodic Auction Eligible Orders would allow firms to also seek liquidity on the Continuous Book before and after the execution of a Periodic Auction. The Exchange believes that it is appropriate to offer these two methods of initiating Periodic Auctions so that market participants can decide whether to use Periodic Auctions as the sole means of sourcing liquidity, or as an additional means of accessing liquidity if an order entered onto the Continuous Book has not been executed.

Periodic Auction Only Orders would provide a means for Users to indicate that they solely wish to have their order executed in a Periodic Auction. Since Periodic Auctions would only take place during the Regular Trading Session, Periodic Auction Only Orders would be accepted with a time-in-force of RHO (either during or outside of Regular Trading Hours), or IOC (solely during Regular Trading Hours). If entered with a time-in-force of IOC, a Periodic Auction Only Order would also have to be entered with an instruction to "lock-in" the order to avoid situations where a Periodic Auction Only Order initiates an auction and then is immediately cancelled prior to the execution of that auction. Periodic Auction Only Orders are not eligible to trade on the Continuous Book and therefore must include instructions that would allow the order to be executed in a Periodic Auction. The requirement to "lock-in" the order during the course of a Periodic Auction if the order is marketable at the Periodic Auction Book Price is designed to allow a User to specify that they are only interested in participating in a Periodic Auction if they can do so immediately, while ensuring that they are actually eligible to participate in the execution of that auction, if possible. Without this requirement, a Periodic Auction could be initiated even though the order responsible for initiating that auction, by its terms, would not be eligible to participate at the end of the Periodic Auction Period, which would potentially be to the detriment both of the User entering the order and any Users that submitted contra-side orders to trade with it under the assumption that such interest was available. The Exchange believes that the proposed requirements would benefit Users that are looking for a speedy execution in Periodic Auctions, while also ensuring that Periodic Auction Only Orders entered with a time-in-force of IOC can trade at the end of the Periodic Auction Period.

The Exchange would also allow Users to include certain specified instructions on their Periodic Auction Only Orders. Specifically, such orders would be accepted with minimum execution quantity and pegging instructions. The Exchange believes that the Periodic Auction Only Order may be particularly valuable for market participants that have larger orders to be executed in Periodic Auctions that they may not be willing to expose for trading in the continuous market. As illustrated in Cboe's commenter letter in response to the Commission's statement on thinly-traded securities,[63] liquidity is often more limited in these securities, and as such market participants often look to off-exchange venues that may be able to meet their liquidity needs without displaying orders in the public market, thereby limiting the market impact of their trading activity. The Exchange believes that market participants that are looking for liquidity in size may find Periodic Auctions to be a valuable means of sourcing needed liquidity without the potential risks of displaying their orders for execution.

[63] *See* Letter from Adrian Griffiths, *supra* note 14.

Given the potential benefits to larger orders, the Exchange would permit Users to specify a minimum execution quantity for their Periodic Auction Only Orders. A Periodic Auction Only Order entered with a minimum execution quantity would be executed in a Periodic Auction only if the minimum size specified can be executed against one or more contra-side Periodic Auction Orders. The Exchange offers a Minimum Quantity Order on the Continuous Book today. The proposed instruction that could be attached to a Periodic Auction Only Order is similar to the current Minimum Quantity Order but would only permit the default handling of that order type, and would not allow a member to alternatively specify that the minimum quantity condition be satisfied by each individual contra-side order. Periodic Auction Eligible Orders and Continuous Book Orders entered as Minimum Quantity Orders would be subject to a similar restriction.

In addition, in light of the fact that market participants often value midpoint executions, or may wish to receive executions at other prices based on the applicable national best bid or offer (''NBBO''), the Exchange would also allow Users to enter a pegging instruction for such orders. Periodic Auction Only Orders would therefore accommodate instructions that the order is to be pegged to either the midpoint or same side of the market. As is the case for orders entered for trading on the Continuous Book, Periodic Auction Only Orders entered with a primary peg instruction would be pegged to the NBBO, with or without an offset, provided that only aggressive offsets would be permitted given the fact that Periodic Auctions would be restricted to trading within the Protected NBBO and would not be eligible to trade at inferior prices. Although the Exchange would not generally offer special order handling instructions for Periodic Auction Only Orders, the Exchange believes that midpoint and primary peg instructions, as described, would allow Users to more accurately capture their trading intent, and may therefore promote more active use of Periodic Auctions as a means of sourcing liquidity for such orders.

With respect to Periodic Auction Eligible Orders, the Exchange would allow Users to include an instruction on non-displayed orders entered to trade on the Continuous Book that would allow such orders to initiate a Periodic Auction if executable against contra-side Periodic Auction Orders. The Exchange would not allow Users to enter displayed orders as Periodic Auction Eligible Orders as such Periodic Auction Eligible Orders would not be available for execution during an ongoing Periodic Auction. As a result, displayed orders, which are disseminated to the market and subject to firm quote requirements under Rule 602(b)(2) of Regulation NMS,[64] would not be able to be entered as Periodic Auction Eligible Orders. However, such displayed orders could still participate in Periodic Auctions as Continuous Book Orders, and would receive execution priority when executed in that manner.

As discussed in the purpose section of the proposed rule change, the time-in-force included on a Periodic Auction Eligible Order would need to allow the order to remain executable during the course of a Periodic Auction. The Exchange has therefore proposed to: (1) Only allow IOC orders to be entered as Periodic Auction Eligible Orders if such orders include an instruction not to cancel the order during a Periodic Auction Period; and (2) disallow FOK orders from being entered as Periodic Auction Orders. The Exchange believes that both of these requirements are consistent with just and equitable principles of trade as they are designed to ensure that a Periodic Auction Eligible Order, which as discussed would be eligible for the initiation of a Periodic Auction, would not be prevented from participating in the eventual execution of such Periodic Auction due to a time-in-force that contemplates the order either being executed or cancelled immediately on entry. As discussed with respect to Periodic Auction Only Orders, without this requirement, a Periodic Auction could be initiated even though the order responsible for initiating that auction, by its terms, would not be eligible to participate at the end of the Periodic Auction Period, which would potentially be to the detriment both of the User entering the order and any Users that submitted contra-side orders to trade with it under the assumption that such interest was available.

Nevertheless, the Exchange believes that some Users may find it valuable to enter IOC orders as Periodic Auction Eligible Orders. Although such Users may be looking for a speedy execution, and would therefore generally prefer an execution on entry, or not at all, they may be willing to wait 100 milliseconds for a potential execution in a Periodic Auction, instead of having the order cancelled immediately. The Exchange would therefore allow Users to signal their intent to trade in this manner by entering the IOC order with an instruction that it should not be cancelled during a Periodic Auction. If entered in this manner, a Periodic Auction Eligible Order may trade immediately on entry on the Continuous Book, whether in full or in part, or may alternatively participate in a Periodic Auction, subject to cancellation no later than the end of any Periodic Auction Period. The Exchange does not anticipate the same use case for FOK orders, which contain an additional condition that requires the order to be executable in full, and would therefore restrict their ability to be entered as Periodic Auction Eligible Orders.

The Exchange would also not accept Mid-Point Peg Orders entered as Periodic Auction Eligible Orders if the Mid-Point Peg Order is entered with an instruction to not execute when the NBBO is locked. If the Exchange permitted Mid-Point Peg Orders with this instruction to be entered as Periodic Auction Eligible Orders, those orders could initiate a Periodic Auction but would not be available for the auction's eventual execution if the market subsequently becomes locked at that time. The Exchange believes that the proposed handling is consistent with just and equitable principles of trade as the Exchange wishes to avoid the potential for such orders to initiate a Periodic Auction that may ultimately not execute due to the inclusion of this condition. Periodic Auction Eligible Orders are designed to initiate Periodic Auctions and may encourage other Users to enter orders that could participate in the auction's execution. As a result, the Exchange believes that such orders should reflect trading interest that does not include unnecessary conditions. Users that wish to use Mid-Point Peg Orders with this instruction would still be eligible to participate in Periodic Auctions as Continuous Book Orders, which are able to participate in the eventual execution of a Periodic Auction, but would not initiate such auctions.

Similar to the proposed handling of Periodic Auction Only Orders, the Exchange would allow Periodic Auction Eligible Orders to be entered as Minimum Quantity Orders, but would only permit such orders to be entered with the default handling of that instruction. That is, Minimum Quantity Orders entered as Periodic Auction Eligible Orders would execute only if the minimum size specified can be executed against one or more contra-side Periodic Auction Orders or Continuous Book Orders. Although the Exchange does offer an alternative instruction that permits the User to

[64] *See* 17 CFR 242.602(b)(2).

request that the Exchange only execute the order against a single contra-side order, such handling is designed primarily for use on the Continuous Book, and would complicate the execution of Periodic Auctions.[65] For similar reasons, Minimum Quantity Orders are excluded from the Exchange's opening process for securities traded pursuant to unlisted trading privileges. However, as discussed, the Exchange believes that Users participating in Periodic Auctions may value the ability to specify a minimum quantity, and the Exchange has therefore proposed to allow such functionality for Periodic Auction Eligible Orders so long as the User is willing for those orders to be executed against one or more contra-side orders. The Exchange believes that this strikes the right balance between allowing Users to ensure that they only trade in a Periodic Auction if their minimum quantity criteria can be met, while excluding instructions that could unnecessarily complicate the execution of Periodic Auctions.

In addition, the Exchange would specify handling for Discretionary Orders, Pegged Orders, and Mid-Point Pegged Orders that are entered as Periodic Auction Eligible Orders. Including this information in the rule would increase transparency around the operation of the Exchange and ensure that Users are properly informed about how orders with these instructions would be handled in Periodic Auctions. The same handling is currently applied to the Exchange's opening process for securities traded pursuant to unlisted trading privileges, and treating these orders in the same manner for purposes of Periodic Auctions would ensure a consistent and familiar experience for market participants that enter such orders on the Exchange. The Exchange therefore believes that these proposed rules are consistent the maintenance of a fair and orderly market.

The Exchange also believes that it is consistent with just and equitable principles of trade to allow Continuous Book Orders, *i.e.,* orders that are not entered as either Periodic Auction Only Orders or Periodic Auction Eligible Orders, to participate in any Periodic Auction that results in an execution. Although Continuous Book Orders would not initiate a Periodic Auction, such orders would be eligible to participate in the resulting execution, thereby facilitating additional liquidity for those orders without disrupting their ability to trade normally during the course of the auction. Continuous Book Orders would remain on the Continuous Book and subject to potential execution during a Periodic Auction Period, but would be included in the final determination of the Periodic Auction Price, and participate in any resulting execution. Although the Exchange believes that a number of Users may wish to use Periodic Auction Orders that are specifically designed for participation in Periodic Auctions and have the ability to initiate those auctions, the Exchange also believes that Periodic Auctions would be valuable to Users that wish primarily to trade on the Continuous Book but may be able to secure an execution in a Periodic Auction if possible. As a result, Continuous Book Orders would generally be eligible to trade in Periodic Auctions at the end of the auction process, except in the case of Minimum Quantity Orders entered with the alternative instruction that requires the minimum size specified to be satisfied by each individual contra-side order.[66]

Such Continuous Book Orders would be subject to similar handling to Periodic Auction Eligible Orders that may also trade on the Continuous Book in addition to Periodic Auctions, including the same handling discussed above with respect to Discretionary Orders, Pegged Orders, and Mid-Point Peg Orders. The Exchange believes that this handling is consistent with just and equitable principles of trade as it would ensure consistent treatment of similar orders traded in Periodic Auctions. In addition, Continuous Book Orders that are entered as Minimum Quantity Orders would be subject to similar but not identical handling to Periodic Auction Eligible Orders. Given the value of Minimum Quantity Orders that include the alternative instruction that allows a User to specify that the minimum size specified be satisfied by each individual contra-side order, Users would continue to be able to use this instruction for trading on the Continuous Book. However, such orders, which would not be permitted to be entered as Periodic Auction Orders, would similarly not be able to participate in Periodic Auctions as Continuous Book Orders. Users that wish to include a minimum quantity on their orders could participate in Periodic Auctions as either Periodic Auction Only Orders, Periodic Auction Eligible Orders, or Continuous Book Orders, provided that for each of these order types, the order must be willing to trade against one or more contra-side orders. As discussed, the Exchange believes that this treatment is necessary in order to offer a minimum quantity instruction in an auction that pools interest and executes such interest at a single price.

The Exchange also believes that the proposed handling of Continuous Book Orders entered as Reserve Orders is consistent with the maintenance of a fair and orderly market as it will ensure a familiar and consistent experience for market participants that trade on the Exchange. Although Periodic Auction Eligible Orders must be non-displayed and therefore cannot be entered as a Reserve Order that, by rule, includes both a displayed portion and non-displayed portion, the proposed handling for Continuous Book Orders is the same as the handling applied to the Exchange's opening process securities traded pursuant to unlisted trading privileges. Thus, similar to the treatment of Discretionary Orders, Pegged Orders, and Mid-Point Peg Orders, detailing the proposed handling of Reserve Orders would both increase operational transparency and ensure consistent and familiar treatment of similar orders on the Exchange.

Periodic Auctions would be initiated throughout Regular Trading Hours when Periodic Auction Orders entered by Users are executable against each other, thereby ensuring that the initiation of an auction is tied to demonstrated interest from both buyers and sellers in the security. Once the Exchange has matched two or more Periodic Auction Orders in this manner, a Periodic Auction Period of 100 milliseconds would begin to allow orders from additional market participants to participate in the execution of the Periodic Auction. The fixed 100-millisecond auction length is based on the maximum auction duration used for periodic auctions conducted by Cboe Europe today.[67] Based on the Exchange's affiliates experience operating auctions for the trading of European equities, the Exchange believes that the proposed auction length would facilitate the prompt processing and execution of Periodic Auctions, while continuing to provide time for interested market participants to enter orders to participate in the auction.

To facilitate the pooling of Periodic Auction Orders during this period, the

[65] *See* BYX Rule 11.23(a)(2).

[66] As discussed in the following paragraph, such orders are not compatible with Periodic Auctions, and therefore would not participate in the execution of such auctions.

[67] Cboe Europe randomizes the length of the auction rather than its dissemination of the auction message. As a result, periodic auctions conducted by Cboe Europe would be for a maximum duration of 100 milliseconds, but could also be for a shorter duration.

Exchange would publish information about the auction, including (1) an indicative Periodic Auction Book Price that reflects price at which the Periodic Auction could be executed, counting only Periodic Auction Orders and excluding Continuous Book Orders that may be subject to execution prior to the end of the Periodic Auction Period; and (2) the total number of shares of Periodic Auction Orders that are matched at the Periodic Auction Book Price. This information would be first published beginning at a randomized time in one millisecond intervals, and would be refreshed in five millisecond intervals thereafter as additional orders are entered or cancelled, or other changes to market conditions are made that could impact the Periodic Auction Book Price. The Exchange believes that it is consistent with the protection of investors and the public interest to publish this information as it may inform potential trading in periodic auctions and encourage additional order flow to be entered to participate in such auctions. The Exchange also believes that sending out the initial dissemination at a randomized time after Periodic Auction Orders have been matched would facilitate the operation of a fair and orderly market. This handling would allow additional Periodic Auction Orders received during this interim period to be pooled in the initial dissemination of auction information. In addition, since market participants would not know how much time is left in the Periodic Auction Period, firms would be incentivized to respond quickly with Periodic Auction Orders to participate in the Periodic Auction, rather than potentially waiting until the end of the auction, which may reduce the value of the information proposed to be disseminated to investors and may impact price discovery.

Once the 100 millisecond Periodic Auction Period has ended, the Exchange would calculate the execution price of the auction, *i.e.,* the Periodic Auction Price, and execute Periodic Auction Orders and Continuous Book Orders that are eligible to trade at that price. The Exchange believes that the proposed methodology for determining the Periodic Auction Price is consistent with just and equitable principles of trade. Generally, the proposed methodology for calculating the Periodic Auction Price is designed to allow Periodic Auctions to facilitate price discovery while maintaining important investor protections and assuring compliance with applicable regulations. Given the important price formation function of these auctions, the Exchange would use logic for pricing Periodic Auctions that largely mirrors the logic used by its affiliate, BZX, for opening and closing auctions in that exchange's listed securities.[68]

Specifically, the Exchange would seek to execute Periodic Auctions at a price that maximizes the number of shares that can trade in the auction, subject to specified price collars that would limit executions at prices that are not reasonably related to the price of the security established by the market. The applicable price collars would also be based on the auction collars used for BZX opening and closing auctions, except that trading would be further limited by applicable LULD Price Bands and the Protected NBBO, as required pursuant to applicable regulatory requirements.[69] That is, the auction collars would generally be the same as those used for BZX auctions, but could be narrowed by applicable regulatory requirements.

Finally, the price calculation would be subject to tie-breakers that are consistent with those used for BZX opening and closing auctions in situations where there is a volume-based tie at multiple price levels. These tie-breakers would help ensure the selection of a meaningful Periodic Auction Price by selecting the price that would minimize the potential imbalance between supply and demand, and then favoring prices closer to a Volume Based Tie Breaker that is generally the midpoint of the NBBO. In sum, the proposed calculation of the Periodic Auction Price would allow the Exchange to appropriately balance supply and demand in Periodic Auctions and facilitate robust price formation similar to opening and closing auctions.

After the Exchange determines the Periodic Auction Price, any Periodic Auction Orders or Continuous Book Orders that are eligible for execution at that price would be executed based on a special allocation methodology designed for use in Periodic Auctions. First, in order to continue to incentivize the entry of displayed orders on the Exchange, Continuous Book Orders that are displayed on the Continuous Book would be executed first in price/time priority. Although the Exchange is proposing to introduce Periodic Auctions to incentivize additional liquidity, the Exchange believes that it is important to continue to encourage the entry of displayed orders on the Continuous Book. Displayed orders entered in the public market contribute to price formation, and are used as a reference price for the execution of orders on other venues. As a result, the Exchange's proposal to introduce Periodic Auctions is designed to continue to encourage the entry of displayed orders that would both trade on the Continuous Book and simultaneously benefit from priority when executed in a Periodic Auction.

Second, after Continuous Book Orders displayed on the Continuous Book have been executed, Periodic Auction Orders would be executed in size/time priority. As previously noted, the Exchange believes that Periodic Auctions may be valuable for investors that are seeking liquidity in size. As a result, the priority methodology employed by the Exchange for Periodic Auction Orders would preference larger orders, which the Exchange believes may contribute to greater depth in Periodic Auctions. In turn, the liquidity provided by these larger orders would contribute to the execution of smaller orders that may also participate in Periodic Auctions, thereby facilitating the execution of all orders, both large and small, that seek liquidity in such auctions, and furthering execution opportunities for investors that trade on the Exchange.

Finally, non-displayed Continuous Book Orders would be executed last in priority. Unlike displayed orders entered on the Continuous Book, or Periodic Auction Orders that contribute to important pricing information disseminated to market participants during the course of a Periodic Auction, non-displayed orders entered on the Continuous Book do not contribute to pre-execution price formation.[70] As a result, while these orders would be eligible to trade in Periodic Auctions, where they may benefit from additional execution opportunities, they would be subject to the lowest priority among Periodic Auction Orders and Continuous Book Orders. In addition, since these orders are not specifically seeking liquidity in Periodic Auctions, and would participate in Periodic Auctions solely as an additional source of liquidity, priority within this band would be determined based on the

[68] *See* BZX Rules 11.23(b)(2)(B), (c)(2)(B).

[69] As discussed in the purpose section of this proposed rule change, both the requirements of the LULD Plan and the Order Protection Rule apply to transactions executed during Regular Trading Hours. Although opening and closing auctions are generally exempt from these requirements, there are currently no exemptions that would apply to Periodic Auctions that perform a similar role in facilitating price discovery.

[70] Non-displayed orders would contribute to price formation at the end of a Periodic Auction as they would be considered in the determination of the Periodic Auction Price.

normal execution priority afforded to such orders on the Continuous Book. The Exchange believes that this approach is consistent with just and equitable principles of trade as it would ensure that non-displayed Continuous Book Orders receive the priority that they would normally be afforded for executions on the Continuous Book.

Similar to the Exchange's opening process for securities traded pursuant to unlisted trading privileges,[71] all Match Trade Prevention modifiers, as defined in BYX Rule 11.9(f), would be ignored as it relates to executions occurring during a Periodic Auction. The Exchange's Match Trade Prevention modifiers are designed to allow Users to better manage order flow and prevent certain undesirable executions on the Continuous Book. However, this functionality would complicate the processing of Periodic Auctions, where orders are pooled together and executed at a price that balances supply and demand in the auction. As a result, the Exchange believes that ignoring Match Trade Prevention modifiers in Periodic Auctions, similar to the handling currently used by the Exchange for its opening process,[72] is consistent with the maintenance of a fair and orderly market in securities traded in such Periodic Auctions.

The Exchange also believes that it is consistent with the maintenance of a fair and orderly market to cancel a Periodic Auction that cannot be completed after a specified number of attempts communicated to members. As discussed in the purpose section of this proposed rule change, there may be rare circumstances where the inclusion of a minimum execution quantity on one or more Periodic Auction Orders and/or Continuous Book Orders may result in the Exchange being unable to process a Periodic Auction in a timely manner. To prevent potential capacity and/or performance issues that may impact both the execution of the auction, as well as trading on Continuous Book, the Exchange would cancel the auction after a specified number of attempts, as determined by the Exchange, rather than continuing to attempt to complete the auction *ad infinitum* when there may be no possibility for eventual execution, and no guarantee that such execution could be determined and processed in a timely fashion. While the Exchange believes that these situations are likely to be infrequent, the proposed handling would serve to eliminate certain potential performance issues, and including this language in the rule would add additional transparency around the operation of the Exchange.

Finally, the Exchange believes that the proposed language being codified in the Interpretations and Policies to the proposed rule is consistent with the Exchange Act and the rules and regulations adopted thereunder. As proposed, these rules would include language that identifies how Periodic Auctions would be conducted during a crossed market, and consistent with applicable regulatory requirements related to handling of trading halts and Regulation SHO. Such rules would also describe appropriate standards of member conduct, consistent with the Exchange's obligations under the Act to regulate and surveil its market. The proposed rules included in Interpretations and Policies .01–.03 would ensure that: (1) Periodic Auctions do not take place when their execution may be complicated by the existence of a crossed market that could interfere with the auction's price discovery function, or when such execution would not be permissible due to a trading halt in a security; [73] and (2) when the security is in a short sale circuit breaker, short sale orders that are not marked ''short exempt'' would either be re-priced to a Permissible Price pursuant to BYX Rule 11.9(g)(5), *i.e.,* in the case of Periodic Auction Eligible Orders and Continuous Book Orders, or subject to rejection or cancellation, *i.e.,* in the case of Periodic Auction Only Orders, in each instance to ensure that the execution or display of such short sale orders is consistent with the requirements of Rule 201 of Regulation SHO. Further, the proposed rules included in Interpretations and Policies .04 would provide additional guidance to Users with respect to conduct that would be considered inconsistent with just and equitable principles of trade. The Exchange intends to conduct appropriate surveillance of its members to ensure that their participation in Periodic Auctions is done in a manner that is consistent with such rules. As a result, these rules would ensure that orders in Periodic Auctions would be processed in a manner that is consistent with applicable regulatory obligations and the maintenance of a fair and orderly market in securities traded on the Exchange.

c. Benefits for Thinly-Traded Securities

As mentioned in the purpose section of this proposed rule change, the Exchange believes that its proposed introduction of Periodic Auctions is responsive to the Statement that the Commission issued in October 2019 to address market quality concerns in thinly-traded securities.[74] Specifically, the Periodic Auction proposal is designed to improve liquidity and price formation in thinly-traded and other securities that suffer from diminished market quality, while also allowing the Exchange to better compete with off-exchange venues that currently offer features that investors may find beneficial for sourcing liquidity when displayed liquidity in the public markets is more scarce. Cboe offered its thoughts in response to the Statement in a comment letter submitted to the Commission on December 20, 2019. As stated in that comment letter, Cboe believes that innovation by national securities exchanges, rather than potentially harmful regulatory changes that favor a limited segment of the market, is what is ultimately needed to facilitate better market quality in thinly-traded securities. The Exchange believes that Periodic Auctions, as designed, are such an innovation, and would address the three main difficulties that market participants currently face in trading thinly traded securities: (1) Sourcing liquidity, (2) the availability of price improvement opportunities, and (3) the potential for significant market impact in securities that are less liquid and trade infrequently.

First, Periodic Auctions would assist investors in sourcing liquidity in the public markets by establishing meaningful liquidity events outside of the opening and closing auctions conducted by the primary listing exchanges. As proposed, Periodic Auctions would pool available interest from market participants and execute those orders in price forming auctions conducted at multiple points in time during the course of the trading day when there are matching Periodic Auctions to buy and sell. The Exchange therefore believes that Periodic Auctions would help investors to source liquidity, including block-size liquidity, that may be unavailable through continuous trading on a traditional limit order book. In addition, the Exchange has taken steps to encourage greater liquidity in Periodic Auctions, including prioritizing Periodic Auction Orders based on size, establishing minimum size requirements for auction

[71] *See* BYX Rule 11.23(b).

[72] *See* BYX Rule 11.23(b).

[73] Although Rule 611(b)(4) of Regulation NMS provides an exception from the trade-through requirements of that rule for situations where a protected bid is crossed with a protected offer, the Exchange believes that market participants may not desire an execution in a Periodic Auction during periods when the market is crossed.

[74] *See supra* note 13.

participation, and supporting minimum execution size instructions in the auction. These features, in combination with other features that are designed to encourage participation in Periodic Auctions generally, may increase needed liquidity in thinly-traded securities.

Second, Periodic Auctions are designed to balance supply and demand and execute available interest at a single market clearing price that would benefit both buyers and sellers by providing potential price improvement opportunities. This price formation process is broadly beneficial, but would also be particularly beneficial in thinly-traded securities where spreads are typically wider and executing transactions at a market clearing price within the spread would allow for meaningful price improvement opportunities for investors that may otherwise have to seek those opportunities in the off-exchange market. Based on Cboe Europe's experience in operating periodic auctions for the European equities market, the Exchange believes that Periodic Auctions may facilitate significant price improvement, including midpoint executions, which as discussed account for about 85% of value traded in Cboe Europe's periodic auctions.

Third, Periodic Auctions are designed to minimize the risk of market impact of transacting in thinly-traded securities by providing a mechanism that allows market participants to trade, potentially in size, without the information leakage that may otherwise be associated with displaying orders to trade on a traditional limit order book. The Exchange believes that this may encourage additional participation in Periodic Auctions as market participants can avoid publicly showing their trading interest similar to their ability to do so in various off-exchange markets that currently trade significant volume in thinly-traded securities.

d. Compliance With Other Regulatory Requirements

As discussed in more detail below, the Exchange also believes that the proposed rule change is consistent with other regulatory requirements, including the Order Protection Rule, the LULD Plan, and Rule 602 of Regulation NMS (*i.e.,* the ''Quote Rule'').

First, with respect to compliance with the Order Protection Rule, the Exchange's proposed auction collars would, as previously discussed, limit trades to prices that are within the Protected NBBO. As discussed in the purpose section of this proposed rule change, the Order Protection Rule applies to transactions executed during Regular Trading Hours. Although opening and closing auctions are generally exempt from these requirements,[75] there are currently no exceptions that would apply to Periodic Auctions that perform a similar role in facilitating price discovery. The Exchange would therefore not execute Periodic Auctions at prices that are inconsistent with the requirements of that rule. Generally, the Order Protection Rule requires trading centers to establish, maintain, and enforce written policies and procedures that are reasonably designed to prevent trade-throughs on that trading center of protected quotations in NMS stocks, unless an exception applies. A ''trade-through'' is defined in Rule 600(b)(81) of Regulation NMS as the purchase or sale of an NMS stock during regular trading hours, either as principal or agent, at a price that is lower than a protected bid or higher than a protected offer. The proposed auction collars would be applied at the time of *execution,* and would therefore prevent trades from occurring at prices that would constitute a trade-through at the time the Periodic Auction is processed, consistent with the requirements of the Order Protection Rule.

Similarly, with respect to compliance with the LULD Plan, the Exchange's proposed auction collars would also limit trades to prices that are within the LULD Price Bands established pursuant to that national market system plan. As is the case with the Exchange's utilization of the Protected NBBO in setting applicable auction collars, the LULD Price Bands would be used as an additional collar on Periodic Auctions, and would ensure that all transactions that result from a Periodic Auction would be executed within the applicable LULD Price Bands at the time the Periodic Auction is processed. The Exchange would not execute Periodic Auctions at prices that are inconsistent with the LULD Plan.

The Exchange also believes that the proposed rule change is consistent with the Quote Rule. Generally, the firm quote provisions of the Quote Rule require each responsible broker or dealer to execute an order presented to it, other than an odd lot order, at a price at least as favorable as its published bid or published offer, in any amount up to its published quotation size. Periodic Auction Orders, including both Periodic Auction Only Orders that trade solely in Periodic Auctions and Periodic Auction Eligible Orders that may also trade on the Continuous Book, would at all times be non-displayed, and therefore would not trigger the firm quote requirements of the Quote Rule. That is, there would be no ''published bid'' or ''published offer'' displayed to market participants that would be required to be ''firm'' under the Quote Rule.

Similarly, the introduction of Periodic Auctions alongside trading on the Continuous Book would not result in violations of the Quote Rule. The Exchange would not halt or otherwise suspend trading on the Continuous Book while conducting a Periodic Auction. As a result, Continuous Book Orders entered to trade with the Exchange's published quotation would continue to be able to do so in the same manner that they do today, notwithstanding the introduction of Periodic Auctions to be conducted throughout the course of the trading day. The Exchange has designed its system for trading Periodic Auctions to minimize unnecessary latency, and therefore does not believe that the introduction of Periodic Auctions would impair the ability of the Exchange to execute incoming orders entered on the Continuous Book against its published bids or offers. The Exchange will continue to monitor system performance and latency after the introduction of Periodic Auctions to ensure that it is able to process both Periodic Auctions and Continuous Book Orders efficiently and without undue latency.

In addition, the Exchange would continue to handle events processed by the matching engine in sequence, and a Continuous Book Order that is included in the Exchange's published bid or offer would trade with incoming Continuous Book Orders unless the Periodic Auction is processed prior to the matching engine's receipt of the incoming Continuous Book Order. Such executions would not run afoul of the firm quote requirements of the Quote Rule as Rule 602(b)(3) of Regulation NMS contains an explicit exemption from these requirements for broker-dealers that are in the process of effecting a transaction in that security at the time the incoming order is ''presented'' to the broker-dealer for potential execution.

Finally, the Exchange's published quotations would continue to be considered ''automated quotations'' as defined in Rule 600(b)(4) of Regulation NMS. As discussed with respect to compliance with the Quote Rule, the

[75] Rule 611(b)(3) of Regulation NMS provides an exception to the requirements of the Order Protection Rule where the transaction that constituted the trade-through was a single-priced opening, reopening, or closing transaction by the trading center.

Exchange has designed its system for trading Periodic Auctions to minimize unnecessary latency, and therefore does not believe that the introduction of Periodic Auctions would impair the ability of the Exchange to execute incoming orders entered on the Continuous Book against its published bids or offers. In this regard, the Exchange represents that any additional latency on the Continuous Book that may result from the proposed introduction of Periodic Auctions would not be material from the perspective of compliance with the Order Protection Rule. Under Regulation NMS, an ''automated'' quotation is one that, among other things, can be executed ''immediately and automatically'' against an incoming immediate-or-cancel order. Although the Commission's recent guidance related to automated quotations has focused on the introduction of intentional delay mechanisms or ''speed bumps,'' [76] which present different and more complex issues under Regulation NMS, the Exchange believes that its proposed implementation of Periodic Auctions would not frustrate the purposes of the Order Protection Rule by ''impairing fair and efficient access'' to the Exchange's quotations. In this regard, the Exchange notes that it has engaged in substantial testing of its Periodic Auction product and, based on that testing, believes that any additional latency that may be experienced on the Continuous Book as a result of the introduction of its Periodic Auction product would be minimal and *de minis [sic]* from the perspective of the Order Protection Rule.[77]

e. *Compliance With Section 11(a) of the Exchange Act*

The proposed rule change is also consistent with Section 11(a)(1) of the Act [78] and the rules promulgated thereunder. Generally, Section 11(a)(1) of the Act restricts any member of a national securities exchange from effecting any transaction on such exchange for (i) the member's own account, (ii) the account of a person associated with the member, or (iii) an account with respect to which the member or a person associated with the member exercises investment discretion (collectively referred to as ''covered accounts''), unless a specific exemption is available. Rule 11a2–2(T) under the Act,[79] known as the ''effect versus execute'' rule, provides exchange members with an exemption from the Section 11(a)(1) prohibition.

The ''Effect vs. Execute'' exemption permits an exchange member, subject to certain conditions, to effect transactions for covered accounts by arranging for an unaffiliated member to execute transactions on the exchange. To comply with Rule 11a2–2(T)'s conditions, a member: (i) Must transmit the order from off the exchange floor; (ii) may not participate in the execution of the transaction once it has been transmitted to the member performing the execution; [80] (iii) may not be affiliated with the executing member; and (iv) with respect to an account over which the member has investment discretion, neither the member nor its associated person may retain any compensation in connection with effecting the transaction except as provided in the rule. For the reasons set forth below, the Exchange believes that members entering orders into Periodic Auctions would satisfy the requirements of Rule 11a2–2(T), and that the proposal is therefore consistent with Section 11(a) of the Act and the rules thereunder.

The first condition of Rule 11a2–2(T) is that orders for covered accounts be transmitted from off the exchange floor. The Exchange's system, including the proposed system for processing Periodic Auctions pursuant Proposed Rule 11.25, would continue to receive orders electronically through remote terminals or computer-to-computer interfaces. In the context of other automated trading systems, the Commission has found that the off-floor transmission requirement is met if an order for a covered account is transmitted from a remote location directly to an exchange by electronic means.[81] Because the Exchange's system for handling Periodic Auctions would receive orders from members electronically through remote terminals or computer-to-computer interfaces, the Exchange believes that orders submitted to a Periodic Auction electronically would satisfy the off-floor transmission requirement.

The second condition of Rule 11a2–2(T) requires that neither a member nor an associated person of such member participate in the execution of its order. This requirement was originally intended to prevent members from using their own brokers on an exchange floor to influence or guide the execution of their orders.[82] The Exchange represents that Periodic Auctions would be executed automatically pursuant to the rules set forth in Proposed Rule 11.25, which would govern the operation of Periodic Auctions. Although the Exchange would disseminate Periodic Auction Messages during the Periodic Auction Period and members would generally be permitted to modify and/or cancel their orders during the auction process, the execution of a member's orders in a Periodic Auction would depend not on the member entering the order, but rather on what other orders are present, the priority of those orders, and the remaining duration of any Periodic Auction in the security. Specifically, the Periodic Auction Price at which orders would be executed in a Periodic Auction would be established at the end of the 100 millisecond Periodic Auction Period based on objective rules that balance supply and demand in the auction pursuant to Proposed Rule 11.25(d), and the priority of any orders executed at the Periodic Auction Price would be determined based on the criteria established in Proposed Rule 11.25(e), which defines the priority of orders executed in such auctions. Thus, at no time following the submission of an order is a member or associated person of such member able to acquire control or influence over the result or timing of order execution, which would instead be conducted pursuant to Proposed Rules 11.25(d)–(e), as described, based on the Periodic Auction Orders and Continuous Book Orders available to participate in the execution of the auction.[83] Once an

[76] *See* Securities Exchange Act Release No. 78102 (June 17, 2016), 81 FR 40785 (June 23, 2017) (File No. S7–03–16) (''Commission Interpretation'').

[77] Although the Commission refused to enumerate a numeric latency threshold for an intentional delay that is sufficiently *de minimis* for the purposes of the Order Protection Rule, the Staff of the Division of Trading and Markets has issued guidance stating the Staff's belief that delays of less than one millisecond would qualify as *de minimis*. *See* Staff Guidance on Automated Quotations under Regulation NMS (June 17, 2016), *available at https://www.sec.gov/divisions/marketreg/automated-quotations-under-regulation-nms.htm*. While the Exchange's proposal would not introduce an intentional delay, the Exchange's testing indicates that any additional latency that may result from the proposed introduction of Periodic Auctions would be well within this threshold.

[78] 15 U.S.C. 78k(a). Section 11(a)(1) prohibits a member of a national securities exchange from effecting transactions on that exchange for its own account, the account of an associated person, or an account over which it or its associated person exercises discretion unless an exception applies.

[79] 17 CFR 240.11a2–2(T).

[80] The member may, however, participate in clearing and settling the transaction.

[81] *See* Securities Exchange Act Release No. 15533 (January 29, 1979), 44 FR 6084 (January 31, 1979) (''1979 Release''); 14563 (March 14, 1978), 43 FR 11542 (March 17, 1978) (''1978 Release''); *see also* Securities Exchange Act Release No. 88806 (May 4, 2020), 85 FR 27451 (May 8, 2020) (order approving MEMX LLC's exchange registration); 85828 (May 10, 2019), 84 FR 21841 (May 15, 2019) (order approving the Long-Term Stock Exchange, Inc.'s exchange registration).

[82] *Id.* (''1978 Release'').

[83] Users may modify and/or cancel their Periodic Auction Orders at any time unless the User has

order has been transmitted, the member that transmitted the order will not participate in its eventual execution.

The third condition of Rule 11a2–2(T) requires that the order be executed by an exchange member who is unaffiliated with the member initiating the order. The Commission has recognized that the requirement is satisfied when automated exchange facilities are used, as long as the design of these systems ensures that members do not possess any special or unique trading advantages in handling their orders after transmitting them to the exchange.[84] The Exchange represents that the Periodic Auctions are designed such that no member has any special or unique trading advantage in the handling of any orders that are processed in Periodic Auctions after transmitting such orders to the Exchange.

Finally, the fourth condition of Rule 11a2–2(T) requires that, in the case of a transaction effected for an account with respect to which the initiating member or an associated person thereof exercises investment discretion, neither the initiating member nor any associated person thereof may retain any compensation in connection with effecting the transaction, unless the person authorized to transact business for the account has expressly provided otherwise by written contract referring to Section 11(a) of the Act and Rule 11a2–2(T) thereunder.[85] The Exchange recognizes that members relying on Rule 11a2–2(T) for transactions effected through a Periodic Auction must comply with this condition of the Rule, and the Exchange will enforce this requirement pursuant to its obligations under Section 6(b)(1) of the Act to enforce compliance with federal securities laws.

f. Conclusion

In conclusion, the Exchange believes that the proposed rule change would enhance the experience of investors looking to access liquidity in the public market and fill an important role in the U.S. equities market where liquidity may be more limited outside of the open and close of trading. By introducing a price forming auction for the aggregation and execution of buy and sell orders intraday, Periodic Auctions would increase execution opportunities available to investors. In turn, Periodic Auctions may improve trading outcomes for market participants that have trouble sourcing liquidity in the public markets today, including in thinly-traded securities where liquidity is often limited and trading often occurs on a number of off-exchange venues that can offer reduced market impact. As such, the Exchange believes that the proposed rule change would remove impediments to and perfect the mechanism of a free and open market.

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

The Exchange does not believe that the proposed rule change would impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. Rather, the proposed rule change is designed to increase competition by introducing an additional mechanism for equities market participants to seek liquidity during the course of the trading day. Indeed, the proposed introduction of Periodic Auctions is a pro-competitive means of addressing the concerns that the Commission expressed in its Statement on thinly-traded securities. The proposal, which seeks to introduce innovative functionality on a non-primary listing exchange, would allow competition, rather than regulatory intervention designed to limit competition (*e.g.,* through the suspension or termination of unlisted trading privileges), to improve market quality in thinly-traded and other securities.

The introduction of Periodic Auctions is designed to improve execution quality for investors sourcing liquidity during the trading day, and, in particular, those that are looking to trade in size, or are looking to access liquidity in thinly-traded or other securities where liquidity may be more scarce. Providing an additional mechanism for price forming orders to be executed would promote competition between venues that seek to execute this order flow, and provide market participants and investors with greater choice with respect to how they choose to source liquidity. The equities industry is fiercely competitive as the Exchange must compete with other equities exchanges and off-exchange venues for order flow. The proposal is both evidence of this competition, and would further enable the Exchange to compete effectively in this market.

III. Discussion and Commission Findings

After careful review of the proposal and the comments, the Commission finds that the Exchange's proposal is consistent with the requirements of the Exchange Act and the rules and regulations thereunder applicable to a national securities exchange.[86] In particular, the Commission finds that the proposed rule change is consistent

elected to use the proposed ''lock-in'' feature. *See* Proposed Rule 11.25(b). The Commission has stated that the non-participation requirement does not preclude members from cancelling or modifying orders, or from modifying instructions for executing orders, after they have been transmitted so long as such modifications or cancellations are also transmitted from off the floor. *See* Securities Exchange Act Release No. 14563 (March 14, 1978), 43 FR 11542, 11547 (the ''1978 Release'').

[84] In considering the operation of automated execution systems operated by an exchange, the Commission noted that, while there is not an independent executing exchange member, the execution of an order is automatic once it has been transmitted into the system. Because the design of these systems ensures that members do not possess any special or unique trading advantages in handling their orders after transmitting them to the exchange, the Commission has stated that executions obtained through these systems satisfy the independent execution requirement of Rule 11a2–2(T). *See* 1979 Release.

[85] *See* 17 CFR 240.11a2–2(T)(a)(2)(iv). In addition, Rule 11a2–2(T)(d) requires a member or associated person authorized by written contract to retain compensation, in connection with effecting transactions for covered accounts over which such member or associated persons thereof exercises investment discretion, to furnish at least annually to the person authorized to transact business for the account a statement setting forth the total amount of compensation retained by the member in connection with effecting transactions for the account during the period covered by the statement which amount must be exclusive of all amounts paid to others during that period for services rendered to effect such transactions. *See also* 1978 Release, at 11548 (stating ''[t]he contractual and disclosure requirements are designed to assure that accounts electing to permit transaction-related compensation do so only after deciding that such arrangements are suitable to their interests'').

[86] In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f). One commenter asserts that exchange operators creating new matching protocols and order types on exchanges with little trading volume forces market participants ''to do their own subjective analysis to understand how these methods will affect the overall market'' and that it involves a ''painstaking assessment of every order type across each exchange that only the most sophisticated participants can master.'' Letter from Joanna Mallers, Secretary, FIA Principal Traders Group, to Vanessa Countryman, Secretary, Commission, dated August 25, 2020 (''FIA PTG Letter'') at 2. The Commission does not believe that exchanges should be held to different standards for introducing new functionality based on their trading volume. The Commission has consistently encouraged trading centers to innovate and compete for order flow, consistent with the objectives of Section 11A of the Exchange Act, to assure fair competition among brokers and dealers, among exchange markets and between exchange markets and markets other than exchange markets. For example, in amending Rule 606(b)(3) of Regulation NMS, the Commission stated that the modified rule could affect competition among trading centers. The Commission stated: ''If broker-dealers change their order routing decisions to focus more on execution quality and route fewer orders to a given trading center, that trading center will have an incentive to take measures to attract and gain back order flow by innovating on execution quality.'' Securities Exchange Act Release No. 84528 (November 2, 2018), 83 FR 58338, 58400 (November 19, 2018) (S7–14–16).

with Section 6(b)(5) of the Exchange Act,[87] which requires, among other things, that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, 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. As outlined below, the Commission has carefully reviewed the proposed rule change, comments received, and BYX's response to comments to arrive at these findings.

In the current market structure for trading NMS stocks, there are multiple competing trading centers for the display and execution of orders. Congress has found that it is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to assure, among other things, the economically efficient execution of securities transactions, the availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities, and the practicability of brokers executing investors' orders in the best market.[88]

In the U.S. equity market structure, auctions are a fundamental form of price discovery mechanism, in which orders to buy and sell are matched at a single executing price. Traditionally, the U.S. markets open and close with an auction, and trading throughout the day is conducted via continuous trading. Consistent with Section 11A of the Exchange Act, the Commission has encouraged and welcomed beneficial innovations in the marketplace by market participants.[89] In considering market structure innovations that may provide benefits to thinly traded securities, the Commission noted that some suggested that an exchange implement periodic intraday auctions as a means of concentrating liquidity at times other than solely at the market open and market close.[90] The Exchange is proposing to add Periodic Auctions to continuous trading in an attempt to attract intra-day trading liquidity.

Two commenters support the innovation of the proposal and its potential benefits to the national market system.[91] Commenters also raise some concerns and offer suggestions regarding the proposal. One commenter characterizes Periodic Auctions as a new mechanism for non-displayed transactions and raises a concern that Periodic Auctions would encourage non-displayed trading.[92] The commenter also states that market structure considerations, including the mechanics of matching trades, are complex and that a seemingly small change in market structure can result in significant negative and often unintended consequences and costs. From this general proposition, the commenter concludes that Periodic Auctions could cause wider bid-ask spreads[93] and decreased posted size.[94] The Commission notes that while auction orders are not displayed, information about auctions is disseminated to the marketplace, including transaction information. In addition, the Periodic Auction Book Price and the total number of shares of Periodic Auction Orders that are matched at the Periodic Auction Book Price would be disseminated and trades would be reported. Although the commenter states that trading system changes can result in increased costs to market participants,[95] the Commission notes that participation in the Periodic Auctions is not required by the Exchange and that costs related to participation in or assessment of the Periodic Auctions would be determined by market participants. The Exchange asserts, in response to the commenter, that its proposal will enhance market quality by encouraging market participants to post orders on its Continuous Book because Periodic Auctions will: (1) Increase execution opportunities for such orders; and (2) provide an opportunity for such orders to receive price improvement beyond their posted prices when executed in a Periodic Auction.[96] In addition, the Exchange states that it has already conducted rigorous testing (discussed below)[97] and that, prior to implementing Periodic Auctions, it will conduct more testing of the proposed functionality. This additional testing will include: (1) Unit testing by the development team and system-wide integration testing by an independent quality assurance team, both of which will be incorporated into the Exchange's automated test framework; (2) at least two weeks of internal testing in the Exchange's certification environment using an automated system to generate and send orders as well as manual testing by the Exchange's trade desk; and (3) at least four weeks of customer testing in the certification environment.[98] The Exchange states that its certification environment will remain available alongside the production release of Periodic Auctions for members that want to test Periodic Auction functionality in that environment following its initial rollout.[99] The Commission believes that this testing may allow the Exchange and members to identify negative unintended consequences resulting from Periodic Auctions. More generally, the Commission believes that market innovations may create new opportunities for investors and have the potential to benefit the market overall. Given the anticipated enhancements to price discovery and opportunities for price improvement that Periodic Auctions may provide, the Commission finds the Exchange's proposal is consistent with the Exchange Act.

One commenter asks whether there would be any impact on price discovery

[87] 15 U.S.C. 78f(b)(5).

[88] *See* Section 11A(a)(1)(C) of the Exchange Act, 15 U.S.C. 78k(a)(1)(C).

[89] *See* Securities Exchange Act Release Nos. 61358 (January 14, 2010) (Concept Release on Equity Market Structure) (''Moreover, to the extent that a competitive advantage flows from these [highly sophisticated trading tools], does that competitive advantage help to promote and enable competition, beneficial innovation, and ultimately, enhanced market quality?'') and 83663 (July 18, 2018) (Regulation of NMS Stock Alternative Trading Systems) (''Regulation ATS was designed to encourage innovation and provide enough flexibility to accommodate the business objectives of, and benefits provided by, alternative trading systems''). *See also* Securities Exchange Act Release No. 87327, *supra* note 13.

[90] *See* Securities Exchange Act Release No. 87327, *supra* note 13, 84 FR at 56957, n.15 and accompanying text.

[91] *See* letter from Ellen Greene, Managing Director, Equities & Options Market Structure, Securities Industry and Financial Markets Association, to Vanessa Countryman, Secretary, Commission, dated December 17, 2020 (''SIFMA Letter'') at 1; letter from Joe Wald and Ray Ross, Managing Directors and Co-Heads of Electronic Trading, BMO Capital Markets Group, to Vanessa Countryman, Secretary, Commission, dated December 22, 2020 (''BMO Letter'') at 1.

[92] *See* FIA PTG Letter, *supra* note 86, at 1.

[93] Another commenter states that it is difficult to predict whether Periodic Auctions would increase liquidity. *See* SIFMA Letter, *supra* note 91, at 2. This commenter had previously submitted a letter stating that it might comment on the substance of the proposal after reviewing the Exchange's FAQs about the operation of the Periodic Auction. *See* letter from Ellen Greene, Managing Director, Equities & Options Market Structure, Securities Industry and Financial Markets Association, to Vanessa Countryman, Secretary, Commission, dated August 28, 2020. The Exchange did post FAQs on its website and the commenter submitted its second comment letter.

[94] *See* FIA PTG Letter, *supra* note 86, at 2. Therefore, the commenter suggests that it is necessary to conduct a comprehensive and quantitative analysis to understand the consequences. *See id.*

[95] *See id.*

[96] *See* letter from Adrian Griffiths, Assistant General Counsel, Exchange, to Vanessa Countryman, Secretary, Commission, dated February 4, 2021 (''BYX Response'') at 6.

[97] *See infra* note 102, and accompanying text.

[98] *See* Amendment No. 4 at 7–8.

[99] *See id.* at 8.

in the continuous order book.[100] The Exchange states that offering Periodic Auctions alongside its continuous trading would not cause any undue latency that would negatively impact trading on the Continuous Book.[101] The Exchange represents that it has conducted rigorous testing, including both an analysis of system performance related to Periodic Auctions in expected market conditions and additional stress testing, including scenarios beyond what the Exchange expects to happen in a production environment.[102] As a result, the Exchange does not believe that the proposed Periodic Auctions would have any meaningful impact on its ability to offer continuous trading alongside its proposed Periodic Auction and would not inappropriately interfere with trading on the Continuous Book.[103] The Exchange states that, based on its analysis, any additional latency that may be experienced on the Continuous Book would be minimal, and both (1) within the range of latencies experienced when the Exchange conducts other resource consumptive tasks today, such as re-pricing of pegged orders; and (2) so small as to not present any regulatory concerns under either the Quote Rule or the Order Protection Rule.[104] These statements supplement the Exchange's representation in Amendment No. 3 that, based on substantial testing, any additional latency resulting from running a Periodic Auction would be minimal and *de minimis* from the perspective of the Order Protection Rule and would be well within a threshold of one millisecond.[105] Further, to prevent potential capacity and/or performance issues, the Exchange will cancel a Periodic Auction at the end of the Periodic Auction Period if it is unable to successfully process such Periodic Auction according to Rule 11.25 after a specified number of attempts determined by the Exchange and published in a circular distributed to members.[106] Based on the Exchange's representations and the Commission's understanding of the proposed operation of the Periodic Auctions, the Commission finds that the potential for delay resulting from the Periodic Auctions as proposed would not impair fair and efficient access to the Exchange's protected quotations under the Exchange Act.[107]

Two commenters raise concerns about the potential for market participants to manipulate or otherwise misuse Periodic Auctions or the continuous book. One commenter states that market participants may route orders to other trading venues before and during the auction (based on information disseminated by the Exchange) and thereby impact the price of the auction, which could affect investors who submitted orders on BYX's continuous book because orders on the continuous book may not opt out of the auction.[108] Another commenter states that because orders may be cancelled at any time, and given the interconnectivity of the periodic auction with the continuous order book, market participants may be able to utilize the ability to cancel and the transparency surrounding orders in the periodic auction to gain and improperly use information about trading interest on the Exchange in general.[109] Supplementary Material to .04 to Proposed Rule 11.25 provides that (1) Periodic Auction Orders must be entered with the intent to participate in Periodic Auctions; and (2) a pattern or practice of submitting orders for the purpose of disrupting or manipulating Periodic Auctions, including entering and immediately cancelling Periodic Auction Orders, will be deemed conduct inconsistent with just and equitable principles of trade. The Exchange represents that it will conduct surveillance to ensure that users do not inappropriately enter Periodic Auction Orders for impermissible purposes, including to gain information about Periodic Auction Orders that are resting on the Periodic Auction Book or to otherwise disrupt or manipulate Periodic Auctions.[110] Based on the proposed standard established by Supplementary Material to .04 to Proposed Rule 11.25 as well as the Exchange's representation and the Commission's assessment of the Exchange's proposed surveillances, the Commission finds that the proposal is designed to prevent fraudulent and manipulative acts and practices.

On a related point, one commenter raises concerns about information leakage from the operation of the Periodic Auctions. The commenter suggests that having a specific liquidity code attached to a continuous book order that interacts with an auction order indicating it was executed in a Periodic Auction could provide a ''free look'' regarding an imbalance in the market and the direction of the imbalance.[111] The Exchange disagrees, asserting that disclosing when an execution occurs as part of an auction is required and important post-trade transparency, not a form of improper information leakage.[112] Responding to the commenter's specific concern about potentially signaling a potential buy or sell imbalance by including Continuous Book Orders in Periodic Auctions, the Exchange states that: (1) The Commission has approved the dissemination of actual imbalance information in other auctions for U.S. equity securities due to the value of that information in informing public price discovery; (2) the Periodic Auction Price at which orders are executed in a Periodic Auction would also be reported on each executed transaction, rendering any additional information that could be inferred about a potential imbalance in a completed auction meaningless; and (3) Periodic Auctions are actually designed to perform an important price discovery function, which is facilitated by post-trade transparency about the execution of orders in the auction.[113] While one may be able to detect that an order imbalance existed prior to a Periodic Auction based on the reported price of executions from that auction, the Commission agrees with the Exchange that one may not necessarily infer from that reported price that an imbalance persists after the auction and believes that timely dissemination of transaction information is an important element of the national market system.

The same commenter seeks confirmation that the FIX message associated with a periodic auction

[100] *See* BMO Letter, *supra* note 91, at 2. The commenter also asks what the parameters are surrounding the circumstances in which the Exchange would ''throttle'' the initiation of periodic auctions. *See id.* In response, in Amendment No. 3, the Exchange provides additional information, stating that ''the throttle would limit the rate at which new auctions are initiated by the System by imposing configurable limits for both: (1) A sustained rate that controls the number of Periodic Auctions that can be initiated on a continuous basis, calculated by looking at System load during high utilization periods and the time it takes to initiate an auction to determine a safe maximum for the number of auctions that can be initiated each second; and (2) a burst rate that would allow the System to initiate a larger number of Periodic Auctions when either no or few auctions have been initiated for a specified time period.'' Amendment No. 3 at 19, n.30.

[101] *See* BYX Response, *supra* note 96, at 10.

[102] *See id.* at 11.

[103] *See id.*

[104] *See id.*

[105] *See* Amendment No. 3, at 64, n.69.

[106] *See* proposed BYX Rule 11.25(f). *See also* Amendment No. 3 at 27.

[107] *See* Securities Exchange Act Release No. 78102 (June 17, 2016), 81 FR 40785 (File No. S7–03–16) (Commission Interpretation Regarding Automated Quotations Under Regulation NMS) (''Commission Interpretation'').

[108] *See* SIFMA Letter, *supra* note 91, at 2.

[109] *See* BMO Letter, *supra* note 91, at 2, n.4.

[110] *See* BYX Response, *supra* note 96, at 6. *See also* Amendment No. 3 at 31 and 58.

[111] *See* BMO Letter, *supra* note 91, at 3.

[112] *See* BYX Response, *supra* note 96, at 9.

[113] *See id.* at 10.

execution would not have anything indicating that it occurred in an auction, *i.e.,* the auction trade print will be a bulk print that includes all fills, but that the trade will be identified as an auction print on the Exchange's proprietary data feed.[114] The Exchange responds that it would disseminate information about executions in Periodic Auctions through both the securities information processors and its proprietary market data feeds as a single ''bulk print'' indicating the number of shares executed in the auction and the price at which those shares are executed. It also responds that its proprietary market data feeds would indicate that the execution is an auction execution.[115] The Exchange states that currently there is no similar indicator disseminated by the SIPs for intraday auction executions.[116] To facilitate additional transparency about the nature of Periodic Auction executions to subscribers of the SIP feeds, the Exchange represents that it will submit a request to the operating committee(s) of the NMS plan(s) governing the dissemination of such information and make best efforts to have similar information included on those feeds as soon as practicable.[117] The Commission notes that SIP indicators currently include those for opening and closing auctions and believes that adding an indicator to identify Periodic Auction transactions via the SIP feeds should enhance transparency.

National securities exchanges compete to attract orders through a variety of means, including by offering innovative order execution functionality. In turn, market participants have flexibility to choose how to route their orders so long as they meet their regulatory obligations, including their obligations to meet the requirements under Regulation NMS and meet best execution obligations for their customers.[118] To the extent that market participants are concerned about possible information leakage through the reporting of the execution price or the operation of the Periodic Auctions, they may seek to protect their information in a number of ways, including choosing not to post orders on the Continuous Book, or not to submit orders to Periodic Auctions.[119]

Commenters also suggest modifications to BYX's proposal that they think could be beneficial, although commenters do not raise concerns that the proposal is inconsistent with the Exchange Act if the Exchange does not incorporate these suggested modifications. One commenter suggests that initially Periodic Auctions be held only for thinly traded securities and, if there are clear improvements to liquidity, Periodic Auctions should be gradually permitted for more liquid securities.[120] The Exchange states that, while Periodic Auctions may be particularly beneficial in thinly traded securities, Periodic Auctions would be broadly beneficial to trading in other securities, including those that suffer from diminished market quality for reasons other than being thinly traded.[121] The Exchange also states that its understanding, based on the experience of national securities exchanges that have implemented trading mechanisms limited to a subset of NMS stocks, is that a number of market participants that transact in NMS stocks do not employ differentiated routing logic for different symbols.[122] Therefore, BYX believes those market participants may not incorporate Periodic Auctions into their routing logic if Periodic Auctions were limited to thinly traded securities, and this, in turn, may impact the Exchange's ability to achieve the critical mass necessary to make Periodic Auctions successful.[123]

The same commenter suggests that Continuous Book Orders be excluded from the Periodic Auctions.[124] That commenter and another commenter also suggest making Continuous Book Order participation in the Periodic Auctions optional.[125] In response, the Exchange asserts that if a user is concerned that its Continuous Book Orders could be executed in Periodic Auctions at an unfair price the user would be no worse off than if the user were to trade with an immediate-or-cancel order in the Continuous Book.[126] The Exchange states that a Continuous Book Order that is executed in a Periodic Auction would always trade at a price that is at least as good, and in many cases better than, the price it would obtain in an execution on the Continuous Book.[127] Additionally, the Exchange asserts that, because each Periodic Auction is a price forming auction, a market participant that attempted to misuse the Periodic Auctions by entering orders into the Periodic Auction to trade with Continuous Book Orders at unfair prices would incur additional risks if trading in a Periodic Auction, where it may have to trade with such orders at an improved price rather than trading immediately with such orders on the Continuous Book.[128]

One commenter suggests that the Exchange execute orders in Periodic Auctions only at the midpoint of the NBBO to both reduce a potential latency impact on the continuous order book and address the complexity that Periodic Auctions would add to the market.[129] The commenter also asserts that its suggested NBBO midpoint execution would create less potential for information leakage.[130] The Exchange responds that the Periodic Auction is not designed to execute trades at the midpoint, but that it is designed as a price forming auction to execute orders at a price that balances supply and demand in the Periodic Auctions, whether or not that price is the NBBO midpoint.[131] In addition, the Exchange states that market participants that wish to receive midpoint executions already can do so by using midpoint pegged orders and similar order types.[132]

The same commenter suggests that the Exchange provide further clarity regarding how and whether orders that trade in Periodic Auctions will receive a unique fee code indicating that they indeed were executed in a Periodic Auction.[133] The Exchange notes that the pending proposal does not address fees, states that it intends to submit a fee proposal separately, and asserts that consideration of such fee codes is inappropriate in connection with this proposal.[134]

The commenter also asks that BYX add its ''True Minimum Quantity'' instruction for orders participating in the proposed auction mechanism. The commenter states that this would better facilitate the interaction of large-size orders.[135] The Exchange's ''true minimum'' instruction allows Users trading on the Continuous Book to enter orders with a minimum size condition that must be met by a single contra-side order, instead of one or more contra-side

[114] *See* BMO Letter, *supra* note 91, at 3.

[115] *See* BYX Response, *supra* note 96, at 9.

[116] *See* Amendment No. 4 at 5.

[117] *See id.* at 5–6.

[118] *See* Securities Exchange Act Release No. 90610 (December 9, 2020) (S7–03–20) at 37–38.

[119] *See* text accompanying note 123, *infra.*

[120] *See* SIFMA Letter, *supra* note 91, at 3.

[121] *See* BYX Response, *supra* note 96, at 7.

[122] *See id.* at 7, text accompanying n.8.

[123] *See id.* at 7–8.

[124] *See* SIFMA Letter, *supra* note 91, at 3.

[125] *See* BMO Letter, *supra* note 91, at 2.

[126] *See* BYX Response, *supra* note 96, at 5.

[127] *See id.* at 4.

[128] *See id.* at 5.

[129] *See* BMO Letter, *supra* note 91, at 3.

[130] *See id.*

[131] *See* BYX Response, *supra* note 96, at 8.

[132] *See id.*

[133] *See* BMO Letter, *supra* note 91, at 3, n.5.

[134] *See* BYX Response, *supra* note 96, at 9, n.10. The Exchange also notes that the commenter will have an opportunity comment on its fee proposal if it has concerns. *See id.*

[135] *See* BMO Letter, *supra* note 91, at 4.

orders.[136] The Exchange states that introducing the true minimum instruction into a Periodic Auction would unnecessarily complicate executions; instead, the Exchange is proposing to offer a minimum quantity instruction in the Periodic Auctions, which it believes will be valuable.[137] The Commission believes that the Exchange's decision not to incorporate the various suggestions offered by commenters into its proposal does not render the proposed rule change without a rational basis or inconsistent with the Exchange Act.

The Commission finds that the proposed rule change is designed to remove impediments to and perfect the mechanism of a free and open market and a national market system. Periodic Auctions would supplement existing opening and closing auctions by consolidating buy and sell interest in price forming auctions during the course of the trading day. Periodic Auctions may be particularly helpful in fulfilling and improving execution quality of orders by or on behalf of market participants seeking to trade in size or in thinly traded securities. One potential issue with a periodic auction running concurrently with a continuous book is that the act of operating the periodic auction could cause latency in the operation of the continuous book that would impact market participants' ability to receive timely executions on the continuous book. As discussed above, the Exchange has conducted testing, including stress testing, of the potential latency the Periodic Auctions may introduce into the continuous book and has made representations that the impact would be minimal and *de minimis* from the perspective of the Order Protection Rule and would be well within a threshold of one millisecond.[138] As a result, the Commission concludes that the potential latency caused by the Periodic Auctions as proposed does not impair fair and efficient access to the Exchange's protected quotations under the Exchange Act. In addition, the Commission believes that the Exchange has addressed the potential for manipulation or misuse of the Periodic Auctions and that the Exchange has appropriate surveillances in place to detect and deter such manipulation or misuse.

The Commission must approve the proposed rule change, as modified by Amendments No. 3 and No. 4, which does not incorporate any of the commenters' suggestions, if it finds that it is consistent with the Exchange Act; [139] alternatively the Commission must disapprove it if it cannot make that finding.[140] For the reasons discussed above, the Commission finds that the proposed rule change, as modified by Amendments No. 3 and No. 4, is consistent with the Exchange Act [141] and the rules and regulations thereunder applicable to a national securities exchange.

IV. Solicitation of Comments on Amendments No. 3 and No. 4 to the Proposed Rule Change

Interested persons are invited to submit written views, data, and arguments concerning whether Amendments No. 3 and No. 4 are consistent with the Exchange 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 email to *rule-comments@sec.gov.* Please include File Number SR–CboeBYX–2020–021 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–CboeBYX–2020–021. This file number should be included on the subject line if email 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–CboeBYX–2020–021 and should be submitted on or before April 22, 2021.

V. Accelerated Approval of the Proposed Rule Change, as Modified by Amendments No. 3 and No. 4

The Commission finds good cause to approve the proposed rule change, as modified by Amendments No. 3 and No. 4, prior to the thirtieth day after the date of publication of notice of the filing of Amendments No. 3 and No. 4 in the **Federal Register**. In Amendment No. 3, the Exchange (among other things) discussed how its proposal is consistent with Rule 201 of Regulation SHO. This supplemental information in Amendment No. 3 assisted the Commission in evaluating the Exchange's proposal and in determining that it is consistent with the Exchange Act. In Amendment No. 4, the Exchange corrected Example 6. Additionally, in Amendment No. 4, in response to comments, the Exchange discussed its efforts to submit trade reports to the SIP indicating which transactions were effected during Periodic Auctions, offered additional rationale for its proposal to allow cancellations of Periodic Auction Orders during ongoing Periodic Auctions, and set forth its implementation plans for the Periodic Auction. Neither Amendment No. 3 nor No. 4 raise any novel legal issue. Accordingly, the Commission finds good cause, pursuant to Section 19(b)(2) of the Exchange Act,[142] to approve the proposed rule change, as modified by Amendments No. 3 and No. 4, on an accelerated basis.

VI. Conclusion

It is therefore ordered, pursuant to Section 19(b)(2) of the Exchange Act,[143] that the proposed rule change (SR–CboeBYX–2020–021), as modified by Amendments No. 3 and No. 4, be, and

[136] *See* BYX Response, *supra* note 96, at 11. *See also* BYX Rule 11.9(c)(5).

[137] *See* BYX Response, *supra* note 96, at 11–12. BYX also states that no provision of the Exchange Act requires that the Exchange make any particular order instruction available to customers, or to allow the use of all order instructions that it has determined to offer in each and every trading mechanism that is offers to its members. *See id.* at 12.

[138] *See* Commission Interpretation, *supra* note 107.

[139] *See* Section 19(b)(2)(C)(i) of the Exchange Act.

[140] *See* Section 19(b)(2)(C)(ii) of the Exchange Act.

[141] 15 U.S.C. 78f(b)(5).

[142] 15 U.S.C. 78s(b)(2).

[143] *Id.*

it hereby is, approved on an accelerated basis.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[144]

J. Matthew DeLesDernier,

Assistant Secretary.

[FR Doc. 2021–06676 Filed 3–31–21; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–91416; File No. SR–NYSE–2021–18]

Self-Regulatory Organizations; New York Stock Exchange LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend Rule 103B, Which Governs the Allocation of Securities to Designated Market Makers

March 26, 2021.

Pursuant to Section 19(b)(1)[1] of the Securities Exchange Act of 1934 (the ''Act'')[2] and Rule 19b–4 thereunder,[3] notice is hereby given that on March 15, 2021, New York Stock Exchange LLC (''NYSE'' or the ''Exchange'') filed with the Securities and Exchange Commission (the ''Commission'') the proposed rule change as described in Items I and II below, which Items have been prepared by the self-regulatory organization. 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 to amend Rule 103B, which governs the allocation of securities to Designated Market Makers (''DMMs''). The proposed rule change is available on the Exchange's website at *www.nyse.com,* at the principal office of the Exchange, 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 self-regulatory organization 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 those 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 parts of such statements.

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

1. Purpose

The Exchange proposes to amend Rule 103B, which governs the allocation of securities to DMMs, to streamline the allocation process and facilitate the selection of DMM units by issuers of acquisition companies listed under NYSE Listed Company Manual Section 102.06 (''Acquisition Companies'').

Background

Current Rule 103B

Rule 103B(III) sets out the procedures under which DMM units are assigned to securities listed on the Exchange: An issuer may either select a DMM unit after interviewing all DMM units eligible to participate in the allocation process (Rule 103B(III)(A)), or delegate the authority for selecting its DMM unit to the Exchange (Rule 103B(III)(B)).

In addition, Rule 103B(VI)(A)(1) sets out an abbreviated DMM allocation process for listing companies that are a spin-off of or a company related to a listed company or one that lists a Related Security as defined in Rule 103B(VI)(A)(2).[4] Under Rule 103B(VI)(A)(1), such a listing company may remain with the DMM unit registered in the Related Security or acting as the assigned DMM unit to the related listed company or be allocated through the allocation process pursuant to NYSE Rule 103B, Section III. The rule further provides that if the spin-off company or company related to a listed company chooses to have its DMM unit selected by the Exchange pursuant to NYSE Rule 103B, Section III(B), and requests not to be allocated to the DMM unit that was its listed company's DMM unit, such request will be honored.

Acquisition Companies

Section 102.06 of the NYSE Listed Company Manual sets forth the listing standards for Acquisition Companies. An Acquisition Company (known in the marketplace as a special purpose acquisition company or ''SPAC'') is a special purpose company formed for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization or similar business combination with one or more operating businesses or assets. The securities sold by the Acquisition Company in its initial public offering are typically units, consisting of one share of common stock and one or more warrants (or a fraction of a warrant) to purchase common stock, that are separable at some point after the IPO. Under Section 102.06 of the NYSE Listed Company Manual, among other things, an Acquisition Company must keep 90% of the gross proceeds of its IPO in an escrow account until the date of a business combination.[5] The Acquisition Company must also complete one or more business combinations, having an aggregate fair market value of at least 80% of the value of the escrow account, within 36 months of the effectiveness of the IPO registration statement.[6] Following a business combination, the combined company must meet the Exchange's requirements for initial listing of an operating company.[7]

An Acquisition Company is formed by a person or group of people acting together or by a corporate entity (in each case, a ''Sponsor''). Persons affiliated with the Sponsor manage the Acquisition Company, seek to identify an appropriate business combination, and successfully complete that transaction. The Sponsor is not usually compensated in cash by the Acquisition Company, but rather undertakes these activities because it receives an ownership interest in the Acquisition Company that it acquires for nominal consideration. In many cases, Acquisition Company Sponsors are asset management entities or are controlled by individuals who have had successful careers in the banking or asset management industries. In many

[144] 17 CFR 200.30–3(a)(12).

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

[2] 15 U.S.C. 78a.

[3] 17 CFR 240.19b–4.

[4] For purposes of NYSE Rule 103B, a ''Related Security'' is defined as: (i) Any security listed on the Exchange issued by a company whose common equity securities are listed on the Exchange, other than such common equity securities; and (ii) any security listed on the Exchange by any issuer affiliated with a company whose common equity securities are listed on the Exchange. Related Securities of either a listed company whose common equity securities are listed on the Exchange or of an affiliated entity of such listed company include, but are not limited to, securities listed under NYSE Listed Company Manual Section 703.19 (except for Repackaged Securities).

[5] *See* Section 102.06 of the NYSE Listed Company Manual. Section 102.06 also contains additional quantitative requirements to list an Acquisition Company.

[6] *See generally id.* Public shareholders who object to a business combination have the right to convert their common stock into a pro rata share of the funds held in escrow. *See* Section 102.06(b) of the NYSE Listed Company Manual.

[7] This includes the requirement to maintain a minimum of 400 round lot holders. *See* Sections 102.01A and 802.01B of the NYSE Listed Company Manual.