SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-89731; File No. SR-BX-2020-016]

Self-Regulatory Organizations; Nasdaq BX, Inc.; Order Approving Proposed Rule Change to Amend BX’s Opening Process in Connection with a Technology Migration

September 1, 2020.

I. **Introduction**

   On July 20, 2020, Nasdaq BX, Inc. (“BX” or “Exchange”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”),\(^1\) and Rule 19b-4 thereunder,\(^2\) a proposed rule change to amend the Exchange’s opening process in connection with a technology migration. The proposed rule change was published for comment in the Federal Register on July 27, 2020.\(^3\) The Commission received no comment letters on the proposed rule change. This order approves the proposed rule change.

II. **Description of the Proposal**

   The Exchange proposes to amend Options 2, Section 4 (Obligations of Market Makers and Lead Market Makers), Options 3, Section 7 (Types of Orders and Order and Quote Protocols), Options 3, Section 8 (Opening and Halt Cross), Options 4A, Section 11 (Trading

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Sessions), and Options 6B, Section 1 (Exercise of Options Contracts) in connection with a technology migration to an enhanced Nasdaq, Inc. (“Nasdaq”) architecture.\(^4\)

A. **Proposed Opening Process\(^5\)**

The Exchange proposes to delete the entirety of current BX Options 3, Section 8 and replace the current Exchange opening process with an opening process described in Phlx Options 3, Section 8,\(^6\) while retaining certain elements of its current process and making conforming changes to reflect particularities to the BX market.\(^7\)

1. **Opening Sweeps**

The Exchange proposes to define a new order type, “Opening Sweep,” for the new opening process.\(^8\) A Market Maker assigned in a particular option may only submit an Opening Sweep if, at the time of entry, that Market Maker has already submitted and maintained a Valid

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\(^4\) The Exchange represents that in connection with the technology migration, BX is adopting certain opening functionality that is similar to the process used by Nasdaq Phlx LLC (“Phlx”) at Options 3, Section 8 (Options Opening Process). See Notice, supra note 3, 85 FR at 45243.

\(^5\) In connection with the new opening process, the Exchange proposes to adopt a new “Definitions” section in proposed BX Options 3, Section 8(a), similar to Phlx Options 3, Section 8(a), to define several terms that are used throughout the opening rule. Proposed BX Options 3, Section 8 will define: “Away Best Bid or Offer” or “ABBO,” “imbalance,” “market for the underlying security,” “Opening Price,” “Opening Process,” “Potential Opening Price,” “Pre-Market BBO,” “Valid Width National Best Bid or Offer” or “Valid Width NBBO,” “Valid Width Quote,” and “Zero Bid Market.” For definitions of these terms, see Notice, supra note 3, 85 FR at 45244-45.

\(^6\) The Exchange proposes to amend the title of Options 3, Section 8 from “Opening and Halt Cross” to “Options Opening Process” to conform the title to Phlx’s Rule at Options 3, Section 8, “Options Opening Process.” The Exchange also proposes to amend the title of Options 3, Section 8, within Options 4A, Section 11, Trading Session, and Options 6B, Section 1, Exercise of Options Contracts, to conform the title to “Options Opening Process.”

\(^7\) For example, unlike the Phlx opening process, BX does not: (1) require its Lead Market Makers to quote during the opening; (2) require a Valid Width Quote/Quality Opening Market to trigger the opening process and instead relies on a Valid Width NBBO.
Width Quote. Opening Sweeps may be entered at any price with a minimum price variation applicable to the affected series, on either side of the market, at single or multiple price level(s), and may be cancelled and re-entered. A single Market Maker may enter multiple Opening Sweeps, with each Opening Sweep at a different price level. If a Market Maker submits multiple Opening Sweeps, the system will consider only the most recent Opening Sweep at each price level submitted by such Market Maker in determining the Opening Price (described below). Unexecuted Opening Sweeps will be cancelled once the affected series is open.

2. Opening Only Orders

BX currently permits orders marked with a “Time In Force” or “TIF” of “On the Open Order” or “OPG” to be utilized to specify orders for submission into the Opening Cross. This designed to similarly ensure the price at which the Exchange opens reflects current market conditions; (3) have a trading floor and related opening rules; or (4) allow All-or-None Orders to rest on the order book. See Notice, supra note 3.

The Exchange proposes to define an “Opening Sweep” as a one-sided order entered by a Market Maker through SQF for execution against eligible interest in the system during the Opening Process. The Opening Sweep is not subject to any protections listed in Options 3, Section 15, except for Automated Quotation Adjustments. The Opening Sweep will only participate in the Opening Process pursuant to Options 3, Section 8 and will be cancelled upon the open if not executed. See proposed BX Options 3, Section 7(a)(9). In connection with the new definition of Opening Sweep, the Exchange proposes to remove a similar order type described as “On the Open Order” in current BX Options 3, Section 7(a)(9).

Proposed BX Options 3, Section 8(b)(1)(A). All Opening Sweeps in the affected series entered by a Market Maker will be cancelled immediately if that Market Maker fails to maintain a continuous quote with a Valid Width Quote in the affected series. See proposed BX Options 3, Section 8(b)(1)(A).

See proposed BX Options 3, Section 8(b)(1)(B).

See id.

See id. The Exchange proposes to define “Opening Price” by cross-referencing proposed BX Options 3, Section 8(i) and (k). See proposed BX Options 3, Section 8(a)(4).

See proposed BX Options 3, Section 8(b)(1)(B).
TIF of “OPG” means for orders so designated, that if after entry into the system, the order is not fully executed in its entirety during the Opening Cross, the order, or any unexecuted portion of such order, will be cancelled back to the entering participant. BX proposes to replace the “On the Open Order” TIF with an “Opening Only” or “OPG” TIF, which can only be executed in the Opening Process pursuant to Options 3, Section 8. This order type is not subject to any protections listed in Options 3, Section 15. Any portion of the order that is not executed during the Opening Process is cancelled. OPG orders also may not route.

3. Interest Included in the Opening Process

The first part of the Opening Process determines what constitutes eligible interest.

Proposed BX Options 3, Section 8(b) explains the eligible interest that will be accepted during the Opening Process, which includes Valid Width Quotes, Opening Sweeps, and orders.

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14 See current BX Options 3, Section 7(b)(1).
15 See id.
16 See id.
17 See proposed BX Options 3, Section 7(b).
18 See id.
19 See id.
20 See id.
21 The Exchange proposes to define “Opening Process” by cross-referencing proposed BX Options 3, Section 8(d). See proposed BX Options 3, Section 8(a)(5). The proposed “Opening Process” term is replacing the current term, “BX Opening Cross.”
22 The Exchange proposes to define “Valid Width Quotes” as a two-sided electronic quotation, submitted by a Market Maker, quoted with a difference not to exceed $5 between the bid and offer regardless of the price of the bid. However, respecting in-the-money series where the market for the underlying security is wider than $5, the bid/ask differential may be as wide as the quotation for the underlying security on the primary market, or its decimal equivalent rounded down to the nearest minimum increment. The Exchange may establish differences other than the above for one or more series or classes of options. See proposed BX Options 3, Section 8(a)(9).
23 See proposed BX Options 3, Section 7(a)(9).
Quotes, other than Valid Width Quotes, will not be included in the Opening Process. The system will allocate interest pursuant to Options 3, Section 10.\textsuperscript{24}

Market Maker Valid Width Quotes and Opening Sweeps received starting at 9:25 AM Eastern Time are included in the Opening Process.\textsuperscript{25} Orders entered at any time before an option series opens are included in the Opening Process.\textsuperscript{26}

4. \textit{Opening Process and Reopening After a Trading Halt}

Proposed BX Options 3, Section 8(d)(1) describes when the Opening Process may begin with specific time-related triggers. The proposed rule provides that the Opening Process for an option series will be conducted pursuant to proposed Options 3, Section 8(f) through (k) on or after 9:30 AM Eastern Time, when the system has received the opening trade or quote on the market for the underlying security\textsuperscript{27} in the case of equity options or in the case of index options. This requirement is intended to tie the Opening Process to receipt of liquidity.\textsuperscript{28}

For all options, the underlying security, including indexes, must be open on the market for the underlying security for a certain time period, as determined by the Exchange, for the

\begin{itemize}
\item \textsuperscript{24} See proposed BX Options 3, Section 8(b)(2).
\item \textsuperscript{25} See proposed BX Options 3, Section 8(d).
\item \textsuperscript{26} See id.
\item \textsuperscript{27} The Exchange proposes to define “market for the underlying security” as either the primary listing market or an alternative market designated by the primary market. In the event that the primary market is unable to open and an alternative market is not designated by the primary market and/or the alternative market designated by the primary market does not open, the Exchange may utilize a non-primary market to open all underlying securities from the primary market. The Exchange will select the non-primary market with the most liquidity in the aggregate for all underlying securities that trade on the primary market for the previous two calendar months, excluding the primary and alternative markets. See proposed BX Options 3, Section 8(a)(3).
\item \textsuperscript{28} See Notice, \textit{supra} note 3, 85 FR at 45247.
\end{itemize}
Opening Process to commence.\textsuperscript{29} The Opening Process will stop and an option series will not open if the ABBO\textsuperscript{30} becomes crossed.\textsuperscript{31} Once this condition no longer exists, the Opening Process in the affected option series will start again pursuant proposed BX Options 3, Section 8(f) - (k).\textsuperscript{32} Furthermore, the Opening Process will stop and an options series will not open if a Valid Width NBBO\textsuperscript{33} is no longer present, pursuant to Options 3, Section 8(i)(2).\textsuperscript{34} Once this condition no longer exists, the Opening Process in the affected options series will start again, pursuant to Options 3, Section 8(j) and (k) below. The Exchange would wait for the ABBO to become uncrossed before initiating the Opening Process to ensure that there is stability in the marketplace as the Exchange determines the Opening Price, or for a Valid Width Quote to be

\textsuperscript{29} See proposed BX Options 3, Section 8(d)(2). Proposed BX Options 3, Section 8(d)(2) stipulates that this time period will be no less than 100 milliseconds and no more than 5 seconds. The Exchange represents that it will set the timer initially at 100 milliseconds and will issue a notice to provide the initial setting and will thereafter issue a notice if it were to change the timing. See Notice, supra note 3, 85 FR at 45247, n.30. If the Exchange were to select a time not between 100 milliseconds and 5 seconds, it will be required to file a rule proposal with the Commission. See id.

\textsuperscript{30} The Exchange proposes to define “Away Best Bid or Offer” or “ABBO” as the displayed National Best Bid or Offer not included in the Exchange’s Best Bid or Offer. See proposed BX Options 3, Section 8(a)(1).

\textsuperscript{31} See proposed BX Options 3, Section 8(d)(3).

\textsuperscript{32} See id.

\textsuperscript{33} The Exchange proposes to define “Valid Width NBBO” as the combination of all away market quotes and Valid Width Quotes received over the SQF. The Valid Width NBBO will be configurable by the underlying security, and tables with valid width differentials, which will be posted by the Exchange on its website. Away markets that are crossed will void all Valid Width NBBO calculations. If any Market Maker quotes on the Exchange
Submitted.\textsuperscript{35} Proposed Options 3, Section 8(e) states that the procedure described in the proposed Options 3, Section 8 will be used to reopen an options series after a trading halt. If there is a trading halt or pause in the underlying security, the Opening Process will recommence irrespective of the specific times listed in proposed Options 3, Section 8(d).

5. \textbf{Opening with a BBO (No Trade)}

Under proposed BX Options 3, Section 8(f), the Exchange will first see if the option series will open for trading with a best bid or offer (“BBO”). If there are no opening quotes or orders that lock or cross each other, and no routable orders locking or crossing the ABBO, the system will open with an opening quote by disseminating the Exchange’s best bid and offer among quotes and orders (“BBO”) that exist in the system at that time, if any of the following conditions are satisfied: (1) a Valid Width NBBO is present; (2) a certain number of other options exchanges (as determined by the Exchange) have disseminated a firm quote on OPRA;\textsuperscript{36} or (3) a certain period of time (as determined by the Exchange) has elapsed.\textsuperscript{37}

\textsuperscript{34} Today, BX would not open with a trade unless there is a Valid Width NBBO present. The Exchange represents that this would remain the case with the proposed Opening Process. \textit{See} Notice, \textit{supra} note 3, 85 FR at 45259.

\textsuperscript{35} \textit{See} Notice, \textit{supra} note 3, 85 FR at 45247.

\textsuperscript{36} The Exchange states that it will require at least two other options exchanges to open, which is the existing practice on the Exchange. \textit{See} Notice, \textit{supra} note 3, 85 FR at 45258, n.33.

\textsuperscript{37} The Exchange states that it will require 15 minutes to pass with respect to this setting, which is the existing practice on the Exchange. \textit{See} Notice, \textit{supra} note 3, 85 FR at 45258, n.34.
6. **Further Opening Process**

If, as proposed, an opening does not occur pursuant to proposed Options 3, Section 8(e) (Reopening After a Trading Halt) and there are opening Valid Width Quotes, or orders, that lock or cross each other, the system will calculate the Pre-Market BBO. The Exchange states that it calculates a Pre-Market BBO in order for the Exchange to open with a trade pursuant to proposed Options 3, Section 8(i), to ensure that the Pre-Market BBO is a Valid Width NBBO, which is required to open the market. The Exchange also states that it does not disseminate a Pre-Market BBO, rather, the Exchange disseminates imbalance messages to notify Participants of available trading opportunities on BX during the Opening Process.

7. **Opening with a Trade**

If there are Valid Width Quotes or orders that lock or cross each other, the system will try to open with a trade. Options 3, Section 8(i) provides that the Exchange will open the option series with a trade of Exchange interest only at the Opening Price, if any of the following conditions occur: (1) the Potential Opening Price (described below) is at or within the best of the Pre-Market BBO and the ABBO, which is also a Valid Width NBBO; (2) the Potential Opening Price is at or within the non-zero bid ABBO, which is also a Valid Width NBBO, if the

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38 See proposed BX Options 3, Section 8(g). The Exchange proposes to define “Pre-Market BBO” as the highest bid and the lowest offer among Valid Width Quotes. See proposed BX Options 3, Section 8(a)(7).

39 See Notice, supra note 3, 85 FR at 45248.

40 See id.

41 The Exchange proposes to define “Potential Opening Price” by cross-referencing proposed BX Options 3, Section 8(h). See proposed BX Options 3, Section 8(a)(6).
Pre-Market BBO is crossed; or (3) where there is no ABBO, the Potential Opening Price is at or within the Pre-Market BBO, which is also a Valid Width NBBO.42

To undertake the above described process, the Exchange will calculate the Potential Opening Price by taking into consideration all Valid Width Quotes and orders (including Opening Sweeps) for the option series and identify the price at which the maximum number of contracts can trade (“maximum quantity criterion”).43

Under proposed Options 3, Section 8(h)(1), when two or more Potential Opening Prices would satisfy the maximum quantity criterion and leave no contracts unexecuted, the system will take the highest and lowest of those prices and takes the mid-point. If such mid-point cannot be expressed as a permitted minimum price variation, the mid-point will be rounded to the minimum price variation that is closest to the closing price for the affected series from the immediately prior trading session.44 If there is no closing price from the immediately prior trading session, the system will round up to the minimum price variation to determine the Opening Price.45

If two or more Potential Opening Prices for the affected series would satisfy the maximum quantity criterion and leave contracts unexecuted, the Opening Price will be either the lowest executable bid or highest executable offer of the largest sized side.46 Furthermore, the Potential Opening Price calculation will be bounded by the better away market price that may

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42 See proposed BX Options 3, Section 8(i)(1).
43 See proposed BX Options 3, Section 8(h).
44 See proposed BX Options 3, Section 8(h)(1).
45 See id.
46 See proposed BX Options 3, Section 8(h)(2).
not be satisfied with the Exchange routable interest.\textsuperscript{47} According to the Exchange, this would ensure that the price is a reasonable one by identifying the quality of that price; if a well-defined, fair price can be found within these boundaries, the option series can open at that price without going through a further price discovery mechanism.\textsuperscript{48}

Proposed BX Options 3, Section 8(i)(2), provides that if there is more than one Potential Opening Price, which meets the conditions set forth in proposed BX Options 3, Section 8(i)(1)(A), (B) or (C), where (A) no contracts would be left unexecuted and (B) any value used for the mid-point calculation (which is described in proposed BX Options 3, Section 8(g)) would cross either: (i) the Pre-Market BBO or (ii) the ABBO, then, for purposes of calculating the midpoint, the Exchange will use the better of the Pre-Market BBO or ABBO as a boundary price and will open the option series for trading with an execution at the resulting Potential Opening Price. If these aforementioned conditions are not met, but a Valid Width NBBO is present, an Opening Quote Range ("OQR") is calculated as described in proposed BX Options 3, Section 8(j) and the price discovery mechanism ("PDM"), described in proposed BX Options 3, Section 8(k), will commence.

8. **Price Discovery Mechanism**

If the Exchange has not opened with a BBO or trade pursuant to proposed Options 3, Section 8(f) or (i), the Exchange will conduct a PDM pursuant to proposed Options 3, Section 8(j) to determine the Opening Price. According to the Exchange, the purpose of the PDM is to

\textsuperscript{47} See id.

\textsuperscript{48} See Notice, supra note 3, 85 FR at 45249.
satisfy the maximum number of contracts possible by applying wider price boundaries and seeking additional liquidity.\(^{49}\)

Before conducting a PDM, however, the Exchange will calculate the OQR under proposed Options 3, Section 8(j). The OQR, which is used during PDM, is an additional boundary beyond the boundaries described in proposed BX Options 3, Section 8(h) and (i), designed to limit the Opening Price to a reasonable price and reduce the potential for erroneous trades during the Opening Process.\(^{50}\) The OQR is constrained by the least aggressive limit prices within the broader limits of OQR.\(^{51}\) The least aggressive buy order or Valid Width Quote bid and least aggressive sell order or Valid Width Quote offer within the OQR will further bound the OQR.\(^{52}\)

To determine the minimum value for the OQR, an amount, as defined in a table to be determined by the Exchange, will be subtracted from the highest quote bid among Valid Width Quotes on the Exchange and on the away market(s), if any, except as provided in proposed BX Options 3, Section 8(j) paragraphs (3) and (4).\(^{53}\) To determine the maximum value for the OQR, an amount, as defined in a table to be determined by the Exchange, will be added to the lowest quote offer among Valid Width Quotes on the Exchange and on the away market(s), if any, except as provided in proposed BX Options 3, Section 8(j) paragraphs (3) and (4).\(^{54}\) If one or more away markets are collectively disseminating a BBO that is not crossed, however, and there

\(^{49}\) See Notice, supra note 3, 85 FR at 45251.

\(^{50}\) See Notice, supra note 3, 85 FR at 45250.

\(^{51}\) See proposed BX Options 3, Section 8(j).

\(^{52}\) See id.

\(^{53}\) See proposed Options 3, Section 8(j)(1).

\(^{54}\) See proposed BX Options 3, Section 8(j)(2).
are Valid Width Quotes on the Exchange that are executable against each other or that are executable against the ABBO, then the minimum value of the OQR will be the highest away bid and the maximum value will be the lowest away offer.\textsuperscript{55}

The Exchange will use the OQR to help calculate the Opening Price. For example, if there is more than one Potential Opening Price possible, where no contracts would be left unexecuted, any price used for the mid-point calculation (which is described in proposed BX Options 3, Section 8(h)(3)), that is outside of the OQR, will be restricted to the OQR price on that side of the market for the purposes of the mid-point calculation.\textsuperscript{56}

During PDM, the Exchange will take into consideration the away market prices in calculating the Potential Opening Price. For example, if there is more than one Potential Opening Price possible, where no contracts would be left unexecuted, pursuant to proposed BX Options 3, Section 8(h)(3), when contracts will be routed, the system will use the away market price as the Potential Opening Price.\textsuperscript{57} Moreover, proposed Options 3, Section 8(h)(6) provides that if the Exchange determines that non-routable interest can execute the maximum number of Exchange contracts against Exchange interest, after routable interest has been determined by the system to satisfy the away market, then the Potential Opening Price is the price at which the maximum number of contracts can execute, excluding the interest which will be routed to an away market, which may be executed on the Exchange as described in proposed BX Options 3,

\textsuperscript{55} See proposed BX Options 3, Section 8(j)(3). Proposed BX Options 3, Section 8(j)(3)(A) further notes that the Opening Process will stop and an option series will not open if the ABBO becomes crossed, pursuant to proposed BX Options 3, Section 8(d)(3).

\textsuperscript{56} See proposed BX Options 3, Section 8(j)(4).

\textsuperscript{57} See proposed BX Options 3, Section 8(j)(5).
Section 8(h). The system will route all routable interest pursuant to Options 3, Section 10(a)(1).\(^{58}\)

After the OQR is calculated, the system will broadcast an Imbalance Message for the affected series\(^ {59}\) to attract additional liquidity and begin an “Imbalance Timer,” not to exceed three seconds to notify Participants of available interest that may be crossed during the Opening Process.\(^ {60}\) The Imbalance Timer will be for the same number of seconds for all options traded on the Exchange, and each Imbalance Message will be subject to an Imbalance Timer.\(^ {61}\) The Exchange may have up to four Imbalance Messages which each run its own Imbalance Timer pursuant to the PDM process.\(^ {62}\)

Proposed BX Options 3, Section 8(k)(2) states that any new interest received by the system will update the Potential Opening Price. If during or at the end of the Imbalance Timer, the Opening Price is at or within the OQR, the Imbalance Timer will end and the system will open with a trade at the Opening Price if the executions consist of Exchange interest only

\(^{58}\) In contrast, Phlx routes Public Customer and Professional orders, while BX will route orders for all market participants. See Notice, supra note 3, 85 FR at 45251, n.46.

\(^{59}\) Imbalance Message includes the symbol, side of the imbalance, size of matched contracts, size of the imbalance, and Potential Opening Price bounded by the Pre-Market BBO. See proposed BX Options 3, Section 8(k)(1). In connection with the proposed handling of imbalance, the Exchange proposes to eliminate the term “Order Imbalance Indicator” at current BX Options 3, Section 8(a)(2).

\(^{60}\) See proposed BX Options 3, Section 8(k)(1). The Imbalance Timer will initially be set 200 milliseconds. See Notice, supra note 3, 85 FR at 45252.

\(^{61}\) See proposed BX Options 3, Section 8(k)(1).

\(^{62}\) See Notice, supra note 3, 85 FR at 45260. An Imbalance Message will be disseminated showing a “0” volume and a $0.00 price if: (i) no executions are possible but routable interest is priced at or through the ABBO; or (ii) internal quotes are crossing each other. Where the Potential Opening Price is through the ABBO, an imbalance message will display the side of interest priced through the ABBO. See proposed BX Options 3, Section 8(k)(1)(A).
without trading through the ABBO and without trading through the limit price(s) of interest within the OQR, which is unable to be fully executed at the Opening Price. If no new interest comes in during the Imbalance Timer and the Potential Opening Price is at or within the OQR and does not trade through the ABBO, the Exchange will open with a trade at the end of the Imbalance Timer at the Potential Opening Price.

If the option series has not opened pursuant to proposed BX Options 3, Section 8(k)(2) described above, the system will concurrently: (i) send a second Imbalance Message with a Potential Opening Price that is bounded by the OQR (and would not trade through the limit price(s) of interest within the OQR which is unable to be fully executed at the Opening Price) and includes away market volume in the size of the imbalance to participants; and (ii) initiate a Route Timer, not to exceed one second. As proposed, the Route Timer will operate as a pause before an order is routed to an away market. The Exchange states that the Route Timer is intended to give participants an opportunity to respond to an Imbalance Message before any opening interest is routed to away markets and thereby maximize trading on the Exchange. If during the Route Timer, interest is received by the system which would allow the Opening Price to be within the OQR without trading through away markets and without trading through the limit price(s) of interest within the OQR, which is unable to be fully executed at the Opening Price, the system will open with trades, and the Route Timer will simultaneously end. The

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63 See proposed BX Options 3, Section 8(k)(3)(A)-(B).
64 See proposed BX Options 3, Section 8(k)(3)(B).
65 See Notice, supra note 3, 85 FR at 45253.
66 See proposed BX Options 3, Section 8(k)(3)(B).
system will monitor quotes received during the Route Timer and make ongoing corresponding changes to the permitted OQR and Potential Opening Price to reflect them.67

Proposed BX Options 3, Section 8(k)(3)(C) provides that, if no trade occurs pursuant to proposed BX Options 3, Section 8(k)(3)(B), when the Route Timer expires, and if the Potential Opening Price is within the OQR (and would not trade through the limit price(s) of interest within the OQR, which is unable to be fully executed at the Opening Price), the system will determine if the total number of contracts displayed at better prices than the Exchange’s Potential Opening Price on away markets (“better priced away contracts”) would satisfy the number of marketable contracts available on the Exchange. The Exchange will then open the option series by routing and/or trading on the Exchange, pursuant to proposed BX Options 3, Section 8(k)(3)(C) paragraphs (i) through (iii).

Proposed BX Options 3, Section 8(k)(3)(i) provides that, if the total number of better priced away contracts would satisfy the number of marketable contracts available on the Exchange on either the buy or sell side, the system will route all marketable contracts on the Exchange to such better priced away markets as an Intermarket Sweep Order (“ISO”) designated as Immediate-or-Cancel (“IOC”) order(s) and determine an opening BBO that reflects the interest remaining on the Exchange. The system will price any contracts routed to away markets at the Exchange’s Opening Price. The Exchange states that routing away at the Exchange’s Opening Price is intended to achieve the best possible price available at the time the order is received by the away market.68

67 See id.
68 See Notice, supra note 3, 85 at 45253.
Proposed Options 3, Section 8(k)(3)(C)(ii) provides that, if the total number of better priced away contracts would not satisfy the number of marketable contracts on the Exchange, the system will determine how many contracts it has available at the Exchange Opening Price. If the total number of better priced away contracts, plus the number of contracts available at the Exchange Opening Price, would satisfy the number of marketable contracts on the Exchange on either the buy or sell side, the system will contemporaneously route, based on price/time priority of routable interest, a number of contracts that will satisfy interest at away markets at prices better than the Opening Price and trade available contracts on the Exchange at the Exchange Opening Price.\textsuperscript{69} The system will price any contracts routed to away markets at the better of the Exchange Opening Price or the order’s limit price pursuant to proposed Options 3, Section 8(k)(3)(C)(ii).\textsuperscript{70} The Exchange states that this proposed rule is designed to maximize execution of interest on the Exchange or away markets.\textsuperscript{71}

Proposed Options 3, Section 8(k)(3)(C)(iii) provides that, if the total number of better priced away contracts, plus the number of contracts available at the Opening Price, plus the contracts available at away markets at the Exchange Opening Price would satisfy the number of marketable contracts on the Exchange has, on either the buy or sell side, the system will contemporaneously route, based on price/time priority of routable interest, a number of contracts that will satisfy such away market interest (pricing any contracts routed to away markets at the better of the Exchange Opening Price or the order’s limit price), trade available contracts on the Exchange at the Exchange Opening Price, and route a number of contracts that will satisfy

\begin{itemize}
  \item \textsuperscript{69} See proposed BX Options 3, Section 8(k)(3)(C)(ii).
  \item \textsuperscript{70} See id.
  \item \textsuperscript{71} See id.
\end{itemize}
interest at other markets at prices equal to the Opening Price. The Exchange states that routing at the better of the Exchange Opening Price or the order’s limit price is intended to achieve the best possible price available at the time the order is received by the away market and that routing at the order’s limit price ensures that the order’s limit price is not violated.\(^72\)

Proposed Options 3, Section 8(k)(3)(D) provides that the system may send up to two additional Imbalance Messages (which may occur while the Route Timer is operating) bounded by the OQR and reflecting away market interest in the volume. After the Route Timer has expired, the processes in proposed Options 3, Section 8(k)(3)(C) will repeat (except no new Route Timer will be initiated).\(^73\)

9. **Forced Opening**

Proposed Options 3, Section 8(k)(3)(E) describes the process that occurs if the steps described above have not resulted in an opening of the options series. After all additional Imbalance Messages have been broadcasted pursuant to proposed Options 3, Section 8(k)(3)(D), the system will open the series by executing as many contracts as possible by routing to away markets at prices better than the Exchange Opening Price for their disseminated size, trading available contracts on the Exchange at the Exchange Opening Price bounded by OQR (without trading through the limit price(s) of interest within OQR, which is unable to be fully executed at the Opening Price).\(^74\) The system will also route contracts to away markets at prices equal to the Exchange Opening Price at their disseminated size.\(^75\) In this situation, the system will price any contracts routed to away markets at the better of the Exchange Opening Price or the order’s limit

\(^72\) See Notice, supra note 3, 85 FR at 45253-54.

\(^73\) See proposed BX Options 3, Section 8(k)(3)(D).

\(^74\) See proposed BX Options 3, Section 8(k)(3)(E).

\(^75\) See id.
price. Any unexecuted interest from the imbalance not traded or routed will be cancelled back to the entering Participant, if they remain unexecuted and priced through the Opening Price, otherwise orders will remain in the Order Book. All other interest will be eligible for trading after opening, if consistent with the Participant’s instruction.

Proposed Options 3, Section 8(k)(3)(F) provides that the system will execute non-routable orders, such as “Do-Not-Route” or “DNR” Orders, to the extent possible. The system will only route non-contingency orders.

The Exchange proposes to state at Options 3, Section 8(k)(4) that, pursuant to Options 3, Section 8(k)(3)(F), the system will re-price Do Not Route Orders (that would otherwise have to be routed to the exchange(s) disseminating the ABBO for an opening to occur) to a price that is one minimum trading increment inferior to the ABBO, and disseminate the re-priced DNR Order as part of the new BBO. Proposed BX Options 3, Section 8(k)(5) provides that the system will cancel any order or quote that is priced through the Opening Price. All other interest will be eligible for trading after the opening. Proposed BX Options 3, Section 8(k)(6), provides that during the opening of the option series, where there is an execution possible, the system will give

76 See id.
77 See id. The Exchange believes that cancelling the order back to the Participant allows for the Participant to determine how its customer would like its order to be handled. See Notice, supra note 3, 85 FR at 45254. In comparison, on Phlx, unless the member that submitted the original order has instructed the exchange in writing to reenter the remaining size, the remaining size will be automatically submitted as a new order. See id.
78 See id.
79 A Do-Not-Route Order is described within BX Options 5, Section 4(a)(iii)(A).
80 See proposed BX Options 3, Section 8(k)(3)(F).
priority to Market Orders\textsuperscript{81} first, then to resting Limit Orders\textsuperscript{82} and quotes. BX’s Order Book allocation provisions in Options 3, Section 10 will apply.\textsuperscript{83} Proposed BX Options 3, Section 8(k)(7) provides that upon opening of an option series, regardless of an execution, the system disseminates the price and size of the Exchange’s best bid and offer (BBO). Finally, proposed BX Options 3, Section 8(k)(8) provides that any remaining contracts, which are not priced through the Exchange Opening Price after routing a number of contracts to satisfy better priced away contracts, will be posted to the Order Book at the better of the away market price or the order’s limit price.

10. **Opening Process Cancel Timer**

The Exchange proposes to retain BX’s Opening Order Cancel Timer, which is currently described within Options 3, Section 8(c). The Exchange proposes to relocate this rule text to Options 3, Section 8(l), and rename it “Opening Process Cancel Timer.”\textsuperscript{84} The Opening Process Cancel Timer represents a period of time since the underlying market has opened, and is established and disseminated by the Exchange on its website.\textsuperscript{85} If an option series has not opened before the conclusion of the Opening Process Cancel Timer, a Participant may elect to have orders returned by providing written notification to the Exchange.\textsuperscript{86} These orders include all non-Good Til Cancelled Orders received over the FIX protocol.\textsuperscript{87}

\textsuperscript{81} BX Options 3, Section 7(a)(5) defines “Market Orders.”

\textsuperscript{82} BX Options 3, Section 7(a)(3) defines “Limit Orders.”

\textsuperscript{83} See proposed BX Options 3, Section 8(k)(6).

\textsuperscript{84} The Exchange states that while it is retaining the timer, the Exchange proposes to amend the rule text to conform the language to Phlx’s rule text. See Notice, supra note 3, 85 FR at 45255

\textsuperscript{85} See proposed BX Options 3, Section 8(l).

\textsuperscript{86} See id.
B. Other Changes

The Exchange proposes to remove the rule text from BX Options 2, Section 4(g) (Unusual Conditions – Opening Auction) and reserve the subparagraph. As described above, the Exchange proposes to state within the definition of “Valid Width Quote” at proposed BX Options 3, Section 8(a)(9), that the Exchange may establish bid/ask differentials other than those listed in proposed BX Options 3, Section 8(a)(9) for one or more series or classes of options. The rule text of current BX Options 2, Section 4(g) permits spread differentials of up to two times, or in exceptional circumstances, up to three times, the legal limits permitted under the rules of BX Options. The Exchange proposes to delete the rule text from BX Options 2, Section 4(g) in order to conform its rules to the proposed Opening Process and align BX with the procedures of other Nasdaq options exchanges follow, which notify members in writing, via an Options Regulatory Alert, of any discretion that is being granted by the Exchange.88

C. Implementation

The Exchange states that it intends to begin implementation of the proposed rule change prior to October 30, 2020.89 The Exchange represents that it will issue an Options Trader Alert to Members to provide notification of the symbols that will migrate and the relevant dates.90

III. Discussion and Commission Findings

After careful review, the Commission finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national

87  See id.
88  See Notice, supra note 3, 85 FR at 45256.
89  See id.
90  See id. For a more detailed description of the proposed rule change, see Notice, supra note 3.
In particular, the Commission finds that the proposed rule change is consistent with Section 6(b)(5) of the Act, 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 foster cooperation and coordination with persons engaged in facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.

The Exchange proposes to delete in its entirety the current opening process and replace it with an opening process similar to the process in place on Phlx, with conforming changes to reflect particularilities to the BX market. In making this change, the Exchange delineates detailed steps of the opening process. By providing more clearly each sequence of the opening process, the Commission notes that the proposed rule helps market participants understand how the new opening process will operate. To that extent, the new opening process may promote transparency, reduce the potential for investor confusion, and assist market participants in deciding whether to participate in BX’s opening process. Further, if they do participate in the new opening process, the proposed rule may help provide market participants with the confidence and certainty as to how their orders or quotes will be processed.

Further, the Commission believes that the proposed rule change is designed to promote just and equitable principles of trade by seeking to ensure that option series open in a fair and orderly manner. For example, the Commission notes that the proposed rule change is designed

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91 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).
93 See, e.g., supra note 7.
to mitigate the effects of the underlying security’s volatility as the overlying option series undergoes the opening process. Specifically, the proposed rule provides for a range of no less than 100 milliseconds and no more than 5 seconds in order to ensure that the Exchange has the ability to adjust the period for which the underlying must be open on the primary market before the opening process commences. Moreover, the Commission notes that the proposed rule provides an orderly process for handling eligible interests during the opening process, while seeking to avoid opening executions at suboptimal prices. For instance, the proposed rule ensures that the Opening Process will stop and an option series will not open if the ABBO becomes crossed, which can be indicative of price uncertainty with respect to an option series. Likewise, the Exchange will not open an option series with a trade unless any of the following conditions occur: (1) the Potential Opening Price is at or within the Pre-Market BBO and the ABBO, which is also a Valid Width NBBO; (2) the Potential Opening Price is at or within the non-zero bid ABBO, which is also a Valid Width NBBO, if the Pre-Market BBO is crossed; or (3) where there is no ABBO, the Potential Opening Price is at or within the Pre-Market BBO, which is also a Valid Width NBBO. While the proposed opening process attempts to maximize the number of contracts executed on the Exchange during such process, including by seeking additional liquidity, if necessary, the Commission notes that the proposed opening process takes into consideration away market interests and ensures that better away prices are not traded through.

For these reasons, the Commission believes that the proposed rule change is consistent with the Act.

IV. Conclusion

\[94\] See supra note 29.
IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Exchange Act,\textsuperscript{95} that the proposed rule change (SR-BX-2020-016), be, and it hereby is, approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.\textsuperscript{96}

J. Matthew DeLesDernier,

Assistant Secretary.


\textsuperscript{96} 17 CFR 200.30-3(a)(12).