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Page 1 of \* 127

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

File No. \* SR 2022 - \* 10

Amendment No. (req. for Amendments \*)

Filing by Nasdaq MRX, LLC

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

|   |                                      |                                     |  |  |  |
|---|--------------------------------------|-------------------------------------|--|--|--|
| Initial * <input checked="" type="checkbox"/> | Amendment * <input type="checkbox"/> | Withdrawal <input type="checkbox"/> | Section 19(b)(2) * <input checked="" type="checkbox"/> | Section 19(b)(3)(A) * <input type="checkbox"/> | Section 19(b)(3)(B) * <input type="checkbox"/> |
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|--------------------------------|---|-------------------------------------|--------------------------------------|--------------------------------------|--|
| Pilot <input type="checkbox"/> | Extension of Time Period for Commission Action * <input type="checkbox"/> | Date Expires * <input type="text"/> | Rule                                 |                                      |  |
|                                |   |                                     | <input type="checkbox"/> 19b-4(f)(1) | <input type="checkbox"/> 19b-4(f)(4) |  |
|                                |   |                                     | <input type="checkbox"/> 19b-4(f)(2) | <input type="checkbox"/> 19b-4(f)(5) |  |
|                                |   |                                     | <input type="checkbox"/> 19b-4(f)(3) | <input type="checkbox"/> 19b-4(f)(6) |  |

Notice of proposed change pursuant to the Payment, Clearing, and Settlement Act of 2010  
Section 806(e)(1) \*

Section 806(e)(2) \*

Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934  
Section 3C(b)(2) \*

Exhibit 2 Sent As Paper Document

Exhibit 3 Sent As Paper Document

**Description**

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

Amendments to Complex Orders In Connection with a Technology Migration

**Contact Information**

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

First Name \* Angela Last Name \* Dunn

Title \* Principal Associate General Counsel

E-mail \* angela.dunn@nasdaq.com

Telephone \* (215) 496-5692 Fax

**Signature**

Pursuant to the requirements of the Securities Exchange of 1934, Nasdaq MRX, LLC has duty caused this filing to be signed on its behalf by the undersigned thereunto duty authorized.

Date 07/18/2022 (Title \*)

By John Zecca EVP and Chief Legal Officer  
(Name \*)

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



DN:  
email=john.zecca@nasdaq.com  
Date: 2022.07.18 12:31:59  
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Required fields are shown with yellow backgrounds and astericks.

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

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

**Form 19b-4 Information \***

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SR-MRX-2022-10 19b-4.doc

The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act.

**Exhibit 1 - Notice of Proposed Rule Change \***

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SR-MRX-2022-10 Exhibit 1.doc

The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

**Exhibit 1A - Notice of Proposed Rule Change, Security-Based Swap Submission, or Advanced Notice by Clearing Agencies \***

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The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

**Exhibit 2- Notices, Written Comments, Transcripts, Other Communications**

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Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G.

Exhibit Sent As Paper Document

**Exhibit 3 - Form, Report, or Questionnaire**

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Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change.

Exhibit Sent As Paper Document

**Exhibit 4 - Marked Copies**

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The full text shall be marked, in any convenient manner, to indicate additions to and deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit the staff to identify immediately the changes made from the text of the rule with which it has been working.

**Exhibit 5 - Proposed Rule Text**

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SR-MRX-2022-10 Exhibit 5.doc

The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change

**Partial Amendment**

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If the self-regulatory organization is amending only part of the text of a lengthy proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions.

1. Text of the Proposed Rule Change

(a) Nasdaq MRX, LLC (“MRX” or “Exchange”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> is filing with the Securities and Exchange Commission (“Commission”) a proposal to amend Options 3, Section 7, Types of Orders and Order and Quote Protocols; Options 3, Section 10, Priority of Quotes and Orders; Options 3, Section 13, Price Improvement Mechanisms for Crossing Transactions; Options 3, Section 14, Complex Orders; and Options 3, Section 16, Complex Risk Protections.

A notice of the proposed rule change for publication in the Federal Register is attached as Exhibit 1. The text of the proposed rule change is attached as Exhibit 5.

(b) Not applicable.

(c) Not applicable.

2. Procedures of the Self-Regulatory Organization

The proposed rule change was approved by the Board of Directors of the Exchange on November 16, 2021. No other action is necessary for the filing of the rule change.

Questions and comments on the proposed rule change may be directed to:

Angela Saccomandi Dunn  
Principal Associate General Counsel  
Nasdaq, Inc.  
215-496-5692

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

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

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

a. Purpose

In connection with a technology migration to an enhanced Nasdaq, Inc. (“Nasdaq”) functionality which will result in higher performance, scalability, and more robust architecture, the Exchange intends to adopt certain trading functionality currently utilized at Nasdaq affiliate exchanges. Also, the Exchange intends to remove certain functionality. Specifically, the following sections would be amended: Options 3, Section 7, Types of Orders and Order and Quote Protocols, Options 3, Section 10, Priority of Quotes and Orders; Options 3, Section 13, Price Improvement Mechanisms for Crossing Transactions; Options 3, Section 14, Complex Orders; and Options 3, Section 16, Complex Risk Protections. Each change will be described below.

Legging Order

The Exchange proposes to amend Options 3, Section 7(k)(1) to add a provision which states that a Legging Order<sup>3</sup> will not be generated during a Posting Period, as described in detail below, in progress on the same side in the series pursuant to Options 3, Section 15 regarding Acceptable Trade Range (“ATR”). A Legging Order would not be generated because it would no longer be at the Exchange’s displayed best bid or offer, therefore, generating a Legging Order during a Posting Period in progress, on the same side in the series, would lead to its immediate removal, making it superfluous to have been generated.

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<sup>3</sup> A Legging Order is a limit order on the regular limit order book that represents one side of a Complex Options Order that is to buy or sell an equal quantity of two options series resting on the Exchange's Complex Order Book. See Options 3, Section 7(k).

ATR is a risk protection, that sets dynamic boundaries within which quotes and orders may trade. It is designed to guard the System<sup>4</sup> from experiencing dramatic price swings by preventing the immediate execution of quotes and orders beyond the thresholds set by this risk protection. In a separate proposal, the Exchange proposes to amend MRX's ATR to adopt an iterative process wherein an order/quote that reaches its ATR boundary will be paused for a brief period of time to allow more liquidity to be collected, before the order/quote is automatically re-priced and a new ATR is calculated.<sup>5</sup>

Specifically, in MRX-2022-5P, the Exchange proposes to amend current Options 3, Section 15(a)(2)(A)(iii) to provide that if an order or quote reaches the outer limit of the ATR ("Threshold Price") without being fully executed, it will be posted at the Threshold Price for a brief period, not to exceed one second ("Posting Period"), to allow the market to refresh and determine whether or not more liquidity will become available (on the Exchange or any other exchange if the order is designated as routable) within the posted price of the order or quote before moving on to a new Threshold Price.<sup>6</sup> Upon posting, either the current Threshold Price of the order/quote or an updated NBB for buy orders/quotes or the NBO for sell orders/quotes (whichever is higher for a buy

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<sup>4</sup> The term "System" means the electronic system operated by the Exchange that receives and disseminates quotes, executes orders and reports transactions. See MRX Options 1, Section 1(a)(49).

<sup>5</sup> MRX has separately filed to amend ATR within SR-MRX-2022-5P. Within SR-MRX-2022-5P, MRX proposes an iterative process for ATR wherein the Exchange will attempt to execute interest that exceeds the outer limit of the ATR for a brief period of time while that interest is automatically re-priced as described herein. Today, MRX would cancel, rather than re-price, any interest that exceeds the outer limit of the ATR.

<sup>6</sup> See SR-MRX-2022-5P.

order/quote or lower for a sell order/quote) would become the reference price for calculating a new ATR. If the order remains unexecuted, a new ATR will be calculated and the order will execute, route, or post up to the new Threshold Price. This process will repeat until either (1) the order/quote is executed, cancelled, or posted at its limit price or (2) the order/quote has been subject to a configurable number of instances of the ATR as determined by the Exchange (in which case it will be returned). During the proposed Posting Period, an order would be in flux and would potentially increase (decrease) past the price of any Legging Order generated on the bid (offer) as the order works its way through the book. Legging Orders are removed from the order book when they are no longer at the Exchange's displayed best bid or offer and, therefore, generating a Legging Order during a Posting Period in progress on the same side in the series would lead to its immediate removal. Accordingly, in the current proposal, the Exchange proposes to amend Options 3, Section 7(k)(1) to provide that a Legging Order would not be created during the Posting Period in progress on the same side in the series. By way of example, assume that the ATR is set for \$0.05, the MPV is \$0.01 and the following quotations are posted on MRX and away markets:

Away Exchange Quotes:

| Exchange | Bid Size | Bid Price | Offer Price | Offer Size |
|----------|----------|-----------|-------------|------------|
| ISE      | 10       | \$0.75    | \$0.90      | 10         |
| AMEX     | 10       | \$0.75    | \$0.92      | 10         |
| PHLX     | 10       | \$0.75    | \$0.94      | 10         |

MRX Price Levels:

| Exchange | Bid Size | Bid Price | Offer Price | Offer Size |
|----------|----------|-----------|-------------|------------|
|----------|----------|-----------|-------------|------------|

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|     |    |        |        |    |
|-----|----|--------|--------|----|
| MRX | 10 | \$0.75 | \$0.90 | 10 |
| MRX | 10 | \$0.75 | \$0.95 | 10 |
| MRX | 10 | \$0.75 | \$1.00 | 10 |
| MRX | 10 | \$0.75 | \$1.05 | 10 |

MRX receives a routable order to buy 70 contracts at \$1.10. The ATR is \$0.05 and the reference price is the National Best Offer - \$0.90. The ATR threshold is then  $\$0.90 + \$0.05 = \$0.95$ . The order is allowed to execute up to and including \$0.95. The System then pauses for a brief period not to exceed one second to allow the market (including other exchanges) to refresh and to determine whether additional liquidity will become available within the order's posted price. If additional liquidity becomes available on MRX or any away market, that liquidity will be accessed and executed.

- 10 contracts will be executed at \$0.90 against MRX
- 10 contracts will be executed at \$0.90 against ISE
- 10 contracts will be executed at \$0.92 against AMEX
- 10 contracts will be executed at \$0.94 against PHLX
- 10 contracts will be executed at \$0.95 against MRX
- Then, after executing at multiple price levels, the order is posted at \$0.95 for a brief period not to exceed one second to determine whether additional liquidity will become available.
- During this pause, the MRX BBO for this option is 0.95 x 1.00
- Assume the leg above with the Posting Period in process is Leg A of an A-B complex strategy

- Leg B has a BBO of 0.85 x 0.88
- Therefore, the cBBO<sup>7</sup> of this A-B complex strategy is 0.07 x 0.15
  - (Leg A Bid 0.95 – Leg B Offer 0.88 = 0.07)
  - (Leg A Offer 1.00 – Leg B Bid 0.85 = 0.15)
- Also during the pause, a Complex Options Order to buy A-B arrives for net price of \$0.11
- The Complex Options Order could generate a Legging Order at \$0.96 on the bid of Leg A, relying on the \$0.85 bid to sell Leg B and achieve a net price \$0.11, however the Legging Order is not generated because Leg A has an order on the bid side in an ATR Posting Period which will continue to move through the order book, and would ultimately lead to the immediate removal of the Legging Order once it is no longer at the Exchange's displayed best bid.
- A new ATR Threshold Price of \$1.00 is determined (new reference price of  $\$0.95 + \$0.05 = \$1.00$ )
- If, during the brief pause not to exceed 1 second, no liquidity becomes available within the order's posted price of \$0.95, the System will then execute 10 contracts at \$1.00
- Then, after executing at multiple price levels, the order is posted at \$1.00 for a brief period not to exceed one second to determine whether additional liquidity will become available.

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<sup>7</sup> The "cBBO" represents the net price of a complex strategy comprised of the best bids and offers of the individual legs.

- A new ATR Threshold Price of \$1.05 is determined (new reference price of  $\$1.00 + \$0.05 = \$1.05$ ).
- During this time the MRX BBO would be  $\$1.00 \times \$1.05$ .
- If, during the brief pause not to exceed 1 second, no liquidity becomes available within the order's posted price of \$1.00, the System will then execute 10 contracts at \$1.05.

The Exchange believes from a System processing and user acceptance standpoint, the best practice is to wait for the ATR Posting Period to complete before attempting to generate a Legging Order on the same side in the series, as the time required to complete the ATR Posting Period is minimal. Nasdaq Phlx LLC's ("Phlx") legging order rule in Options 3, Section 14(f)(iii)(C)(2) has the same restriction on generating legging orders during the ATR Posting Period as proposed to be added to MRX's Legging Order rule.<sup>8</sup>

#### Changes to the Single-Leg Price Improvement Mechanism for Crossing Transactions

The Price Improvement Mechanism ("PIM") is a process by which an Electronic Access Member can provide price improvement opportunities for a transaction wherein the Electronic Access Member seeks to facilitate an order it represents as agent, and/or a transaction wherein the Electronic Access Member solicited interest to execute against an order it represents as agent (a "Crossing Transaction"). The Exchange provides a PIM for single-leg<sup>9</sup> orders and for Complex Orders<sup>10</sup> and proposes to amend both single-leg

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<sup>8</sup> Phlx Options 3, Section 14(f)(iii)(C)(2) provides that a Legging Order will not be created, "... (ii) if there is ... a Posting Period under Options 3, Section 15 regarding Acceptable Trade Range on the same side in progress in the series...".

<sup>9</sup> See MRX Options 3, Section 13(a) - (d).

and Complex PIM rules. The Exchange proposes to amend the single-leg PIM in Options 3, Section 13(d)(4) which currently provides,

When a market order or marketable limit order on the opposite side of the market from the Agency Order ends the exposure period, it will participate in the execution of the Agency Order at the price that is mid-way between the best counter-side interest and the NBBO, so that both the market or marketable limit order and the Agency Order receive price improvement. Transactions will be rounded, when necessary, to the \$.01 increment that favors the Agency Order.

Today, unrelated interest in the form of a market order or marketable limit order, on the opposite side of the market from an Agency Order,<sup>11</sup> may end an exposure period<sup>12</sup> within a single-leg PIM and participate in the execution of the Agency Order. The unrelated order would participate at the price that is mid-way between the best counter-side interest and the NBBO, so that both the market order or marketable limit order and

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<sup>10</sup> See MRX Options 3, Section 13(e).

<sup>11</sup> An Agency Order is the part of a Crossing Transaction that an Electronic Access Member represents as agent. See MRX Options 3, Section 13(b).

<sup>12</sup> Upon entry of a Crossing Transaction into the PIM, a broadcast message that includes the series, price and size of the Agency Order, and whether it is to buy or sell, will be sent to all Members. The Exchange designates a time of no less than 100 milliseconds and no more than 1 second for Members to indicate the size and price at which they want to participate in the execution of the Agency Order (“Improvement Orders”). During the exposure period, Improvement Orders may not be canceled, but may be modified to (i) increase the size at the same price, or (ii) improve the price of the Improvement Order for any size up to the size of the Agency Order. During the exposure period, responses (including the Counter-Side Order, Improvement Orders, and any changes to either) submitted by Members shall not be visible to other auction participants. The exposure period will automatically terminate (i) at the end of the time period designated by the Exchange pursuant to Options 3, Section 13(c)(1) above, (ii) upon the receipt of a market or marketable limit order on the Exchange in the same series, or (iii) upon the receipt of a non-marketable limit order in the same series on the same side of the market as the Agency Order that would cause the price of the Crossing Transaction to be outside of the best bid or offer on the Exchange. See MRX Options 3, Section 13(c).

the Agency Order receive price improvement.

First, the Exchange proposes to not permit unrelated marketable interest on the opposite side of the market from the Agency Order, which is received during a single-leg PIM, to early terminate a PIM. The Exchange proposes to amend MRX Options 3, Section 13(d)(4) to instead provide,

Unrelated market or marketable interest (against the MRX BBO) on the opposite side of the market from the Agency Order received during the exposure period will not cause the Crossing Transaction to end early and will execute against interest outside of the Crossing Transaction. If contracts remain from such unrelated order at the time the auction exposure period ends, they will be considered for participation in the order allocation process described in sub-paragraph (3).<sup>13</sup>

Today, Phlx<sup>14</sup> and Nasdaq BX, Inc. (“BX”)<sup>15</sup> similarly do not permit unrelated interest on the opposite side of the market from the Agency Order to early terminate their price

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<sup>13</sup> Subparagraph (3) of Options 3, Section 13(d) describes the manner in which a Counter-Side Order would be allocated. The Counter Side Order is one part of a Crossing Transaction and represents the full size of the Agency Order. The Counter-Side Order may represent interest for the Member's own account, or interest the Member has solicited from one or more other parties, or a combination of both. See MRX Options 3, Section 13(b).

<sup>14</sup> Phlx Options 3, Section 13(b)(4) provides that an unrelated market or marketable Limit Order (against the PBBO) on the opposite side of the market from the PIXL Order received during the Auction will not cause the Auction to end early and will execute against interest outside of the Auction. See Securities Exchange Act Releases No. 79835 (January 18, 2017), 82 FR 8445 (January 25, 2017) (SR-Phlx-2016-119) (Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment No. 1 Thereto, To Amend the PIXL Price Improvement Auction in Phlx Rule 1080(n) and To Make Pilot Program Permanent) and 63027 (October 1, 2010), 75 FR 62160 (October 7, 2010) (SR-Phlx-2010-108) (“PIXL Approval Order”). The Commission noted in SR-Phlx-2016-119 that, “In approving this feature on a pilot basis, the Commission found that ‘allowing the PIXL auction to continue for the full auction period despite receipt of unrelated orders outside the Auction would allow the auction to run its full course and, in so doing, will provide a full opportunity for price improvement to the PIXL Order. Further, the unrelated order would be available to participate in the PIXL order allocation.’ The Exchange does not believe that this provision

improvement auctions. With this proposed change, the single-leg PIM exposure period would continue for the full period despite the receipt of unrelated marketable interest on the opposite side of the market from the Agency Order. Allowing the single-leg PIM to run its full course would provide an opportunity for additional price improvement to the Crossing Transaction. Further, the unrelated interest would participate in the single-leg PIM allocation with any residual contracts remaining after interacting with the order book pursuant to MRX Options 3, Section 13(d). The aforementioned residual contracts are contracts that remain available for execution after the unrelated order on the opposite side of market as the Agency Order, which was marketable with bids and offers on the same side of the market as the Agency Order, executed against bids and offers on the Exchange's order book.

Second, the Exchange also proposes to amend current MRX Options 3, Section 13(c)(5) which states,

The exposure period will automatically terminate (i) at the end of the time period designated by the Exchange pursuant to Options 3, Section 13(c)(1) above, (ii) upon the receipt of a market or marketable limit order on the Exchange in the same series, or (iii) upon the receipt of a non-marketable limit order in the same series on the same side of the market as the Agency Order that would cause the price of the Crossing Transaction to be outside of the best bid or offer on the Exchange.

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has had a significant impact on either the unrelated order or the PIXL Auction process, either for simple or Complex PIXL Orders. The Exchange therefore has requested that the Commission approve this aspect of the Pilot on a permanent basis for both simple and Complex PIXL Orders.”

<sup>15</sup> BX Options 3, Section 13(ii)(D) provides that unrelated market or marketable interest (against the BX BBO) on the opposite side of the market from the PRISM Order received during the Auction will not cause the Auction to end early and will execute against interest outside of the Auction.

Specifically, the Exchange proposes to remove “(ii),” which provides the exposure period will automatically terminate “...(ii) upon the receipt of a market or marketable limit order on the Exchange in the same series...”. The Exchange notes that this sentence applies to the receipt of marketable orders both on the same side and opposite side of the Agency order. As described above, the Exchange proposes to not permit unrelated marketable interest on the opposite side of the market from the Agency Order, which is received during a single-leg PIM, to early terminate a PIM. Therefore, with respect to the opposite side of the Agency Order, the termination of the auction will no longer be possible with the proposed change to MRX Options 3, Section 13(d)(4). With respect to the same side of the Agency Order, today, an unrelated market or marketable limit order in the same series on the same side of the Agency Order would cause the PIM to early terminate as well. At this time the Exchange proposes to not permit an unrelated market or marketable limit order in the same series *on the same side* of the Agency Order to cause the PIM to early terminate. This proposed change will align the functionality of MRX’s PIM to that of BX’s PRISM and Phlx’s PIXL,<sup>16</sup> which do not permit an unrelated market or marketable limit order in the same series on the same side of the Agency Order to cause the PRISM or PIXL to early terminate, unless the BBO improves beyond the price of the Crossing Transaction on the same side. The Exchange notes that a market or marketable limit order in the same series on the same side of the Agency Order cannot interact with a PIM auction. The market or marketable limit order may interact with the single-leg order book, and if there are residual contracts that remain from the market or marketable limit order in the same series on the same side of the Agency Order, they

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<sup>16</sup> See Options 3, Section 13 of BX’s PRISM Rules and Phlx’s PIXL Rules.

could rest on the order book and improve the BBO beyond the price of the Crossing Transaction which would cause early termination pursuant to proposed Options 3, Section 13(c)(5)(ii) as discussed below. In this instance, residual contracts are contracts that remain available for execution after the unrelated order on the same side of market as the Agency Order, which was marketable with bids and offers on the opposite side of the market as the Agency Order, executed against bids and offers on the Exchange's order book. The Exchange believes that this outcome would allow for the single-leg PIM exposure period to continue for the full period despite the receipt of unrelated marketable interest on the same side of the market from the Agency Order, provided residual interest does not go on to rest on the order book, improving the BBO beyond the price of the Crossing Transaction. Allowing the single-leg PIM to run its full course (unless the BBO improves beyond the price of the Crossing Transaction on the same side), rather than early terminate, would provide an opportunity for price improvement to the Agency Order.

Third, the Exchange proposes to amend current MRX Options 3, Section 13(c)(iii) to align the rule text more closely with language in BX Options 3, Section 13(ii)(B)(2).<sup>17</sup> Specifically, the Exchange proposes to amend Options 3, Section 13(c)(5) to delete current "iii" and renumber as "ii". Proposed new Options 3, Section 13(c)(5)(ii) would state, "The exposure period will automatically terminate...(ii) any time the

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<sup>17</sup> BX Options 3, Section 13(ii)(B) provides "Conclusion of Auction. The PRISM Auction shall conclude at the earlier to occur of (1) through (3) below, with the PRISM Order executing pursuant to paragraph (C)(1) or (C)(2) below if it concludes pursuant to (2) or (3) of this paragraph. (1) The end of the Auction period; (2) For a PRISM Auction any time the BX BBO crosses the PRISM Order stop price on the same side of the market as the PRISM Order; (3) Any time there is a trading halt on the Exchange in the affected series."

Exchange best bid or offer improves beyond the price of the Crossing Transaction on the same side of the market as the Agency Order...” The proposed rule is designed to align to BX’s rule text to remove any ambiguity that a market or marketable limit order priced more aggressively than the Agency Order could ultimately rest on the order book, improving the BBO beyond the price of the Crossing Transaction and, therefore, cause the early termination of a PIM auction.

By way of example, assume: MRX 1.00 x 2.00 (10) and a second MRX Market Maker’s quote is 1.00 x 2.10 (10). If a PIM auction starts with a buy at 1.50, and subsequently an order to buy for 20 @ 2.00 arrives, the incoming order would trade with the quote, and the remaining 10 contracts would rest on the order book. Thereafter, the MRX BBO would update to 2.00 x 2.10 and trigger the early termination of the single-leg PIM pursuant to Options 3, Section 13(c)(5)(iii), which is being renumbered to Options 3, Section 13(c)(5)(ii). Early terminating the single-leg PIM in this example is necessary because the price of the single-leg PIM is no longer at the top of book (best price) and would not have execution priority with respect to responses or unrelated interest that arrive. By early terminating the single-leg PIM, MRX allows responses to the single-leg PIM, which arrived prior to the time the Exchange’s best bid and offer improved beyond the Crossing Transaction, to execute.

The Exchange believes the proposed rule text will provide greater clarity to the manner in which the System operates today with respect to early termination of single-leg PIMs when the BBO on the same side improves beyond the price of the Crossing Transaction. The proposed amendment to the rule text is not intended to amend the current System functionality, rather it is intended to make clear that a market or

marketable limit order could ultimately rest on the order book with residual interest and improve the BBO on the same side as the Agency Order beyond the price of the Crossing Transaction and cause the single-leg PIM to early terminate.

Fourth, the Exchange proposes to add a new MRX Options 3, Section 13(c)(5)(iii) which states, "... (iii) any time there is a trading halt on the Exchange in the affected series...". This proposed rule text is not modifying how the System currently operates.<sup>18</sup> Today, a trading halt would cause a single-leg PIM to early terminate. Current MRX Options 3, Section 13(d)(5) notes such an early termination as a result of the aforementioned trading halt. Adding this circumstance to the list of events that would terminate the exposure period would make the list complete and add clarity to the rule. Furthermore, the Exchange notes that in a separate rule change, SR-MRX-2022-5P,<sup>19</sup> the Exchange is proposing to amend Options 3, Section 13(d)(5) to change the System behavior such that if a trading halt is initiated after an order is entered into the PIM, such auction will be automatically terminated with execution solely with the Counter-Side

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<sup>18</sup> MRX Options 3, Section 13(d)(5) currently states that, "If a trading halt is initiated after an order is entered into the Price Improvement Mechanism, such auction will be automatically terminated without execution." Of note, the Exchange is proposing to amend MRX's PIM within a separate rule change, SR-MRX-2022-5P. Among other things, the Exchange proposes to amend the PIM functionality so that if a trading halt is initiated after an order is entered into the PIM, the auction will be automatically terminated with an execution. Specifically, SR-MRX-2022-5P proposes to renumber current MRX Options 3, Section 13(d) to Options 3, Section 13(d)(6) and proposes to state, "If a trading halt is initiated after an order is entered into the Price Improvement Mechanism, such auction will be automatically terminated with execution solely with the Counter-Side Order."

<sup>19</sup> MRX has separately filed to amend Options 3, Section 13(d)(5) within SR-MRX-2022-5P. SR-MRX-2022-5P amends, among other things, the rule text in Options 3, Section 13, except that it does not amend Options 3, Section 13(c)(5).

Order. Today, if a trading halt is initiated after an order is entered into the PIM, such auction will be automatically terminated without execution.<sup>20</sup>

#### Changes to the Complex PIM

In accordance with the proposed rule change regarding the early termination provisions of a single-leg PIM auction explained above, the Exchange also proposes to remove a paragraph related to Complex PIM in current MRX Options 3, Section 13(e)(4)(vi) which provides,

A Complex Price Improvement Mechanism in a complex strategy may be ongoing at the same time as a Price Improvement Auction pursuant to this Rule or during an exposure period pursuant to Supplementary Material .02 to Options 5, Section 2 in a component leg(s) of such Complex Order. If a Complex Price Improvement Mechanism is early terminated pursuant to paragraph (iv) above, and the incoming Complex Order that causes the early termination in the complex strategy is also marketable against a component leg(s) of the complex strategy that is the subject of a concurrent ongoing Price Improvement Auction pursuant to this Rule or an exposure period pursuant to Supplementary Material .02 to Options 5, Section 2, then the concurrent Complex Price Improvement Mechanism and component leg auction(s) are processed in the following sequence: (1) the Complex Price Improvement Mechanism is early terminated; (2) the component leg auction(s) are early terminated and processed; and (3) legging of residual incoming Complex Order interest occurs, except with respect to Stock Option Orders and Stock Complex Orders.

Today, unrelated marketable interest may cause the early termination of a single-leg PIM, if a component leg of a Complex Order is marketable against the order book in the same series as the single-leg PIM. An example is provided below.

#### Example #1 (Complex PIM early termination elimination – opposite side)<sup>21</sup>

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<sup>20</sup> See current MRX Options 3, Section 13(d)(5).

<sup>21</sup> Example 1 addresses an order on the opposite side of the Agency Order, although the same early termination would apply to an order on the same side of an Agency Order pursuant to MRX Options 3, Section 13(e)(4)(vi).

Complex Order Strategy A-B

MM Quote Leg A 4.20 (100) x 4.50 (100)

MM Quote Leg B 4.00 (100) x 4.10 (100)

cBBO 0.10 x 0.50

(Leg A Bid 4.20 – Leg B Offer 4.10 = 0.10)

(Leg A Offer 4.50 – Leg B Bid 4.00 = 0.50)

Complex PIM to Buy A-B 10 @ 0.20, with an election to automatically match to a net price of 0.10

*Complex PIM begins*

Single-leg PIM Auction on Leg A to Buy 100 @ 4.25

*Single-leg PIM begins*

During both auction timers, an unrelated marketable Complex Order A-B to sell 50 @ a net price of 0.10 arrives (the individual legs of the marketable Complex Order would be selling A @ 4.20 and buying B @ 4.10)

Complex Order PIM is early terminated and trades 4 with the Counter-Side Order @ a net price of 0.10 and 6 with the unrelated Complex Order @ a net price of 0.15

Today, the unrelated Complex Order would have legged-in after trading with the Complex PIM and caused the single-leg PIM to early terminate because one leg of the Complex Order was marketable against the Leg A bid of 4.20.

With the proposed amendment, the unrelated Complex Order will not cause the single-leg PIM to early terminate as a result of trading with an unrelated order on the opposite side in the same series. The unrelated marketable Complex Order will trade with the Complex PIM as well as the best bids and offers from the single-leg order book. In this case, the remaining quantity of the unrelated Complex Order would leg-in and trade with the single-leg quotes without impacting the single-leg PIM; the single-leg PIM auction timer would conclude after running its full course. Thereafter, if there are no responses to the single-leg PIM, the Agency Order would trade 100 @ 4.25 with the Counter-Side Order.

Today, if a Complex PIM is early terminated pursuant to MRX Options 3, Section

14(e)(4)(iv)<sup>22</sup> and the incoming Complex Order that causes the early termination in the

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<sup>22</sup> MRX Options 3, Section 14(e)(4)(iv) provides, “The exposure period will automatically terminate (A) at the end of the time period designated by the Exchange pursuant to subparagraph (4)(i) above, (B) upon the receipt of a Complex Order in the same complex strategy on either side of the market that is

complex strategy is also marketable against a component leg(s) of the complex strategy that is the subject of a concurrent ongoing single-leg PIM, or an exposure period pursuant to flash functionality as provided for in Supplementary Material .02 to Options 5, Section 2,<sup>23</sup> then the concurrent Complex PIM and component leg auction(s) are processed in accordance with MRX Options 3, Section 14(e)(4)(vi).

With this proposed change, a single-leg PIM will no longer early terminate as a result of the arrival of unrelated marketable interest on either the same or the opposite side of the market from the Agency Order. Because a single-leg PIM will no longer early terminate from the arrival of unrelated marketable interest on either the same or the opposite side of the market from the Agency Order, and because the flash functionality will no longer exist,<sup>24</sup> the Exchange proposes to delete MRX Options 3, Section 13(e)(4)(vi) in its entirety.

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marketable against the Complex Order Book or bids and offers for the individual legs, or (C) upon the receipt of a non-marketable Complex Order in the same complex strategy on the same side of the market as the Agency Complex Order that would cause the execution of the Agency Complex Order to be outside of the best bid or offer on the Complex Order Book.”

<sup>23</sup> Pursuant to Supplementary Material .02 to ISE Options 5, Section 2, ISE permits certain orders to first be exposed at the NBBO to all Members for execution at the National Best Bid or Offer (“NBBO”) before the order would be routed to another market for execution (“flash functionality”). MRX Options 5 Rules are incorporated by reference to ISE Options 5 Rules.

<sup>24</sup> MRX filed a rule change to eliminate its flash functionality. See Securities Exchange Act Release No. 94897 (May 12, 2022), 87 FR 30294 (May 18, 2022) (SR-ISE-2022-11) (Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend Routing Functionality in Connection With a Technology Migration). MRX’s rule regarding flash functionality at Supplementary Material .02 to Options 5, Section 2 is incorporated by reference to Nasdaq ISE, LLC Options 5 rules. Therefore, eliminating the flash functionality from ISE Options 5 rules also eliminates the flash functionality from MRX’s Options 5 rules.

Additionally, the Exchange proposes to remove a related paragraph in current Supplementary Material .01(b)(iii) of MRX Options 3, Section 14 describing Complex Order Exposure, which states,

A Complex Order Exposure in a complex strategy may be ongoing in a complex strategy at the same time as a Price Improvement Auction pursuant to Options 3, Section 13 or during an exposure period pursuant to Supplementary Material .02 to Options 5, Section 2 in a component leg(s) of such complex strategy. If a Complex Order Exposure is early terminated pursuant to paragraph (ii) above, and the incoming Complex Order that causes the early termination in the complex strategy is also marketable against a component leg(s) of the complex strategy that is the subject of a concurrent ongoing Price Improvement Auction pursuant to Options 3, Section 13 or an exposure period pursuant to Supplementary Material .02 to Options 5, Section 2, then the concurrent Complex Order and component leg auction(s) are processed in the following sequence: (1) the Complex Order exposure is early terminated; (2) the component leg auction(s), which are early terminated and processed; and (3) legging of residual incoming Complex Order interest occurs.

Today, unrelated marketable interest may cause the early termination of a single-leg PIM, therefore, when a Complex Order legs into the single-leg order book, it may cause the early termination of a single-leg PIM if that leg was on either the same or the opposite side of the market from the single-leg PIM. An example is provided below.

Example # 2 (Complex Exposure early termination elimination – opposite side)<sup>25</sup>

Complex Order Strategy A-B

MM Quote Leg A 4.20 (100) x 4.50 (100)

MM Quote Leg B 4.00 (100) x 4.10 (100)

cBBO 0.10 x 0.50

(Leg A Bid 4.20 – Leg B Offer 4.10 = 0.10)

(Leg A Offer 4.50 – Leg B Bid 4.00 = 0.50)

Complex Order in A-B Strategy marked for Complex Order Exposure to buy 10 @ 0.20

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<sup>25</sup> Example 2 addresses an order on the opposite side of the Agency Order, although the same early termination would apply to an order on the same side of the Agency Order pursuant to Supplementary Material .01(b)(iii) of MRX Options 3, Section 14.

*Complex Order Exposure auction begins*

Single-leg PIM Auction on Leg A to Buy 100 @ 4.25

*Single-leg PIM begins*

During both auction timers, unrelated marketable Complex Order A-B Sell 50 @ 0.10 arrives

Complex Order Exposure is early terminated and the exposed order to buy A-B 10 @ 0.20 and trades with the unrelated Complex Order 10 @ net price of 0.10

Today, the unrelated marketable Complex Order would have legged-in after trading with the Complex Order Exposure and caused the single-leg PIM to early terminate because one leg of the marketable Complex Order on the opposite side was marketable against the Leg A bid of 4.20.

With the proposed amendment, the unrelated marketable Complex Order will not cause the single-leg PIM on the opposite side in the same series to early terminate as a result of the component leg of the Complex Order being marketable against the bid in the same series as the single-leg PIM. The unrelated marketable Complex Order will trade with the Complex Order Exposure order as well as the best bids and offers from the single-leg order book. In this case, the remaining quantity would leg-in and trade with the single-leg quotes without impacting the single-leg PIM; the auction timer would conclude after running its full course. Thereafter, the Crossing Transaction would trade 100 @ 4.25 Agency Order with the Counter-Side Order.

Today, when a Complex Order Exposure early terminates, as a result of the arrival of unrelated marketable Complex Order interest that trades against the exposed Complex Order and the best bids and offers on the single-leg order book (as described in Supplementary Material .01(b)(ii) of MRX Options 3, Section 14), the component legs of the unrelated marketable Complex Order on either the same or the opposite side of the single-leg PIM may leg-in and cause early termination of the single-leg PIM. Thereafter, the component leg auction(s) would be processed pursuant to Supplementary Material .01(b)(iii) of MRX Options 3, Section 14. With this proposed change to MRX Options 3, Section 13(d)(4), a single-leg PIM will no longer early terminate from the arrival of unrelated marketable interest on either the same or opposite side of the market from the

Agency Order. Therefore, because a single-leg PIM will no longer early terminate from the arrival of unrelated marketable interest on either the same or opposite side of the market from the Agency Order, and because the flash functionality will no longer exist,<sup>26</sup> the early termination provisions addressed in Supplementary Material .01(b)(iii) of MRX Options 3, Section 14 will no longer arise, accordingly, the Exchange proposes to delete Supplementary Material .01(b)(iii) of MRX Options 3, Section 14 in its entirety.

#### Complex Orders Delayed Functionality

The Exchange proposes to delay the implementation of certain functionality in connection with the technology migration. Specifically, Stock-Option Strategies,<sup>27</sup> Stock-Complex Strategies,<sup>28</sup> Complex QCC with Stock Orders,<sup>29</sup> and QCC with Stock

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<sup>26</sup> Id.

<sup>27</sup> A Stock-Option Strategy is the purchase or sale of a stated number of units of an underlying stock or a security convertible into the underlying stock (“convertible security”) coupled with the purchase or sale of options contract(s) on the opposite side of the market representing either (A) the same number of units of the underlying stock or convertible security, or (B) the number of units of the underlying stock necessary to create a delta neutral position, but in no case in a ratio greater than eight-to-one (8.00), where the ratio represents the total number of units of the underlying stock or convertible security in the option leg to the total number of units of the underlying stock or convertible security in the stock leg. See MRX Options 3, Section 14(a)(2).

<sup>28</sup> A Stock-Complex Strategy is the purchase or sale of a stated number of units of an underlying stock or a security convertible into the underlying stock (“convertible security”) coupled with the purchase or sale of a Complex Options Strategy on the opposite side of the market representing either (A) the same number of units of the underlying stock or convertible security, or (B) the number of units of the underlying stock necessary to create a delta neutral position, but in no case in a ratio greater than eight-to-one (8.00), where the ratio represents the total number of units of the underlying stock or convertible security in the option legs to the total number of units of the underlying stock or convertible security in the stock leg. Only those Stock-Complex Strategies with no more than the applicable number of legs, as determined by the Exchange on a class-by-class basis, are eligible for processing. See MRX Options 3, Section 14(a)(3).

Orders,<sup>30</sup> as defined in MRX Options 3, Sections 14(a)(2) and (3) and (b)(15) and Options 3, Section 7(t), respectively, and Trade Value Allowance,<sup>31</sup> as defined in Supplementary Material .03 of MRX Options 3, Section 14, would not be available for symbols that migrated to the platform (“Delayed Functionalities”). Today, these Delayed Functionalities are available to Members.

The Delayed Functionalities would not be available for symbols that migrated to the platform and thereafter, until such time as the Exchange recommenced their availability by announcing a date in an Options Trader Alert, which date would be prior to one year from the start of the migration of the symbols to the platform. The Exchange is staging the migration to provide maximum benefit to its Members while also ensuring

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<sup>29</sup> A Complex QCC with Stock Order is a Qualified Contingent Cross Complex Order, as defined in subparagraph (b)(6) of Options 3, Section 14, entered with a stock component to be communicated to a designated broker-dealer for execution pursuant to MRX Options 3, Section 12(f).

<sup>30</sup> A QCC with Stock Order is a Qualified Contingent Cross Order, as defined in Options 3, Section 7(j), entered with a stock component to be communicated to a designated broker-dealer for execution pursuant to Options 3, Section 12(c). See Options 3, Section 7(t).

<sup>31</sup> Trade Value Allowance permits Stock-Option Strategies and Stock-Complex Strategies at valid increments Options 3, Section 14(c)(1), Stock-Option Strategies and Stock-Complex Strategies to trade outside of their expected notional trade value by a specified amount, in order to facilitate the execution of the stock leg and options leg(s). The Trade Value Allowance is the percentage difference between the expected notional value of a trade and the actual notional value of the trade. The amount of Trade Value Allowance permitted may be determined by the Member, or a default value determined by the Exchange and announced to Members; provided that any amount of Trade Value Allowance is permitted in mechanisms pursuant to Options 3, Sections 11 and 13 when auction orders do not trade solely with their contra-side order. See Supplementary Material .03 of MRX Options 3, Section 14.

a successful rollout. The Delayed Functionalities will provide the Exchange additional time to code, test and implement this functionality on the enhanced platform.

#### Other Complex Order Amendments

##### *Opening Only Complex Order*

Currently, MRX Options 3, Section 14(b)(10) states, “An Opening Only Complex Order is a Limit Order that may be entered for execution during the Complex Opening Process described in Supplementary Material .04 to Options 3, Section 14. Any portion of the order that is not executed during the Complex Opening Process is cancelled.” The Exchange proposes to amend MRX Options 3, Section 14(b)(10) to remove the word “Limit” within the description of the Opening Only Complex Order to allow Opening Only Complex Orders to be submitted as Market Orders or Limit Orders. This amendment is consistent with current System operations. The Exchange believes that both Market and Limit Orders should be permitted in the Complex Opening Process.<sup>32</sup> Market Orders are typically the most aggressively priced orders, while Limit Orders have a limit price contingency that Market Orders do not have. Allowing both of these order types to participate in the Complex Opening Process allows greater liquidity to be present to determine the Opening Price.<sup>33</sup> All Members may enter both Market Orders and Limit Orders during the Complex Opening Process, as well as intra-day.

##### *Complex QCC with Stock Orders*

The Exchange proposes to correct a non-substantive citation with MRX Options

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<sup>32</sup> The Complex Opening Process is described in Supplementary Material .04 of MRX Options 3, Section 14.

<sup>33</sup> The Opening Price is described in MRX Options 3, Section 14(a)(2).

3, Section 14(b)(15) related to Complex QCC with Stock Orders. The current citation to MRX Options 3, Section 12(e) within the description of this order type is incorrect. The citation should be to MRX Options 3, Section 12(f). Correcting this cross reference will clarify the description of the order type.

*Complex Preferred Orders*

The Exchange proposes to add “Complex Preferred Orders” to the list of Complex Order Types in Options 3, Section 14(b). This proposal describes how Complex Preferred Orders will work. MRX Options 2, Section 10 currently describes Preferred Orders which may be Complex Preferred Orders.<sup>34</sup> To complete the list of Complex Order types, the Exchange proposes to state in MRX Options 3, Section 14(b)(19) that,

[a] Complex Preferred Order is a Complex Order for which an Electronic Access Member has designated a Preferred Market Maker as described in Options 2, Section 10. The component leg(s) of a Complex Order with a Preferred Order instruction may allocate pursuant to Options 3, Section 10(c)(1)(C) when the Complex Preferred Order legs into the single-leg market provided that the Preferred Market Maker is quoting at the NBBO for a component leg(s) of the Complex Preferred Order at the time the Complex Preferred Order is received. A Preferred Market Maker will not receive an allocation pursuant to Options 3, Section 10(c)(1)(C) for a component leg(s) of a Complex Preferred Order if the

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<sup>34</sup> MRX Options 2, Section 10 provides, “Preferred Orders. An Electronic Access Member may designate a “Preferred Market Maker” on orders it enters into the System (“Preferred Orders”). (1) A Preferred Market Maker may be the Primary Market Maker appointed to the options class or any Competitive Market Maker appointed to the options class. (2) If the Preferred Market Maker is not quoting at a price equal to the NBBO at the time the Preferred Order is received, the allocation procedure described in Options 3, Section 10(c)(1)(C) shall not be applied to the execution of the Preferred Order. (3) If the Preferred Market Maker is quoting at the NBBO at the time the Preferred Order is received, the allocation procedure described in Options 3, Section 10(c)(1)(C) shall be applied to the execution of the Preferred Order.”

Preferred Market Maker is not quoting at the NBBO for that leg at the time the Complex Preferred Order is received.

Allocation of a leg(s) of a Complex Preferred Order, pursuant to MRX Options 3, Section 10, would occur when a leg(s) of a Complex Order trades synthetically with the Preferred Market Maker's<sup>35</sup> quote that was at the NBBO on the single-leg order book in accordance with MRX Options 3, Section 10. A Preferred Market Maker must be quoting at the NBBO for a component leg(s) of the Complex Preferred Order at the time the Complex Preferred Order is received. As is the case for single-leg orders, a Preferred Market Maker will not receive an allocation pursuant to Options 3, Section 10(c)(1)(C) for a component leg(s) of a Complex Preferred Order if the Preferred Market Maker is not quoting at the NBBO for that leg at the time the Complex Preferred Order is received.

With respect to orders which leg into the single-leg order book, MRX Options 3, Section 14(c) states that, "Except as otherwise provided in this Rule, complex strategies shall be subject to all other Exchange Rules that pertain to orders and quotes generally." Additionally, the Exchange notes that orders that execute against interest on the single-leg order book, including the options leg of Complex Options Strategies are subject to the provisions of MRX Options 3, Section 5 which, among other things, describes the NBBO Price Protection and Trade-Through Compliance and Locked or Crossed Markets.

Further, Supplementary Material .01 to Options 9, Section 1 provides,

[i]t will be a violation of this Rule for a Member to have a relationship with a third party regarding the disclosure of agency orders. Specifically,

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<sup>35</sup> Preferred Market Maker may be the Primary Market Maker appointed to the options class or any Competitive Market Maker appointed to the options class. See MRX Options 2, Section 10(a)(1).

a Member may not disclose to a third party information regarding agency orders represented by the Member prior to entering such orders into the System to allow such third party to attempt to execute against the Member's agency orders. A Member's disclosing information regarding agency orders prior to the execution of such orders on the Exchange would provide an inappropriate informational advantage to the third party in violation of this Rule. For purposes of this paragraph .01, a third party includes any other person or entity, including affiliates of the Member. Nothing in this paragraph is intended to prohibit a Member from soliciting interest to execute against an order it represents as agent (a "solicited order"), the execution of which is governed by Options 3, Section 22(e) and paragraph .02 of Supplementary Material to Options 3, Section 22.

This rule prohibits a Member from notifying a Preferred Market Maker of an intention to submit a Complex Preferred Order so that the Preferred Market Maker could change its quotation to match the NBBO immediately prior to submission of the Complex Preferred Order, and then fade its quote. The Exchange represents that it proactively conducts surveillance for, and enforces against, violations of Supplementary Material .01 to Options 9, Section 1.

The Exchange's proposal to add "Complex Preferred Orders" to the list of Complex Order Types in MRX Options 3, Section 14(b) will continue to encourage Preferred Market Makers to quote aggressively in an effort to execute against the Complex Preferred Order. Preferred Market Makers are not able to ascertain if a particular order is a Complex Preferred Order. The Exchange believes the proposal will encourage Market Makers to quote tighter and add a greater amount of liquidity on MRX in an attempt to interact with Complex Preferred Orders that are sent to the Exchange. This order flow will benefit all market participants on the Exchange because any MRX Member may interact with that order flow.

The addition of Complex Preferred Orders to the list of order types in MRX

Options 3, Section 14(b) will make clear to Members the availability of Complex Preferred Orders. Both Phlx<sup>36</sup> and MIAx<sup>37</sup> have a similar order type.

*Options 3, Section 14(c)(2) and MRX Supplementary Material .02 to Options 3, Section 14*

The Exchange proposes a non-substantive amendment in MRX Options 3, Section 14(c)(2) to amend an incorrect reference to “ISE”. The reference should be to “MRX”. Also, the Exchange proposes to make a non-substantive technical correction in Supplementary Material .02 of MRX Options 3, Section 14 to make a grammatical amendment to change the word “which” to “whom”.

*Complex Opening Price Determination*

The Exchange proposes to amend the citation within Supplementary Material .05(d)(2) to Options 3, Section 14 which states, “*Potential Opening Price*. The System will calculate the Potential Opening Price by identifying the price(s) at which the maximum number of contracts can trade (“maximum quantity criterion”) taking into consideration all eligible interest pursuant to Supplementary Material .06(b) to this Rule.”

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<sup>36</sup> See Phlx Options 3, Section 14(b)(v) which specifies that a Directed Order may be submitted as a Complex Order. See also Phlx Options 3, Section 7(b)(11) which describes a Directed Order. Phlx’s Options 2, Section 10 Directed Order rule is similar to MRX’s Options 2, Section 10 Preferred Order rule.

<sup>37</sup> A “Directed Order” is an order entered into the System by an Electronic Exchange Member with a designation for a Lead Market Maker (referred to as a “Directed Lead Market Maker”). Only Priority Customer Orders will be eligible to be entered into the System as a Directed Order by an Electronic Exchange Member. See MIAx Rule 100. See also MIAx Rule 514(h) which describes allocation. Today, MIAx permits Directed Orders to be submitted as a New Order - Multileg. See [https://www.miaxoptions.com/sites/default/files/page-files/FIX%20Order%20Interface\\_FOI\\_v2.5a\\_re.pdf](https://www.miaxoptions.com/sites/default/files/page-files/FIX%20Order%20Interface_FOI_v2.5a_re.pdf). Pursuant to MIAx’s specifications, “AllocAccount (Tag 79) is defined as MIAx assigned directed firm code of the designated participant for directed order flow.”

The citation to Supplementary Material .06(b), related to Uncrossing is incorrect. The citation should be to Supplementary Material .05(b), related to Complex Opening Price Determination. The citation is referring is to eligible interest during the Complex Opening Price Determination.

The Exchange proposes to amend the Complex Opening Price Determination in Supplementary Material .05(d)(3) to Options 3, Section 14 to allow for additional contracts to be included in the Potential Opening Price calculation leading to better price discovery and more contracts executing as part of the Complex Opening Price Determination process.

With this proposal, when the interest does not match the size and there is more than one Potential Opening Price at which the interest may execute, the Exchange would calculate a Potential Opening Price using the mid-point of the highest (lowest) executable offer (bid) price and the next available executable offer (bid) price rounded, if necessary, down (up) to the closest minimum trading increment. As a result, more options contracts are likely to be executed at better prices than under the current rule. Example number 3 below demonstrates this behavior. This behavior differs from current rules in that, today, the Exchange would calculate the Potential Opening Price as the highest (lowest) executable bid (offer) when there would be contracts left unexecuted on the bid (offer) side of the complex market.

Further, the proposed amendment will allow Market Complex Orders to participate in the Opening Price Determination process in a broader capacity than the rule allows for today. Today, if there are only Market Complex Orders on both sides of the market, or if there are Market Complex Orders on the bid (offer) side of the market for

greater than the total size of Complex Orders on the offer (bid) side of the market, then MRX will not trade in the Complex Opening Price Determination process and would instead open pursuant to an Uncrossing as provide for in Supplementary Material .06(b) of MRX Options 3, Section 14. With the proposed amendment Market Complex Orders will be included in the Complex Opening Price Determination process in both situations described above, leading to more contracts being able to trade in the Complex Opening Price Determination with better price discovery. Example 5 below illustrates this point.

Finally, the proposed amendment considers the Boundary Price earlier in the Complex Opening Process. Today, the rule seeks to satisfy the maximum quantity criterion first and then consider Boundary Prices. With the proposed change, the Exchange will consider the Boundary Price while determining the Potential Opening Price, thereby enabling as many contracts as possible to trade sooner, which reduces risk for market participants awaiting executions. With this proposal, the Complex Opening Process considers the Boundary Price earlier in the process and the Boundary Price becomes the limit price for Market Complex Orders. This proposal should maximize the number of contracts executed, to the benefit of those Members participating in that complex strategy.

Current Supplementary Material .05 of MRX Options 3, Section 14 describes how Complex Orders arrive at an Opening Price. Specifically, Supplementary .05(b) of MRX Options 3, Section 14 describes the interest that is eligible within the Complex Opening Price Determination. The rule text provides that the System would calculate Boundary

Prices<sup>38</sup> at or within which Complex Orders may be executed during the Complex Opening Price Determination.<sup>39</sup> Current Supplementary Material .05(d)(2) of MRX Options 3, Section 14 provides, “The System will calculate the Potential Opening Price<sup>40</sup> by identifying the price(s) at which the maximum number of contracts can trade (“maximum quantity criterion”) taking into consideration all eligible interest pursuant to Supplementary Material .06(b) to this Rule.”<sup>41</sup> The System takes into consideration all Complex Orders, identifies the price at which the maximum number of contracts can trade, and calculates the Potential Opening Price as described in Supplementary Material .05(d)(2) of MRX Options 3, Section 14. Supplementary Material .05(d)(3) of MRX Options 3, Section 14 further describes the way the System handles more than one Potential Opening Price. Current Supplementary Material .05(d)(3) of MRX Options 3, Section 14 states,

When two or more Potential Opening Prices would satisfy the maximum quantity criterion: (A) without leaving unexecuted contracts on the bid or offer side of the market of Complex Orders to be traded at those prices, the System takes the highest and lowest of those prices and takes the mid-point; provided that (1) if the highest and/or lowest price described above is through the price of a bid or offer that is priced to not allocate in the

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<sup>38</sup> The Boundary Price is described in Supplementary Material .05(d)(1) of MRX Options 3, Section 14(a)(1).

<sup>39</sup> See Supplementary Material .05(d)(1) of MRX Options 3, Section 14.

<sup>40</sup> The Potential Opening Price is described in Supplementary Material .05(d)(2) of MRX Options 3, Section 14.

<sup>41</sup> The Exchange proposes to amend the citation within Supplementary Material .05(d)(2) to Options 3, Section 14 within this proposal. The citation to Supplementary Material .06(b), related to Uncrossing, should be to Supplementary Material .05(b), related to Complex Opening Price Determination. Specifically, the reference is to Eligible Interest during the Complex Opening Price Determination.

Complex Opening Price Determination, the highest and/or lowest price will be rounded to the price of such bid or offer that is priced to not allocate before taking the mid-point, and (2) if the midpoint is not expressed as a permitted minimum trading increment, it will be rounded down to the nearest permissible minimum trading increment; or (B) leaving unexecuted contracts on the bid (offer) side of the market of Complex Orders to be traded at those prices, the Potential Opening Price is the highest (lowest) executable bid (offer) price. Notwithstanding the foregoing: (C) if there are Market Complex Orders on the bid (offer) side of the market that would equal the full quantity of Complex Orders on offer (bid) side of the market, the limit price of the highest (lowest) priced Limit Complex Order is the Potential Opening Price; and (D) if there are only Market Complex Orders on both sides of the market, or if there are Market Complex Orders on the bid (offer) side of the market for greater than the total size of Complex Orders on the offer (bid) side of the market, there will be no trade in the Complex Opening Price Determination and the complex strategy will open pursuant to the Complex Uncrossing Process described in Supplementary Material .06(b) to this Rule.

At this time, the Exchange proposes to amend the System handling within the Complex Opening Process by replacing Supplementary Material .05(d)(3) of MRX Options 3, Section 14 with the following proposed rule text,

**Opening Price Determination.** When interest crosses and does not match in size, the System will calculate the Potential Opening Price based on the highest (lowest) executable offer (bid) price when the larger sized interest is offering (bidding), provided, however, that if there is more than one price at which the interest may execute, the Potential Opening Price when the larger sized interest is offering (bidding) shall be the mid-point of the highest (lowest) executable offer (bid) price and the next available executable offer (bid) price rounded, if necessary, down (up) to the closest minimum trading increment; or

When interest crosses and is equal in size, the System will calculate the Potential Opening Price based on the mid-point of lowest executable bid price and the highest executable offer price, rounded, if necessary, up to the closest minimum trading increment.

(A) Executable bids/offers include any interest which could be executed at the Potential Opening Price without trading through residual interest or the Boundary Price or without trading at the Boundary Price where there is Priority Customer interest at the best bid or offer for any leg, consistent with paragraph Options 3, Section 14(c)(2).

(B) Executable bids/offers will be bounded by the Boundary Price on the contra-side of the interest, for determination of the Potential Opening Price described above.

This proposed new Complex Opening Process seeks to maximize the interest which is traded during the Complex Opening Price Determination process and deliver a rational price for the available interest at the opening. The Complex Opening Price Determination process maximizes the number of contracts executed during the Complex Opening Process and ensures that residual contracts of partially executed orders or quotes are at a price equal to or inferior to the Opening Price. In other words, the logic ensures there is no remaining unexecuted interest available at a price which crosses the Opening Price. If multiple prices exist that ensure that there is no remaining unexecuted interest available through such price(s), the opening logic selects the mid-point of such price points. Below are some examples.

Example # 3 (More Than One Potential Opening Price – Mid-Point of Larger-Sized Interest)

*“if there is more than one price at which the interest may execute, the Potential Opening Price when the larger sized interest is offering (bidding) is the mid-point of the highest (lowest) executable offer (bid) price and the next available executable offer (bid) price rounded, if necessary, down (up) to the closest minimum trading increment”*

*Assume*

Complex Order Strategy: A+B strategy

Quote for Leg A @ 1.75 x 1.95

Quote for Leg B @ 1.75 x 1.95

Boundary Price = 3.50 (10) - 3.90 (10)

(Leg A Bid 1.75 + Leg B Bid 1.75 = 3.50)

(Leg A Offer 1.95 + Leg B Offer 1.95 = 3.90)

Complex Order #1: Buy 20 for \$3.79

Complex Order #2: Buy 20 at \$3.73

Complex Order #3: Sell 20 at \$3.60

With the proposed amendment, Opening Price would be for 20 strategies at a price of \$3.76. The execution price of \$3.76 is derived from the mid-point of the lowest executable bid price of \$3.73 and the next available executable bid price of \$3.79. In this example, 20 strategies can be opened at multiple price points ranging from \$3.73 up to \$3.79. None of these Potential Opening Prices would cause the unexecuted \$3.73 buy order to be available at a price which crosses the Opening Price, therefore, the System opens at the mid-point of such prices, \$3.76.

Today, with this same example, the Opening Price would be 3.79, the highest executable bid price, which provides the offer side with all price improvement. With the proposed amendment, the Opening Price seeks to distribute to the extent possible price improvement to both the bid and offer side of the transaction.

Example # 4 (Mid-Point When Interest is Equal In Size)

*“Provided such crossing interest is equal in size, the System will calculate the Potential Opening Price based on the mid-point of lowest executable bid price and the highest executable offer price, rounded, if necessary, up to the closest minimum trading increment”*

Complex Order Strategy: A+B strategy

Quote for Leg A @ 1.75 x 1.95 each

Quote for Leg B @ 1.75 x 1.95 each

Boundary Price= 3.50 (10) - 3.90 (10)

(Leg A Bid 1.75 + Leg B Bid 1.75 = 3.50)

(Leg A Offer 1.95 + Leg B Offer 1.95 = 3.90)

Complex Order #1: Buy 10 for \$3.78

Complex Order #2: Buy 20 for \$3.74

Complex Order #3: Buy 10 at \$3.71

Complex Order #4: Sell 20 at \$3.64

Complex Order #5: Sell 20 at \$3.66

With the proposed amendment, the Opening Price will be for 40 strategies at a price of \$3.69. The execution price of \$3.69 is derived from the mid-point of the lowest executable bid price of \$3.71 and the highest executable offer price of \$3.66, rounded up to the closest minimum trading increment. Today, rounding would be down and with this proposal the rounding would be up.

If the example were changed slightly such that Complex Order #4 and Complex Order #5 were Market Complex Orders rather than Limit Orders, the Opening Price for the 40 strategies would be \$3.61, which is derived from the mid-point of the lowest executable bid price of \$3.71 and the highest executable offer of \$3.50 (which is the Boundary Price of the sell Market Complex Orders), rounded up to the closest minimum trading increment.

The Exchange notes that executable bids/offers include any interest that could be executed at the net price without trading through residual interest or the Boundary Price, or without trading at the Boundary Price where there is Priority Customer interest at the best bid or offer for any leg, consistent with current MRX Options 3, Section 14(c)(2).<sup>42</sup>

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<sup>42</sup> MRX Options 3, Section 14(c)(2) provides, “Complex strategies will not be executed at prices inferior to the best net price achievable from the best ISE bids and offers for the individual legs. Notwithstanding the provisions of Options 3, Section 10: (i) a Complex Options Strategies may be executed at a total credit or debit price with one other Member without giving priority to bids or offers established on the Exchange that are no better than the bids or offers in the individual options series comprising such total credit or debit; provided, however, that if any of the bids or offers established on the Exchange consist of a Priority Customer Order, the price of at least one leg of the complex strategy must trade at a price that is better than the corresponding bid or offer on the Exchange by at least one minimum trading increment for the series as defined in Options 3, Section 3; (ii) the option leg of a Stock-Option Strategy has priority over bids and offers for the individual options series established on the Exchange by Professional Orders and market maker quotes that are no better than the price of the options leg, but not over such bids and offers established by Priority Customer

Further, executable bids/offers would be bounded to the Boundary Price on the contra-side of the interest, for determination of the Opening Price described above when crossing interest is different in size and when crossing interest is equal in size.

The amendment will benefit Members by smoothing the way for the complex strategy to open with Market Complex Orders. Today, Market Complex Orders participate in the Complex Opening Process in a limited capacity as explained above. By permitting Market Complex Orders to participate in the Complex Opening Price Determination process in more situations, the Exchange can provide more opportunity for Complex Orders to trade in the Opening Process without having to go to the Uncrossing process. Market conditions can change between the Complex Opening Price Determination process and the Uncrossing process, which can lead to missed opportunities for execution. The proposed rule would have the Boundary Price assign limits to the Opening Price and therefore permit Market Complex Orders to participate in the Complex Opening Process to the extent that they are within the Boundary Prices. With this change, MRX would permit a complex strategy to calculate an Opening Price utilizing a greater number of Market Complex Orders, which benefits the Opening Process by taking into account these more aggressively priced orders<sup>43</sup> while also bringing more liquidity into the Opening Price calculation.

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Orders; and (iii) the options legs of a Stock-Complex Strategy are executed in accordance with subparagraph (c)(2)(i).

<sup>43</sup> The allowance of a greater number of Market Complex Orders within the Opening Process provides a greater depth of price discovery for an options series. As noted above, the Boundary Price would assign limits to the Opening Price, therefore preventing Market Complex Orders which are aggressively priced from negatively impacting the Opening Price.

Example # 5 (Market Complex Orders trading in Opening Price Determination)

*“Provided interest crosses and does not match in size, the System will calculate the Potential Opening Price based on the highest (lowest) executable offer (bid) price when the larger sized interest is offering (bidding)”*

As referenced above,

*Assume*

Complex Order Strategy: A+B strategy

Quote for Leg A @ 1.75 x 2.00

Quote for Leg B @ 1.75 x 2.00

Boundary Price = 3.50 (10) – 4.00 (10)

(Leg A Bid 1.75 + Leg B Bid 1.75 = 3.50)

(Leg A Offer 2.00 + Leg B Offer 2.00 = 4.00)

Market Complex Order #1: Buy 30

Complex Order #2: Sell 20 at \$3.95

After Complex Opening Price Determination process, but before Uncrossing

ABBO for Leg A updates: 1.85 x 1.90

ABBO for Leg B updates 1.85 x 1.90

cNBBO: 3.70 x 3.80

(ABBO Leg A Bid 1.85 + Leg B Bid 1.85 = 3.70)

(ABBO Leg A Offer 1.90 + Leg B Offer 1.90 = 3.80)

With the proposed amendment the Market Complex Order can be considered in the Complex Opening Price Determination process and therefore is able to trade at the Opening Price of \$4.00 for 20 strategies with Complex Order #2 and also able to trade 10 strategies at a net price \$4.00 with the individual legs at the best bids and offers before the ABBO updates, leaving no place for this complex strategy to trade. The Opening

Price in this example is determined as the lowest executable bid because the bid side is the larger sized interest, which is limited by the Boundary Price on the offer side at 4.00.

Today, Market Complex Orders with a larger quantity than the quantity of interest on the contra side of the market do not participate in the Complex Opening Price Determination and can only execute during the Uncrossing pursuant to Supplementary Material .05(d)(6) of MRX Options 3, Section 14. In the example above, the ABBO of each leg updates after the Complex Opening Price Determination process and restricts the Market Complex Order and Complex Limit Order from trading in the Uncrossing because they cannot match at a price that would be within the Price Limits for Complex Orders pursuant to MRX Options 3, Section 16(a).

Finally, with this proposal and as demonstrated in Example 5 above, a complex strategy would open pursuant to Supplementary Material .05(d)(5) of MRX Options 3, Section 14, with less contracts becoming subject to the Uncrossing pursuant to Supplementary Material .05(d)(6) of MRX Options 3, Section 14. As a result of this change, more interest would be able to trade within the Opening Process, ensuring a greater number of contracts are executed on MRX at the Complex Opening and lessening the likelihood that contracts which remain unmatched during the Complex Opening Price Determination process receive no execution in the Uncrossing due to changing market conditions.<sup>44</sup>

Phlx has a similar methodology to arrive at a complex opening price at Phlx Options 3, Section 14(d)(ii)(C)(2)<sup>45</sup> as compared to proposed Supplementary Material

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<sup>44</sup> Unmatched orders would rest on the Order Book with the potential to execute intra-day.

<sup>45</sup> COOP Evaluation. Upon expiration of the COOP Timer, the System will conduct a COOP Evaluation to determine, for a Complex Order Strategy, the price at which the maximum number of contracts can trade, taking into account Complex Orders marked All-or-None (which will be executed if possible) unless the maximum number of contracts can only trade without including All-or-None Orders. The Exchange will open the Complex Order Strategy at that price, executing marketable trading interest, in the following order: first, to Public Customers in time priority; next to Phlx electronic market makers on a pro rata

.05(d)(3) of MRX Options 3, Section 14. Phlx's COOP Evaluation and MRX's proposed Opening Price Determination both seek the price at which the maximum number of

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basis; and then to all other participants on a pro rata basis. The imbalance of Complex Orders that are unexecutable at that price are placed on the CBOOK.

(1) No trade possible. If at the end of the COOP Timer the System determines that no market or marketable limit Complex Orders or COOP Sweeps, Complex Orders or COOP Sweeps that are equal to or improve the cPBBO, and/or Complex Orders or COOP Sweeps that cross within the cPBBO exist in the System, all Complex Orders received during the COOP Timer will be placed on the CBOOK, as described in paragraph (f) below.

(2) Trade is possible. If at the end of the COOP Timer the System determines that there are market or marketable limit Complex Orders or COOP Sweeps, Complex Orders or COOP Sweeps that are equal to or improve the cPBBO, and/or Complex Orders or COOP Sweeps that cross within the cPBBO in the System, the System will do the following: if such interest crosses and does not match in size, the execution price is based on the highest (lowest) executable offer (bid) price when the larger sized interest is offering (bidding), provided, however, that if there is more than one price at which the interest may execute, the execution price when the larger sized interest is offering (bidding) is the midpoint of the highest (lowest) executable offer (bid) price and the next available executable offer (bid) price rounded, if necessary, down (up) to the closest minimum trading increment. If the crossing interest is equal in size, the execution price is the midpoint of lowest executable bid price and the highest executable offer price, rounded, if necessary, up to the closest minimum trading increment. Executable bids/offers include any interest which could be executed at the net price without trading through residual interest or the cPBBO or without trading at the cPBBO where there is Public Customer interest at the best bid or offer for any leg, consistent with paragraph (c)(iii).

If there is any remaining interest and there is no component that consists of the underlying security and provided that the order is not marked all-or-none, such interest may "leg" whereby each options component may trade at the PBBO with existing quotes and/or Limit Orders on the Limit Order book for the individual components of the Complex Order; provided that remaining interest may execute against any eligible Complex Orders received before legging occurs. If the remaining interest has a component that consists of the underlying security, such Complex Order will be placed on the CBOOK (as defined below).

(3) The Complex Order Strategy will be open after the COOP even if no executions occur.

contracts can trade. Phlx's COOP Evaluation is an auction with a timer, unlike MRX's Opening Price Determination.<sup>46</sup> Proposed Supplementary Material .05(d)(3)(A) and (B) of MRX Options 3, Section 14 differs from Phlx Options 3, Section 14(d)(ii)(C)(2). MRX will open a complex strategy with the Complex Order Book crossed if an Opening Price cannot be found within the Boundary Prices and remain crossed while attempting to uncross the Complex Order Book on a best effort basis, pursuant to Supplementary Material .06 of MRX Options 3, Section 14, until all interest can be executed. Today, Phlx will open a complex strategy crossed when a price cannot be found within Phlx's cPBBO during the COOP Evaluation period and there are more aggressive away market prices that are limiting the ability to leg into the single-leg book, but will not remain crossed as complex orders that are through Phlx's cPBBO would be cancelled pursuant to Phlx Options 3, Section 14(f)(i)(A).<sup>47</sup>

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<sup>46</sup> Phlx's All-or-None order type differs from MRX's All-or-None order in that only Public Customers may utilize the Phlx All-or-None order type and Phlx's All-or-None order may rest on the order book. See Phlx Option 3, Section 7(b)(5). MRX's All-or-None order is a limit or market order that is to be executed in its entirety or not at all. See MRX Options 3, Section 7(c).

<sup>47</sup> By way of example, assume Phlx cPBBO is 1.00 x 2.00 and cNBBO is 1.45 x 1.50. Also, assume Phlx complex Day Order to buy the strategy @ \$0.50 which begins a COOP timer. Next, a complex day order to sell the strategy @ \$0.50 arrives during the COOP timer. These orders are crossed, but are not within Phlx's cPBBO, and, therefore, both orders cannot trade as part of the COOP Evaluation. Additionally, the sell order cannot leg into Phlx's simple order book because of the more aggressive cNBBO which would limit legging as part of the ACE price protection described within Phlx Options 3, Section 16(b)(i), and, therefore, the sell order that is crossed with Phlx's cPBBO cannot remain on the Complex Order Book and is ultimately cancelled. In contrast, on MRX, this sell order would remain crossed on the Complex Order Book while continuously looking for an opportunity to uncross and trade these Complex Orders as new orders arrive or the market moves.

The Exchange also proposes to amend the Opening Price in Supplementary Material .05(d)(4) of MRX Options 3, Section 14 that currently provides,

Opening Price. If the Potential Opening Price is at or within the Boundary Prices, the Potential Opening Price becomes the Opening Price. If the Potential Opening Price is not at or within the Boundary Prices, the Opening Price will be the price closest to the Potential Opening Price that satisfies the maximum quantity criteria without leaving unexecuted contracts on the bid or offer side of the market at that price and is at or within the Boundary Prices. If the bid Boundary Price is higher than the offer Boundary Price, or if no valid Opening Price can be found at or within the Boundary Prices, there will be no trade in the Complex Opening Price Determination and the complex strategy will open pursuant to the Complex Uncrossing Process described in Supplementary Material .06(b) to this Rule.

The Exchange proposes to amend this rule to instead provide,

If the Potential Opening Price is at or within the Boundary Prices, the Potential Opening Price becomes the Opening Price, and the complex strategy will open pursuant to Supplementary Material .05(d)(5) to this Rule. If the bid Boundary Price is higher than the offer Boundary Price, or if no valid Potential Opening Price can be found at or within the Boundary Prices, there will be no trade in the Complex Opening Price Determination and the complex strategy will open pursuant to the Complex Uncrossing Process described in Supplementary Material .06(b) to this Rule.

With the proposed change, if the Potential Opening Price is at or within the Boundary Prices, the Potential Opening Price becomes the Opening Price and the complex strategy will open pursuant to the Uncrossing described in Supplementary Material .05(d)(5) of MRX Options 3, Section 14, as is the case today. However, as is the case today, if the bid Boundary Price is higher than the offer Boundary Price, or if no valid Potential

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Options 3, Section 14 (f)(i)(A) provides that Complex Orders must be entered onto the CBOOK in increments of \$0.01. The individual components of a Complex Order may be executed in minimum increments of \$0.01, regardless of the minimum increments applicable to such components. Such orders will be placed on the CBOOK by the System when the following conditions exist: (A) When the Complex Order does not price-improve upon the cPBBO upon receipt...”.

Opening Price can be found at or within the Boundary Prices, there will be no trade in the Complex Opening Price Determination and the complex strategy will open pursuant to the Complex Uncrossing process described in Supplementary Material .06(b) of MRX Options 3, Section 14 pursuant to the proposed amendment to the Complex Opening Price Determination.

#### Complex Order Risk Protections

The Exchange proposes a non-substantive amendment to the title of a Complex Order Risk Protection in MRX Options 3, Section 16, Complex Order Risk Protections. Specifically, the Exchange proposes to amend MRX Options 3, Section 16(c)(1) to change the title from “Limit Order Price Protection” to “Complex Order Price Protection.” The Exchange believes the proposed title more accurately describes the risk protection. The Exchange also proposes a non-substantive amendment to correct an incorrect citation in MRX Options 3, Section 16(b) to “Options 2, Section 11.” The correct citation is “Options 3, Section 11.” Correcting this citation will make clear what was section was being referenced.

#### Implementation

The Exchange intends to begin implementation of the proposed rule change prior to December 23, 2022. The implementation would commence with a limited symbol migration and continue to migrate symbols over several weeks. The Exchange will issue an Options Trader Alert to Members to provide notification of the symbols that will migrate and the relevant dates.

#### b. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the

Act,<sup>48</sup> in general, and furthers the objectives of Section 6(b)(5) of the Act,<sup>49</sup> in particular, in that it is designed to promote just and equitable principles of trade and to protect investors and the public interest for the reasons discussed below.

### Legging Order

Amending MRX Options 3, Section 7(k)(1) to add a provision which states that a Legging Order will not be generated during a Posting Period in progress on the same side in the series pursuant to Options 3, Section 15 regarding Acceptable Trade Range, is consistent with the Act because from a System processing and user acceptance standpoint, the best practice is to wait for the ATR Posting Period to complete before attempting to generate a Legging Order on the same side in the series, as the time required to complete the ATR Posting Period is minimal. The proposed change is designed to protect investors and the public interest as automatically generated Legging Orders would be removed from the single-leg order book when they are no longer at the Exchange's displayed best bid or offer. Generating a Legging Order during a Posting Period in progress on the same side in the series would lead to the immediate removal of the Legging Order from the single-leg order book, making it superfluous to have been generated. Phlx's legging order rule in Options 3, Section 14(f)(iii)(C)(2)<sup>50</sup> has the same restriction on generating legging orders as proposed herein.

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<sup>48</sup> 15 U.S.C. 78f(b).

<sup>49</sup> 15 U.S.C. 78f(b)(5).

<sup>50</sup> See note 8 above.

Changes to the Single-Leg Price Improvement Mechanism for Crossing Transactions

The Exchange's proposal to amend MRX Options 3, Section 13(d)(4), related to single-leg PIM, to not permit unrelated marketable interest, on the opposite side of the market from the Agency Order, which is received during a single-leg PIM to early terminate a single-leg PIM is consistent with the Act and promotes just and equitable principles because allowing the auction to run its full course would provide a full opportunity for price improvement to the Crossing Transaction. The unrelated interest would participate in the single-leg PIM allocation pursuant to MRX Options 3, Section 13(d), if residual contracts remain after executing with interest on the single-leg order book. Today, Phlx<sup>51</sup> and BX<sup>52</sup> do not permit unrelated interest on the same or opposite side of an Agency Order to early terminate their simple price improvement auctions.

The proposed amendment in MRX Options 3, Section 13(c)(5)(ii), related to single-leg PIM, applies to the receipt of marketable orders both on the same side and opposite side of the Agency order. With respect to the same side of the Agency Order, today, an unrelated market or marketable limit order in the same series on the same side of the Agency Order would cause the single-leg PIM to early terminate as well. The proposal promotes just and equitable principles of trade because a market or marketable limit order in the same series on the same side of the Agency Order cannot interact with a single-leg PIM auction. The market or marketable limit order may interact with the order book, and if there are residual contracts that remain from the market or marketable order

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<sup>51</sup> See note 14 above.

<sup>52</sup> See note 15 above.

in the same series on the same side of the Agency Order, they will rest on the order book and improve the BBO beyond the price of the Crossing Transaction which will cause early termination of the single-leg PIM pursuant to proposed MRX Options 3, Section 13(c)(5)(ii). The Exchange believes that this outcome would allow for the single-leg PIM exposure period to continue for the full period despite the receipt of unrelated marketable interest on the same side of the market from the Agency Order, provided residual interest does not go on to rest on the order book improving the BBO beyond the price of the Crossing Transaction of the PIM. Allowing the single-leg PIM to run its full course protects investors and the general public because it would provide an opportunity for price improvement to the Agency Order.

Amending current MRX Options 3, Section 13(c)(5)(iii) to align the rule text more closely with BX Options 3, Section 13(ii)(B)(2)<sup>53</sup> is consistent with the Act because it removes any ambiguity that a market or marketable limit order priced more aggressively than the Agency Order on the same side could ultimately rest on the order book, improving the BBO beyond the price of the Crossing Transaction of the PIM and, therefore, cause the early termination of a single-leg PIM. Continuing to not permit a single-leg PIM to early terminate any time the Exchange best bid or offer improves beyond the price of the Crossing Transaction on the same side of the market as the Agency Order protects investors and the general public because the Crossing Transaction Agency Order's price is inferior to the Exchange's best bid or offer on the same side of the market as the Agency Order. Upon early termination of the single-leg PIM, the Crossing Transaction would execute against responses that arrived prior to the time the

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<sup>53</sup> See note 17 above.

Exchange's best bid or offer improved beyond the Crossing Transaction. The proposed amendment to the rule text is not intended to amend the current System functionality, rather it is intended to make clear that a market or marketable limit order could ultimately rest on the order book and improve the BBO beyond the price of the Crossing Transaction.

Adding proposed new MRX Options 3, Section 13(c)(5)(iii), which describes the automatic termination of the exposure period resulting from a trading halt on the Exchange in the affected series, is consistent with the Act because a trading halt would cause an option series to stop trading on MRX and thereby impact the PIM auction. Today, if a trading halt is initiated after an order is entered into the single-leg PIM, such auction will be automatically terminated without execution. Of note, the Exchange is separately<sup>54</sup> proposing to amend MRX Options 3, Section 13(d)(5) to change System behavior such that if a trading halt is initiated after an order is entered into the single-leg PIM, such auction will be automatically terminated with execution solely with the Counter-Side Order.<sup>55</sup> The proposed amendment to MRX Options 3, Section 13(c)(5)(iii) protects investors and the general public by making clear that a trading halt would lead to early termination of a single-leg PIM. This amendment is not intended to

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<sup>54</sup> See note 19 above.

<sup>55</sup> SR-MRX-2022-5P proposes to renumber MRX Options 3, Section 13(d)(5) as Options 3, Section 13(d)(6), and proposes to state, "Specifically, current MRX Options 3, Section 13(d) is proposed to be renumbered within SR-MRX-2022-5P to Options 3, Section 13(d)(6) and proposes to state, "If a trading halt is initiated after an order is entered into the Price Improvement Mechanism, such auction will be automatically terminated with execution solely with the Counter-Side Order."

amend the current System functionality, rather it is intended to make clear that a trading halt will cause the single-leg PIM to early terminate.

#### Changes to the Complex PIM

Deleting MRX Options 3, Section 13(e)(4)(vi) within Complex PIM, as well as a paragraph in Supplementary Material .01(b)(ii) of MRX Options 3, Section 14 discussing Complex Order Exposure, related to the early termination of single-leg PIM from the arrival of unrelated marketable interest on either the same or opposite side of the market from the Agency Order, is consistent with the Act because a single-leg PIM will no longer early terminate from the arrival of unrelated marketable interest on either the same or opposite side of the market from the Agency Order and because the flash functionality will no longer exist.<sup>56</sup> The removal of the aforementioned rule text will protect investors and the public by avoiding confusion as the scenarios contemplated by MRX Options 3, Section 13(e)(4)(vi) and Supplementary Material .01(b)(ii) of MRX Options 3, Section 14 will no longer be able to occur.

#### Complex Orders Delayed Functionality

The Exchange's proposal to delay the implementation of certain stock-tied functionality in connection with the technology migration is consistent with the Act as it will allow the Exchange additional time to code, test and implement this functionality on the enhanced platform. Delayed Functionalities would not be available for symbols that migrated to the platform and thereafter, until such time as the Exchange recommenced their availability by announcing a date in an Options Trader Alert, which date would be prior to one year from the start of the migration of the symbols to the platform. The

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<sup>56</sup> See note 24 above.

Exchange's proposal to delay these functionalities protects investor and the general public by allowing the Exchange to stage the migration, thereby providing maximum benefit to its Members while also ensuring a successful rollout.

#### Other Complex Order Amendments

##### *Opening Only Complex Order*

The Exchange's proposal to remove the word "Limit" within the description of the Opening Only Complex Order Type in MRX Options 3, Section 14(b)(10) is consistent with the Act because it allows Opening Only Complex Orders to be submitted as Market Orders or Limit Orders. The Exchange believes that allowing Market and Limit Orders to be submitted within the Complex Opening Process promotes just and equitable principles of trade. Market Orders are typically the most aggressively priced orders while Limit Orders have a limit price contingency that Market Orders do not have. Allowing both of these order types to participate in the Complex Opening Process protects investors and the general public because it allows greater liquidity to be present to determine the Opening Price. All Members may enter both Market Orders and Limit Orders in the Complex Opening Process as well as intra-day. This proposal is consistent with current System operations.

##### *Complex QCC with Stock Orders*

The Exchange's proposal to amend an incorrect citation with MRX Options 3, Section 14(b)(15), related to Complex QCC with Stock Orders, is consistent with the Act because the current citation to MRX Options 3, Section 12(e) in the description of this order type should be to MRX Options 3, Section 12(f). This non-substantive amendment will make clear what was meant by the reference.

*Complex Preferred Orders*

The Exchange's proposal to add "Complex Preferred Orders" to the list of Complex Order Types in MRX Options 3, Section 14(b) is consistent with the Act because the Exchange believes that this order type will promote just and equitable principles of trade because the order type will continue to encourage Preferred Market Makers to quote aggressively in an effort to execute against the Complex Preferred Order. Preferred Market Makers are not able to ascertain if a particular order is a Complex Preferred Order. The Exchange believes the proposal will protect investors and the general public by encouraging greater order flow to be sent to the Exchange through Complex Preferred Orders and that this increased order flow will benefit all market participants on the Exchange because they may interact with that order flow.

The proposal promotes just and equitable principles of trade because it continues to prioritize Priority Customer<sup>57</sup> Orders on the single-leg order book. Priority Customers have priority over non-Priority Customer interest at the same price in the same options series on the single-leg order book.<sup>58</sup> Complex Preferred Orders are allocated based on the competitive bidding of market participants. The Exchange's proposal promotes just and equitable principles of trade as a Preferred Market Maker must be at the NBBO for a component leg(s) of the Complex Preferred Order at the time the Complex Preferred Order is received. Moreover, participation entitlements for Preferred Market

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<sup>57</sup> The term "Priority Customer" means a person or entity that (i) is not a broker or dealer in securities, and (ii) does not place more than 390 orders in listed options per day on average during a calendar month for its own beneficial account(s). See Options 1, Section 1(a)(36).

<sup>58</sup> See MRX Options 3, Section 10(c)(1)(A).

Makers are designed to balance the obligations<sup>59</sup> that the Preferred Market Maker has to the market with corresponding benefits. In its approval of other options exchange preferred or directed order programs, the Commission has, like proposals to amend a specialist guarantee, focused on whether the percentage of the “entitlement” would rise to a level that could have a material adverse impact on quote competition within a particular exchange, and concluded that such programs do not jeopardize market integrity or the incentive for market participants to post competitive quotes.<sup>60</sup>

Further, adding this existing order type, which is described in MRX Options 2, Section 10, would complete the list of Complex Order types in MRX Options 3, Section 14(b). The addition of Complex Preferred Orders to the list of order types in MRX Options 3, Section 14(b) will make clear to Members the availability of Complex Preferred Orders. Both Phlx<sup>61</sup> and MIAX<sup>62</sup> have a similar order type.

*Options 3, Section 14(c)(2) and MRX Supplementary Material .02 to Options 3, Section 14*

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<sup>59</sup> Primary Market Makers are obligated to quote in the Opening Process pursuant to MRX Options 3, Section 8(c) as well as intra-day pursuant to Options 2, Section 5(e), in addition to other obligations noted within MRX Options 2, Sections 4 – 8.

<sup>60</sup> See Securities Exchange Act Release Nos. 74129 (January 23, 2015), 80 FR 4954 at 4955 (January 29, 2015) (SR-BX-2014-049) (Order Approving Proposed Rule Change Relating to Directed Market Makers); and 51759 (May 27, 2005), 70 FR 32860 at 32861 (June 6, 2005) (SR-Phlx-2004-91) (Order Approving Proposed Rule Change and Notice of Filing and Order Granting Accelerated Approval to Amendment No. 1 Thereto To Establish a Directed Order Process for Orders Delivered to the Phlx Via AUTOM).

<sup>61</sup> See note 36 above.

<sup>62</sup> See note 37 above.

Correcting an incorrect reference to “ISE” with MRX Options 3, Section 14(c)(2), which should be to “MRX,” will add clarity to the rule; this amendment is non-substantive. The Exchange’s proposal to make a technical correction in Supplementary Material .02 of MRX Options 3, Section 14 to amend the word “which” to “whom” is a non-substantive amendment.

*Complex Opening Price Determination*

The Exchange’s proposal to amend the citation within Supplementary Material .05(d)(2) to Options 3, Section 14, related to the Potential Opening Price, is consistent with the Act because the current citation to Supplementary Material .06(b) should be to Supplementary Material .05(b). This non-substantive amendment will make clear what was meant by the reference.

The Exchange’s proposal to amend Supplementary Material .05(d)(3) of MRX Options 3, Section 14, which describes the Complex Opening Price Determination, is consistent with the Act because the proposed new Complex Opening Process would allow for additional contracts to be included in the Potential Opening Price calculation. This proposed methodology would protect investors and the general public by leading to better price discovery and more contracts executing as part of the Complex Opening Price Determination. With this proposal, when the interest does not match the size and there is more than one Potential Opening Price at which the interest may execute, then the Exchange would calculate a Potential Opening Price using the mid-point of the highest (lowest) executable offer (bid) price and the next available executable offer (bid) price rounded, if necessary, down (up) to the closest minimum trading increment. As a result, the proposal promotes just and equitable principles of trade as more options contracts are

likely to be executed at better prices than under current rule. This behavior differs from MRX's current opening rule in that, today, the Exchange would calculate the Potential Opening Price as the highest (lowest) executable bid (offer) when there would be contracts left unexecuted on the bid (offer) side of the complex market. The proposed methodology is similar to Phlx.<sup>63</sup>

Further, the proposed amendment promotes just and equitable principles of trade by allowing Market Complex Orders to participate in the Opening Price Determination process in a broader capacity than the MRX opening rule allows for today. Today, if there are only Market Complex Orders on both sides of the market, or if there are Market Complex Orders on the bid (offer) side of the market for greater than the total size of Complex Orders on the offer (bid) side of the market, then MRX will not trade in the Complex Opening Price Determination process and would instead open pursuant to an Uncrossing pursuant to Supplementary Material .06(b) of MRX Options 3, Section 14. The proposed rule would have the Boundary Price assign limits to the Opening Price and, therefore, permit Market Complex Orders to participate in the Complex Opening Process, without limitation to the benefit of investors and the public interest. With this change, MRX would permit a complex strategy to calculate an Opening Price utilizing a greater number of Market Complex Orders, which benefits the Opening Process by taking into account these more aggressively priced orders<sup>64</sup> while also bringing more liquidity into

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<sup>63</sup> See Phlx Options 3, Section 14(d)(ii)(C)(2).

<sup>64</sup> The allowance of a greater number of Market Complex Orders within the Opening Process provides a greater depth of price discovery for an options series. As noted above, the Boundary Price would assign limits to the Opening Price, therefore preventing Market Complex Orders which are aggressively priced from negatively impacting the Opening Price.

the Opening Price calculation. The amendment is designed to promote just and equitable principles of trade as it will benefit Members by smoothing the way for the complex strategy to open with Market Complex Orders.

Finally, the proposed amendments to the Complex Opening Process should promote just and equitable principles by allowing a complex strategy to open pursuant to Supplementary Material .05(d)(4) of MRX Options 3, Section 14, with less contracts becoming subject to the Uncrossing pursuant to Supplementary Material .05(d)(5) of MRX Options 3, Section 14. As a result of this change, more interest would be able to trade within the Opening Process, ensuring a greater number of contracts are executed on MRX at the opening and lessening the likelihood that contracts which remain unmatched during the Uncrossing receive no execution.<sup>65</sup>

#### Complex Order Risk Protections

The Exchange's proposal to amend the title of a Complex Order Risk Protection in Options 3, Section 16, Complex Order Risk Protections is a non-substantive amendment.

#### 4. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act.

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<sup>65</sup> Unmatched orders would rest on the order book with the potential to execute intra-day.

### Legging Orders

Amending MRX Options 3, Section 7(k)(1) to add a provision which states that a Legging Order will not be generated during a Posting Period in progress on the same side in the series pursuant to Options 3, Section 15 regarding Acceptable Trade Range does not impose an undue burden on intra-market competition because the amendment will apply equally to all Members as Legging Orders are generated by the System.

Additionally, this proposal does not impose an undue burden on inter-market competition as other options exchanges may adopt Legging Orders and similar rules for the generation of such orders. Today, Phlx's legging order rule in Options 3, Section 14(f)(iii)(C)(2) has the same restriction as proposed to be added to MRX's Legging Order rule in MRX Options 3, Section 7(k)(1).<sup>66</sup>

### Changes to the Single-Leg Price Improvement Mechanism for Crossing Transactions

The Exchange's proposal to amend MRX Options 3, Section 13(d)(4), MRX Options 3, Section 13(c)(5)(ii) and (iii), and add a proposed new MRX Options 3, Section 13(c)(5)(iii), related to single-leg PIM, does not impose an undue burden on intra-market competition because the amendment will apply equally to all Members. All Members may utilize PIM.

The Exchange's proposal to amend MRX Options 3, Section 13(d)(4), MRX Options 3, Section 13(c)(5)(ii) and (iii), and add a proposed new MRX Options 3, Section 13(c)(5)(iii), related to single-leg PIM, does not impose an undue burden on inter-market

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<sup>66</sup> See note 8 above.

competition because other options exchanges may adopt similar rules. Today, Phlx<sup>67</sup> and BX<sup>68</sup> do not permit unrelated marketable interest on either the same or opposite side of the market from an Agency Order to early terminate their simple price improvement auctions.

#### Changes to the Complex PIM

Deleting MRX Options 3, Section 13(e)(4)(vi) within Complex PIM, as well as a related paragraph in Supplementary Material .01(b)(ii) of MRX Options 3, Section 14, which describes Complex Order Exposure, related to the early termination of single-leg PIM as a result of the arrival of unrelated marketable interest on either the same or the opposite side of the market from the Agency Order does not impose an undue burden on intra-market competition because the amendment will apply equally to all Members. All Members may utilize Complex PIM.

Deleting MRX Options 3, Section 13(e)(4)(vi) within Complex PIM, as well as a related paragraph in Supplementary Material .01(b)(ii) of MRX Options 3, Section 14, which describes Complex Order Exposure, related to the early termination of single-leg PIM from the arrival of unrelated marketable interest on either the same or opposite side of the market from the Agency Order does not impose an undue burden on inter-market competition as other options exchanges may adopt similar rules. Today, Phlx<sup>69</sup> and BX<sup>70</sup> do not permit unrelated marketable interest on either the same or opposite side of the

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<sup>67</sup> See note 14 above.

<sup>68</sup> See note 15 above.

<sup>69</sup> See note 14 above.

<sup>70</sup> See note 15 above.

market from an Agency Order to early terminate their simple price improvement auctions.

#### Complex Orders Delayed Functionality

The Exchange's proposal to delay the implementation of certain stock-tied functionality in connection with the technology migration does not impose an undue burden on intra-market competition because no Member will be able to utilize the Delayed Functionalities.

The Exchange's proposal to delay the implementation of certain stock-tied functionality in connection with the technology migration does not impose an undue burden on inter-market competition because the Exchange does not believe that the proposed rule change will impact the intense competition that exists in the options market. Today, ISE offers the Delayed Functionalities.

#### Other Complex Order Amendments

The Exchange does not believe that the proposed amendments to the Complex Orders rule will impose any significant burden on inter-market competition. Other exchanges today offer complex order functionalities. These options markets may amend their rules to mirror those of MRX. Other options exchanges offer orders similar to Complex Preferred Orders.<sup>71</sup> Additionally, the proposed Complex Opening Process is similar to Phlx.<sup>72</sup> Finally, the proposed Complex Opening Process methodology would allow MRX to compete with other options exchanges that offer Complex Order functionality.

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<sup>71</sup> See e.g., Phlx Options 2, Section 10 and MIAX Rule 100.

<sup>72</sup> See Phlx Options 3, Section 14(d)(ii)(C)(2).

*Opening Only Complex Order*

The Exchange's proposal to remove the word "Limit" within the description of the Opening Only Complex Order Type in MRX Options 3, Section 14(b)(10) does not impose an undue burden on intra-market competition because this proposed change will apply to all Members.

*Complex QCC with Stock Orders*

The Exchange's proposal to amend an incorrect citation with MRX Options 3, Section 14(b)(15), related to Complex QCC with Stock Orders, does not impose an undue burden on intra-market competition because the amendment is non-substantive.

*Complex Preferred Orders*

The Exchange's proposal to add "Complex Preferred Orders" to the list of Complex Order Types in MRX Options 3, Section 14(b) does not impose an undue burden on intra-market competition. Preferred Market Makers have obligations<sup>73</sup> unlike other market participants. The allocation entitlements for Preferred Market Makers are designed to balance the obligations that the Preferred Market Makers has to the market with corresponding benefits. In order to receive the participation entitlement for a Complex Preferred Order, Preferred Market Makers are required to quote 90% of the trading day as compared to Market Makers who are required to quote 60% of the trading day.<sup>74</sup> Further, Priority Customers<sup>75</sup> have priority over non-Priority Customer interest at

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<sup>73</sup> See MRX Options 2, Section 5

<sup>74</sup> See MRX Options 2, Section 5.

<sup>75</sup> See note 57 above.

the same price in the same options series on the single-leg order book.<sup>76</sup>

At the time of receipt of the Complex Preferred Order, a Preferred Market Maker would have to be quoting at the NBBO, which is intended to incentivize the Preferred Market Maker to quote aggressively in order to execute against the Complex Preferred Order. Preferred Market Makers are not able to ascertain if a particular order is a Complex Preferred Order. The Exchange believes the proposal will encourage Market Makers to quote tighter and add a greater amount of liquidity on MRX in an attempt to interact with Complex Preferred Orders that are sent to the Exchange. This order flow will benefit all market participants on the Exchange because any MRX Member may interact with that order flow. Finally, any MRX Member on the single-leg or Complex Order Book may trade with a Complex Preferred Order. Also, any MRX Market Maker may elect to receive Preferred Order.

*Options 3, Section 14(c)(2) and MRX Supplementary Material .02 to Options 3, Section 14*

Correcting an incorrect reference to “ISE” with MRX Options 3, Section 14(c)(2), which should be to “MRX,” will add clarity to the rule; this amendment is non-substantive. The Exchange’s proposal to make a technical correction in Supplementary Material .02 of MRX Options 3, Section 14 to amend the word “which” to “whom” is a non-substantive amendment.

*Complex Opening Price Determination*

The Exchange’s proposal to amend an incorrect citation within Supplementary Material .05(d)(2) to Options 3, Section 14, related to the Potential Opening Price, does

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<sup>76</sup> See MRX Options 3, Section 10(c)(1)(A).

not impose an undue burden on intra-market competition because the amendment is non-substantive.

The Exchange's proposal to amend Supplementary Material .05(d)(3) to MRX Options 3, Section 14, which describes the Complex Opening Price Determination, does not impose an undue burden on intra-market competition because all Members may submit interest into the Complex Opening Process.

Complex Order Risk Protections

The Exchange's proposal to amend the title of a Complex Order Risk Protection in Options 3, Section 16, Complex Order Risk Protections is a non-substantive amendment.

5. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

No written comments were either solicited or received.

6. Extension of Time Period for Commission Action

The Exchange does not consent to an extension of the time period for Commission action.

7. Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2)

Not applicable.

8. Proposed Rule Change Based on Rules of Another Self-Regulatory Organization or of the Commission

Not Applicable.

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

Not applicable.

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

Not applicable.

11. Exhibits

1. Notice of Proposed Rule Change for publication in the Federal Register.
5. Text of the proposed rule change.

**EXHIBIT 1**

SECURITIES AND EXCHANGE COMMISSION  
(Release No. \_\_\_\_\_ ; File No. SR-MRX-2022-10)

July \_\_, 2022

Self-Regulatory Organizations; Nasdaq MRX, LLC; Notice of Filing of Proposed Rule Change to Amendments to Complex Orders In Connection with a Technology Migration

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup>, and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on July 18, 2022, Nasdaq MRX, LLC (“MRX” or “Exchange”) filed with the Securities and Exchange Commission (“SEC” or “Commission”) the proposed rule change as described in Items I, II, and III, below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

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

The Exchange proposes to amend Options 3, Section 7, Types of Orders and Order and Quote Protocols; Options 3, Section 10, Priority of Quotes and Orders; Options 3, Section 13, Price Improvement Mechanisms for Crossing Transactions; Options 3, Section 14, Complex Orders; and Options 3, Section 16, Complex Risk Protections.

The text of the proposed rule change is available on the Exchange’s Website at <https://listingcenter.nasdaq.com/rulebook/mrx/rules>, at the principal office of the Exchange, and at the Commission’s Public Reference Room.

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

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

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

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

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

1. Purpose

In connection with a technology migration to an enhanced Nasdaq, Inc. ("Nasdaq") functionality which will result in higher performance, scalability, and more robust architecture, the Exchange intends to adopt certain trading functionality currently utilized at Nasdaq affiliate exchanges. Also, the Exchange intends to remove certain functionality. Specifically, the following sections would be amended: Options 3, Section 7, Types of Orders and Order and Quote Protocols, Options 3, Section 10, Priority of Quotes and Orders; Options 3, Section 13, Price Improvement Mechanisms for Crossing Transactions; Options 3, Section 14, Complex Orders; and Options 3, Section 16, Complex Risk Protections. Each change will be described below.

Legging Order

The Exchange proposes to amend Options 3, Section 7(k)(1) to add a provision which states that a Legging Order<sup>3</sup> will not be generated during a Posting Period, as

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<sup>3</sup> A Legging Order is a limit order on the regular limit order book that represents one side of a Complex Options Order that is to buy or sell an equal quantity of two options series resting on the Exchange's Complex Order Book. See Options 3, Section 7(k).

described in detail below, in progress on the same side in the series pursuant to Options 3, Section 15 regarding Acceptable Trade Range (“ATR”). A Legging Order would not be generated because it would no longer be at the Exchange’s displayed best bid or offer, therefore, generating a Legging Order during a Posting Period in progress, on the same side in the series, would lead to its immediate removal, making it superfluous to have been generated.

ATR is a risk protection, that sets dynamic boundaries within which quotes and orders may trade. It is designed to guard the System<sup>4</sup> from experiencing dramatic price swings by preventing the immediate execution of quotes and orders beyond the thresholds set by this risk protection. In a separate proposal, the Exchange proposes to amend MRX’s ATR to adopt an iterative process wherein an order/quote that reaches its ATR boundary will be paused for a brief period of time to allow more liquidity to be collected, before the order/quote is automatically re-priced and a new ATR is calculated.<sup>5</sup>

Specifically, in MRX-2022-5P, the Exchange proposes to amend current Options 3, Section 15(a)(2)(A)(iii) to provide that if an order or quote reaches the outer limit of the ATR (“Threshold Price”) without being fully executed, it will be posted at the Threshold Price for a brief period, not to exceed one second (“Posting Period”), to allow the market to refresh and determine whether or not more liquidity will become available

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<sup>4</sup> The term “System” means the electronic system operated by the Exchange that receives and disseminates quotes, executes orders and reports transactions. See MRX Options 1, Section 1(a)(49).

<sup>5</sup> MRX has separately filed to amend ATR within SR-MRX-2022-5P. Within SR-MRX-2022-5P, MRX proposes an iterative process for ATR wherein the Exchange will attempt to execute interest that exceeds the outer limit of the ATR for a brief period of time while that interest is automatically re-priced as described herein. Today, MRX would cancel, rather than re-price, any interest that exceeds the outer limit of the ATR.

(on the Exchange or any other exchange if the order is designated as routable) within the posted price of the order or quote before moving on to a new Threshold Price.<sup>6</sup> Upon posting, either the current Threshold Price of the order/quote or an updated NBB for buy orders/quotes or the NBO for sell orders/quotes (whichever is higher for a buy order/quote or lower for a sell order/quote) would become the reference price for calculating a new ATR. If the order remains unexecuted, a new ATR will be calculated and the order will execute, route, or post up to the new Threshold Price. This process will repeat until either (1) the order/quote is executed, cancelled, or posted at its limit price or (2) the order/quote has been subject to a configurable number of instances of the ATR as determined by the Exchange (in which case it will be returned). During the proposed Posting Period, an order would be in flux and would potentially increase (decrease) past the price of any Legging Order generated on the bid (offer) as the order works its way through the book. Legging Orders are removed from the order book when they are no longer at the Exchange's displayed best bid or offer and, therefore, generating a Legging Order during a Posting Period in progress on the same side in the series would lead to its immediate removal. Accordingly, in the current proposal, the Exchange proposes to amend Options 3, Section 7(k)(1) to provide that a Legging Order would not be created during the Posting Period in progress on the same side in the series. By way of example, assume that the ATR is set for \$0.05, the MPV is \$0.01 and the following quotations are posted on MRX and away markets:

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<sup>6</sup> See SR-MRX-2022-5P.

## Away Exchange Quotes:

| Exchange | Bid Size | Bid Price | Offer Price | Offer Size |
|----------|----------|-----------|-------------|------------|
| ISE      | 10       | \$0.75    | \$0.90      | 10         |
| AMEX     | 10       | \$0.75    | \$0.92      | 10         |
| PHLX     | 10       | \$0.75    | \$0.94      | 10         |

## MRX Price Levels:

| Exchange | Bid Size | Bid Price | Offer Price | Offer Size |
|----------|----------|-----------|-------------|------------|
| MRX      | 10       | \$0.75    | \$0.90      | 10         |
| MRX      | 10       | \$0.75    | \$0.95      | 10         |
| MRX      | 10       | \$0.75    | \$1.00      | 10         |
| MRX      | 10       | \$0.75    | \$1.05      | 10         |

MRX receives a routable order to buy 70 contracts at \$1.10. The ATR is \$0.05 and the reference price is the National Best Offer - \$0.90. The ATR threshold is then  $\$0.90 + \$0.05 = \$0.95$ . The order is allowed to execute up to and including \$0.95. The System then pauses for a brief period not to exceed one second to allow the market (including other exchanges) to refresh and to determine whether additional liquidity will become available within the order's posted price. If additional liquidity becomes available on MRX or any away market, that liquidity will be accessed and executed.

- 10 contracts will be executed at \$0.90 against MRX
- 10 contracts will be executed at \$0.90 against ISE
- 10 contracts will be executed at \$0.92 against AMEX
- 10 contracts will be executed at \$0.94 against PHLX
- 10 contracts will be executed at \$0.95 against MRX

- Then, after executing at multiple price levels, the order is posted at \$0.95 for a brief period not to exceed one second to determine whether additional liquidity will become available.
- During this pause, the MRX BBO for this option is 0.95 x 1.00
- Assume the leg above with the Posting Period in process is Leg A of an A-B complex strategy
- Leg B has a BBO of 0.85 x 0.88
- Therefore, the cBBO<sup>7</sup> of this A-B complex strategy is 0.07 x 0.15
  - (Leg A Bid 0.95 – Leg B Offer 0.88 = 0.07)
  - (Leg A Offer 1.00 – Leg B Bid 0.85 = 0.15)
- Also during the pause, a Complex Options Order to buy A-B arrives for net price of \$0.11
- The Complex Options Order could generate a Legging Order at \$0.96 on the bid of Leg A, relying on the \$0.85 bid to sell Leg B and achieve a net price \$0.11, however the Legging Order is not generated because Leg A has an order on the bid side in an ATR Posting Period which will continue to move through the order book, and would ultimately lead to the immediate removal of the Legging Order once it is no longer at the Exchange's displayed best bid.
- A new ATR Threshold Price of \$1.00 is determined (new reference price of  $\$0.95 + \$0.05 = \$1.00$ )

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<sup>7</sup> The “cBBO” represents the net price of a complex strategy comprised of the best bids and offers of the individual legs.

- If, during the brief pause not to exceed 1 second, no liquidity becomes available within the order's posted price of \$0.95, the System will then execute 10 contracts at \$1.00
- Then, after executing at multiple price levels, the order is posted at \$1.00 for a brief period not to exceed one second to determine whether additional liquidity will become available.
- A new ATR Threshold Price of \$1.05 is determined (new reference price of  $\$1.00 + \$0.05 = \$1.05$ ).
- During this time the MRX BBO would be  $\$1.00 \times \$1.05$ .
- If, during the brief pause not to exceed 1 second, no liquidity becomes available within the order's posted price of \$1.00, the System will then execute 10 contracts at \$1.05.

The Exchange believes from a System processing and user acceptance standpoint, the best practice is to wait for the ATR Posting Period to complete before attempting to generate a Legging Order on the same side in the series, as the time required to complete the ATR Posting Period is minimal. Nasdaq Phlx LLC's ("Phlx") legging order rule in Options 3, Section 14(f)(iii)(C)(2) has the same restriction on generating legging orders during the ATR Posting Period as proposed to be added to MRX's Legging Order rule.<sup>8</sup>

Changes to the Single-Leg Price Improvement Mechanism for Crossing Transactions

The Price Improvement Mechanism ("PIM") is a process by which an Electronic

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<sup>8</sup> Phlx Options 3, Section 14(f)(iii)(C)(2) provides that a Legging Order will not be created, "... (ii) if there is ... a Posting Period under Options 3, Section 15 regarding Acceptable Trade Range on the same side in progress in the series...".

Access Member can provide price improvement opportunities for a transaction wherein the Electronic Access Member seeks to facilitate an order it represents as agent, and/or a transaction wherein the Electronic Access Member solicited interest to execute against an order it represents as agent (a “Crossing Transaction”). The Exchange provides a PIM for single-leg<sup>9</sup> orders and for Complex Orders<sup>10</sup> and proposes to amend both single-leg and Complex PIM rules. The Exchange proposes to amend the single-leg PIM in Options 3, Section 13(d)(4) which currently provides,

When a market order or marketable limit order on the opposite side of the market from the Agency Order ends the exposure period, it will participate in the execution of the Agency Order at the price that is mid-way between the best counter-side interest and the NBBO, so that both the market or marketable limit order and the Agency Order receive price improvement. Transactions will be rounded, when necessary, to the \$.01 increment that favors the Agency Order.

Today, unrelated interest in the form of a market order or marketable limit order, on the opposite side of the market from an Agency Order,<sup>11</sup> may end an exposure period<sup>12</sup>

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<sup>9</sup> See MRX Options 3, Section 13(a) - (d).

<sup>10</sup> See MRX Options 3, Section 13(e).

<sup>11</sup> An Agency Order is the part of a Crossing Transaction that an Electronic Access Member represents as agent. See MRX Options 3, Section 13(b).

<sup>12</sup> Upon entry of a Crossing Transaction into the PIM, a broadcast message that includes the series, price and size of the Agency Order, and whether it is to buy or sell, will be sent to all Members. The Exchange designates a time of no less than 100 milliseconds and no more than 1 second for Members to indicate the size and price at which they want to participate in the execution of the Agency Order (“Improvement Orders”). During the exposure period, Improvement Orders may not be canceled, but may be modified to (i) increase the size at the same price, or (ii) improve the price of the Improvement Order for any size up to the size of the Agency Order. During the exposure period, responses (including the Counter-Side Order, Improvement Orders, and any changes to either) submitted by Members shall not be visible to other auction participants. The exposure period will automatically terminate (i) at the end of the time period designated by the Exchange pursuant to Options 3, Section 13(c)(1) above, (ii) upon the receipt of a

within a single-leg PIM and participate in the execution of the Agency Order. The unrelated order would participate at the price that is mid-way between the best counter-side interest and the NBBO, so that both the market order or marketable limit order and the Agency Order receive price improvement.

First, the Exchange proposes to not permit unrelated marketable interest on the opposite side of the market from the Agency Order, which is received during a single-leg PIM, to early terminate a PIM. The Exchange proposes to amend MRX Options 3, Section 13(d)(4) to instead provide,

Unrelated market or marketable interest (against the MRX BBO) on the opposite side of the market from the Agency Order received during the exposure period will not cause the Crossing Transaction to end early and will execute against interest outside of the Crossing Transaction. If contracts remain from such unrelated order at the time the auction exposure period ends, they will be considered for participation in the order allocation process described in sub-paragraph (3).<sup>13</sup>

Today, Phlx<sup>14</sup> and Nasdaq BX, Inc. (“BX”)<sup>15</sup> similarly do not permit unrelated interest on the opposite side of the market from the Agency Order to early terminate their price

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market or marketable limit order on the Exchange in the same series, or (iii) upon the receipt of a non-marketable limit order in the same series on the same side of the market as the Agency Order that would cause the price of the Crossing Transaction to be outside of the best bid or offer on the Exchange. See MRX Options 3, Section 13(c).

<sup>13</sup> Subparagraph (3) of Options 3, Section 13(d) describes the manner in which a Counter-Side Order would be allocated. The Counter Side Order is one part of a Crossing Transaction and represents the full size of the Agency Order. The Counter-Side Order may represent interest for the Member's own account, or interest the Member has solicited from one or more other parties, or a combination of both. See MRX Options 3, Section 13(b).

<sup>14</sup> Phlx Options 3, Section 13(b)(4) provides that an unrelated market or marketable Limit Order (against the PBBO) on the opposite side of the market from the PIXL Order received during the Auction will not cause the Auction to end early and will execute against interest outside of the Auction. See Securities Exchange Act Releases No. 79835 (January 18, 2017), 82 FR 8445 (January 25, 2017) (SR-

improvement auctions. With this proposed change, the single-leg PIM exposure period would continue for the full period despite the receipt of unrelated marketable interest on the opposite side of the market from the Agency Order. Allowing the single-leg PIM to run its full course would provide an opportunity for additional price improvement to the Crossing Transaction. Further, the unrelated interest would participate in the single-leg PIM allocation with any residual contracts remaining after interacting with the order book pursuant to MRX Options 3, Section 13(d). The aforementioned residual contracts are contracts that remain available for execution after the unrelated order on the opposite side of market as the Agency Order, which was marketable with bids and offers on the same side of the market as the Agency Order, executed against bids and offers on the Exchange's order book.

Second, the Exchange also proposes to amend current MRX Options 3, Section 13(c)(5) which states,

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Phlx-2016-119) (Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment No. 1 Thereto, To Amend the PIXL Price Improvement Auction in Phlx Rule 1080(n) and To Make Pilot Program Permanent) and 63027 (October 1, 2010), 75 FR 62160 (October 7, 2010) (SR-Phlx-2010-108) ("PIXL Approval Order"). The Commission noted in SR-Phlx-2016-119 that, "In approving this feature on a pilot basis, the Commission found that 'allowing the PIXL auction to continue for the full auction period despite receipt of unrelated orders outside the Auction would allow the auction to run its full course and, in so doing, will provide a full opportunity for price improvement to the PIXL Order. Further, the unrelated order would be available to participate in the PIXL order allocation.' The Exchange does not believe that this provision has had a significant impact on either the unrelated order or the PIXL Auction process, either for simple or Complex PIXL Orders. The Exchange therefore has requested that the Commission approve this aspect of the Pilot on a permanent basis for both simple and Complex PIXL Orders."

<sup>15</sup> BX Options 3, Section 13(ii)(D) provides that unrelated market or marketable interest (against the BX BBO) on the opposite side of the market from the PRISM Order received during the Auction will not cause the Auction to end early and will execute against interest outside of the Auction.

The exposure period will automatically terminate (i) at the end of the time period designated by the Exchange pursuant to Options 3, Section 13(c)(1) above, (ii) upon the receipt of a market or marketable limit order on the Exchange in the same series, or (iii) upon the receipt of a non-marketable limit order in the same series on the same side of the market as the Agency Order that would cause the price of the Crossing Transaction to be outside of the best bid or offer on the Exchange.

Specifically, the Exchange proposes to remove “(ii),” which provides the exposure period will automatically terminate “...(ii) upon the receipt of a market or marketable limit order on the Exchange in the same series...”. The Exchange notes that this sentence applies to the receipt of marketable orders both on the same side and opposite side of the Agency order. As described above, the Exchange proposes to not permit unrelated marketable interest on the opposite side of the market from the Agency Order, which is received during a single-leg PIM, to early terminate a PIM. Therefore, with respect to the opposite side of the Agency Order, the termination of the auction will no longer be possible with the proposed change to MRX Options 3, Section 13(d)(4). With respect to the same side of the Agency Order, today, an unrelated market or marketable limit order in the same series on the same side of the Agency Order would cause the PIM to early terminate as well. At this time the Exchange proposes to not permit an unrelated market or marketable limit order in the same series *on the same side* of the Agency Order to cause the PIM to early terminate. This proposed change will align the functionality of MRX’s PIM to that of BX’s PRISM and Phlx’s PIXL,<sup>16</sup> which do not permit an unrelated market or marketable limit order in the same series on the same side of the Agency Order to cause the PRISM or PIXL to early terminate, unless the BBO improves beyond the price of the Crossing Transaction on the same side. The Exchange notes that a market or

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<sup>16</sup> See Options 3, Section 13 of BX’s PRISM Rules and Phlx’s PIXL Rules.

marketable limit order in the same series on the same side of the Agency Order cannot interact with a PIM auction. The market or marketable limit order may interact with the single-leg order book, and if there are residual contracts that remain from the market or marketable limit order in the same series on the same side of the Agency Order, they could rest on the order book and improve the BBO beyond the price of the Crossing Transaction which would cause early termination pursuant to proposed Options 3, Section 13(c)(5)(ii) as discussed below. In this instance, residual contracts are contracts that remain available for execution after the unrelated order on the same side of market as the Agency Order, which was marketable with bids and offers on the opposite side of the market as the Agency Order, executed against bids and offers on the Exchange's order book. The Exchange believes that this outcome would allow for the single-leg PIM exposure period to continue for the full period despite the receipt of unrelated marketable interest on the same side of the market from the Agency Order, provided residual interest does not go on to rest on the order book, improving the BBO beyond the price of the Crossing Transaction. Allowing the single-leg PIM to run its full course (unless the BBO improves beyond the price of the Crossing Transaction on the same side), rather than early terminate, would provide an opportunity for price improvement to the Agency Order.

Third, the Exchange proposes to amend current MRX Options 3, Section 13(c)(iii) to align the rule text more closely with language in BX Options 3, Section 13(ii)(B)(2).<sup>17</sup> Specifically, the Exchange proposes to amend Options 3, Section 13(c)(5)

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<sup>17</sup> BX Options 3, Section 13(ii)(B) provides "Conclusion of Auction. The PRISM Auction shall conclude at the earlier to occur of (1) through (3) below, with the PRISM Order executing pursuant to paragraph (C)(1) or (C)(2) below if it

to delete current “iii” and renumber as “ii”. Proposed new Options 3, Section 13(c)(5)(ii) would state, “The exposure period will automatically terminate...(ii) any time the Exchange best bid or offer improves beyond the price of the Crossing Transaction on the same side of the market as the Agency Order...” The proposed rule is designed to align to BX’s rule text to remove any ambiguity that a market or marketable limit order priced more aggressively than the Agency Order could ultimately rest on the order book, improving the BBO beyond the price of the Crossing Transaction and, therefore, cause the early termination of a PIM auction.

By way of example, assume: MRX 1.00 x 2.00 (10) and a second MRX Market Maker’s quote is 1.00 x 2.10 (10). If a PIM auction starts with a buy at 1.50, and subsequently an order to buy for 20 @ 2.00 arrives, the incoming order would trade with the quote, and the remaining 10 contracts would rest on the order book. Thereafter, the MRX BBO would update to 2.00 x 2.10 and trigger the early termination of the single-leg PIM pursuant to Options 3, Section 13(c)(5)(iii), which is being renumbered to Options 3, Section 13(c)(5)(ii). Early terminating the single-leg PIM in this example is necessary because the price of the single-leg PIM is no longer at the top of book (best price) and would not have execution priority with respect to responses or unrelated interest that arrive. By early terminating the single-leg PIM, MRX allows responses to the single-leg PIM, which arrived prior to the time the Exchange’s best bid and offer improved beyond the Crossing Transaction, to execute.

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concludes pursuant to (2) or (3) of this paragraph. (1) The end of the Auction period; (2) For a PRISM Auction any time the BX BBO crosses the PRISM Order stop price on the same side of the market as the PRISM Order; (3) Any time there is a trading halt on the Exchange in the affected series.”

The Exchange believes the proposed rule text will provide greater clarity to the manner in which the System operates today with respect to early termination of single-leg PIMs when the BBO on the same side improves beyond the price of the Crossing Transaction. The proposed amendment to the rule text is not intended to amend the current System functionality, rather it is intended to make clear that a market or marketable limit order could ultimately rest on the order book with residual interest and improve the BBO on the same side as the Agency Order beyond the price of the Crossing Transaction and cause the single-leg PIM to early terminate.

Fourth, the Exchange proposes to add a new MRX Options 3, Section 13(c)(5)(iii) which states, “...(iii) any time there is a trading halt on the Exchange in the affected series...”. This proposed rule text is not modifying how the System currently operates.<sup>18</sup> Today, a trading halt would cause a single-leg PIM to early terminate. Current MRX Options 3, Section 13(d)(5) notes such an early termination as a result of the aforementioned trading halt. Adding this circumstance to the list of events that would terminate the exposure period would make the list complete and add clarity to the rule.

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<sup>18</sup> MRX Options 3, Section 13(d)(5) currently states that, “If a trading halt is initiated after an order is entered into the Price Improvement Mechanism, such auction will be automatically terminated without execution.” Of note, the Exchange is proposing to amend MRX’s PIM within a separate rule change, SR-MRX-2022-5P. Among other things, the Exchange proposes to amend the PIM functionality so that if a trading halt is initiated after an order is entered into the PIM, the auction will be automatically terminated with an execution. Specifically, SR-MRX-2022-5P proposes to renumber current MRX Options 3, Section 13(d) to Options 3, Section 13(d)(6) and proposes to state, “If a trading halt is initiated after an order is entered into the Price Improvement Mechanism, such auction will be automatically terminated with execution solely with the Counter-Side Order.”

Furthermore, the Exchange notes that in a separate rule change, SR-MRX-2022-5P,<sup>19</sup> the Exchange is proposing to amend Options 3, Section 13(d)(5) to change the System behavior such that if a trading halt is initiated after an order is entered into the PIM, such auction will be automatically terminated with execution solely with the Counter-Side Order. Today, if a trading halt is initiated after an order is entered into the PIM, such auction will be automatically terminated without execution.<sup>20</sup>

#### Changes to the Complex PIM

In accordance with the proposed rule change regarding the early termination provisions of a single-leg PIM auction explained above, the Exchange also proposes to remove a paragraph related to Complex PIM in current MRX Options 3, Section 13(e)(4)(vi) which provides,

A Complex Price Improvement Mechanism in a complex strategy may be ongoing at the same time as a Price Improvement Auction pursuant to this Rule or during an exposure period pursuant to Supplementary Material .02 to Options 5, Section 2 in a component leg(s) of such Complex Order. If a Complex Price Improvement Mechanism is early terminated pursuant to paragraph (iv) above, and the incoming Complex Order that causes the early termination in the complex strategy is also marketable against a component leg(s) of the complex strategy that is the subject of a concurrent ongoing Price Improvement Auction pursuant to this Rule or an exposure period pursuant to Supplementary Material .02 to Options 5, Section 2, then the concurrent Complex Price Improvement Mechanism and component leg auction(s) are processed in the following sequence: (1) the Complex Price Improvement Mechanism is early terminated; (2) the component leg auction(s) are early terminated and processed; and (3) legging of residual incoming Complex Order interest occurs, except with respect to Stock Option Orders and Stock Complex Orders.

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<sup>19</sup> MRX has separately filed to amend Options 3, Section 13(d)(5) within SR-MRX-2022-5P. SR-MRX-2022-5P amends, among other things, the rule text in Options 3, Section 13, except that it does not amend Options 3, Section 13(c)(5).

<sup>20</sup> See current MRX Options 3, Section 13(d)(5).

Today, unrelated marketable interest may cause the early termination of a single-leg PIM, if a component leg of a Complex Order is marketable against the order book in the same series as the single-leg PIM. An example is provided below.

Example #1 (Complex PIM early termination elimination – opposite side)<sup>21</sup>

Complex Order Strategy A-B

MM Quote Leg A 4.20 (100) x 4.50 (100)

MM Quote Leg B 4.00 (100) x 4.10 (100)

cBBO 0.10 x 0.50

(Leg A Bid 4.20 – Leg B Offer 4.10 = 0.10)

(Leg A Offer 4.50 – Leg B Bid 4.00 = 0.50)

Complex PIM to Buy A-B 10 @ 0.20, with an election to automatically match to a net price of 0.10

*Complex PIM begins*

Single-leg PIM Auction on Leg A to Buy 100 @ 4.25

*Single-leg PIM begins*

During both auction timers, an unrelated marketable Complex Order A-B to sell 50 @ a net price of 0.10 arrives (the individual legs of the marketable Complex Order would be selling A @ 4.20 and buying B @ 4.10)

Complex Order PIM is early terminated and trades 4 with the Counter-Side Order @ a net price of 0.10 and 6 with the unrelated Complex Order @ a net price of 0.15

Today, the unrelated Complex Order would have legged-in after trading with the Complex PIM and caused the single-leg PIM to early terminate because one leg of the Complex Order was marketable against the Leg A bid of 4.20.

With the proposed amendment, the unrelated Complex Order will not cause the single-leg PIM to early terminate as a result of trading with an unrelated order on the opposite side in the same series. The unrelated marketable Complex Order will trade with the Complex PIM as well as the best bids and offers from the single-leg order book. In this case, the remaining quantity of the unrelated Complex Order would leg-in and trade with the single-leg quotes without impacting the single-leg PIM; the single-leg PIM auction timer would conclude after running its full course. Thereafter, if there are no responses

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<sup>21</sup> Example 1 addresses an order on the opposite side of the Agency Order, although the same early termination would apply to an order on the same side of an Agency Order pursuant to MRX Options 3, Section 13(e)(4)(vi).

to the single-leg PIM, the Agency Order would trade 100 @ 4.25 with the Counter-Side Order.

Today, if a Complex PIM is early terminated pursuant to MRX Options 3, Section 14(e)(4)(iv)<sup>22</sup> and the incoming Complex Order that causes the early termination in the complex strategy is also marketable against a component leg(s) of the complex strategy that is the subject of a concurrent ongoing single-leg PIM, or an exposure period pursuant to flash functionality as provided for in Supplementary Material .02 to Options 5, Section 2,<sup>23</sup> then the concurrent Complex PIM and component leg auction(s) are processed in accordance with MRX Options 3, Section 14(e)(4)(vi).

With this proposed change, a single-leg PIM will no longer early terminate as a result of the arrival of unrelated marketable interest on either the same or the opposite side of the market from the Agency Order. Because a single-leg PIM will no longer early terminate from the arrival of unrelated marketable interest on either the same or the opposite side of the market from the Agency Order, and because the flash functionality

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<sup>22</sup> MRX Options 3, Section 14(e)(4)(iv) provides, “The exposure period will automatically terminate (A) at the end of the time period designated by the Exchange pursuant to subparagraph (4)(i) above, (B) upon the receipt of a Complex Order in the same complex strategy on either side of the market that is marketable against the Complex Order Book or bids and offers for the individual legs, or (C) upon the receipt of a non-marketable Complex Order in the same complex strategy on the same side of the market as the Agency Complex Order that would cause the execution of the Agency Complex Order to be outside of the best bid or offer on the Complex Order Book.”

<sup>23</sup> Pursuant to Supplementary Material .02 to ISE Options 5, Section 2, ISE permits certain orders to first be exposed at the NBBO to all Members for execution at the National Best Bid or Offer (“NBBO”) before the order would be routed to another market for execution (“flash functionality”). MRX Options 5 Rules are incorporated by reference to ISE Options 5 Rules.

will no longer exist,<sup>24</sup> the Exchange proposes to delete MRX Options 3, Section 13(e)(4)(vi) in its entirety.

Additionally, the Exchange proposes to remove a related paragraph in current Supplementary Material .01(b)(iii) of MRX Options 3, Section 14 describing Complex Order Exposure, which states,

A Complex Order Exposure in a complex strategy may be ongoing in a complex strategy at the same time as a Price Improvement Auction pursuant to Options 3, Section 13 or during an exposure period pursuant to Supplementary Material .02 to Options 5, Section 2 in a component leg(s) of such complex strategy. If a Complex Order Exposure is early terminated pursuant to paragraph (ii) above, and the incoming Complex Order that causes the early termination in the complex strategy is also marketable against a component leg(s) of the complex strategy that is the subject of a concurrent ongoing Price Improvement Auction pursuant to Options 3, Section 13 or an exposure period pursuant to Supplementary Material .02 to Options 5, Section 2, then the concurrent Complex Order and component leg auction(s) are processed in the following sequence: (1) the Complex Order exposure is early terminated; (2) the component leg auction(s), which are early terminated and processed; and (3) legging of residual incoming Complex Order interest occurs.

Today, unrelated marketable interest may cause the early termination of a single-leg PIM, therefore, when a Complex Order legs into the single-leg order book, it may cause the early termination of a single-leg PIM if that leg was on either the same or the opposite side of the market from the single-leg PIM. An example is provided below.

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<sup>24</sup> MRX filed a rule change to eliminate its flash functionality. See Securities Exchange Act Release No. 94897 (May 12, 2022), 87 FR 30294 (May 18, 2022) (SR-ISE-2022-11) (Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend Routing Functionality in Connection With a Technology Migration). MRX's rule regarding flash functionality at Supplementary Material .02 to Options 5, Section 2 is incorporated by reference to Nasdaq ISE, LLC Options 5 rules. Therefore, eliminating the flash functionality from ISE Options 5 rules also eliminates the flash functionality from MRX's Options 5 rules.

Example # 2 (Complex Exposure early termination elimination – opposite side)<sup>25</sup>

Complex Order Strategy A-B

MM Quote Leg A 4.20 (100) x 4.50 (100)

MM Quote Leg B 4.00 (100) x 4.10 (100)

cBBO 0.10 x 0.50

(Leg A Bid 4.20 – Leg B Offer 4.10 = 0.10)

(Leg A Offer 4.50 – Leg B Bid 4.00 = 0.50)

Complex Order in A-B Strategy marked for Complex Order Exposure to buy 10 @ 0.20

*Complex Order Exposure auction begins*

Single-leg PIM Auction on Leg A to Buy 100 @ 4.25

*Single-leg PIM begins*

During both auction timers, unrelated marketable Complex Order A-B Sell 50 @ 0.10 arrives

Complex Order Exposure is early terminated and the exposed order to buy A-B 10 @ 0.20 and trades with the unrelated Complex Order 10 @ net price of 0.10

Today, the unrelated marketable Complex Order would have legged-in after trading with the Complex Order Exposure and caused the single-leg PIM to early terminate because one leg of the marketable Complex Order on the opposite side was marketable against the Leg A bid of 4.20.

With the proposed amendment, the unrelated marketable Complex Order will not cause the single-leg PIM on the opposite side in the same series to early terminate as a result of the component leg of the Complex Order being marketable against the bid in the same series as the single-leg PIM. The unrelated marketable Complex Order will trade with the Complex Order Exposure order as well as the best bids and offers from the single-leg order book. In this case, the remaining quantity would leg-in and trade with the single-leg quotes without impacting the single-leg PIM; the auction timer would conclude after running its full course. Thereafter, the Crossing Transaction would trade 100 @ 4.25 Agency Order with the Counter-Side Order.

Today, when a Complex Order Exposure early terminates, as a result of the arrival of unrelated marketable Complex Order interest that trades against the exposed Complex

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<sup>25</sup> Example 2 addresses an order on the opposite side of the Agency Order, although the same early termination would apply to an order on the same side of the Agency Order pursuant to Supplementary Material .01(b)(iii) of MRX Options 3, Section 14.

Order and the best bids and offers on the single-leg order book (as described in Supplementary Material .01(b)(ii) of MRX Options 3, Section 14), the component legs of the unrelated marketable Complex Order on either the same or the opposite side of the single-leg PIM may leg-in and cause early termination of the single-leg PIM. Thereafter, the component leg auction(s) would be processed pursuant to Supplementary Material .01(b)(iii) of MRX Options 3, Section 14. With this proposed change to MRX Options 3, Section 13(d)(4), a single-leg PIM will no longer early terminate from the arrival of unrelated marketable interest on either the same or opposite side of the market from the Agency Order. Therefore, because a single-leg PIM will no longer early terminate from the arrival of unrelated marketable interest on either the same or opposite side of the market from the Agency Order, and because the flash functionality will no longer exist,<sup>26</sup> the early termination provisions addressed in Supplementary Material .01(b)(iii) of MRX Options 3, Section 14 will no longer arise, accordingly, the Exchange proposes to delete Supplementary Material .01(b)(iii) of MRX Options 3, Section 14 in its entirety.

#### Complex Orders Delayed Functionality

The Exchange proposes to delay the implementation of certain functionality in connection with the technology migration. Specifically, Stock-Option Strategies,<sup>27</sup>

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<sup>26</sup> Id.

<sup>27</sup> A Stock-Option Strategy is the purchase or sale of a stated number of units of an underlying stock or a security convertible into the underlying stock (“convertible security”) coupled with the purchase or sale of options contract(s) on the opposite side of the market representing either (A) the same number of units of the underlying stock or convertible security, or (B) the number of units of the underlying stock necessary to create a delta neutral position, but in no case in a ratio greater than eight-to-one (8.00), where the ratio represents the total number of units of the underlying stock or convertible security in the option leg to the total number of units of the underlying stock or convertible security in the stock leg. See MRX Options 3, Section 14(a)(2).

Stock-Complex Strategies,<sup>28</sup> Complex QCC with Stock Orders,<sup>29</sup> and QCC with Stock Orders,<sup>30</sup> as defined in MRX Options 3, Sections 14(a)(2) and (3) and (b)(15) and Options 3, Section 7(t), respectively, and Trade Value Allowance,<sup>31</sup> as defined in Supplementary Material .03 of MRX Options 3, Section 14, would not be available for

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<sup>28</sup> A Stock-Complex Strategy is the purchase or sale of a stated number of units of an underlying stock or a security convertible into the underlying stock (“convertible security”) coupled with the purchase or sale of a Complex Options Strategy on the opposite side of the market representing either (A) the same number of units of the underlying stock or convertible security, or (B) the number of units of the underlying stock necessary to create a delta neutral position, but in no case in a ratio greater than eight-to-one (8.00), where the ratio represents the total number of units of the underlying stock or convertible security in the option legs to the total number of units of the underlying stock or convertible security in the stock leg. Only those Stock-Complex Strategies with no more than the applicable number of legs, as determined by the Exchange on a class-by-class basis, are eligible for processing. See MRX Options 3, Section 14(a)(3).

<sup>29</sup> A Complex QCC with Stock Order is a Qualified Contingent Cross Complex Order, as defined in subparagraph (b)(6) of Options 3, Section 14, entered with a stock component to be communicated to a designated broker-dealer for execution pursuant to MRX Options 3, Section 12(f).

<sup>30</sup> A QCC with Stock Order is a Qualified Contingent Cross Order, as defined in Options 3, Section 7(j), entered with a stock component to be communicated to a designated broker-dealer for execution pursuant to Options 3, Section 12(c). See Options 3, Section 7(t).

<sup>31</sup> Trade Value Allowance permits Stock-Option Strategies and Stock-Complex Strategies at valid increments Options 3, Section 14(c)(1), Stock-Option Strategies and Stock-Complex Strategies to trade outside of their expected notional trade value by a specified amount, in order to facilitate the execution of the stock leg and options leg(s). The Trade Value Allowance is the percentage difference between the expected notional value of a trade and the actual notional value of the trade. The amount of Trade Value Allowance permitted may be determined by the Member, or a default value determined by the Exchange and announced to Members; provided that any amount of Trade Value Allowance is permitted in mechanisms pursuant to Options 3, Sections 11 and 13 when auction orders do not trade solely with their contra-side order. See Supplementary Material .03 of MRX Options 3, Section 14.

symbols that migrated to the platform (“Delayed Functionalities”). Today, these Delayed Functionalities are available to Members.

The Delayed Functionalities would not be available for symbols that migrated to the platform and thereafter, until such time as the Exchange recommenced their availability by announcing a date in an Options Trader Alert, which date would be prior to one year from the start of the migration of the symbols to the platform. The Exchange is staging the migration to provide maximum benefit to its Members while also ensuring a successful rollout. The Delayed Functionalities will provide the Exchange additional time to code, test and implement this functionality on the enhanced platform.

#### Other Complex Order Amendments

##### *Opening Only Complex Order*

Currently, MRX Options 3, Section 14(b)(10) states, “An Opening Only Complex Order is a Limit Order that may be entered for execution during the Complex Opening Process described in Supplementary Material .04 to Options 3, Section 14. Any portion of the order that is not executed during the Complex Opening Process is cancelled.” The Exchange proposes to amend MRX Options 3, Section 14(b)(10) to remove the word “Limit” within the description of the Opening Only Complex Order to allow Opening Only Complex Orders to be submitted as Market Orders or Limit Orders. This amendment is consistent with current System operations. The Exchange believes that both Market and Limit Orders should be permitted in the Complex Opening Process.<sup>32</sup> Market Orders are typically the most aggressively priced orders, while Limit Orders have a limit price contingency that Market Orders do not have. Allowing both of these order

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<sup>32</sup> The Complex Opening Process is described in Supplementary Material .04 of MRX Options 3, Section 14.

types to participate in the Complex Opening Process allows greater liquidity to be present to determine the Opening Price.<sup>33</sup> All Members may enter both Market Orders and Limit Orders during the Complex Opening Process, as well as intra-day.

*Complex QCC with Stock Orders*

The Exchange proposes to correct a non-substantive citation with MRX Options 3, Section 14(b)(15) related to Complex QCC with Stock Orders. The current citation to MRX Options 3, Section 12(e) within the description of this order type is incorrect. The citation should be to MRX Options 3, Section 12(f). Correcting this cross reference will clarify the description of the order type.

*Complex Preferred Orders*

The Exchange proposes to add “Complex Preferred Orders” to the list of Complex Order Types in Options 3, Section 14(b). This proposal describes how Complex Preferred Orders will work. MRX Options 2, Section 10 currently describes Preferred Orders which may be Complex Preferred Orders.<sup>34</sup> To complete the list of Complex Order types, the Exchange proposes to state in MRX Options 3, Section 14(b)(19) that,

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<sup>33</sup> The Opening Price is described in MRX Options 3, Section 14(a)(2).

<sup>34</sup> MRX Options 2, Section 10 provides, “Preferred Orders. An Electronic Access Member may designate a “Preferred Market Maker” on orders it enters into the System (“Preferred Orders”). (1) A Preferred Market Maker may be the Primary Market Maker appointed to the options class or any Competitive Market Maker appointed to the options class. (2) If the Preferred Market Maker is not quoting at a price equal to the NBBO at the time the Preferred Order is received, the allocation procedure described in Options 3, Section 10(c)(1)(C) shall not be applied to the execution of the Preferred Order. (3) If the Preferred Market Maker is quoting at the NBBO at the time the Preferred Order is received, the allocation procedure described in Options 3, Section 10(c)(1)(C) shall be applied to the execution of the Preferred Order.”

[a] Complex Preferred Order is a Complex Order for which an Electronic Access Member has designated a Preferred Market Maker as described in Options 2, Section 10. The component leg(s) of a Complex Order with a Preferred Order instruction may allocate pursuant to Options 3, Section 10(c)(1)(C) when the Complex Preferred Order legs into the single-leg market provided that the Preferred Market Maker is quoting at the NBBO for a component leg(s) of the Complex Preferred Order at the time the Complex Preferred Order is received. A Preferred Market Maker will not receive an allocation pursuant to Options 3, Section 10(c)(1)(C) for a component leg(s) of a Complex Preferred Order if the Preferred Market Maker is not quoting at the NBBO for that leg at the time the Complex Preferred Order is received.

Allocation of a leg(s) of a Complex Preferred Order, pursuant to MRX Options 3, Section 10, would occur when a leg(s) of a Complex Order trades synthetically with the Preferred Market Maker's<sup>35</sup> quote that was at the NBBO on the single-leg order book in accordance with MRX Options 3, Section 10. A Preferred Market Maker must be quoting at the NBBO for a component leg(s) of the Complex Preferred Order at the time the Complex Preferred Order is received. As is the case for single-leg orders, a Preferred Market Maker will not receive an allocation pursuant to Options 3, Section 10(c)(1)(C) for a component leg(s) of a Complex Preferred Order if the Preferred Market Maker is not quoting at the NBBO for that leg at the time the Complex Preferred Order is received.

With respect to orders which leg into the single-leg order book, MRX Options 3, Section 14(c) states that, "Except as otherwise provided in this Rule, complex strategies shall be subject to all other Exchange Rules that pertain to orders and quotes generally." Additionally, the Exchange notes that orders that execute against interest on the single-leg order book, including the options leg of Complex Options Strategies are subject to the

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<sup>35</sup> Preferred Market Maker may be the Primary Market Maker appointed to the options class or any Competitive Market Maker appointed to the options class. See MRX Options 2, Section 10(a)(1).

provisions of MRX Options 3, Section 5 which, among other things, describes the NBBO Price Protection and Trade-Through Compliance and Locked or Crossed Markets.

Further, Supplementary Material .01 to Options 9, Section 1 provides,

[i]t will be a violation of this Rule for a Member to have a relationship with a third party regarding the disclosure of agency orders. Specifically, a Member may not disclose to a third party information regarding agency orders represented by the Member prior to entering such orders into the System to allow such third party to attempt to execute against the Member's agency orders. A Member's disclosing information regarding agency orders prior to the execution of such orders on the Exchange would provide an inappropriate informational advantage to the third party in violation of this Rule. For purposes of this paragraph .01, a third party includes any other person or entity, including affiliates of the Member. Nothing in this paragraph is intended to prohibit a Member from soliciting interest to execute against an order it represents as agent (a "solicited order"), the execution of which is governed by Options 3, Section 22(e) and paragraph .02 of Supplementary Material to Options 3, Section 22.

This rule prohibits a Member from notifying a Preferred Market Maker of an intention to submit a Complex Preferred Order so that the Preferred Market Maker could change its quotation to match the NBBO immediately prior to submission of the Complex Preferred Order, and then fade its quote. The Exchange represents that it proactively conducts surveillance for, and enforces against, violations of Supplementary Material .01 to Options 9, Section 1.

The Exchange's proposal to add "Complex Preferred Orders" to the list of Complex Order Types in MRX Options 3, Section 14(b) will continue to encourage Preferred Market Makers to quote aggressively in an effort to execute against the Complex Preferred Order. Preferred Market Makers are not able to ascertain if a particular order is a Complex Preferred Order. The Exchange believes the proposal will encourage Market Makers to quote tighter and add a greater amount of liquidity on

MRX in an attempt to interact with Complex Preferred Orders that are sent to the Exchange. This order flow will benefit all market participants on the Exchange because any MRX Member may interact with that order flow.

The addition of Complex Preferred Orders to the list of order types in MRX Options 3, Section 14(b) will make clear to Members the availability of Complex Preferred Orders. Both Phlx<sup>36</sup> and MIAx<sup>37</sup> have a similar order type.

*Options 3, Section 14(c)(2) and MRX Supplementary Material .02 to Options 3, Section 14*

The Exchange proposes a non-substantive amendment in MRX Options 3, Section 14(c)(2) to amend an incorrect reference to “ISE”. The reference should be to “MRX”. Also, the Exchange proposes to make a non-substantive technical correction in Supplementary Material .02 of MRX Options 3, Section 14 to make a grammatical amendment to change the word “which” to “whom”.

*Complex Opening Price Determination*

The Exchange proposes to amend the citation within Supplementary Material .05(d)(2) to Options 3, Section 14 which states, “*Potential Opening Price*. The System

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<sup>36</sup> See Phlx Options 3, Section 14(b)(v) which specifies that a Directed Order may be submitted as a Complex Order. See also Phlx Options 3, Section 7(b)(11) which describes a Directed Order. Phlx’s Options 2, Section 10 Directed Order rule is similar to MRX’s Options 2, Section 10 Preferred Order rule.

<sup>37</sup> A “Directed Order” is an order entered into the System by an Electronic Exchange Member with a designation for a Lead Market Maker (referred to as a “Directed Lead Market Maker”). Only Priority Customer Orders will be eligible to be entered into the System as a Directed Order by an Electronic Exchange Member. See MIAx Rule 100. See also MIAx Rule 514(h) which describes allocation. Today, MIAx permits Directed Orders to be submitted as a New Order - Multileg. See [https://www.miaxoptions.com/sites/default/files/page-files/FIX%20Order%20Interface\\_FOI\\_v2.5a\\_re.pdf](https://www.miaxoptions.com/sites/default/files/page-files/FIX%20Order%20Interface_FOI_v2.5a_re.pdf). Pursuant to MIAx’s specifications, “AllocAccount (Tag 79) is defined as MIAx assigned directed firm code of the designated participant for directed order flow.”

will calculate the Potential Opening Price by identifying the price(s) at which the maximum number of contracts can trade (“maximum quantity criterion”) taking into consideration all eligible interest pursuant to Supplementary Material .06(b) to this Rule.”

The citation to Supplementary Material .06(b), related to Uncrossing is incorrect. The citation should be to Supplementary Material .05(b), related to Complex Opening Price Determination. The citation is referring is to eligible interest during the Complex Opening Price Determination.

The Exchange proposes to amend the Complex Opening Price Determination in Supplementary Material .05(d)(3) to Options 3, Section 14 to allow for additional contracts to be included in the Potential Opening Price calculation leading to better price discovery and more contracts executing as part of the Complex Opening Price Determination process.

With this proposal, when the interest does not match the size and there is more than one Potential Opening Price at which the interest may execute, the Exchange would calculate a Potential Opening Price using the mid-point of the highest (lowest) executable offer (bid) price and the next available executable offer (bid) price rounded, if necessary, down (up) to the closest minimum trading increment. As a result, more options contracts are likely to be executed at better prices than under the current rule. Example number 3 below demonstrates this behavior. This behavior differs from current rules in that, today, the Exchange would calculate the Potential Opening Price as the highest (lowest) executable bid (offer) when there would be contracts left unexecuted on the bid (offer) side of the complex market.

Further, the proposed amendment will allow Market Complex Orders to participate in the Opening Price Determination process in a broader capacity than the rule allows for today. Today, if there are only Market Complex Orders on both sides of the market, or if there are Market Complex Orders on the bid (offer) side of the market for greater than the total size of Complex Orders on the offer (bid) side of the market, then MRX will not trade in the Complex Opening Price Determination process and would instead open pursuant to an Uncrossing as provide for in Supplementary Material .06(b) of MRX Options 3, Section 14. With the proposed amendment Market Complex Orders will be included in the Complex Opening Price Determination process in both situations described above, leading to more contracts being able to trade in the Complex Opening Price Determination with better price discovery. Example 5 below illustrates this point.

Finally, the proposed amendment considers the Boundary Price earlier in the Complex Opening Process. Today, the rule seeks to satisfy the maximum quantity criterion first and then consider Boundary Prices. With the proposed change, the Exchange will consider the Boundary Price while determining the Potential Opening Price, thereby enabling as many contracts as possible to trade sooner, which reduces risk for market participants awaiting executions. With this proposal, the Complex Opening Process considers the Boundary Price earlier in the process and the Boundary Price becomes the limit price for Market Complex Orders. This proposal should maximize the number of contracts executed, to the benefit of those Members participating in that complex strategy.

Current Supplementary Material .05 of MRX Options 3, Section 14 describes how Complex Orders arrive at an Opening Price. Specifically, Supplementary .05(b) of MRX

Options 3, Section 14 describes the interest that is eligible within the Complex Opening Price Determination. The rule text provides that the System would calculate Boundary Prices<sup>38</sup> at or within which Complex Orders may be executed during the Complex Opening Price Determination.<sup>39</sup> Current Supplementary Material .05(d)(2) of MRX Options 3, Section 14 provides, “The System will calculate the Potential Opening Price<sup>40</sup> by identifying the price(s) at which the maximum number of contracts can trade (“maximum quantity criterion”) taking into consideration all eligible interest pursuant to Supplementary Material .06(b) to this Rule.”<sup>41</sup> The System takes into consideration all Complex Orders, identifies the price at which the maximum number of contracts can trade, and calculates the Potential Opening Price as described in Supplementary Material .05(d)(2) of MRX Options 3, Section 14. Supplementary Material .05(d)(3) of MRX Options 3, Section 14 further describes the way the System handles more than one Potential Opening Price. Current Supplementary Material .05(d)(3) of MRX Options 3, Section 14 states,

When two or more Potential Opening Prices would satisfy the maximum quantity criterion: (A) without leaving unexecuted contracts on the bid or offer side of the market of Complex Orders to be traded at those prices,

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<sup>38</sup> The Boundary Price is described in Supplementary Material .05(d)(1) of MRX Options 3, Section 14(a)(1).

<sup>39</sup> See Supplementary Material .05(d)(1) of MRX Options 3, Section 14.

<sup>40</sup> The Potential Opening Price is described in Supplementary Material .05(d)(2) of MRX Options 3, Section 14.

<sup>41</sup> The Exchange proposes to amend the citation within Supplementary Material .05(d)(2) to Options 3, Section 14 within this proposal. The citation to Supplementary Material .06(b), related to Uncrossing, should be to Supplementary Material .05(b), related to Complex Opening Price Determination. Specifically, the reference is to Eligible Interest during the Complex Opening Price Determination.

the System takes the highest and lowest of those prices and takes the mid-point; provided that (1) if the highest and/or lowest price described above is through the price of a bid or offer that is priced to not allocate in the Complex Opening Price Determination, the highest and/or lowest price will be rounded to the price of such bid or offer that is priced to not allocate before taking the mid-point, and (2) if the midpoint is not expressed as a permitted minimum trading increment, it will be rounded down to the nearest permissible minimum trading increment; or (B) leaving unexecuted contracts on the bid (offer) side of the market of Complex Orders to be traded at those prices, the Potential Opening Price is the highest (lowest) executable bid (offer) price. Notwithstanding the foregoing: (C) if there are Market Complex Orders on the bid (offer) side of the market that would equal the full quantity of Complex Orders on offer (bid) side of the market, the limit price of the highest (lowest) priced Limit Complex Order is the Potential Opening Price; and (D) if there are only Market Complex Orders on both sides of the market, or if there are Market Complex Orders on the bid (offer) side of the market for greater than the total size of Complex Orders on the offer (bid) side of the market, there will be no trade in the Complex Opening Price Determination and the complex strategy will open pursuant to the Complex Uncrossing Process described in Supplementary Material .06(b) to this Rule.

At this time, the Exchange proposes to amend the System handling within the Complex Opening Process by replacing Supplementary Material .05(d)(3) of MRX Options 3, Section 14 with the following proposed rule text,

**Opening Price Determination.** When interest crosses and does not match in size, the System will calculate the Potential Opening Price based on the highest (lowest) executable offer (bid) price when the larger sized interest is offering (bidding), provided, however, that if there is more than one price at which the interest may execute, the Potential Opening Price when the larger sized interest is offering (bidding) shall be the mid-point of the highest (lowest) executable offer (bid) price and the next available executable offer (bid) price rounded, if necessary, down (up) to the closest minimum trading increment; or

When interest crosses and is equal in size, the System will calculate the Potential Opening Price based on the mid-point of lowest executable bid price and the highest executable offer price, rounded, if necessary, up to the closest minimum trading increment.

(A) Executable bids/offers include any interest which could be executed at the Potential Opening Price without trading through residual interest or the Boundary Price or without trading at the Boundary Price where there is

Priority Customer interest at the best bid or offer for any leg, consistent with paragraph Options 3, Section 14(c)(2).

(B) Executable bids/offers will be bounded by the Boundary Price on the contra-side of the interest, for determination of the Potential Opening Price described above.

This proposed new Complex Opening Process seeks to maximize the interest which is traded during the Complex Opening Price Determination process and deliver a rational price for the available interest at the opening. The Complex Opening Price Determination process maximizes the number of contracts executed during the Complex Opening Process and ensures that residual contracts of partially executed orders or quotes are at a price equal to or inferior to the Opening Price. In other words, the logic ensures there is no remaining unexecuted interest available at a price which crosses the Opening Price. If multiple prices exist that ensure that there is no remaining unexecuted interest available through such price(s), the opening logic selects the mid-point of such price points. Below are some examples.

Example # 3 (More Than One Potential Opening Price – Mid-Point of Larger-Sized Interest)

*“if there is more than one price at which the interest may execute, the Potential Opening Price when the larger sized interest is offering (bidding) is the mid-point of the highest (lowest) executable offer (bid) price and the next available executable offer (bid) price rounded, if necessary, down (up) to the closest minimum trading increment”*

*Assume*

Complex Order Strategy: A+B strategy

Quote for Leg A @ 1.75 x 1.95

Quote for Leg B @ 1.75 x 1.95

Boundary Price = 3.50 (10) - 3.90 (10)

(Leg A Bid 1.75 + Leg B Bid 1.75 = 3.50)

(Leg A Offer 1.95 + Leg B Offer 1.95 = 3.90)

Complex Order #1: Buy 20 for \$3.79

Complex Order #2: Buy 20 at \$3.73

Complex Order #3: Sell 20 at \$3.60

With the proposed amendment, Opening Price would be for 20 strategies at a price of \$3.76. The execution price of \$3.76 is derived from the mid-point of the lowest executable bid price of \$3.73 and the next available executable bid price of \$3.79. In this example, 20 strategies can be opened at multiple price points ranging from \$3.73 up to \$3.79. None of these Potential Opening Prices would cause the unexecuted \$3.73 buy order to be available at a price which crosses the Opening Price, therefore, the System opens at the mid-point of such prices, \$3.76.

Today, with this same example, the Opening Price would be 3.79, the highest executable bid price, which provides the offer side with all price improvement. With the proposed amendment, the Opening Price seeks to distribute to the extent possible price improvement to both the bid and offer side of the transaction.

Example # 4 (Mid-Point When Interest is Equal In Size)

*“Provided such crossing interest is equal in size, the System will calculate the Potential Opening Price based on the mid-point of lowest executable bid price and the highest executable offer price, rounded, if necessary, up to the closest minimum trading increment”*

Complex Order Strategy: A+B strategy

Quote for Leg A @ 1.75 x 1.95 each

Quote for Leg B @ 1.75 x 1.95 each

Boundary Price= 3.50 (10) - 3.90 (10)

(Leg A Bid 1.75 + Leg B Bid 1.75 = 3.50)

(Leg A Offer 1.95 + Leg B Offer 1.95 = 3.90)

Complex Order #1: Buy 10 for \$3.78

Complex Order #2: Buy 20 for \$3.74

Complex Order #3: Buy 10 at \$3.71

Complex Order #4: Sell 20 at \$3.64

Complex Order #5: Sell 20 at \$3.66

With the proposed amendment, the Opening Price will be for 40 strategies at a price of \$3.69. The execution price of \$3.69 is derived from the mid-point of the lowest executable bid price of \$3.71 and the highest executable offer price of \$3.66, rounded up to the closest minimum trading increment. Today, rounding would be down and with this proposal the rounding would be up.

If the example were changed slightly such that Complex Order #4 and Complex Order #5 were Market Complex Orders rather than Limit Orders, the Opening Price for the 40 strategies would be \$3.61, which is derived from the mid-point of the lowest executable bid price of \$3.71 and the highest executable offer of \$3.50 (which is the Boundary Price of the sell Market Complex Orders), rounded up to the closest minimum trading increment.

The Exchange notes that executable bids/offers include any interest that could be executed at the net price without trading through residual interest or the Boundary Price, or without trading at the Boundary Price where there is Priority Customer interest at the best bid or offer for any leg, consistent with current MRX Options 3, Section 14(c)(2).<sup>42</sup>

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<sup>42</sup> MRX Options 3, Section 14(c)(2) provides, “Complex strategies will not be executed at prices inferior to the best net price achievable from the best ISE bids and offers for the individual legs. Notwithstanding the provisions of Options 3, Section 10: (i) a Complex Options Strategies may be executed at a total credit or debit price with one other Member without giving priority to bids or offers established on the Exchange that are no better than the bids or offers in the individual options series comprising such total credit or debit; provided, however, that if any of the bids or offers established on the Exchange consist of a Priority Customer Order, the price of at least one leg of the complex strategy must trade at a price that is better than the corresponding bid or offer on the Exchange by at least one minimum trading increment for the series as defined in Options 3, Section 3; (ii) the option leg of a Stock-Option Strategy has priority over bids and offers for the individual options series established on the Exchange by

Further, executable bids/offers would be bounded to the Boundary Price on the contra-side of the interest, for determination of the Opening Price described above when crossing interest is different in size and when crossing interest is equal in size.

The amendment will benefit Members by smoothing the way for the complex strategy to open with Market Complex Orders. Today, Market Complex Orders participate in the Complex Opening Process in a limited capacity as explained above. By permitting Market Complex Orders to participate in the Complex Opening Price Determination process in more situations, the Exchange can provide more opportunity for Complex Orders to trade in the Opening Process without having to go to the Uncrossing process. Market conditions can change between the Complex Opening Price Determination process and the Uncrossing process, which can lead to missed opportunities for execution. The proposed rule would have the Boundary Price assign limits to the Opening Price and therefore permit Market Complex Orders to participate in the Complex Opening Process to the extent that they are within the Boundary Prices. With this change, MRX would permit a complex strategy to calculate an Opening Price utilizing a greater number of Market Complex Orders, which benefits the Opening Process by taking into account these more aggressively priced orders<sup>43</sup> while also bringing more liquidity into the Opening Price calculation.

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Professional Orders and market maker quotes that are no better than the price of the options leg, but not over such bids and offers established by Priority Customer Orders; and (iii) the options legs of a Stock-Complex Strategy are executed in accordance with subparagraph (c)(2)(i).

<sup>43</sup> The allowance of a greater number of Market Complex Orders within the Opening Process provides a greater depth of price discovery for an options series. As noted above, the Boundary Price would assign limits to the Opening Price, therefore preventing Market Complex Orders which are aggressively priced from negatively impacting the Opening Price.

Example # 5 (Market Complex Orders trading in Opening Price Determination)

*“Provided interest crosses and does not match in size, the System will calculate the Potential Opening Price based on the highest (lowest) executable offer (bid) price when the larger sized interest is offering (bidding)”*

As referenced above,

*Assume*

Complex Order Strategy: A+B strategy

Quote for Leg A @ 1.75 x 2.00

Quote for Leg B @ 1.75 x 2.00

Boundary Price = 3.50 (10) – 4.00 (10)

(Leg A Bid 1.75 + Leg B Bid 1.75 = 3.50)

(Leg A Offer 2.00 + Leg B Offer 2.00 = 4.00)

Market Complex Order #1: Buy 30

Complex Order #2: Sell 20 at \$3.95

After Complex Opening Price Determination process, but before Uncrossing

ABBO for Leg A updates: 1.85 x 1.90

ABBO for Leg B updates 1.85 x 1.90

cNBBO: 3.70 x 3.80

(ABBO Leg A Bid 1.85 + Leg B Bid 1.85 = 3.70)

(ABBO Leg A Offer 1.90 + Leg B Offer 1.90 = 3.80)

With the proposed amendment the Market Complex Order can be considered in the Complex Opening Price Determination process and therefore is able to trade at the Opening Price of \$4.00 for 20 strategies with Complex Order #2 and also able to trade 10 strategies at a net price \$4.00 with the individual legs at the best bids and offers before the ABBO updates, leaving no place for this complex strategy to trade. The Opening

Price in this example is determined as the lowest executable bid because the bid side is the larger sized interest, which is limited by the Boundary Price on the offer side at 4.00.

Today, Market Complex Orders with a larger quantity than the quantity of interest on the contra side of the market do not participate in the Complex Opening Price Determination and can only execute during the Uncrossing pursuant to Supplementary Material .05(d)(6) of MRX Options 3, Section 14. In the example above, the ABBO of each leg updates after the Complex Opening Price Determination process and restricts the Market Complex Order and Complex Limit Order from trading in the Uncrossing because they cannot match at a price that would be within the Price Limits for Complex Orders pursuant to MRX Options 3, Section 16(a).

Finally, with this proposal and as demonstrated in Example 5 above, a complex strategy would open pursuant to Supplementary Material .05(d)(5) of MRX Options 3, Section 14, with less contracts becoming subject to the Uncrossing pursuant to Supplementary Material .05(d)(6) of MRX Options 3, Section 14. As a result of this change, more interest would be able to trade within the Opening Process, ensuring a greater number of contracts are executed on MRX at the Complex Opening and lessening the likelihood that contracts which remain unmatched during the Complex Opening Price Determination process receive no execution in the Uncrossing due to changing market conditions.<sup>44</sup>

Phlx has a similar methodology to arrive at a complex opening price at Phlx Options 3, Section 14(d)(ii)(C)(2)<sup>45</sup> as compared to proposed Supplementary Material

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<sup>44</sup> Unmatched orders would rest on the Order Book with the potential to execute intra-day.

<sup>45</sup> COOP Evaluation. Upon expiration of the COOP Timer, the System will conduct a COOP Evaluation to determine, for a Complex Order Strategy, the price at which the maximum number of contracts can trade, taking into account Complex Orders marked All-or-None (which will be executed if possible) unless the maximum number of contracts can only trade without including All-or-None Orders. The Exchange will open the Complex Order Strategy at that price, executing marketable trading interest, in the following order: first, to Public Customers in time priority; next to Phlx electronic market makers on a pro rata

.05(d)(3) of MRX Options 3, Section 14. Phlx's COOP Evaluation and MRX's proposed Opening Price Determination both seek the price at which the maximum number of contracts can trade. Phlx's COOP Evaluation is an auction with a timer, unlike MRX's

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basis; and then to all other participants on a pro rata basis. The imbalance of Complex Orders that are unexecutable at that price are placed on the CBOOK.

(1) No trade possible. If at the end of the COOP Timer the System determines that no market or marketable limit Complex Orders or COOP Sweeps, Complex Orders or COOP Sweeps that are equal to or improve the cPBBO, and/or Complex Orders or COOP Sweeps that cross within the cPBBO exist in the System, all Complex Orders received during the COOP Timer will be placed on the CBOOK, as described in paragraph (f) below.

(2) Trade is possible. If at the end of the COOP Timer the System determines that there are market or marketable limit Complex Orders or COOP Sweeps, Complex Orders or COOP Sweeps that are equal to or improve the cPBBO, and/or Complex Orders or COOP Sweeps that cross within the cPBBO in the System, the System will do the following: if such interest crosses and does not match in size, the execution price is based on the highest (lowest) executable offer (bid) price when the larger sized interest is offering (bidding), provided, however, that if there is more than one price at which the interest may execute, the execution price when the larger sized interest is offering (bidding) is the midpoint of the highest (lowest) executable offer (bid) price and the next available executable offer (bid) price rounded, if necessary, down (up) to the closest minimum trading increment. If the crossing interest is equal in size, the execution price is the midpoint of lowest executable bid price and the highest executable offer price, rounded, if necessary, up to the closest minimum trading increment. Executable bids/offers include any interest which could be executed at the net price without trading through residual interest or the cPBBO or without trading at the cPBBO where there is Public Customer interest at the best bid or offer for any leg, consistent with paragraph (c)(iii).

If there is any remaining interest and there is no component that consists of the underlying security and provided that the order is not marked all-or-none, such interest may "leg" whereby each options component may trade at the PBBO with existing quotes and/or Limit Orders on the Limit Order book for the individual components of the Complex Order; provided that remaining interest may execute against any eligible Complex Orders received before legging occurs. If the remaining interest has a component that consists of the underlying security, such Complex Order will be placed on the CBOOK (as defined below).

(3) The Complex Order Strategy will be open after the COOP even if no executions occur.

Opening Price Determination.<sup>46</sup> Proposed Supplementary Material .05(d)(3)(A) and (B) of MRX Options 3, Section 14 differs from Phlx Options 3, Section 14(d)(ii)(C)(2).

MRX will open a complex strategy with the Complex Order Book crossed if an Opening Price cannot be found within the Boundary Prices and remain crossed while attempting to uncross the Complex Order Book on a best effort basis, pursuant to Supplementary Material .06 of MRX Options 3, Section 14, until all interest can be executed. Today, Phlx will open a complex strategy crossed when a price cannot be found within Phlx's cPBBO during the COOP Evaluation period and there are more aggressive away market prices that are limiting the ability to leg into the single-leg book, but will not remain crossed as complex orders that are through Phlx's cPBBO would be cancelled pursuant to Phlx Options 3, Section 14(f)(i)(A).<sup>47</sup>

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<sup>46</sup> Phlx's All-or-None order type differs from MRX's All-or-None order in that only Public Customers may utilize the Phlx All-or-None order type and Phlx's All-or-None order may rest on the order book. See Phlx Option 3, Section 7(b)(5). MRX's All-or-None order is a limit or market order that is to be executed in its entirety or not at all. See MRX Options 3, Section 7(c).

<sup>47</sup> By way of example, assume Phlx cPBBO is 1.00 x 2.00 and cNBBO is 1.45 x 1.50. Also, assume Phlx complex Day Order to buy the strategy @ \$0.50 which begins a COOP timer. Next, a complex day order to sell the strategy @ \$0.50 arrives during the COOP timer. These orders are crossed, but are not within Phlx's cPBBO, and, therefore, both orders cannot trade as part of the COOP Evaluation. Additionally, the sell order cannot leg into Phlx's simple order book because of the more aggressive cNBBO which would limit legging as part of the ACE price protection described within Phlx Options 3, Section 16(b)(i), and, therefore, the sell order that is crossed with Phlx's cPBBO cannot remain on the Complex Order Book and is ultimately cancelled. In contrast, on MRX, this sell order would remain crossed on the Complex Order Book while continuously looking for an opportunity to uncross and trade these Complex Orders as new orders arrive or the market moves.

Options 3, Section 14 (f)(i)(A) provides that Complex Orders must be entered onto the CBOOK in increments of \$0.01. The individual components of a Complex Order may be executed in minimum increments of \$0.01, regardless of the minimum increments applicable to such components. Such orders will be

The Exchange also proposes to amend the Opening Price in Supplementary Material .05(d)(4) of MRX Options 3, Section 14 that currently provides,

Opening Price. If the Potential Opening Price is at or within the Boundary Prices, the Potential Opening Price becomes the Opening Price. If the Potential Opening Price is not at or within the Boundary Prices, the Opening Price will be the price closest to the Potential Opening Price that satisfies the maximum quantity criteria without leaving unexecuted contracts on the bid or offer side of the market at that price and is at or within the Boundary Prices. If the bid Boundary Price is higher than the offer Boundary Price, or if no valid Opening Price can be found at or within the Boundary Prices, there will be no trade in the Complex Opening Price Determination and the complex strategy will open pursuant to the Complex Uncrossing Process described in Supplementary Material .06(b) to this Rule.

The Exchange proposes to amend this rule to instead provide,

If the Potential Opening Price is at or within the Boundary Prices, the Potential Opening Price becomes the Opening Price and the complex strategy will open pursuant to Supplementary Material .05(d)(5) to this Rule. If the bid Boundary Price is higher than the offer Boundary Price, or if no valid Potential Opening Price can be found at or within the Boundary Prices, there will be no trade in the Complex Opening Price Determination and the complex strategy will open pursuant to the Complex Uncrossing Process described in Supplementary Material .06(b) to this Rule.

With the proposed change, if the Potential Opening Price is at or within the Boundary Prices, the Potential Opening Price becomes the Opening Price and the complex strategy will open pursuant to the Uncrossing described in Supplementary Material .05(d)(5) of MRX Options 3, Section 14, as is the case today. However, as is the case today, if the bid Boundary Price is higher than the offer Boundary Price, or if no valid Potential Opening Price can be found at or within the Boundary Prices, there will be no trade in the Complex Opening Price Determination and the complex strategy will open pursuant to

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placed on the CBOOK by the System when the following conditions exist: (A) When the Complex Order does not price-improve upon the cPBBO upon receipt...”.

the Complex Uncrossing process described in Supplementary Material .06(b) of MRX Options 3, Section 14 pursuant to the proposed amendment to the Complex Opening Price Determination.

#### Complex Order Risk Protections

The Exchange proposes a non-substantive amendment to the title of a Complex Order Risk Protection in MRX Options 3, Section 16, Complex Order Risk Protections. Specifically, the Exchange proposes to amend MRX Options 3, Section 16(c)(1) to change the title from “Limit Order Price Protection” to “Complex Order Price Protection.” The Exchange believes the proposed title more accurately describes the risk protection. The Exchange also proposes a non-substantive amendment to correct an incorrect citation in MRX Options 3, Section 16(b) to “Options 2, Section 11.” The correct citation is “Options 3, Section 11.” Correcting this citation will make clear what was section was being referenced.

#### Implementation

The Exchange intends to begin implementation of the proposed rule change prior to December 23, 2022. The implementation would commence with a limited symbol migration and continue to migrate symbols over several weeks. The Exchange will issue an Options Trader Alert to Members to provide notification of the symbols that will migrate and the relevant dates.

#### 2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act,<sup>48</sup> in general, and furthers the objectives of Section 6(b)(5) of the Act,<sup>49</sup> in particular,

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<sup>48</sup> 15 U.S.C. 78f(b).

in that it is designed to promote just and equitable principles of trade and to protect investors and the public interest for the reasons discussed below.

#### Legging Order

Amending MRX Options 3, Section 7(k)(1) to add a provision which states that a Legging Order will not be generated during a Posting Period in progress on the same side in the series pursuant to Options 3, Section 15 regarding Acceptable Trade Range, is consistent with the Act because from a System processing and user acceptance standpoint, the best practice is to wait for the ATR Posting Period to complete before attempting to generate a Legging Order on the same side in the series, as the time required to complete the ATR Posting Period is minimal. The proposed change is designed to protect investors and the public interest as automatically generated Legging Orders would be removed from the single-leg order book when they are no longer at the Exchange's displayed best bid or offer. Generating a Legging Order during a Posting Period in progress on the same side in the series would lead to the immediate removal of the Legging Order from the single-leg order book, making it superfluous to have been generated. Phlx's legging order rule in Options 3, Section 14(f)(iii)(C)(2)<sup>50</sup> has the same restriction on generating legging orders as proposed herein.

#### Changes to the Single-Leg Price Improvement Mechanism for Crossing Transactions

The Exchange's proposal to amend MRX Options 3, Section 13(d)(4), related to single-leg PIM, to not permit unrelated marketable interest, on the opposite side of the market from the Agency Order, which is received during a single-leg PIM to early

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<sup>49</sup> 15 U.S.C. 78f(b)(5).

<sup>50</sup> See note 8 above.

terminate a single-leg PIM is consistent with the Act and promotes just and equitable principles because allowing the auction to run its full course would provide a full opportunity for price improvement to the Crossing Transaction. The unrelated interest would participate in the single-leg PIM allocation pursuant to MRX Options 3, Section 13(d), if residual contracts remain after executing with interest on the single-leg order book. Today, Phlx<sup>51</sup> and BX<sup>52</sup> do not permit unrelated interest on the same or opposite side of an Agency Order to early terminate their simple price improvement auctions.

The proposed amendment in MRX Options 3, Section 13(c)(5)(ii), related to single-leg PIM, applies to the receipt of marketable orders both on the same side and opposite side of the Agency order. With respect to the same side of the Agency Order, today, an unrelated market or marketable limit order in the same series on the same side of the Agency Order would cause the single-leg PIM to early terminate as well. The proposal promotes just and equitable principles of trade because a market or marketable limit order in the same series on the same side of the Agency Order cannot interact with a single-leg PIM auction. The market or marketable limit order may interact with the order book, and if there are residual contracts that remain from the market or marketable order in the same series on the same side of the Agency Order, they will rest on the order book and improve the BBO beyond the price of the Crossing Transaction which will cause early termination of the single-leg PIM pursuant to proposed MRX Options 3, Section 13(c)(5)(ii). The Exchange believes that this outcome would allow for the single-leg PIM exposure period to continue for the full period despite the receipt of unrelated marketable

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<sup>51</sup> See note 14 above.

<sup>52</sup> See note 15 above.

interest on the same side of the market from the Agency Order, provided residual interest does not go on to rest on the order book improving the BBO beyond the price of the Crossing Transaction of the PIM. Allowing the single-leg PIM to run its full course protects investors and the general public because it would provide an opportunity for price improvement to the Agency Order.

Amending current MRX Options 3, Section 13(c)(5)(iii) to align the rule text more closely with BX Options 3, Section 13(ii)(B)(2)<sup>53</sup> is consistent with the Act because it removes any ambiguity that a market or marketable limit order priced more aggressively than the Agency Order on the same side could ultimately rest on the order book, improving the BBO beyond the price of the Crossing Transaction of the PIM and, therefore, cause the early termination of a single-leg PIM. Continuing to not permit a single-leg PIM to early terminate any time the Exchange best bid or offer improves beyond the price of the Crossing Transaction on the same side of the market as the Agency Order protects investors and the general public because the Crossing Transaction Agency Order's price is inferior to the Exchange's best bid or offer on the same side of the market as the Agency Order. Upon early termination of the single-leg PIM, the Crossing Transaction would execute against responses that arrived prior to the time the Exchange's best bid or offer improved beyond the Crossing Transaction. The proposed amendment to the rule text is not intended to amend the current System functionality, rather it is intended to make clear that a market or marketable limit order could ultimately rest on the order book and improve the BBO beyond the price of the Crossing Transaction.

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<sup>53</sup>

See note 17 above.

Adding proposed new MRX Options 3, Section 13(c)(5)(iii), which describes the automatic termination of the exposure period resulting from a trading halt on the Exchange in the affected series, is consistent with the Act because a trading halt would cause an option series to stop trading on MRX and thereby impact the PIM auction. Today, if a trading halt is initiated after an order is entered into the single-leg PIM, such auction will be automatically terminated without execution. Of note, the Exchange is separately<sup>54</sup> proposing to amend MRX Options 3, Section 13(d)(5) to change System behavior such that if a trading halt is initiated after an order is entered into the single-leg PIM, such auction will be automatically terminated with execution solely with the Counter-Side Order.<sup>55</sup> The proposed amendment to MRX Options 3, Section 13(c)(5)(iii) protects investors and the general public by making clear that a trading halt would lead to early termination of a single-leg PIM. This amendment is not intended to amend the current System functionality, rather it is intended to make clear that a trading halt will cause the single-leg PIM to early terminate.

#### Changes to the Complex PIM

Deleting MRX Options 3, Section 13(e)(4)(vi) within Complex PIM, as well as a paragraph in Supplementary Material .01(b)(ii) of MRX Options 3, Section 14 discussing Complex Order Exposure, related to the early termination of single-leg PIM from the arrival of unrelated marketable interest on either the same or opposite side of the market

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<sup>54</sup> See note 19 above.

<sup>55</sup> SR-MRX-2022-5P proposes to renumber MRX Options 3, Section 13(d)(5) as Options 3, Section 13(d)(6), and proposes to state, “Specifically, current MRX Options 3, Section 13(d) is proposed to be renumbered within SR-MRX-2022-5P to Options 3, Section 13(d)(6) and proposes to state, “If a trading halt is initiated after an order is entered into the Price Improvement Mechanism, such auction will be automatically terminated with execution solely with the Counter-Side Order.”

from the Agency Order, is consistent with the Act because a single-leg PIM will no longer early terminate from the arrival of unrelated marketable interest on either the same or opposite side of the market from the Agency Order and because the flash functionality will no longer exist.<sup>56</sup> The removal of the aforementioned rule text will protect investors and the public by avoiding confusion as the scenarios contemplated by MRX Options 3, Section 13(e)(4)(vi) and Supplementary Material .01(b)(ii) of MRX Options 3, Section 14 will no longer be able to occur.

#### Complex Orders Delayed Functionality

The Exchange's proposal to delay the implementation of certain stock-tied functionality in connection with the technology migration is consistent with the Act as it will allow the Exchange additional time to code, test and implement this functionality on the enhanced platform. Delayed Functionalities would not be available for symbols that migrated to the platform and thereafter, until such time as the Exchange recommenced their availability by announcing a date in an Options Trader Alert, which date would be prior to one year from the start of the migration of the symbols to the platform. The Exchange's proposal to delay these functionalities protects investor and the general public by allowing the Exchange to stage the migration, thereby providing maximum benefit to its Members while also ensuring a successful rollout.

#### Other Complex Order Amendments

##### *Opening Only Complex Order*

The Exchange's proposal to remove the word "Limit" within the description of the Opening Only Complex Order Type in MRX Options 3, Section 14(b)(10) is

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<sup>56</sup> See note 24 above.

consistent with the Act because it allows Opening Only Complex Orders to be submitted as Market Orders or Limit Orders. The Exchange believes that allowing Market and Limit Orders to be submitted within the Complex Opening Process promotes just and equitable principles of trade. Market Orders are typically the most aggressively priced orders while Limit Orders have a limit price contingency that Market Orders do not have. Allowing both of these order types to participate in the Complex Opening Process protects investors and the general public because it allows greater liquidity to be present to determine the Opening Price. All Members may enter both Market Orders and Limit Orders in the Complex Opening Process as well as intra-day. This proposal is consistent with current System operations.

*Complex QCC with Stock Orders*

The Exchange's proposal to amend an incorrect citation with MRX Options 3, Section 14(b)(15), related to Complex QCC with Stock Orders, is consistent with the Act because the current citation to MRX Options 3, Section 12(e) in the description of this order type should be to MRX Options 3, Section 12(f). This non-substantive amendment will make clear what was meant by the reference.

*Complex Preferred Orders*

The Exchange's proposal to add "Complex Preferred Orders" to the list of Complex Order Types in MRX Options 3, Section 14(b) is consistent with the Act because the Exchange believes that this order type will promote just and equitable principles of trade because the order type will continue to encourage Preferred Market Makers to quote aggressively in an effort to execute against the Complex Preferred Order. Preferred Market Makers are not able to ascertain if a particular order is a

Complex Preferred Order. The Exchange believes the proposal will protect investors and the general public by encouraging greater order flow to be sent to the Exchange through Complex Preferred Orders and that this increased order flow will benefit all market participants on the Exchange because they may interact with that order flow.

The proposal promotes just and equitable principles of trade because it continues to prioritize Priority Customer<sup>57</sup> Orders on the single-leg order book. Priority Customers have priority over non-Priority Customer interest at the same price in the same options series on the single-leg order book.<sup>58</sup> Complex Preferred Orders are allocated based on the competitive bidding of market participants. The Exchange's proposal promotes just and equitable principles of trade as a Preferred Market Maker must be at the NBBO for a component leg(s) of the Complex Preferred Order at the time the Complex Preferred Order is received. Moreover, participation entitlements for Preferred Market Makers are designed to balance the obligations<sup>59</sup> that the Preferred Market Maker has to the market with corresponding benefits. In its approval of other options exchange preferred or directed order programs, the Commission has, like proposals to amend a specialist guarantee, focused on whether the percentage of the "entitlement" would rise to a level that could have a material adverse impact on quote competition within a particular exchange, and concluded that such programs do not jeopardize market integrity

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<sup>57</sup> The term "Priority Customer" means a person or entity that (i) is not a broker or dealer in securities, and (ii) does not place more than 390 orders in listed options per day on average during a calendar month for its own beneficial account(s). See Options 1, Section 1(a)(36).

<sup>58</sup> See MRX Options 3, Section 10(c)(1)(A).

<sup>59</sup> Primary Market Makers are obligated to quote in the Opening Process pursuant to MRX Options 3, Section 8(c) as well as intra-day pursuant to Options 2, Section 5(e), in addition to other obligations noted within MRX Options 2, Sections 4 – 8.

or the incentive for market participants to post competitive quotes.<sup>60</sup>

Further, adding this existing order type, which is described in MRX Options 2, Section 10, would complete the list of Complex Order types in MRX Options 3, Section 14(b). The addition of Complex Preferred Orders to the list of order types in MRX Options 3, Section 14(b) will make clear to Members the availability of Complex Preferred Orders. Both Phlx<sup>61</sup> and MIAX<sup>62</sup> have a similar order type.

*Options 3, Section 14(c)(2) and MRX Supplementary Material .02 to Options 3, Section 14*

Correcting an incorrect reference to “ISE” with MRX Options 3, Section 14(c)(2), which should be to “MRX,” will add clarity to the rule; this amendment is non-substantive. The Exchange’s proposal to make a technical correction in Supplementary Material .02 of MRX Options 3, Section 14 to amend the word “which” to “whom” is a non-substantive amendment.

*Complex Opening Price Determination*

The Exchange’s proposal to amend the citation within Supplementary Material .05(d)(2) to Options 3, Section 14, related to the Potential Opening Price, is consistent with the Act because the current citation to Supplementary Material .06(b) should be to Supplementary Material .05(b). This non-substantive amendment will make clear what

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<sup>60</sup> See Securities Exchange Act Release Nos. 74129 (January 23, 2015), 80 FR 4954 at 4955 (January 29, 2015) (SR-BX-2014-049) (Order Approving Proposed Rule Change Relating to Directed Market Makers); and 51759 (May 27, 2005), 70 FR 32860 at 32861 (June 6, 2005) (SR-Phlx-2004-91) (Order Approving Proposed Rule Change and Notice of Filing and Order Granting Accelerated Approval to Amendment No. 1 Thereto To Establish a Directed Order Process for Orders Delivered to the Phlx Via AUTOM).

<sup>61</sup> See note 36 above.

<sup>62</sup> See note 37 above.

was meant by the reference.

The Exchange's proposal to amend Supplementary Material .05(d)(3) of MRX Options 3, Section 14, which describes the Complex Opening Price Determination, is consistent with the Act because the proposed new Complex Opening Process would allow for additional contracts to be included in the Potential Opening Price calculation. This proposed methodology would protect investors and the general public by leading to better price discovery and more contracts executing as part of the Complex Opening Price Determination. With this proposal, when the interest does not match the size and there is more than one Potential Opening Price at which the interest may execute, then the Exchange would calculate a Potential Opening Price using the mid-point of the highest (lowest) executable offer (bid) price and the next available executable offer (bid) price rounded, if necessary, down (up) to the closest minimum trading increment. As a result, the proposal promotes just and equitable principles of trade as more options contracts are likely to be executed at better prices than under current rule. This behavior differs from MRX's current opening rule in that, today, the Exchange would calculate the Potential Opening Price as the highest (lowest) executable bid (offer) when there would be contracts left unexecuted on the bid (offer) side of the complex market. The proposed methodology is similar to Phlx.<sup>63</sup>

Further, the proposed amendment promotes just and equitable principles of trade by allowing Market Complex Orders to participate in the Opening Price Determination process in a broader capacity than the MRX opening rule allows for today. Today, if there are only Market Complex Orders on both sides of the market, or if there are Market

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<sup>63</sup> See Phlx Options 3, Section 14(d)(ii)(C)(2).

Complex Orders on the bid (offer) side of the market for greater than the total size of Complex Orders on the offer (bid) side of the market, then MRX will not trade in the Complex Opening Price Determination process and would instead open pursuant to an Uncrossing pursuant to Supplementary Material .06(b) of MRX Options 3, Section 14. The proposed rule would have the Boundary Price assign limits to the Opening Price and, therefore, permit Market Complex Orders to participate in the Complex Opening Process, without limitation to the benefit of investors and the public interest. With this change, MRX would permit a complex strategy to calculate an Opening Price utilizing a greater number of Market Complex Orders, which benefits the Opening Process by taking into account these more aggressively priced orders<sup>64</sup> while also bringing more liquidity into the Opening Price calculation. The amendment is designed to promote just and equitable principles of trade as it will benefit Members by smoothing the way for the complex strategy to open with Market Complex Orders.

Finally, the proposed amendments to the Complex Opening Process should promote just and equitable principles by allowing a complex strategy to open pursuant to Supplementary Material .05(d)(4) of MRX Options 3, Section 14, with less contracts becoming subject to the Uncrossing pursuant to Supplementary Material .05(d)(5) of MRX Options 3, Section 14. As a result of this change, more interest would be able to trade within the Opening Process, ensuring a greater number of contracts are executed on

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<sup>64</sup> The allowance of a greater number of Market Complex Orders within the Opening Process provides a greater depth of price discovery for an options series. As noted above, the Boundary Price would assign limits to the Opening Price, therefore preventing Market Complex Orders which are aggressively priced from negatively impacting the Opening Price.

MRX at the opening and lessening the likelihood that contracts which remain unmatched during the Uncrossing receive no execution.<sup>65</sup>

#### Complex Order Risk Protections

The Exchange's proposal to amend the title of a Complex Order Risk Protection in Options 3, Section 16, Complex Order Risk Protections is a non-substantive amendment.

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

The Exchange does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act.

#### Legging Orders

Amending MRX Options 3, Section 7(k)(1) to add a provision which states that a Legging Order will not be generated during a Posting Period in progress on the same side in the series pursuant to Options 3, Section 15 regarding Acceptable Trade Range does not impose an undue burden on intra-market competition because the amendment will apply equally to all Members as Legging Orders are generated by the System.

Additionally, this proposal does not impose an undue burden on inter-market competition as other options exchanges may adopt Legging Orders and similar rules for the generation of such orders. Today, Phlx's legging order rule in Options 3, Section 14(f)(iii)(C)(2) has the same restriction as proposed to be added to MRX's Legging Order rule in MRX Options 3, Section 7(k)(1).<sup>66</sup>

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<sup>65</sup> Unmatched orders would rest on the order book with the potential to execute intra-day.

<sup>66</sup> See note 8 above.

Changes to the Single-Leg Price Improvement Mechanism for Crossing Transactions

The Exchange's proposal to amend MRX Options 3, Section 13(d)(4), MRX Options 3, Section 13(c)(5)(ii) and (iii), and add a proposed new MRX Options 3, Section 13(c)(5)(iii), related to single-leg PIM, does not impose an undue burden on intra-market competition because the amendment will apply equally to all Members. All Members may utilize PIM.

The Exchange's proposal to amend MRX Options 3, Section 13(d)(4), MRX Options 3, Section 13(c)(5)(ii) and (iii), and add a proposed new MRX Options 3, Section 13(c)(5)(iii), related to single-leg PIM, does not impose an undue burden on inter-market competition because other options exchanges may adopt similar rules. Today, Phlx<sup>67</sup> and BX<sup>68</sup> do not permit unrelated marketable interest on either the same or opposite side of the market from an Agency Order to early terminate their simple price improvement auctions.

Changes to the Complex PIM

Deleting MRX Options 3, Section 13(e)(4)(vi) within Complex PIM, as well as a related paragraph in Supplementary Material .01(b)(ii) of MRX Options 3, Section 14, which describes Complex Order Exposure, related to the early termination of single-leg PIM as a result of the arrival of unrelated marketable interest on either the same or the opposite side of the market from the Agency Order does not impose an undue burden on intra-market competition because the amendment will apply equally to all Members. All Members may utilize Complex PIM.

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<sup>67</sup> See note 14 above.

<sup>68</sup> See note 15 above.

Deleting MRX Options 3, Section 13(e)(4)(vi) within Complex PIM, as well as a related paragraph in Supplementary Material .01(b)(ii) of MRX Options 3, Section 14, which describes Complex Order Exposure, related to the early termination of single-leg PIM from the arrival of unrelated marketable interest on either the same or opposite side of the market from the Agency Order does not impose an undue burden on inter-market competition as other options exchanges<sup>69</sup> may adopt similar rules. Today, Phlx<sup>69</sup> and BX<sup>70</sup> do not permit unrelated marketable interest on either the same or opposite side of the market from an Agency Order to early terminate their simple price improvement auctions.

#### Complex Orders Delayed Functionality

The Exchange's proposal to delay the implementation of certain stock-tied functionality in connection with the technology migration does not impose an undue burden on intra-market competition because no Member will be able to utilize the Delayed Functionalities.

The Exchange's proposal to delay the implementation of certain stock-tied functionality in connection with the technology migration does not impose an undue burden on inter-market competition because the Exchange does not believe that the proposed rule change will impact the intense competition that exists in the options market. Today, ISE offers the Delayed Functionalities.

#### Other Complex Order Amendments

The Exchange does not believe that the proposed amendments to the Complex

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<sup>69</sup> See note 14 above.

<sup>70</sup> See note 15 above.

Orders rule will impose any significant burden on inter-market competition. Other exchanges today offer complex order functionalities. These options markets may amend their rules to mirror those of MRX. Other options exchanges offer orders similar to Complex Preferred Orders.<sup>71</sup> Additionally, the proposed Complex Opening Process is similar to Phlx.<sup>72</sup> Finally, the proposed Complex Opening Process methodology would allow MRX to compete with other options exchanges that offer Complex Order functionality.

*Opening Only Complex Order*

The Exchange's proposal to remove the word "Limit" within the description of the Opening Only Complex Order Type in MRX Options 3, Section 14(b)(10) does not impose an undue burden on intra-market competition because this proposed change will apply to all Members.

*Complex QCC with Stock Orders*

The Exchange's proposal to amend an incorrect citation with MRX Options 3, Section 14(b)(15), related to Complex QCC with Stock Orders, does not impose an undue burden on intra-market competition because the amendment is non-substantive.

*Complex Preferred Orders*

The Exchange's proposal to add "Complex Preferred Orders" to the list of Complex Order Types in MRX Options 3, Section 14(b) does not impose an undue burden on intra-market competition. Preferred Market Makers have obligations<sup>73</sup> unlike

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<sup>71</sup> See e.g., Phlx Options 2, Section 10 and MIAX Rule 100.

<sup>72</sup> See Phlx Options 3, Section 14(d)(ii)(C)(2).

<sup>73</sup> See MRX Options 2, Section 5

other market participants. The allocation entitlements for Preferred Market Makers are designed to balance the obligations that the Preferred Market Makers has to the market with corresponding benefits. In order to receive the participation entitlement for a Complex Preferred Order, Preferred Market Makers are required to quote 90% of the trading day as compared to Market Makers who are required to quote 60% of the trading day.<sup>74</sup> Further, Priority Customers<sup>75</sup> have priority over non-Priority Customer interest at the same price in the same options series on the single-leg order book.<sup>76</sup>

At the time of receipt of the Complex Preferred Order, a Preferred Market Maker would have to be quoting at the NBBO, which is intended to incentivize the Preferred Market Maker to quote aggressively in order to execute against the Complex Preferred Order. Preferred Market Makers are not able to ascertain if a particular order is a Complex Preferred Order. The Exchange believes the proposal will encourage Market Makers to quote tighter and add a greater amount of liquidity on MRX in an attempt to interact with Complex Preferred Orders that are sent to the Exchange. This order flow will benefit all market participants on the Exchange because any MRX Member may interact with that order flow. Finally, any MRX Member on the single-leg or Complex Order Book may trade with a Complex Preferred Order. Also, any MRX Market Maker may elect to receive Preferred Order.

*Options 3, Section 14(c)(2) and MRX Supplementary Material .02 to Options 3, Section 14*

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<sup>74</sup> See MRX Options 2, Section 5.

<sup>75</sup> See note 57 above.

<sup>76</sup> See MRX Options 3, Section 10(c)(1)(A).

Correcting an incorrect reference to “ISE” with MRX Options 3, Section 14(c)(2), which should be to “MRX,” will add clarity to the rule; this amendment is non-substantive. The Exchange’s proposal to make a technical correction in Supplementary Material .02 of MRX Options 3, Section 14 to amend the word “which” to “whom” is a non-substantive amendment.

*Complex Opening Price Determination*

The Exchange’s proposal to amend an incorrect citation within Supplementary Material .05(d)(2) to Options 3, Section 14, related to the Potential Opening Price, does not impose an undue burden on intra-market competition because the amendment is non-substantive.

The Exchange’s proposal to amend Supplementary Material .05(d)(3) to MRX Options 3, Section 14, which describes the Complex Opening Price Determination, does not impose an undue burden on intra-market competition because all Members may submit interest into the Complex Opening Process.

Complex Order Risk Protections

The Exchange’s proposal to amend the title of a Complex Order Risk Protection in Options 3, Section 16, Complex Order Risk Protections is a non-substantive amendment.

C. Self-Regulatory Organization’s Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period (i) as the Commission may designate up to 90 days of such date

if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the Exchange consents, the Commission shall: (a) by order approve or disapprove such proposed rule change, or (b) institute proceedings to determine whether the proposed rule change should be disapproved.

#### IV. Solicitation of Comments

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

##### Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-MRX-2022-10 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-MRX-2022-10. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<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; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly.

All submissions should refer to File Number SR-MRX-2022-10 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>77</sup>

J. Matthew DeLesDernier  
Assistant Secretary

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<sup>77</sup> 17 CFR 200.30-3(a)(12).

**EXHIBIT 5**

*New text is underlined; deleted text is in brackets.*

**Nasdaq MRX, LLC Rules**

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**Options 3 Options Trading Rules**

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**Section 7. Types of Orders and Order and Quote Protocols**

\* \* \* \* \*

(k) Legging Orders. A legging order is a limit order on the regular limit order book that represents one side of a Complex Options Order that is to buy or sell an equal quantity of two options series resting on the Exchange's Complex Order Book. Legging orders are firm orders that are included in the Exchange's displayed best bid or offer.

(1) A legging order may be automatically generated for one leg of a Complex Options Order at a price: (i) that matches or improves upon the best displayed bid or offer on the regular limit order book; and (ii) at which the net price can be achieved when the other leg is executed against the best displayed bid or offer on the regular limit order book. A legging order will not be created at a price that locks or crosses the best bid or offer of another exchange or during a Posting Period in progress on the same side in the series, pursuant to Options 3, Section 15 regarding Acceptable Trade Range.

\* \* \* \* \*

**Section 10. Priority of Quotes and Orders**

\* \* \* \* \*

(c) *Execution Priority and Processing in the System.* The Exchange will apply a Size Pro-Rata execution algorithm to orders, unless otherwise specified. The System shall execute trading interest within the System in price priority, meaning it will execute all trading interest at the best price level within the System before executing trading interest at the next best price. Size Pro-Rata Priority shall mean that if there are two or more resting orders or quotes at the same price, the System allocates contracts from an incoming order or quote to resting orders and quotes beginning with the resting order or quote displaying the largest size proportionally according to displayed size, based on the total number of contracts displayed at that price. If the result is not a whole number, it will be rounded up to the nearest whole number. If there are still contracts to be allocated after the displayed size of all orders at that price has been executed, the remaining size from the incoming order will be allocated proportionally against non-displayed interest according to

remaining total size of each resting order at such price, beginning with the order which has the largest total size remaining.

(1) **Priority Overlays Applicable to Size Pro-Rata Execution Algorithm:** the Exchange will apply the following designated Member priority overlays. No Member shall be entitled to receive a number of contracts that is greater than the size that is associated with their quotation or order.

\* \* \* \* \*

(E) **All Other Remaining Interest:** If there are contracts remaining after all priorities in (A)-(D) have been fully executed, notwithstanding Options 3, Section 7(g)(3) and (k)(2), such contracts shall be executed based on the Size Pro-Rata execution algorithm as described within Options 3, Section 10(c). Legging Orders will be allocated after all other non-displayed interest, pursuant to Options 3, Section 7(k)([2]3).

\* \* \* \* \*

### **Section 13. Price Improvement Mechanism for Crossing Transactions**

\* \* \* \* \*

(c) **Exposure Period.** Upon entry of a Crossing Transaction into the Price Improvement Mechanism, a broadcast message that includes the series, price and size of the Agency Order, and whether it is to buy or sell, will be sent to all Members. This broadcast message will not be included in the Exchange's disseminated best bid or offer and will not be disseminated through OPRA.

\* \* \* \* \*

(5) The exposure period will automatically terminate (i) at the end of the time period designated by the Exchange pursuant to Options 3, Section 13(c)(1) above, (ii) [upon the receipt of a market or marketable limit order on the Exchange in the same series, or (iii) upon the receipt of a non-marketable limit order in the same series on the same side of the market as the Agency Order that would cause the price of the Crossing Transaction to be outside of the best bid or offer on the Exchange] any time the Exchange best bid or offer improves beyond the price of the Crossing Transaction on the same side of the market as the Agency Order ; or (iii) any time there is a trading halt on the Exchange in the affected series.

\* \* \* \* \*

(d) Execution. At the end of the exposure period the Agency Order will be executed in full at the best prices available, taking into consideration orders and quotes in the Exchange market, Improvement Orders, and the Counter-Side Order. The Agency Order will receive executions at multiple price levels if there is insufficient size to execute the entire order at the best price.

\* \* \* \* \*

(4) [When a market order or marketable limit order on the opposite side of the market from the Agency Order ends the exposure period, it will participate in the execution of the Agency Order at the price that is mid-way between the best counter-side interest and the NBBO, so that both the market or marketable limit order and the Agency Order receive price improvement. Transactions will be rounded, when necessary, to the \$.01 increment that favors the Agency Order]Unrelated market or marketable interest (against the MRX BBO) on the opposite side of the market from the Agency Order received during the exposure period will not cause the Crossing Transaction to end early and will execute against interest outside of the Crossing Transaction. If contracts remain from such unrelated order at the time the auction exposure period ends, they will be considered for participation in the order allocation process described in sub-paragraph (3).

\* \* \* \* \*

(e) **Complex Price Improvement Mechanism.** Electronic Access Members may use the Price Improvement Mechanism according to this Rule to execute Complex Orders at a net price. The Complex Price Improvement Mechanism is a process by which an Electronic Access Member can provide price improvement opportunities for a transaction wherein the Electronic Access Member seeks to facilitate a Complex Order it represents as agent, and/or a transaction wherein the Electronic Access Member solicited interest to execute against a Complex Order it represents as agent (a “Crossing Transaction”).

\* \* \* \* \*

(4) Exposure Period. Upon entry of a Complex Order into the Complex Price Improvement Mechanism, a broadcast message that includes the net price, side and size of the Agency Complex Order will be sent to Members.

\* \* \* \* \*

[(vi) A Complex Price Improvement Mechanism in a complex strategy may be ongoing at the same time as a Price Improvement Auction pursuant to this Rule or during an exposure period pursuant to Supplementary Material .02 to Options 5, Section 2 in a component leg(s) of such Complex Order. If a Complex Price Improvement Mechanism is early terminated pursuant to paragraph (iv) above, and the incoming Complex Order that causes the early termination in the complex

strategy is also marketable against a component leg(s) of the complex strategy that is the subject of a concurrent ongoing Price Improvement Auction pursuant to this Rule or an exposure period pursuant to Supplementary Material .02 to Options 5, Section 2, then the concurrent Complex Price Improvement Mechanism and component leg auction(s) are processed in the following sequence: (1) the Complex Price Improvement Mechanism is early terminated; (2) the component leg auction(s) are early terminated and processed; and (3) legging of residual incoming Complex Order interest occurs, except with respect to Stock Option Orders and Stock Complex Orders.]

\* \* \* \* \*

#### **Section 14. Complex Orders**

MRX will migrate symbols to an enhanced platform (“Platform”) pursuant to a symbol migration commencing in the fourth quarter of 2022. Stock-Option Strategies, Stock-Complex Strategies, Complex QCC with Stock Orders, and QCC with Stock Orders, as defined in Options 3, Sections 14(a)(2) and (3) and (b)(15), and Options 3, Section 7(t), respectively, will not be available for symbols that migrated to the Platform. The Exchange will specify the symbol migration schedule in an Options Trader Alert to be issued by the Exchange. The Exchange will recommence the availability of Stock-Option Strategies, Stock-Complex Strategies, Complex QCC with Stock Orders, and QCC with Stock Orders, as defined in Options 3, Sections 14(a)(2) and (3) and (b)(15), and Options 3, Section 7(t), respectively, prior to one year from the start of migration of symbols to the Platform as announced in a separate Options Trader Alert.

Additionally, Trade Value Allowance as defined in Supplementary Material .03 to Options 3, Section 14 will not be available for symbols that migrated to the Platform. The Exchange will recommence the availability of Trade Value Allowance, as defined in Supplementary Material 0.3 to Options 3, Section 14, prior to one year from the start of migration of symbols to the Platform as announced in a separate Options Trader Alert.

(a) *Definitions.*

\* \* \* \* \*

(b) *Types of Complex Orders.* Unless otherwise specified, the definitions used below have the same meaning contained in Options 3, Section 7. The Exchange may determine to make certain order types and/or times-in-force available on a class or System basis. Complex Orders may be entered using the following orders or designations:

\* \* \* \* \*

(10) Opening Only Complex Order. An Opening Only Complex Order is a [Limit] Complex Order that may be entered for execution during the Complex Opening Process described in Supplementary Material .04 to Options 3, Section 14. Any

portion of the order that is not executed during the Complex Opening Process is cancelled.

\* \* \* \* \*

(15) **Complex QCC with Stock Orders.** A Complex QCC with Stock Order is a Qualified Contingent Cross Complex Order, as defined in subparagraph (b)(6), entered with a stock component to be communicated to a designated broker-dealer for execution pursuant to Options 3, Section 12([e]f).

\* \* \* \* \*

(18) **Complex PIM Order.** A Complex PIM Order is an order entered into the Complex Price Improvement Mechanism as described in Options 3, Section 13(e).

(19) Complex Preferred Order. A Complex Preferred Order is a Complex Order for which an Electronic Access Member has designated a Preferred Market Maker as described in Options 2, Section 10. The component leg(s) of a Complex Order with a Preferred Order instruction may allocate pursuant to Options 3, Section 10(c)(1)(C) when the Complex Preferred Order legs into the single-leg market provided that the Preferred Market Maker is quoting at the NBBO for a component leg(s) of the Complex Preferred Order at the time the Complex Preferred Order is received. A Preferred Market Maker will not receive an allocation pursuant to Options 3, Section 10(c)(1)(C) for a component leg(s) of a Complex Preferred Order if the Preferred Market Maker is not quoting at the NBBO for that leg at the time the Complex Preferred Order is received.

(c) *Applicability of Exchange Rules.* Except as otherwise provided in this Rule, complex strategies shall be subject to all other Exchange Rules that pertain to orders and quotes generally.

\* \* \* \* \*

(2) *Complex Order.* Complex strategies will not be executed at prices inferior to the best net price achievable from the best [ISE]MRX bids and offers for the individual legs. Notwithstanding the provisions of Options 3, Section 10:

\* \* \* \* \*

### **Supplementary Material to Options 3, Section 14**

**.01 Complex Order Exposure.** If designated by a Member for exposure, eligible Complex Orders are exposed upon entry for a period of up to one (1) second pursuant to subparagraph (d)(1) as follows:

\* \* \* \* \*

(b) Upon entry of an eligible Complex Order, a broadcast message that includes net price or at market, size, and side will be sent and Members will be given an opportunity to enter Responses with the prices and sizes at which they are willing to participate in the execution of the Complex Order.

\* \* \* \* \*

[(iii) A Complex Order Exposure in a complex strategy may be ongoing in a complex strategy at the same time as a Price Improvement Auction pursuant to Options 3, Section 13 or during an exposure period pursuant to Supplementary Material .02 to Options 5, Section 2 in a component leg(s) of such complex strategy. If a Complex Order Exposure is early terminated pursuant to paragraph (ii) above, and the incoming Complex Order that causes the early termination in the complex strategy is also marketable against a component leg(s) of the complex strategy that is the subject of a concurrent ongoing Price Improvement Auction pursuant to Options 3, Section 13 or an exposure period pursuant to Supplementary Material .02 to Options 5, Section 2, then the concurrent Complex Order and component leg auction(s) are processed in the following sequence: (1) the Complex Order exposure is early terminated; (2) the component leg auction(s), which are early terminated and processed; and (3) legging of residual incoming Complex Order interest occurs.]

\* \* \* \* \*

**.02 Stock-Option and Stock-Complex Orders.** The Exchange will electronically communicate the stock leg of an executable Stock-Option Order and Stock-Complex Order to a broker-dealer for execution. To execute Stock-Option Orders and Stock-Complex Orders on the Exchange, Members must enter into a brokerage agreement with a broker-dealer designated by the Exchange. The Member may also enter into a brokerage agreement with one or more other broker-dealers to which the Exchange is able to route stock orders. The Exchange will automatically transmit the stock leg of a trade to one-or more broker-dealer(s) with [which]whom a Member has an agreement for execution on behalf of the Member using routing logic that takes into consideration objective factors such as execution cost, speed of execution and fill-rates. The Exchange will have no financial arrangements with the brokers with respect to routing stock orders to them. Members may also indicate preferred execution brokers, and such preferences will determine order routing priority whenever possible. A trade of a Stock-Option Order or a Stock-Complex Order will be automatically cancelled if market conditions prevent the execution of the stock or option leg(s) at the prices necessary to achieve the agreed upon net price. When a Stock-Option Order or Stock-Complex Order has been matched with another Stock-Option Order or Stock-Complex Order that is for less than the full size of the Stock-Option Order or Stock-Complex Order, the full size of the Stock-Option Order or Stock Complex Order being processed by the stock execution venue will be unavailable for trading while the order is being processed.

\* \* \* \* \*

**.05 Complex Opening Price Determination.***(a) Definitions.*

- (1) “Boundary Price” is described herein in paragraph (d)(1).
- (2) “Opening Price” is described herein in paragraph (d)([4]3).
- (3) “Potential Opening Price” is described herein in paragraph (d)(2).

\* \* \* \* \*

(d) If the best bid for a complex strategy locks or crosses the best offer, the System will open the complex strategy as follows:

\* \* \* \* \*

(2) *Potential Opening Price.* The System will calculate the Potential Opening Price by identifying the price(s) at which the maximum number of contracts can trade (“maximum quantity criterion”) taking into consideration all eligible interest pursuant to Supplementary Material .0[6]5(b) to this Rule.

(3) *Opening Price Determination.* When interest crosses and does not match in size, the System will calculate the Potential Opening Price based on the highest (lowest) executable offer (bid) price when the larger sized interest is offering (bidding), provided, however, that if there is more than one price at which the interest may execute, the Potential Opening Price when the larger sized interest is offering (bidding) shall be the mid-point of the highest (lowest) executable offer (bid) price and the next available executable offer (bid) price rounded, if necessary, down (up) to the closest minimum trading increment; or

When interest crosses and is equal in size, the System will calculate the Potential Opening Price based on the mid-point of lowest executable bid price and the highest executable offer price, rounded, if necessary, up to the closest minimum trading increment.

(A) Executable bids/offers include any interest which could be executed at the Potential Opening Price without trading through residual interest or the Boundary Price or without trading at the Boundary Price where there is Priority Customer interest at the best bid or offer for any leg, consistent with paragraph Options 3, Section 14(c)(2).

(B) Executable bids/offers will be bounded by the Boundary Price on the contra-side of the interest, for determination of the Potential Opening Price described above.

*[More Than One Potential Opening Price.* When two or more Potential Opening Prices would satisfy the maximum quantity criterion: (A) without leaving unexecuted contracts on the bid or offer side of the market of Complex Orders to be traded at those prices, the System takes the highest and lowest of those prices and takes the mid-point; provided that (1) if the highest and/or lowest price described above is through the price of a bid or offer that is priced to not allocate in the Complex Opening Price Determination, the highest and/or lowest price will be rounded to the price of such bid or offer that is priced to not allocate before taking the mid-point, and (2) if the midpoint is not expressed as a permitted minimum trading increment, it will be rounded down to the nearest permissible minimum trading increment; or (B) leaving unexecuted contracts on the bid (offer) side of the market of Complex Orders to be traded at those prices, the Potential Opening Price is the highest (lowest) executable bid (offer) price. Notwithstanding the foregoing: (C) if there are Market Complex Orders on the bid (offer) side of the market that would equal the full quantity of Complex Orders on offer (bid) side of the market, the limit price of the highest (lowest) priced Limit Complex Order is the Potential Opening Price; and (D) if there are only Market Complex Orders on both sides of the market, or if there are Market Complex Orders on the bid (offer) side of the market for greater than the total size of Complex Orders on the offer (bid) side of the market, there will be no trade in the Complex Opening Price Determination and the complex strategy will open pursuant to the Complex Uncrossing Process described in Supplementary Material .06(b) to this Rule.]

(4) *Opening Price.* If the Potential Opening Price is at or within the Boundary Prices, the Potential Opening Price becomes the Opening Price and the complex strategy will open pursuant to Supplementary Material .05(d)(5) to this Rule. If the bid Boundary Price is higher than the offer Boundary Price, or if no valid Potential Opening Price can be found at or within the Boundary Prices, there will be no trade in the Complex Opening Price Determination and the complex strategy will open pursuant to the Complex Uncrossing Process described in Supplementary Material .06(b) to this Rule.[If the Potential Opening Price is not at or within the Boundary Prices, the Opening Price will be the price closest to the Potential Opening Price that satisfies the maximum quantity criteria without leaving unexecuted contracts on the bid or offer side of the market at that price and is at or within the Boundary Prices. If the bid Boundary Price is higher than the offer Boundary Price, or if no valid Opening Price can be found at or within the Boundary Prices, there will be no trade in the Complex Opening Price Determination and the complex strategy will open pursuant to the Complex Uncrossing Process described in Supplementary Material .06(b) to this Rule.]

\* \* \* \* \*

## **Section 16. Complex Order Risk Protections**

The following are Complex Order risk protections on MRX:

\* \* \* \* \*

(b) **Strategy Protections.** The following protections will apply throughout the trading day, including pre-market, during the Opening Process and during a trading halt. The protections will not apply to Complex Orders being auctioned and auction responses in the Facilitation Mechanism, Solicited Order Mechanism within Options [2]3, Section 11, and Price Improvement Mechanism within Options 3, Section 13 and will not apply to Customer Cross Orders pursuant to Options 3, Section 12.

\* \* \* \* \*

(c) Other Price Protections which apply to Complex Orders.

(1) **[Limit]Complex Order Price Protection.** There is a limit on the amount by which the net price of an incoming Limit Complex Order to buy may exceed the net price available from the individual options series on the Exchange and the national best bid or offer for any stock leg, and by which the net price of an incoming Limit Complex Order to sell may be below the net price available from the individual options series on the Exchange and the national best bid or offer for any stock leg. Limit Complex Orders that exceed the pricing limit are rejected. The limit is established by the Exchange from time-to-time for Limit Complex Orders to buy (sell) as the net price available from the individual options series on the Exchange and the national best bid or offer for any stock leg plus (minus) the greater of: (i) an absolute amount not to exceed \$2.00, or (ii) a percentage of the net price available from the individual options series on the Exchange and the national best bid or offer for any stock leg not to exceed 10%.

\* \* \* \* \*