

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-93962; SR-EMERALD-2022-01)

January 12, 2022

Self-Regulatory Organizations: Notice of Filing and Immediate Effectiveness of a Proposed Rule Change by MIAX Emerald, LLC to Amend Exchange Rule 521, Nullification and Adjustment of Options Transactions Including Obvious Errors

Pursuant to the provisions of 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 January 7, 2022, MIAX Emerald, LLC (“MIAX Emerald” or “Exchange”) filed with the Securities and Exchange Commission (“Commission”) a 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 make a technical amendment to Exchange Rule 521, Nullification and Adjustment of Options Transactions Including Obvious Errors.

The text of the proposed rule change is available on the Exchange’s website at <http://www.miaxoptions.com/rule-filings/emerald> at MIAX Emerald’s principal office, and at the Commission’s Public Reference Room.

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

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified

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

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

in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

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

1. Purpose

The Exchange is proposing to amend Exchange Rule 521, Nullification and Adjustment of Options Transactions Including Obvious Errors, to improve the operation of the Rule. Following discussions with other exchanges and a cross-section of industry participants and in coordination with the Listed Options Market Structure Working Group (“LOMSWG”) (collectively, the “Industry Working Group”), the Exchange proposes: (1) to amend section (b)(3) of the Rule to permit the Exchange to determine the Theoretical Price<sup>3</sup> of a Customer<sup>4</sup> option transaction in a wide market so long as a narrow market exists at any point during the 10-second period after an opening or re-opening; and (2) to amend section (c)(4)(B) of the Rule to adjust, rather than nullify, Customer transactions in Obvious Error situations, provided the adjustment does not violate the limit price.

Proposed Change to Section (b)(3)

Exchange Rule 521 has been part of various harmonization efforts by the Industry Working Group.<sup>5</sup> These efforts have often centered around the Theoretical Price for which an options transaction should be compared to determine whether an Obvious Error has occurred. For instance, all options exchanges have adopted language comparable to Interpretations and

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<sup>3</sup> See Exchange Rule 521(b).

<sup>4</sup> For purposes of Rule 521, the term “Customer” means a Priority Customer as defined in Rule 100. See Exchange Rule 521(a)(1).

<sup>5</sup> See e.g., Securities Exchange Act Release Nos. 74918 (May 8, 2015), 80 FR 27781 (May 14, 2015) (SR-MIAX-2015-35); 80284 (March 21, 2017), 82 FR 15251 (March 27, 2017) (SR-MIAX-2017-13).

Policies .04, Exchange Determining Theoretical Price,<sup>6</sup> which explains how an exchange is to determine Theoretical Price at the open, when there are no valid quotes, and when there is a wide quote. This includes at times the use of a singular third-party vendor, known as a TP Provider (currently CBOE Livevol, LLC).

Similarly, section (b)(3) of Rule 521 was previously harmonized across all options exchanges to handle situations where executions occur in markets that are wide (as set forth in the rule).<sup>7</sup> Under that section, the Exchange determines the Theoretical Price if the NBBO<sup>8</sup> for the subject series is wide immediately before execution and a narrow market (as set forth in the rule) existed “during the 10 seconds prior to the transaction.” The rule goes on to clarify that, should there be no narrow quotes “during the 10 seconds prior to the transaction,” the Theoretical Price for the affected series is the NBBO that existed at the time of execution (regardless of its width).

In recent discussions, the Industry Working Group has identified proposed changes to section (b)(3) of Rule 521 that would improve the Rule’s functioning. Currently, section (b)(3) does not permit the Exchange to determine the Theoretical Price unless there is a narrow quote 10 seconds prior to the transaction. However, in the first seconds of trading, there is no 10-second period “prior to the transaction.” Further, the Industry Working Group has observed that prices in certain series can be disjointed at the start of trading. Accordingly, the Exchange proposes to provide additional protections to trading in certain circumstances immediately after the opening before liquidity has had a chance to enter the market. The Exchange proposes to

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<sup>6</sup> See Securities Exchange Act Release No. 81321 (August 7, 2017), 82 FR 37633 (August 11, 2017) (SR-MIAX-2017-38).

<sup>7</sup> See supra note 5.

<sup>8</sup> The term “NBBO” means the national best bid or offer as calculated by the Exchange based on market information received by the Exchange from OPRA. See Exchange Rule 100.

amend section (b)(3) to allow the Exchange to determine the Theoretical Price in a wide market so long as a narrow market exists at any point during the 10-second period after an opening or re-opening.

Specifically, the Exchange proposes that the existing text of section (b)(3) would become subsection “(A).” The Exchange proposes to add the following heading and text as subsection “(B)”:

(B) Customer Transactions Occurring Within 10 Seconds or Less After an Opening or Re-Opening:

(i) The Exchange will determine the Theoretical Price if the bid/ask differential of the NBB and NBO for the affected series just prior to the Customer’s erroneous transaction was equal to or greater than the Minimum Amount set forth in paragraph A above and there was a bid/ask differential less than the Minimum Amount during the 10 seconds prior to the transaction.

(ii) If there was no bid/ask differential less than the Minimum Amount during the 10 seconds prior to the transaction, then the Exchange will determine the Theoretical Price if the bid/ask differential of the NBB and NBO for the affected series just prior to the Customer’s erroneous transaction was equal to or greater than the Minimum Amount set forth in paragraph A above and there was a bid/ask differential less than the Minimum Amount anytime during the 10 seconds after an opening or re-opening.

(iii) If there was no bid/ask differential less than the Minimum Amount during the 10 seconds following an Opening or Re-Opening, then the Theoretical Price of an option series is the last NBB or NBO just prior to the Customer transaction in question, as set forth in paragraph (b) above.

(iv) Customer transactions occurring more than 10 seconds after an opening or re-opening are subject to paragraph A above.

The following examples illustrate the functioning of the proposed rule change. Consider that the NBBO of a series opens as \$0.01 at \$4.00. A marketable limit order to buy one contract arrives one second later and is executed at \$4.00. In the third second of trading, the NBBO narrows from \$0.01 at \$4.00 to \$2.00 at \$2.10. While the execution occurred in a market with wide widths, there was no tight market within the 10 seconds prior to execution. Accordingly, under the current rule, the trade would not qualify for obvious error review, in part due to the fact that there was only a single second of trading before the execution. Under the proposal, since a tight market existed at some point in the first 10 seconds of trading (i.e., in the third second), the Exchange would be able to determine the Theoretical Price as provided in Interpretations and Policies .04.

As another example, the NBBO for a series opens as \$0.01 at \$4.00. In the seventh second of trading, a marketable limit order is received to buy one contract and is executed at \$4.00. Five seconds later (i.e., in the twelfth second of trading), the NBBO narrows from \$0.01 at \$4.00 to \$2.00 at \$2.10. While the execution occurred in a market with wide widths, there was no tight market within 10 seconds prior to execution. Accordingly, under the current rule, the trade would not qualify for obvious error review. Under the proposal, since no tight market existed at any point during the first 10 seconds of trading (i.e., the narrow market occurred in the twelfth second), the trade would not qualify for obvious error review.

The proposed rule change would also better harmonize section (b)(3) with section (b)(1) of the Rule. Under section (b)(1), the Exchange is permitted to determine the Theoretical Price for transactions occurring as part of the opening auction process (as described in Exchange Rule

503) if there is no NBB or NBO for the affected series just prior to the erroneous transaction. However, under the current version of section (b)(3), a core trading transaction could occur in the same wide market but the Exchange would not be permitted to determine the Theoretical Price. Consider an example where one second after the Exchange opens a selected series, the NBBO is \$1.00 at \$5.00. At 9:30:03, a customer submits a marketable buy order to the Exchange and pays \$5.00. At 9:30:03, a different exchange runs an opening auction that results in a customer paying \$5.00 for the same selected series. At 9:30:06, the NBBO changes from \$1.00 at \$5.00 to \$1.35 at \$1.45. Under the current version of section (b)(3), the Exchange would not be able to determine the Theoretical Price for the trade occurring during core trading. However, the trade on the other exchange could be submitted for review under (b)(1) and that exchange would be able to determine the Theoretical Price. If the proposed change to section (b)(3) were approved, both of the trades occurring at 9:30:03 (on the Exchange during core trading and on another exchange via auction) would also be entitled to the same review regarding the same Theoretical Price based upon the same time.

The proposal would not change any obvious error review beyond the first 10 seconds of an opening or re-opening.

#### Proposed Change to Section (c)(4)(B)

The Exchange proposes to amend section (c)(4)(B) – the “Adjust or Bust” rule for Customer transactions in Obvious Error situations – to adjust rather than nullify such orders, provided the adjustment does not violate the Customer’s limit price.

Currently, the Rule provides that in Obvious Error situations, transactions involving non-Customers should be adjusted, while transactions involving Customers are nullified, unless a

certain condition applies.<sup>9</sup> The Industry Working Group has concluded that the treatment of these transactions should be harmonized under the Rule, such that transactions involving Customers may benefit from adjustment, just as non-Customer transactions currently do, except where such adjustment would violate the Customer's limit price; in that instance, the trade would be nullified.

Specifically, the Exchange proposes to amend the text of section (c)(4)(B) to add that where at least one party to the Obvious Error is a Customer, "the execution price of the transaction will be adjusted by the Official pursuant to the table immediately above. Any Customer Obvious Error exceeding 50 contracts will be subject to the Size Adjustment Modifier defined in subparagraph (a)(4) above. However, if such adjustment(s) would result in an execution price higher (for buy transactions) or lower (for sell transactions) than the Customer's limit price," the trade will be nullified. The "table immediately above" referenced in the proposed text refers to the table at current Section (c)(4)(A), which provides for the adjustment of prices a specified amount away from the Theoretical Price, rather than adjusting the Theoretical Price.

The Exchange proposes no other changes at this time.

#### Implementation Date

The proposed rule change will become operative no sooner than six months following the approval of the NYSEArca proposal<sup>10</sup> to coincide with implementation on other option

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<sup>9</sup> Specifically, the current Rule provides at section (c)(4)(C) that if any Member has 200 or more Customer transactions under review concurrently and the orders resulting in such transactions were submitted during the course of 2 minutes or less, where at least one party to the Obvious Error is a non-Customer, then the Exchange will apply the non-Customer adjustment criteria set forth in (c)(4)(A) for such transactions.

<sup>10</sup> See Securities Exchange Act Release No. 93818 (December 17, 2021), 86 FR 73009 (December 23, 2021) (SR-NYSEArca-2021-91) (Order Approving a Proposed Rule Change to Amend Rule 6.87-O).

exchanges. The Exchange will announce the implementation date to its Members via Regulatory Circular.

## 2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act<sup>11</sup> in general, and furthers the objectives of Section 6(b)(5) of the Act<sup>12</sup> in particular, in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanisms of a free and open market and a national market system and, in general, to protect investors and the public interest and because it is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

The Exchange believes the proposed rule change to section (b)(3) of the Rule would remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, protect investors and the public interest because it provides a method for addressing Obvious Error Customer transactions that occur in a wide market at the opening of trading. Generally, a wide market is an indication of a lack of liquidity in the market such that the market is unreliable. Current section (b)(3) recognizes that a persistently wide quote (i.e., more than 10 seconds) should be considered the reliable market regardless of its width, but does not address transactions that occur in a wide market in the first seconds of trading, where there is no preceding 10-second period to reference. Accordingly, in the first 10 seconds of trading, there is no opportunity for a wide quote to have persisted for a sufficiently

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<sup>11</sup> 15 U.S.C. 78f(b).

<sup>12</sup> 15 U.S.C. 78f(b)(5).



lengthy period such that the market should consider it a reliable market for the purposes of determining an Obvious Error transaction.

The proposed change would rectify this disparity and permit the Exchange to consider whether a narrow quote is present at any time during the 10-second period after an opening or re-opening. The presence of such a narrow quote would indicate that the market has gained sufficient liquidity and that the previous wide market was unreliable, such that it would be appropriate for the Exchange to determine the Theoretical Price of an Obvious Error transaction. In this way, the proposed rule harmonizes the treatment of Customer transactions that execute in an unreliable market at any point of the trading day, by making them uniformly subject to Exchange determination of the Theoretical Price.

The Exchange believes that the proposed change to section (c)(4)(B) of the Rule would remove impediments to and perfect the mechanism of a free and open market and a national market system and enhance the protection of investors by harmonizing the treatment of non-Customer transactions and Customer transactions under the Rule. Under the current Rule, Obvious Error situations involving non-Customer transactions are adjusted, while those involving Customer transactions are generally nullified, unless they meet the additional requirements of section (c)(4)(C) (i.e., where a Member has 200 or more Customer transactions under review concurrently and the orders resulting in such transactions were submitted during the course of 2 minutes or less.) The proposal would harmonize the treatment of non-Customer and Customer transactions by providing for the adjustment of all such transactions, except where such adjustment would violate the Customer's limit price.

When the current rule was proposed in 2015, the MIAX Options Exchange believed there were sound reasons for treating non-Customer transactions and Customer transactions

differently. At the time, the MIAX Options Exchange stated its belief that “Customers are not necessarily immersed in the day-to-day trading of the markets, are less likely to be watching trading activity in a particular option throughout the day, and may have limited funds in their trading accounts,” and that nullifying Obvious Error transactions involving Customers would give Customers “greater protections” than adjusting such transactions by eliminating the possibility that a Customer’s order will be adjusted to a significantly different price. The Exchange also noted its belief that “Customers are . . . less likely to have engaged in significant hedging or other trading activity based on earlier transactions, and thus, are less in need of maintaining a position at an adjusted price than non-Customers.”<sup>13</sup>

Those assumptions about Customer trading and hedging activity no longer hold. The Exchange and the Industry Working Group believe that over the course of the last five years, Customers that use options have become more sophisticated, as retail broker-dealers have enhanced the trading tools available. Pursuant to OCC data, volumes clearing in the Customer range have expanded from 12,022,163 ADV in 2015 to 35,081,130 ADV in 2021. This increase in trading activity underscores the greater understanding of options by Customers as a trading tool and its use in the markets. Customers who trade options today largely are more educated, have better trading tools, and have better access to financial news than any time prior.<sup>14</sup> The proposed rule would extend the hedging protections currently enjoyed by non-Customers to Customers, by allowing them to maintain an option position at an adjusted price, which would in

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<sup>13</sup> See Securities Exchange Act Release No. 74918 (May 8, 2015), 80 FR 27781 (May 14, 2015) (SR-MIAX-2015-35).

<sup>14</sup> Dan Raju, *Retail Traders Adopt Options En Masse*, by Dan Raju, (Dec 8, 2020) available at <https://www.nasdaq.com/articles/retail-traders-adopt-options-en-masse-2020-12-08>.

turn prevent a cascading effect by maintaining the hedge relationship between the option transaction and any other transactions in a related security.

The Exchange believes that extending such hedging protections to Customer transactions would remove impediments to and perfect the mechanism of a free and open market and a national market system and enhance the protection of investors by providing greater certainty of execution for all participants to options transactions. Under the current Rule, a Customer that believes its transaction was executed pursuant to an Obvious Error may be disincentivized from submitting the transaction for review, since during the review process, the Customer would be uncertain whether the trade would be nullified, and if so, whether market conditions would still permit the opportunity to execute a related order at a better price after the nullification ruling is finalized. In contrast, under the proposed rule, the Customer would know that the only likely outcomes of submitting a trade to Obvious Error review would be that the trade would stand or be re-executed at a better price; the trade would only be nullified if the adjustment would violate the order's limit. Similarly, under the current Rule, during the review period, a market maker who traded contra to the Customer would be uncertain if it should retain any position executed to hedge the original trade, or attempt to unwind it, possibly at a significant loss. Under the proposed rule change, this uncertainty is largely eliminated, and the question would be whether the already-executed and hedged trade would be adjusted to a better price for the Customer, or if it would stand as originally executed. In this way, the proposed rule enhances the protection of investors and removes impediments to and perfects the mechanism of a free and open market and a national market system.

The proposed rule also addresses the concern the Exchange cited in its 2015 filing that adjusting, rather than nullifying, Customer transactions could lead to a Customer's order being

adjusted to a significantly different price. To address that concern, the proposed rule would prevent Customer transactions from being adjusted to a price that violates the order's limit; if the adjustment would violate a Customer's limit, the trade would instead be nullified. The Exchange believes it is in the best interest of investors to expand the availability of adjustments to Customer transactions in all Obvious Error situations except where the adjustment would violate the Customer's limit price.

Further, the Exchange believes that, with respect to such proposed adjustments to Customer transactions, it is appropriate to use the same form of adjustment as is currently in place with respect to non-Customer transactions as laid out in the table in section (c)(4)(A). That is, the Exchange believes that it is appropriate to adjust to prices a specified amount away from the Theoretical Price rather than to adjust the Theoretical Price, even though the Exchange has determined a given trade to be erroneous in nature, because the parties in question should have had some expectation of execution at the price or prices submitted. Also, it is common that by the time it is determined that an Obvious Error has occurred, additional hedging and trading activity has already occurred based on the executions that previously happened. The Exchange believes that providing an adjustment to the Theoretical Price in all cases would not appropriately incentivize market participants to maintain appropriate controls to avoid potential errors, while adjusting to prices a specified amount away from the Theoretical Price would incentivize such behavior.

The Exchange believes that the proposal is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers. The proposed change to section (b)(3) would apply to all instances of a wide market occurring within the first 10 seconds of trading followed by a narrow market at any point in the subsequent 10-second period, regardless of the types of

market participants involved in such transactions. The proposed change to section (c)(4)(B) would harmonize the treatment of Obvious Error transactions involving Customers and non-Customers, no matter what type of market participants those parties may be.

For these reasons, the Exchange believes that the proposal is consistent with the Act.

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

The Exchange believes that the proposal will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of Section 6(b)(8) of the Act.<sup>15</sup>

The Exchange anticipates that the other options exchanges will adopt substantively similar proposals, such that there would be no burden on intermarket competition from the Exchange's proposal. Accordingly, the proposed change is not meant to affect competition among the options exchanges. For these reasons, the Exchange believes that the proposed rule change reflects this competitive environment and does not impose any undue burden on intermarket competition.

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

Written comments were neither solicited nor received.

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

Because the foregoing proposed rule change does not: (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days after the date of the filing, or such shorter time as the

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<sup>15</sup> 15 U.S.C. 78f(b)(8).

Commission may designate, it has become effective pursuant to 19(b)(3)(A) of the Act<sup>16</sup> and Rule 19b-4(f)(6)<sup>17</sup> thereunder.

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

#### IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act.

Comments may be submitted by any of the following methods:

##### Electronic Comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-EMERALD-2022-01 on the subject line.

##### Paper Comments:

- Send paper comments in triplicate to Vanessa Countryman, Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-EMERALD-2022-01. This file number should

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<sup>16</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>17</sup> 17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6) requires a self-regulatory organization to give the Commission written notice of its intent to file the proposed rule change at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-EMERALD-2022-01 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>18</sup>

J. Matthew DeLesDernier  
Assistant Secretary

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<sup>18</sup> 17 CFR 200.30-3(a)(12).