Page 1 of * 35		SECURITIES AND EXCHA WASHINGTON, E Form 19b		File No. * SF t No. (req. for Ar				
Filing by MIAX	Emerald, LLC							
Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934								
Initial *	Amendment *	Withdrawal	Section 19(b	Section 19(b))(3)(A) *	Section 19(b)(3)(B) *		
	Futuration of Time Desired for		-	Rule				
Pilot	Extension of Time Period for Commission Action *	Date Expires *		19b-4(f)(1)	19b-4(f)(4)			
				19b-4(f)(2)	19b-4(f)(5)			
				19b-4(f)(3)	19b-4(f)(6)			
	pposed change pursuant to the Pay	-	Act of 2010	Security-Based Swa Securities Exchange Section 3C(b)(2) *		ursuant to the		
Section 806((e)(1) "	Section 806(e)(2)	Section 806(e)(2) * Section					
Exhibit 2 Sent As Paper Document Exhibit 3 Sent As Paper Document Exhibit 3 Sent As Paper Document								
Provide a brief description of the action (limit 250 characters, required when Initial is checked *). 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								
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 *	Greg	Last Name * Zieg	ler					
Title *					_			
E-mail *	Senior Counsel							
	gziegler@miaxoptions.com				_			
Telephone *	(609) 613-1465	Fax						
Signature								
Pursuant to the requirements of the Securities Exchange of 1934, MIAX Emerald, LLC has duty caused this filing to be signed on its behalf by the undersigned thereunto duty authorized.								
Date	01/07/2022		(Title *)				
Ву	Gregory P. Ziegler	Senio	or Counsel					
	(Name *)				ı			
form. A digital s	the signature block at right will initiate digitally signature is as legally binding as a physical sig is form cannot be changed.	y signing the gnature, and	gory Ziegler	Date: 2022.01.07 11:32:57 -05'00'				

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

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

Exhibit Sent As Paper Document

Exhibit Sent As Paper Document

Form 19b-4 Information *							
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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 *

Add Remove View
SR-EMERALD-2022-01 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

Add Remove View

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 3 - Form, Report, or Questionnaire

Add Remove View

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 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

Add Remove View

SR-EMERALD-2022-01 Exhibit 5.docx

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

Add Remove View

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.

SR-EMERALD-2022-01 Page 3 of 35

1. <u>Text of the Proposed Rule Change</u>

(a) MIAX Emerald, LLC ("MIAX Emerald" or the "Exchange"), pursuant to the provisions of Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹ and Rule 19b-4 thereunder,² proposes to make a technical amendment to Exchange Rule 521, Nullification and Adjustment of Options Transactions Including Obvious Errors.

Notice of the proposed rule change for publication in the <u>Federal Register</u> is attached hereto as <u>Exhibit 1</u>, and the text of the proposed rule change is attached hereto as <u>Exhibit 5</u>.

- (b) Not applicable.
- (c) Not applicable.

2. Procedures of the Self-Regulatory Organization

The proposed rule change was approved by the Chief Executive Officer of the Exchange or his designee pursuant to authority delegated by the MIAX Emerald Board of Directors on January 28, 2021. Exchange staff will advise the Board of Directors of any action taken pursuant to delegated authority.

Questions and comments on the proposed rule change may be directed to Greg Ziegler, Vice President and Senior Counsel, at (609) 897-1483.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

SR-EMERALD-2022-01 Page 4 of 35

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

a. <u>Purpose</u>

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 Price³ of a Customer⁴ 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.⁵ 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

³ <u>See</u> Exchange Rule 521(b).

For purposes of Rule 521, the term "Customer" means a Priority Customer as defined in Rule 100. See Exchange Rule 521(a)(1).

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).

SR-EMERALD-2022-01 Page 5 of 35

Policies .04, Exchange Determining Theoretical Price,⁶ 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). Under that section, the Exchange determines the Theoretical Price if the NBBO⁸ 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

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

⁷ See supra note 5.

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. <u>See</u> Exchange Rule 100.

SR-EMERALD-2022-01 Page 6 of 35

the opening before liquidity has had a chance to enter the market. The Exchange proposes to 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 reopening.

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

SR-EMERALD-2022-01 Page 7 of 35

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.

SR-EMERALD-2022-01 Page 8 of 35

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.

SR-EMERALD-2022-01 Page 9 of 35

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. 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

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.

SR-EMERALD-2022-01 Page 10 of 35

The proposed rule change will become operative no sooner than six months following the approval of the NYSEArca proposal ¹⁰ to coincide with implementation on other option exchanges. The Exchange will announce the implementation date to its Members via Regulatory Circular.

b. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act¹¹ in general, and furthers the objectives of Section 6(b)(5) of the Act¹² 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

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).

¹⁵ U.S.C. 78f(b).

¹⁵ U.S.C. 78f(b)(5).

SR-EMERALD-2022-01 Page 11 of 35

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 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 reopening. 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

SR-EMERALD-2022-01 Page 12 of 35

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." ¹³

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,

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

SR-EMERALD-2022-01 Page 13 of 35

have better trading tools, and have better access to financial news than any time prior. ¹⁴ 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 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

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.

SR-EMERALD-2022-01 Page 14 of 35

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

SR-EMERALD-2022-01 Page 15 of 35

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.

4. <u>Self-Regulatory Organization's Statement on Burden on Competition</u>

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. ¹⁵

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.

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

No written comments were either solicited or received.

¹⁵ U.S.C. 78f(b)(8).

SR-EMERALD-2022-01 Page 16 of 35

Extension of Time Period for Commission Action

Not applicable.

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

Pursuant to Section 19(b)(3)(A) of the Act¹⁶ and Rule 19b-4(f)(6)¹⁷ thereunder, the Exchange has designated this proposal as one that effects a change that: (i) does not significantly affect the protection of investors or the public interest; (ii) does not impose any significant burden on competition; and (iii) by its terms, does not become operative for 30 days after the date of the filing, or such shorter time as the Commission may designate if consistent with the protection of investors and the public interest.

The Exchange believes that the proposed rule change does not significantly affect the protection of investors or the public interest because the proposal seeks to improve the Exchange's ability to calculate a Theoretical Price in certain circumstances. Additionally, the Exchange believes its proposed change to the "Adjust or Bust" rule does not significantly affect the protection of investors or the public interest because the proposal seeks to protect Customer's by adjusting, rather than nullifying, orders in Obvious Error situations, provided that the adjustment does not violate the Customer's limit price.

Additionally, the Exchange believes that the proposal does not impose any significant burden on competition as the proposal is not a competitive filing and harmonizes the Exchange's obvious error rule with that of at least one other options exchange.¹⁸

¹⁶ 15 U.S.C. 78s(b)(3)(A).

¹⁷ 17 CFR 240.19b-4(f)(6).

See Securities Exchange Act Release No. 93818 (December 17, 2021) (SR-NYSEArca 2021-91) (Order Approving a Proposed Rule Change to Amend Rule 6.87-O).

SR-EMERALD-2022-01 Page 17 of 35

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.

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.

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

The proposed rule change is based on a proposal made by NYSEArca. ¹⁹

9. <u>Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act</u> 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 for publication in the <u>Federal Register</u>.
- 5. Text of proposed rule change.

See supra note 17.

EXHIBIT 1

SECURITIES AND EXCHANGE COMMISSION

(Release No. 34- ; File No. SR-EMERALD-2022-01)

January___, 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")¹ and Rule 19b-4 thereunder,² 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. <u>Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed</u> <u>Rule Change</u>

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. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change</u>

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

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

SR-EMERALD-2022-01 Page 19 of 35

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. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory</u> <u>Basis for, the Proposed Rule Change</u>

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 Price³ of a Customer⁴ 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.⁵ 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.

³ <u>See Exchange Rule 521(b).</u>

For purposes of Rule 521, the term "Customer" means a Priority Customer as defined in Rule 100. See Exchange Rule 521(a)(1).

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).

SR-EMERALD-2022-01 Page 20 of 35

For instance, all options exchanges have adopted language comparable to Interpretations and Policies .04, Exchange Determining Theoretical Price,⁶ 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). Under that section, the Exchange determines the Theoretical Price if the NBBO⁸ 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

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

See supra note 5.

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.

SR-EMERALD-2022-01 Page 21 of 35

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 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 reopening.

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

SR-EMERALD-2022-01 Page 22 of 35

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

SR-EMERALD-2022-01 Page 23 of 35

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 SR-EMERALD-2022-01 Page 24 of 35

certain condition applies.⁹ 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 ¹⁰ to coincide with implementation on other option

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.

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).

SR-EMERALD-2022-01 Page 25 of 35

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 Act¹¹ in general, and furthers the objectives of Section 6(b)(5) of the Act¹² 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

¹⁵ U.S.C. 78f(b).

¹⁵ U.S.C. 78f(b)(5).

SR-EMERALD-2022-01 Page 26 of 35

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 reopening. 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

SR-EMERALD-2022-01 Page 27 of 35

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." ¹³

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. ¹⁴ 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 turn prevent a cascading effect by maintaining the hedge relationship between the option transaction and any other transactions in a related security.

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

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.

SR-EMERALD-2022-01 Page 28 of 35

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

SR-EMERALD-2022-01 Page 29 of 35

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.

SR-EMERALD-2022-01 Page 30 of 35

B. <u>Self-Regulatory Organization's Statement on Burden on Competition</u>

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. ¹⁵

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

Written comments were neither solicited nor received.

III. <u>Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action</u>

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 Commission may designate, it has become effective pursuant to 19(b)(3)(A) of the Act^{16} and Rule $19b-4(f)(6)^{17}$ thereunder.

¹⁵ U.S.C. 78f(b)(8).

¹⁶ 15 U.S.C. 78s(b)(3)(A).

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.

SR-EMERALD-2022-01 Page 31 of 35

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. <u>Solicitation of Comments</u>

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

Comments may be submitted by any of the following methods:

Electronic comments:

- ☐ Use the Commission's Internet comment form (http://www.sec.gov/rules/sro.shtml); or
- □ Send an e-mail to rule-comments@sec.gov. Please include File Number SR-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 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

SR-EMERALD-2022-01 Page 32 of 35

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-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. ¹⁸

Vanessa Countryman Secretary

EXHIBIT 5

New text is <u>underlined</u>; Deleted text is in [brackets]

MIAX Emerald, LLC Rules

Rule 521. Nullification and Adjustment of Options Transactions Including Obvious Errors

The Exchange may nullify a transaction or adjust the execution price of a transaction in accordance with this Rule. However, the determination as to whether a trade was executed at an erroneous price may be made by mutual agreement of the affected parties to a particular transaction. A trade may be nullified or adjusted on the terms that all parties to a particular transaction agree, provided, however, that such agreement to nullify or adjust must be conveyed to the Exchange in a manner prescribed by the Exchange prior to 8:30 a.m. Eastern Time on the first trading day following the execution. It is considered conduct inconsistent with just and equitable principles of trade for any Member to use the mutual adjustment process to circumvent any applicable Exchange rule, the Act or any of the rules and regulations thereunder.

- (a) No change.
- (b) **Theoretical Price.** Upon receipt of an obvious or catastrophic error notification (as described below) and prior to any review of a transaction execution price, the "Theoretical Price" for the option must be determined. For purposes of this Rule, if the applicable option series is traded on at least one other options exchange, then the Theoretical Price of an option series is the last NBB just prior to the trade in question with respect to an erroneous sell transaction or the last NBO just prior to the trade in question with respect to an erroneous buy transaction unless one of the exceptions in subparagraphs (b)(1) through (3) below exists. For purposes of this provision, when a single order received by the Exchange is executed at multiple price levels, the last NBB and last NBO just prior to the trade in question would be the last NBB and last NBO just prior to the Exchange's receipt of the order. The Exchange will rely on this paragraph (b) and Interpretation and Policy .04 of this Rule when determining Theoretical Price.
 - (1) (2) No change.

(3) Wide Quotes.

(A) 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 erroneous transaction was equal to or greater than the Minimum Amount set forth below and there was a bid/ask differential less than

SR-EMERALD-2022-01 Page 34 of 35

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

Bid Price at Time of Trade	Minimum Amount
Below \$2.00	\$0.75
\$2.00 to \$5.00	\$1.25
Above \$5.00 to \$10.00	\$1.50
Above \$10.00 to \$20.00	\$2.50
Above \$20.00 to \$50.00	\$3.00
Above \$50.00 to \$100.00	\$4.50
Above \$100.00	\$6.00

(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.

(c) Obvious Errors.

- (1) (3) No change.
- (4) **Adjust or Bust.** If it is determined that an Obvious Error has occurred, the Exchange shall take one of the actions listed below. Upon taking final action, the Exchange shall promptly notify both parties to the trade electronically or via telephone.

(A) **Non-Customer Transactions**. Where neither party to the transaction is a Customer, the execution price of the transaction will be adjusted by the Official pursuant to the table below. Any non-Customer Obvious Error exceeding 50 contracts will be subject to the Size Adjustment Modifier defined in subparagraph (a)(4) above.

Theoretical Price (TP)		Sell Transaction Adjustment – TP Minus
Below \$3.00	\$0.15	\$0.15
At or above \$3.00	\$0.30	\$0.30

(B) Customer Transactions. 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, subject to subparagraph (C) below.
