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

File No.* SR - 2020 - * 046
Amendment No. (req. for Amendments *)

Filing by Cboe Exchange, Inc.

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

Initial * [x] Amendment * [ ] Withdrawal [ ]

Section 19(b)(2) * [ ] Section 19(b)(3)(A) * [x] Section 19(b)(3)(B) * [ ]

Pilot [ ]

Extension of Time Period for Commission Action * [ ]

Date Expires *

Rule

[ ] 19b-4(f)(1) [ ] 19b-4(f)(4)
[ ] 19b-4(f)(2) [ ] 19b-4(f)(5)
[ ] 19b-4(f)(3) [x] 19b-4(f)(6)

Notice of proposed change pursuant to the Payment, Clearing, and Settlement Act of 2010

Section 806(e)(1) * [ ] Section 806(e)(2) * [ ]

Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934

Section 3C(b)(2) * [ ]

Exhibit 2 Sent As Paper Document [ ] Exhibit 3 Sent As Paper Document [ ]

Description

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

The Exchange proposes to amend its debit/credit price reasonability check.

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 * Laura Last Name * Dickman

Title * VP, Associate General Counsel

E-mail * ldickman@cboe.com

Telephone * (312) 786-7572 Fax

Signature

Pursuant to the requirements of the Securities Exchange Act of 1934,

has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.

Date 05/14/2020

By Laura G. Dickman

(Name *)

(Title *)

VP, Associate General Counsel

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

ldickman@cboe.com

Required fields are shown with yellow backgrounds and asterisks.

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

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

Form 19b-4 Information * Add Remove View	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	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 Advance Notice by Clearing Agencies * Add Remove View	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, security-based swap submission, or advance notice 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 Exhibit Sent As Paper Document ☐	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 Exhibit Sent As Paper Document ☐	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 Add Remove View	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	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.

Item 1. **Text of the Proposed Rule Change**

(a) Cboe Exchange, Inc. (the "Exchange" or "Cboe Options") proposes to amend its debit/credit price reasonability check. The text of the proposed rule change is provided below and in Exhibit 1.

(additions are underlined; deletions are [bracketed])

* * * * *

Rules of Cboe Exchange, Inc.

* * * * *

Rule 5.34. Order and Quote Price Protections Mechanisms and Risk Controls

The System's acceptance and execution of orders, quotes, and bulk messages, as applicable, pursuant to the Rules, including Rules 5.31 through 5.33, and orders routed to PAR pursuant to Rule 5.82 are subject to the following price protection mechanisms and risk controls, as applicable.

(a) No change.

(b) *Complex Orders.*

(1) *Definitions.* For purposes of this subparagraph (b):

(A) – (C) No change.

(D) *Calendar Spread.* A "calendar" spread is a two-legged complex order with one leg to buy a number of calls (puts) and one leg to sell the same number of calls (puts) with the same exercise price but different expiration dates.

(2) No change.

(3) *Debit/Credit Price Reasonability Checks.*

(A) The Exchange cancels or rejects a complex order (or unexecuted portion) that is a limit order for a debit strategy with a net credit price that exceeds a pre-set buffer, a limit order (or unexecuted portion) for a credit strategy with a net debit price that exceeds a pre-set buffer, or a market order (or unexecuted portion) for a credit strategy that would execute at a net debit price that exceeds a pre-set buffer (the pre-set buffers are determined by the Exchange on a class and strategy (*i.e.*, vertical, calendar, butterfly, orders with different expiration dates and exercise prices) basis).

(B) The System defines a complex order as a debit or credit as follows:

(i) – (ii) No change.

(iii) an order for which all pairs and loners are debits (credits) is a debit (credit). For purposes of this check, a "pair" is a pair of legs in an order for which both legs are calls or both legs are puts, one leg is a buy and one leg is a sell, and the legs have the same expiration date but different exercise prices (*i.e.*, vertical), [or] the same exercise price but different expiration dates (*i.e.*, calendar), or the exercise price for the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration date. A "loner" is any leg in an order that the System cannot pair with another leg in the order. Notwithstanding the foregoing, if the stock component of a stock-option order is to buy (sell), the stock-option order is a debit (credit).

(a) No change.

(b) The System then pairs legs to the extent possible [with the same exercise prices] across expiration dates, pairing one [leg]call (put) with the [leg]call (put) that has the next nearest expiration date and the same or next lower (higher) exercise price.

(c) A pair of calls is a credit (debit) if the exercise price of the buy (sell) leg is higher than the exercise price of the sell (buy) leg (if the pair has the same expiration date) or if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg (if the [pair has the same] exercise price of the sell (buy) leg is the same as or lower than the exercise price of the buy (sell) leg).

(d) A pair of puts is a credit (debit) if the exercise price of the sell (buy) leg is higher than the exercise price of the buy (sell) leg (if the pair has the same expiration date) or if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg (if the [pair has the same] exercise price of the sell (buy) leg is the same as or higher than the exercise price of the buy (sell) leg).

* * * * *

(b) Not applicable.

(c) Not applicable.

Item 2. <u>Procedures of the Self-Regulatory Organization</u>

(a) The Exchange's President (or designee) pursuant to delegated authority approved the proposed rule change on March 16, 2020.

(b) Please refer questions and comments on the proposed rule change to Pat Sexton, Executive Vice President, General Counsel, and Corporate Secretary, (312) 786-7467, or Laura G. Dickman, (312) 786-7572, Cboe Exchange, Inc., 400 South LaSalle, Chicago, Illinois 60605.

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

(a) <u>Purpose</u>

The proposed rule change amends the debit/credit price reasonability check for complex orders in Rule 5.34(b)(3) to expand its applicability and provide flexibility with respect to its application. Pursuant to the debit/credit price reasonability check, the Exchange cancels or rejects a complex order (or unexecuted portion) that is a limit order for a debit strategy with a net credit price that exceeds a pre-set buffer, a limit order (or unexecuted portion) for a credit strategy with a net debit price that exceeds a pre-set buffer, or a market order (or unexecuted portion) for a credit strategy that would execute at a net debit price that exceeds a pre-set buffer (the pre-set buffers are determined by the Exchange). The System defines a complex order as a debit (credit) if all pairs and loners are debits (credits).[1] For purposes of the debit/credit price reasonability check, a "pair" is a pair of legs in an order for which both legs are calls or both legs are puts, one leg is a buy and

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[1] Rule 5.34(b)(3)(B). The System also determines certain call and put butterfly spreads as debits and credits. <u>See</u> <u>id.</u>

one leg is a sell, and both legs have the same expiration date but different exercise prices[2] or the same exercise price but different expiration dates.[3] A "loner" is any leg is an order that the System cannot pair with another leg in the order.

(1) The System first pairs legs to the extent possible within each expiration date, pairing one leg with the leg that has the next highest exercise price.

(2) The System then pairs legs to the extent possible with the same exercise prices across expiration dates, pairing one leg with the leg that has the next nearest expiration date.

(3) A pair of calls is a credit (debit) if the exercise price of the buy (sell) leg is higher than the exercise price of the sell (buy) leg (if the pair has the same expiration date) or if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg (if the pair has the same exercise price).

(4) A pair of puts is a credit (debit) if the exercise price of the sell (buy) leg is higher than the exercise price of the buy (sell) leg (if the pair has the same expiration date) or if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg (if the pair has the same exercise price).

(5) A loner to buy is a debit, and a loner to sell is a credit.

The System does not apply the debit/credit price reasonability check to an order for which the System cannot define whether it is a debit or credit.

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2 The proposed rule change defines this as a "vertical," which is consistent with the definition of a vertical in Rule 5.34(b)(1)(A).

3 The proposed rule change defines this as a "calendar," and adds the definition of a calendar spread to Rule 5.34(b)(1)(D).

Background

The Exchange implemented a debit/credit reasonability check in 2016.[4] The version of the debit/credit price reasonability check in place until the Exchange's System migration on October 7, 2019 was substantially similar to the current version described above. However, under that version, the Exchange previously applied the debit/credit price reasonability check to pairs with different expiration dates and exercise prices for which the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration (*i.e.*, diagonals), except to options that are European-settled.[5] Diagonal options in European-settled options were excluded from the debit/credit price reasonability check, because certain market conditions could cause options with nearer expirations to be worth more than options with farther expirations (as further discussed below). Additionally, under the prior version of the debit/credit price reasonability check, while the Exchange did not apply a pre-set buffer, it was able to apply the debit/credit price reasonability check on a class-by-class basis.

In connection with the System migration on October 7, 2019, the Exchange adopted the current version of the debit/credit price reasonability check.[6] The Exchange adopted flexibility to apply a buffer rather than the flexibility to turn the debit/credit price reasonability check on or off, as the Exchange believed it would provide additional

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4 See Securities Exchange Act Release Nos. 76960 (January 21, 2016), 81 FR 4728 (January 27, 2016) (SR-CBOE-2015-107) (Notice of Filing of Amendment No. 2 and Order Granting Accelerated Approval of Proposed Rule Change, as Modified by Amendment Nos. 1 and 2 Thereto, Relating to Price Protection Mechanisms for Quotes and Orders); and 79589 (December 19, 2016), 81 FR 94469 (December 23, 2019) (SR-CBOE-2016-086).

5 Id.

6 See Securities Exchange Act Release No. 86923 (September 10, 2019), 84 FR 48664 (September 16, 2019) (SR-CBOE-2019-057).

flexibility to adapt the check to market conditions. The Exchange inadvertently omitted the debit/credit price reasonability check's application to the diagonal pairs that were subject to the check under the prior version of the rule; however, the debit/credit price reasonability check was included in the new System and has been applied to complex orders, including diagonals, since October 7, 2019. The Exchange did not exclude European-settled options from the debit/credit price reasonability check in the Rules, as it previously did, because the System was built to permit the buffer to be modified on a class-by-class basis as well as a strategy basis. The proposed rule change codifies the applicability of the debit/credit price reasonability check to diagonal pairs, as well as the Exchange's ability to modify the debit/credit price reasonability check on class and strategy basis, which the Exchange believes is appropriate given that market conditions impact classes and strategies in different manners, and the flexibility will permit it modify the debit/credit price reasonability check to adapt to these market conditions so that legitimate strategies may receive execution opportunities.

As discussed in the rule filing that first proposed adoption of the debit/credit price reasonability check, the System determines whether an order is a debit or credit based on general options volatility and pricing principles, which the Exchange understands are used by market participants in their option pricing models.[7] With respect to options with the same underlying:

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7 Securities Exchange Act Release Nos. 76960 (January 21, 2016), 81 FR 4728 (January 27, 2016) (SR-CBOE-2015-107) (Notice of Filing of Amendment No. 2 and Order Granting Accelerated Approval of Proposed Rule Change, as Modified by Amendment Nos. 1 and 2 Thereto, Relating to Price Protection Mechanisms for Quotes and Orders); and 79589 (December 19, 2016), 81 FR 94469 (December 23, 2019) (SR-CBOE-2016-086).

- if two calls have the same expiration date, the price of the call with the lower exercise price is more than the price of the call with the higher exercise price;
- if two puts have the same expiration date, the price of the put with the higher exercise price is more than the price of the put with the lower exercise price; and
- if two calls (puts) have the same exercise price, the price of the call (put) with the nearer expiration is less than the price of the call (put) with the farther expiration.

In other words, a call (put) with a lower (higher) exercise price is more expensive than a call (put) with a higher (lower) exercise price, because the ability to buy stock at a lower price is more valuable than the ability to buy stock at a higher price, and the ability to sell stock at a higher price is more valuable than the ability to sell stock at a lower price. A call (put) with a farther expiration is more expensive than the price of a call (put) with a nearer expiration, because locking in a price further into the future involves more risk for the buyer and seller and thus is more valuable, making an option (call or put) with a farther expiration more expensive than an option with a nearer expiration.

Proposed Application to Certain Diagonal Pairs

Under the current the debit/credit price reasonability check, the System only pairs calls (puts) if they have the same expiration date but different exercise prices or the same exercise price but different expiration dates. With respect to pairs with different expiration dates but the same exercise price,[8] a pair of calls is a credit (debit) strategy if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg), and a pair of puts is a credit (debit) strategy if the expiration date of the sell (buy) leg is farther than the

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8 A complex order consisting of a buy leg and a sell leg with different expiration dates are commonly referred to in the industry as a "calendar spread."

expiration date of the buy (sell) leg). However, based on the principles described above, if the sell (buy) leg of a pair of calls has a farther expiration date (and thus is more expensive) than the expiration date of the buy (sell) leg as well as a lower exercise price (and thus is more expensive) than the exercise price of the sell (buy) leg, then the pair is a credit (debit) (as is the case if the exercise prices of each call were the same under the current rule). Similarly, if the sell (buy) leg of a pair of puts has a farther expiration date (and thus is more expensive) than the expiration date of the buy (sell) leg as well as a higher exercise price (and thus is more expensive) than the exercise price of the buy (sell) leg, then the pair of puts is a credit (as is the case if the exercise prices of each put were the same under the current rule).

Therefore, the proposed rule change expands the debit/credit price reasonability check to pair calls (puts) with different expiration dates if the exercise price for the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration date in addition to those with different expiration dates and the same exercise price. Specifically, the proposed rule change amends subparagraph (c)(2)(C) to state, for purposes of the debit/credit price reasonability check, a "pair" is a pair of legs in an order for which both legs are calls or both legs are puts, one leg is a buy and one leg is a sell, and the legs have different expiration dates and the exercise price for the call (put) with the farther expiration date is the same as or lower (higher) than the exercise price for the nearer expiration date. The proposed rule change also amends subparagraphs (b)(3)(B)(iii)(b) through (d) to incorporate these orders with different expiration dates and exercise prices. When pairing legs across expiration dates, the System will pair one call (put) with the call (put) that has the next nearest expiration date and the same or next lower (higher) exercise price.

Based on the pricing principles described above, a pair of calls is a credit (debit) strategy if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg (if the exercise price of the sell (buy) leg is the same as or lower than the exercise price of the buy (sell) leg). A pair of puts is a credit (debit) strategy if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg (if the exercise price of the sell (buy) leg is the same as or higher than the exercise price of the buy (sell) leg).[9] Entering a calendar spread with a credit (debit) strategy at a debit (credit) price (or that would execute at a debit (credit) price), which price is inconsistent with the strategy, may result in executions at prices that are extreme and potentially erroneous.

Below are examples demonstrating how the System determines whether a complex order with two legs, which have different expiration dates and different exercise prices, is a debit or credit, and whether the System will reject the order pursuant to the debit/credit price reasonability check, with a pre-set buffer of $10.00.[10]

<u>Example #1 – Limit Call Spread</u>

A Trading Permit Holder enters a spread to buy 10 May 30 XYZ calls and sell 10 Aug 20 XYZ calls at a net debit price of -$20.00. The System defines this order as a credit, because the buy leg is for the call with the nearer expiration date and higher exercise price

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9 The proposed rule change makes no changes to the debit/credit price reasonability check with respect to pairs of orders with the same expiration date but different exercise prices. Therefore, the rule filing omits references to the portions of the current rule related to those pairs to focus on the changes made to pairs with different expiration dates.

10 The same principles would apply to complex orders with more than two legs, which include two legs that can be paired in this way.

(and is thus the less expensive leg). The System rejects the order back to the Trading Permit Holder because it is a limit order for a credit strategy that contains a net debit price, as it exceeds the pre-set buffer.

Example #2 – Limit Put Spread

A Trading Permit Holder enters a spread to buy 20 May 30 XYZ puts and sell 20 Apr 20 XYZ puts at a net credit price of $15.00. The System defines this order as a debit, because the buy leg is for the put with the farther expiration date and the higher exercise price (and thus the more expensive leg). The System rejects the order back to the Trading Permit Holder because it is a limit order for a debit strategy that contains a net credit price, as it exceeds the pre-set buffer.

Proposed Flexibility

Given the different characteristics applicable to different classes, the Exchange proposes to determine the pre-set buffer on a class-by-class basis. As discussed above, the prior version of the check excluded application of the check to pairs for which the exercise price for the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration date in European-settled options (which is a group of classes), which demonstrates the need to apply different parameters to different classes. The Exchange will issue an Exchange notice for all pre-set buffers, including any changes to those buffers.[11]

Additionally, the proposed rule change will permit the Exchange to determine a different buffer on a strategy basis. In other words, the Exchange may have different buffers applicable to calendars, verticals, butterflies, and orders whose legs have different exercise

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11 See Rule 1.5.

prices and different expiration dates for which the exercise price for the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration date (which the check will apply pursuant to this rule change). Strategies are impacted differently by market conditions just as classes are impacted differently by market conditions. As noted, the previous version of the check excluded European-style options from the diagonal pair check, but applied the check to those options for other strategy pairs (such as calendars and verticals), which demonstrates that different strategies may need different parameters.

As previously noted, the Exchange understands that in certain market conditions, particularly in volatile conditions as have recently occurred, the general pricing principles described above may not apply to certain classes or strategies. For example, it is possible that the leg with the farther expiration may be trading at a discount and thus is worth less than the leg with the nearer term expiration, and thus entering a diagonal or calendar strategy as a debit may be consistent with the then-current market.[12] In such conditions, the Exchange may deem it appropriate to increase the buffer to permit these orders to be accepted for electronic processing. While an order with a diagonal or calendar strategy entered as a debit in normal market conditions may appear erroneous and be appropriately rejected, in volatile market conditions, such an order entered as a debit may be accurately reflecting the market, and the Exchange believes it would be appropriate to provide such an

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12 This would apply to calendar spreads and orders with legs with different expiration dates and exercise prices for which the exercise price for the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration date, but not vertical spreads, demonstrating the need to apply different buffers to different strategies. It is for this reason that the previous version of the debit/credit price reasonability check did not apply to these diagonal strategies in European-settled options.

order with electronic execution opportunities. The proposed flexibility to establish pre-set buffers on a class and strategy basis will permit the Exchange to respond to unusual market conditions as soon as practicable.

In the wake of recent market volatility caused by the ongoing coronavirus pandemic, certain classes exhibited backwardation, which occurs when series with the farther expirations are worth less than series with the nearer term expirations. As discussed above, this is the opposite of what occurs pursuant to general options pricing principles in normal market conditions. Given this backwardation, market participants were submitting diagonal in certain classes (which were European-settled) with debit prices, which were consistent with market conditions, but the System was rejecting those orders because they did not satisfy the debit/credit price reasonability check (as the buffer was set to $0).

This issue became exacerbated beginning on March 16, when the Exchange suspended open outcry trading due to the coronavirus pandemic. When the trading floor was open, market participants had the option to submit orders that the System rejected to the trading floor for execution in open outcry. However, that requires additional time, which may introduce price risk to the execution, which is heightened when the markets are volatile. With the closure of the trading floor, market participants have no way to execute these orders with legitimate strategies on the Exchange, except by submitting them as separate orders, which introduces market and execution risk. Between March 16 and April 9, the System rejected an average of approximately 215 SPX complex orders with two legs and a diagonal strategy each trading day, with a low of fewer than 100 and a high above 500.[13]

13 SPX options have been impacted by backwardation given recent market conditions. As a European style option, the Exchange notes diagonal pairs in SPX were excluded from the debit/credit reasonability check. The Exchange

This range demonstrates the impact of market conditions on the pricing on this strategy in SPX. On trading days with higher volatility, more SPX orders were submitted with this strategy as credits rather than debits, which were consistent with market conditions but unable to execute on the Exchange. However, these orders were unable to execute on the Exchange, because they did not satisfy the debit/credit price reasonability check. The proposed rule change will permit the Exchange to modify the buffer of these strategies to provide execution opportunities to these legitimately priced orders (while providing continued protection to other strategies in the class (and other classes) not impacted by current market conditions).

Under normal market conditions, these prices would be considered erroneous.[14] However, during unusual market conditions, these prices are consistent with those market conditions, and the Exchange believes such orders should have electronic execution opportunities at prices consistent with the market. Under the current rule, the Exchange could have changed the buffer, but that change would have applied to all classes and all strategies. Given that backwardation does not impact pricing for all classes, and all strategies, the Exchange did not make that change, as it believes the System would have accepted many erroneously priced orders in addition to the legitimately priced orders in the

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intends to widen the buffer for SPX diagonal pairs upon effectiveness of this filing based on market conditions, the characteristics of SPX options, and data reviewed by the Exchange, which increased buffer corresponds to the exclusion of these options under the prior version of the reasonability check.

14 As noted above, under the prior version of the rule, the diagonal pairs in European-style options were always excluded from the debit/credit price reasonability check (and thus two-legged complex orders with a diagonal pair in European-settled classes were always accepted into the System in all market conditions). Applying a widened buffer to diagonal pairs in European-style options under the current rule would be consistent with the prior version of the rule.

impacted classes and strategies. The proposed rule change would permit the Exchange in similar circumstances to modify the buffer in classes and strategies whose pricing was impacted by changed market conditions, while maintaining the same level of protection for classes and strategies whose pricing was not impacted by those market conditions. The Exchange would consider market conditions, investor demand, and other relevant factors when determining whether to modify a buffer amount to attempt to create an appropriate balance between protection against executions at potentially erroneous prices and provision of execution opportunities for legitimately priced orders.

The Exchange offers a suite of risk controls, as described in Rule 5.34, which are designed to prevent trades at potentially erroneous prices. The debit/credit price reasonability check is an example of one of these risk controls. If the Exchange modified the debit/credit check buffer for a class or strategy in response to changes in market conditions, there are other risk controls that would separately apply to incoming orders to provide other protections against executions at potentially erroneous prices. The Exchange regularly monitors the application of the debit/credit price reasonability check, including the number of orders rejected as a result of the check. Additionally, the Exchange monitors orders that may be executed at erroneous prices pursuant to Rule 6.5. The Exchange considers all of these factors, and the factors described above, when determining whether to modify the parameters of the available risk controls, including the debit/credit check buffer.

The Exchange announces any changes to these parameters to market participants by Exchange notice pursuant to Rule 1.5. As noted above, market participants requested that we modify the buffer in certain classes with respect to diagonal pairs (as would be permitted by the proposed rule change) in connection with recent volatility. The proposal was presented to Trading Permit Holders at a town hall held on March 12, 2020 (which was available to all Trading Permit Holders and attended in person or by phone by hundreds of participants), at which the Exchange indicated, among other things, that it was seeking a rule change to permit such a modification. While requests for the change have decreased in recent weeks given the calming of the markets, the Exchange believes the proposed rule change will permit it to respond efficiently to any future changes in market conditions that may occur in connection with the ongoing coronavirus pandemic or other potential events.

(b) Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the "Act") and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.[15] Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[16] requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[17] requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

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15 15 U.S.C. 78f(b).

16 15 U.S.C. 78f(b)(5).

17 Id.

In particular, the proposed rule change expands the applicability of the current debit/credit price reasonability check to additional complex order strategies for which the Exchange can determine whether the order is a debit or credit. By expanding the orders to which these checks apply, the Exchange can further assist with the maintenance of a fair and orderly market by mitigating the potential risks associated with additional complex orders trading at prices that are inconsistent with their strategies (which may result in executions at prices that are extreme and potentially erroneous), which ultimately protects investors. This proposed expansion of the debit/credit price reasonability check promotes just and equitable principles of trade, as it is based on the same general option and volatility pricing principles the System currently uses to pair calls and puts, which principles the Exchange understands are used by market participants in their option pricing models. As discussed above, the Exchange previously applied the debit/credit price reasonability check to pairs for which the exercise price for the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration as proposed (until less than six months ago). However, this price check did not apply to orders with these strategies in option classes with European-style settlement. Therefore, to the extent the Exchange determines to increase the pre-set buffer for a class with European-style settlement, the Exchanges notes these orders were not subject to this price check under the previous version of the rules.

Additionally, until less than six months ago, the Exchange previously had flexibility to apply this check on a class-by-class basis, and the proposed rule change to permit the Exchange to determine buffers on a class-by-class basis is consistent with that previous authority. The Exchange believe class flexibility is appropriate to permit the

Exchange to apply reasonable buffers to classes, which may exhibit different trading characteristics and have different market models. The proposed rule change to permit the Exchange to determine buffers for different strategies will further permit the Exchange to modify this parameter in response to market conditions, which may create pricing conditions that are contrary to the general pricing principles described above. In such conditions, the System may reject legitimately priced complex strategies given volatile market conditions that would generally be erroneously priced in normal market conditions. The Exchange believes this flexibility is appropriate, as it will provide additional execution opportunities given then-current market conditions, which will ultimately benefit investors.

This price check does apply to market orders that can be defined as a net credit or debit,[18] which if within the pre-set buffer, will execute upon entry at the price of the market. With a wider buffer, the Exchange understands that market orders may execute within a wider price range. However, the Exchange believes the proposed rule change to permit wider buffers by class and strategy will still protect investors and the public interest, even with its application to market orders. The purpose of a market order is to execute at the then-current market. As noted above, the then-current market for a market order submitted as a debit strategy may be a credit price rather than a debit price. Therefore, an investor may want to enter a market order with that strategy so that it executes at a credit price, and the proposed rule change may provide that order with an

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[18] Therefore, currently market orders the System cannot define as a credit or debit do not receive any protection from the debit/credit price reasonability check. Additionally, the Exchange notes that market orders in options that are European-settled that had a diagonal strategy were not subject to the previous version of the debit/credit price reasonability check.

execution opportunity. The Exchange believes it is appropriate that a market order be permitted to execute at such a price, as a market participant that submits a market order in that market may expect execution at such a price. While a market participant generally takes on more market risk when submitting a market order rather than a limit order, particularly when markets are volatile, the Exchange believes that even if it sets a wider buffer in a class, it has other risk controls in place to help prevent complex market orders from erroneous executions.[19] Given that market participants will receive sufficient advance notice of any changes the Exchange makes to the pre-set buffers, the Exchange believes the proposed rule change will continue to protect investors that submit complex market orders, as they will know the price range within which their market orders may execute. Additionally, the proposed flexibility to apply buffers by strategy as well as class will permit the Exchange to continue to apply the check with a narrower buffer to orders, including market orders, based on market conditions. In other words, only market orders submitted in classes and strategies with wider buffers would be eligible for executions within a wider price range.

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

The proposed rule change will not impose any burden on intramarket competition, because the debit/credit price reasonability check will continue to apply to all incoming complex orders of all Trading Permit Holders in the same manner. The proposed rule change expands the applicability of the current check to additional complex orders for

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19 <u>See, e.g.</u>, Rule 5.34(b)(2) (which prevents a market order from executing at a net debit price after receiving execution at a net credit price), (b)(5) (which prevents orders (including market orders) with certain strategies from executing outside of an acceptable price range), and (b)(6) (which prevents orders from executing more than a buffer amount outside of the then-current SNBBO).

which the Exchange can determine whether the order is a debit or credit, which will help further prevent potentially erroneous executions and benefits all market participants. Any Exchange-determination of different pre-set buffers for different classes and different strategies will similarly apply to complex orders of all Trading Permit Holders. The proposed rule change does not impose any burden on intermarket competition, as it is intended to prevent potentially erroneously priced orders from entering Cboe Options' System and executing on Cboe Options' market, while providing the Exchange with sufficient flexibility to provide execution opportunities to orders that may not be erroneously priced in certain market conditions. The Exchange believes the proposed rule change would ultimately provide all market participants with additional protection from anomalous or erroneous executions and additional execution opportunities when appropriate.

The Exchange believes the proposal will enhance risk protections, the individual firm benefits of which flow downstream to counterparties both at the Exchange and at other options exchanges, which increases systemic protections as well. The Exchange believes enhancing risk protections will allow Trading Permit Holders to enter orders and quotes with further reduced fear of inadvertent exposure to excessive risk, which will benefit investors through increased liquidity for the execution of their orders. Without adequate risk management tools, such as the one proposed to be enhanced in this filing, Trading Permit Holders could reduce the amount of order flow and liquidity they provide. Such actions may undermine the quality of the markets available to customers and other market participants. Accordingly, the proposed rule change is designed to encourage Trading Permit Holders to submit additional order flow and liquidity to the Exchange, which may ultimately promote competition. The proposed flexibility may similar provide additional execution opportunities, which further benefits liquidity in potentially volatile markets. In addition, providing Trading Permit Holders with more tools for managing risk will facilitate transactions in securities because, as noted above, Trading Permit Holders will have more confidence protections are in place that reduce the risks from potential system errors and market events.

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

The Exchange neither solicited nor received comments on the proposed rule change.

Item 6. <u>Extension of Time Period for Commission Action</u>

Not applicable.

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

(a) The proposed rule change is filed for immediate effectiveness pursuant to Section 19(b)(3)(A) of Act[20] and Rule 19b-4(f)(6)[21] thereunder.

(b) The Exchange designates that the proposed rule change 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. Additionally, the Exchange has given the Commission written notice of its

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20 15 U.S.C. 78s(b)(3)(A).

21 17 CFR 240.19b-4(f)(6).

intent to file the proposed rule change, along with a brief description and text of 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 believes the proposed rule change will not significantly affect the protection of investors or the public interest, because it expands the applicability of the current debit/credit price reasonability check to additional complex orders for which the Exchange can determine whether the order is a debit or credit. The Exchange believes the proposed flexibility will permit the Exchange to apply reasonable buffers to classes, which may exhibit different trading characteristics and have different market models, and to strategies, which may require different protection in different market conditions, will permit the Exchange to set buffers that continue to mitigate the potential risks associated with additional complex orders trading at prices that are inconsistent with their strategies (which may result in executions at prices that are extreme and potentially erroneous), while providing additional execution opportunities for orders in volatile market conditions that may otherwise be deemed erroneous and not be electronically processed, which ultimately benefits investors.

The Exchange believes the proposed rule change will not impose any significant burden on competition, because the debit/credit price reasonability check will continue to apply to all incoming complex orders of all Trading Permit Holders in the same manner. The proposed rule change expands the applicability of the current check to additional complex orders for which the Exchange can determine whether the order is a debit or credit, which will help further prevent potentially erroneous executions and benefits all market participants. Any Exchange-determination of different pre-set buffers for different classes and different strategies will similarly apply to complex orders of all Trading Permit Holders. The proposed rule change is intended to prevent potentially erroneously priced orders from entering Cboe Options' System and executing on Cboe Options' market, while providing the Exchange with sufficient flexibility to provide execution opportunities to orders that may not be erroneously priced in certain market conditions. The Exchange believes the proposed rule change would ultimately provide all market participants with additional protection from anomalous or erroneous executions and additional execution opportunities when appropriate.

For the foregoing reasons, this rule filing qualifies as a "non-controversial" rule change under Rule 19b-4(f)(6), which renders the proposed rule change effective upon filing with the Commission. At any time within 60 days of the filing of this 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 will institute proceedings to determine whether the proposed rule change should be approved or disapproved.

The Exchange respectfully requests that the Commission waive the five-day pre-filing requirement and the 30-day operative delay period after which a proposed rule change under Rule 19b-4(f)(6) becomes effective. As discussed above, the Exchange's debit/credit price reasonability check applied to pairs for which the exercise price for the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration date added in this rule filing, and on a class-by-class basis, until October 7, 2019. While they did not previously permit application on a strategy basis, as discussed above, the Exchange currently has price reasonability checks that apply only to specific strategies, so the concept is not novel.[22] As noted above, market participants requested that we modify the buffer in certain classes with respect to diagonal pairs (as would be permitted by the proposed rule change) in connection with recent volatility. The proposal was presented to Trading Permit Holders at a town hall held on March 12, 2020 (which was available to all Trading Permit Holders and attended in person or by phone by hundreds of participants), at which the Exchange indicated, among other things, that it was seeking a rule change to permit such a modification. This issue became exacerbated beginning on March 16, when the Exchange suspended open outcry trading due to the coronavirus pandemic. When the trading floor was open, market participants had the option to submit orders that the System rejected to the trading floor for execution in open outcry. However, that requires additional time, which may introduce price risk to the execution, which is heightened when the markets are volatile. With the closure of the trading floor, market participants have no way to execute these orders with legitimate strategies on the Exchange, except by submitting them as separate orders, which introduces market and execution risk. While requests for the change have decreased in recent weeks given the calming of the markets, the Exchange believes the proposed rule change will permit it to respond efficiently to any future changes in market conditions

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22 See, e.g., Rule 5.34(b)(4) (buy strategy price check applicable to only certain buy complex strategies) and (5) (price check applicable only to verticals, true butterflies, and box spreads). While these price checks do not provide flexibility within the rule to apply differently to different strategies, they reflect that only certain strategies may require certain types of price protections while others do not. Additionally, TPHs may request nullification or adjustment of an execution price if it believes the original execution price was erroneous, pursuant to Rule 6.5.

that may occur in connection with the ongoing coronavirus pandemic or other potential events.

The Exchange has numerous other risk controls in place that it believes will help prevent erroneous executions of complex orders, even if it chooses to widen a buffer for a particular class or strategy. Waiver of the operative delay will permit the Exchange to appropriately modify the pre-set buffers in classes and strategies whose pricing may be impacted by changes in market conditions, particularly if the trading floor remains closed for an extended amount of time (and orders consistent with market conditions have no execution opportunities during that time). As noted above, when determining whether to make any such modifications, the Exchange will consider market conditions, investor demand, the number of orders being rejected due to the check, and executions at potentially erroneous prices.

(c) Not applicable.

(d) Not applicable.

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

The proposed rule change is not based on a rule either of another self-regulatory organization or of the Commission.

Item 9. <u>Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act</u>

Not applicable.

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

Not applicable.

Item 11. Exhibits

Exhibit 1. Completed Notice of Proposed Rule Change for publication in the Federal Register.

EXHIBIT 1

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34- ; File No. SR-CBOE-2020-046]

[Insert date]

Self-Regulatory Organizations; Cboe Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Relating to Amend its Debit/Credit Price Reasonability Check

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"),[1] and Rule 19b-4 thereunder,[2] notice is hereby given that on [insert date], Cboe Exchange, Inc. (the "Exchange" or "Cboe Options") filed with the Securities and Exchange Commission (the "Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Exchange filed the proposal as a "non-controversial" proposed rule change pursuant to Section 19(b)(3)(A)(iii) of the Act[3] and Rule 19b-4(f)(6) thereunder.[4] 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

Cboe Exchange, Inc. (the "Exchange" or "Cboe Options") proposes to amend its debit/credit price reasonability check. The text of the proposed rule change is provided below.

(additions are underlined; deletions are [bracketed])

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

2 17 CFR 240.19b-4.

3 15 U.S.C. 78s(b)(3)(A)(iii).

4 17 CFR 240.19b-4(f)(6).

Rules of Cboe Exchange, Inc.

* * * * *

Rule 5.34. Order and Quote Price Protections Mechanisms and Risk Controls

The System's acceptance and execution of orders, quotes, and bulk messages, as applicable, pursuant to the Rules, including Rules 5.31 through 5.33, and orders routed to PAR pursuant to Rule 5.82 are subject to the following price protection mechanisms and risk controls, as applicable.

(a) No change.

(b) *Complex Orders.*

(1) *Definitions.* For purposes of this subparagraph (b):

(A) – (C) No change.

(D) *Calendar Spread.* A "calendar" spread is a two-legged complex order with one leg to buy a number of calls (puts) and one leg to sell the same number of calls (puts) with the same exercise price but different expiration dates.

(2) No change.

(3) *Debit/Credit Price Reasonability Checks.*

(A) The Exchange cancels or rejects a complex order (or unexecuted portion) that is a limit order for a debit strategy with a net credit price that exceeds a pre-set buffer, a limit order (or unexecuted portion) for a credit strategy with a net debit price that exceeds a pre-set buffer, or a market order (or unexecuted portion) for a credit strategy that would execute at a net debit price that exceeds a pre-set buffer (the pre-set buffers are determined by the Exchange on a class and strategy (*i.e.*, vertical, calendar, butterfly, orders with different expiration dates and exercise prices) basis).

(B) The System defines a complex order as a debit or credit as follows:

(i) – (ii) No change.

(iii) an order for which all pairs and loners are debits (credits) is a debit (credit). For purposes of this check, a "pair" is a pair of legs in an order for which both legs are calls or both legs are puts, one leg is a buy and one leg is a sell, and the legs have the same expiration date but different exercise prices (*i.e.*, vertical), [or] the same exercise price but different expiration dates (*i.e.*, calendar), or the exercise price for the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration date. A "loner" is any leg in an order that the System cannot pair with another leg in the order. Notwithstanding the foregoing, if the stock component of a stock-option order is to buy (sell), the stock-option order is a debit (credit).

(a) No change.

(b) The System then pairs legs to the extent possible [with the same exercise prices] across expiration dates, pairing one [leg]call (put) with the [leg]call (put) that has the next nearest expiration date and the same or next lower (higher) exercise price.

(c) A pair of calls is a credit (debit) if the exercise price of the buy (sell) leg is higher than the exercise price of the sell (buy) leg (if the pair has the same expiration date) or if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg (if the [pair has the same] exercise price of the sell (buy) leg is the same as or lower than the exercise price of the buy (sell) leg).

(d) A pair of puts is a credit (debit) if the exercise price of the sell (buy) leg is higher than the exercise price of the buy (sell) leg (if the pair has the same expiration date) or if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg (if the [pair has the same] exercise price of the sell (buy) leg is the same as or higher than the exercise price of the buy (sell) leg).

* * * * *

The text of the proposed rule change is also available on the Exchange's website (http://www.cboe.com/AboutCBOE/CBOELegalRegulatoryHome.aspx), at the Exchange's Office of the Secretary, 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 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 proposed rule change amends the debit/credit price reasonability check for complex orders in Rule 5.34(b)(3) to expand its applicability and provide flexibility with respect to its application. Pursuant to the debit/credit price reasonability check, the Exchange cancels or rejects a complex order (or unexecuted portion) that is a limit order for a debit strategy with a net credit price that exceeds a pre-set buffer, a limit order (or unexecuted portion) for a credit strategy with a net debit price that exceeds a pre-set buffer, or a market order (or unexecuted portion) for a credit strategy that would execute at a net debit price that exceeds a pre-set buffer (the pre-set buffers are determined by the Exchange). The System defines a complex order as a debit (credit) if all pairs and loners are debits (credits).[5] For purposes of the debit/credit price reasonability check, a "pair" is a pair of legs in an order for which both legs are calls or both legs are puts, one leg is a buy and one leg is a sell, and both legs have the same expiration date but different exercise prices[6] or the same exercise price but different expiration dates.[7] A "loner" is any leg is an order that the System cannot pair with another leg in the order.

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5 Rule 5.34(b)(3)(B). The System also determines certain call and put butterfly spreads as debits and credits. See id.

6 The proposed rule change defines this as a "vertical," which is consistent with the definition of a vertical in Rule 5.34(b)(1)(A).

7 The proposed rule change defines this as a "calendar," and adds the definition of a calendar spread to Rule 5.34(b)(1)(D).

(1) The System first pairs legs to the extent possible within each expiration date, pairing one leg with the leg that has the next highest exercise price.

(2) The System then pairs legs to the extent possible with the same exercise prices across expiration dates, pairing one leg with the leg that has the next nearest expiration date.

(3) A pair of calls is a credit (debit) if the exercise price of the buy (sell) leg is higher than the exercise price of the sell (buy) leg (if the pair has the same expiration date) or if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg (if the pair has the same exercise price).

(4) A pair of puts is a credit (debit) if the exercise price of the sell (buy) leg is higher than the exercise price of the buy (sell) leg (if the pair has the same expiration date) or if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg (if the pair has the same exercise price).

(5) A loner to buy is a debit, and a loner to sell is a credit.

The System does not apply the debit/credit price reasonability check to an order for which the System cannot define whether it is a debit or credit.

Background

The Exchange implemented a debit/credit reasonability check in 2016.[8] The version of the debit/credit price reasonability check in place until the Exchange's System migration on October 7, 2019 was substantially similar to the current version described above.

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8 See Securities Exchange Act Release Nos. 76960 (January 21, 2016), 81 FR 4728 (January 27, 2016) (SR-CBOE-2015-107) (Notice of Filing of Amendment No. 2 and Order Granting Accelerated Approval of Proposed Rule Change, as Modified by Amendment Nos. 1 and 2 Thereto, Relating to Price Protection Mechanisms for Quotes and Orders); and 79589 (December 19, 2016), 81 FR 94469 (December 23, 2019) (SR-CBOE-2016-086).

However, under that version, the Exchange previously applied the debit/credit price reasonability check to pairs with different expiration dates and exercise prices for which the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration (*i.e.*, diagonals), except to options that are European-settled.[9] Diagonal options in European-settled options were excluded from the debit/credit price reasonability check, because certain market conditions could cause options with nearer expirations to be worth more than options with farther expirations (as further discussed below). Additionally, under the prior version of the debit/credit price reasonability check, while the Exchange did not apply a pre-set buffer, it was able to apply the debit/credit price reasonability check on a class-by-class basis.

In connection with the System migration on October 7, 2019, the Exchange adopted the current version of the debit/credit price reasonability check.[10] The Exchange adopted flexibility to apply a buffer rather than the flexibility to turn the debit/credit price reasonability check on or off, as the Exchange believed it would provide additional flexibility to adapt the check to market conditions. The Exchange inadvertently omitted the debit/credit price reasonability check's application to the diagonal pairs that were subject to the check under the prior version of the rule; however, the debit/credit price reasonability check was included in the new System and has been applied to complex orders, including diagonals, since October 7, 2019. The Exchange did not exclude European-settled options from the debit/credit price reasonability check in the Rules, as it previously did, because the System was built to permit the buffer to be modified on a class-by-class basis as well as a

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9 Id.

10 See Securities Exchange Act Release No. 86923 (September 10, 2019), 84 FR 48664 (September 16, 2019) (SR-CBOE-2019-057).

strategy basis. The proposed rule change codifies the applicability of the debit/credit price reasonability check to diagonal pairs, as well as the Exchange's ability to modify the debit/credit price reasonability check on class and strategy basis, which the Exchange believes is appropriate given that market conditions impact classes and strategies in different manners, and the flexibility will permit it modify the debit/credit price reasonability check to adapt to these market conditions so that legitimate strategies may receive execution opportunities.

As discussed in the rule filing that first proposed adoption of the debit/credit price reasonability check, the System determines whether an order is a debit or credit based on general options volatility and pricing principles, which the Exchange understands are used by market participants in their option pricing models.[11] With respect to options with the same underlying:

- if two calls have the same expiration date, the price of the call with the lower exercise price is more than the price of the call with the higher exercise price;
- if two puts have the same expiration date, the price of the put with the higher exercise price is more than the price of the put with the lower exercise price; and
- if two calls (puts) have the same exercise price, the price of the call (put) with the nearer expiration is less than the price of the call (put) with the farther expiration.

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[11] Securities Exchange Act Release Nos. 76960 (January 21, 2016), 81 FR 4728 (January 27, 2016) (SR-CBOE-2015-107) (Notice of Filing of Amendment No. 2 and Order Granting Accelerated Approval of Proposed Rule Change, as Modified by Amendment Nos. 1 and 2 Thereto, Relating to Price Protection Mechanisms for Quotes and Orders); and 79589 (December 19, 2016), 81 FR 94469 (December 23, 2019) (SR-CBOE-2016-086).

In other words, a call (put) with a lower (higher) exercise price is more expensive than a call (put) with a higher (lower) exercise price, because the ability to buy stock at a lower price is more valuable than the ability to buy stock at a higher price, and the ability to sell stock at a higher price is more valuable than the ability to sell stock at a lower price. A call (put) with a farther expiration is more expensive than the price of a call (put) with a nearer expiration, because locking in a price further into the future involves more risk for the buyer and seller and thus is more valuable, making an option (call or put) with a farther expiration more expensive than an option with a nearer expiration.

Proposed Application to Certain Diagonal Pairs

Under the current the debit/credit price reasonability check, the System only pairs calls (puts) if they have the same expiration date but different exercise prices or the same exercise price but different expiration dates. With respect to pairs with different expiration dates but the same exercise price,[12] a pair of calls is a credit (debit) strategy if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg), and a pair of puts is a credit (debit) strategy if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg). However, based on the principles described above, if the sell (buy) leg of a pair of calls has a farther expiration date (and thus is more expensive) than the expiration date of the buy (sell) leg as well as a lower exercise price (and thus is more expensive) than the exercise price of the sell (buy) leg, then the pair is a credit (debit) (as is the case if the exercise prices of each call were the same under the current rule). Similarly, if the sell (buy) leg of a pair of puts has a farther expiration date (and thus is more expensive) than the expiration date of the buy (sell) leg as well as a higher exercise price

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12 A complex order consisting of a buy leg and a sell leg with different expiration dates are commonly referred to in the industry as a "calendar spread."

(and thus is more expensive) than the exercise price of the buy (sell) leg, then the pair of puts is a credit (as is the case if the exercise prices of each put were the same under the current rule).

Therefore, the proposed rule change expands the debit/credit price reasonability check to pair calls (puts) with different expiration dates if the exercise price for the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration date in addition to those with different expiration dates and the same exercise price. Specifically, the proposed rule change amends subparagraph (c)(2)(C) to state, for purposes of the debit/credit price reasonability check, a "pair" is a pair of legs in an order for which both legs are calls or both legs are puts, one leg is a buy and one leg is a sell, and the legs have different expiration dates and the exercise price for the call (put) with the farther expiration date is the same as or lower (higher) than the exercise price for the nearer expiration date. The proposed rule change also amends subparagraphs (b)(3)(B)(iii)(b) through (d) to incorporate these orders with different expiration dates and exercise prices. When pairing legs across expiration dates, the System will pair one call (put) with the call (put) that has the next nearest expiration date and the same or next lower (higher) exercise price.

Based on the pricing principles described above, a pair of calls is a credit (debit) strategy if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg (if the exercise price of the sell (buy) leg is the same as or lower than the exercise price of the buy (sell) leg). A pair of puts is a credit (debit) strategy if the expiration date of the sell (buy) leg is farther than the expiration date of the buy (sell) leg (if the exercise price of the sell (buy) leg is the same as or higher than the exercise price of the buy (sell) leg).[13] Entering a calendar spread with a credit (debit) strategy at a debit (credit) price (or that would execute at a debit (credit) price), which price is inconsistent with the strategy, may result in executions at prices that are extreme and potentially erroneous.

Below are examples demonstrating how the System determines whether a complex order with two legs, which have different expiration dates and different exercise prices, is a debit or credit, and whether the System will reject the order pursuant to the debit/credit price reasonability check, with a pre-set buffer of $10.00.[14]

Example #1 – Limit Call Spread

A Trading Permit Holder enters a spread to buy 10 May 30 XYZ calls and sell 10 Aug 20 XYZ calls at a net debit price of -$20.00. The System defines this order as a credit, because the buy leg is for the call with the nearer expiration date and higher exercise price (and is thus the less expensive leg). The System rejects the order back to the Trading Permit Holder because it is a limit order for a credit strategy that contains a net debit price, as it exceeds the pre-set buffer.

Example #2 – Limit Put Spread

A Trading Permit Holder enters a spread to buy 20 May 30 XYZ puts and sell 20 Apr 20 XYZ puts at a net credit price of $15.00. The System defines this order as a debit, because the buy leg is for the put with the farther expiration date and the higher exercise price (and thus the more expensive leg). The System rejects the order back to the Trading

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13 The proposed rule change makes no changes to the debit/credit price reasonability check with respect to pairs of orders with the same expiration date but different exercise prices. Therefore, the rule filing omits references to the portions of the current rule related to those pairs to focus on the changes made to pairs with different expiration dates.

14 The same principles would apply to complex orders with more than two legs, which include two legs that can be paired in this way.

Permit Holder because it is a limit order for a debit strategy that contains a net credit price, as it exceeds the pre-set buffer.

Proposed Flexibility

Given the different characteristics applicable to different classes, the Exchange proposes to determine the pre-set buffer on a class-by-class basis. As discussed above, the prior version of the check excluded application of the check to pairs for which the exercise price for the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration date in European-settled options (which is a group of classes), which demonstrates the need to apply different parameters to different classes. The Exchange will issue an Exchange notice for all pre-set buffers, including any changes to those buffers.[15]

Additionally, the proposed rule change will permit the Exchange to determine a different buffer on a strategy basis. In other words, the Exchange may have different buffers applicable to calendars, verticals, butterflies, and orders whose legs have different exercise prices and different expiration dates for which the exercise price for the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration date (which the check will apply pursuant to this rule change). Strategies are impacted differently by market conditions just as classes are impacted differently by market conditions. As noted, the previous version of the check excluded European-style options from the diagonal pair check, but applied the check to those options for other strategy pairs (such as calendars and verticals), which demonstrates that different strategies may need different parameters.

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15 See Rule 1.5.

As previously noted, the Exchange understands that in certain market conditions, particularly in volatile conditions as have recently occurred, the general pricing principles described above may not apply to certain classes or strategies. For example, it is possible that the leg with the farther expiration may be trading at a discount and thus is worth less than the leg with the nearer term expiration, and thus entering a diagonal or calendar strategy as a debit may be consistent with the then-current market.[16] In such conditions, the Exchange may deem it appropriate to increase the buffer to permit these orders to be accepted for electronic processing. While an order with a diagonal or calendar strategy entered as a debit in normal market conditions may appear erroneous and be appropriately rejected, in volatile market conditions, such an order entered as a debit may be accurately reflecting the market, and the Exchange believes it would be appropriate to provide such an order with electronic execution opportunities. The proposed flexibility to establish pre-set buffers on a class and strategy basis will permit the Exchange to respond to unusual market conditions as soon as practicable.

In the wake of recent market volatility caused by the ongoing coronavirus pandemic, certain classes exhibited backwardation, which occurs when series with the farther expirations are worth less than series with the nearer term expirations. As discussed above, this is the opposite of what occurs pursuant to general options pricing principles in normal market conditions. Given this backwardation, market participants were submitting diagonal

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16 This would apply to calendar spreads and orders with legs with different expiration dates and exercise prices for which the exercise price for the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration date, but not vertical spreads, demonstrating the need to apply different buffers to different strategies. It is for this reason that the previous version of the debit/credit price reasonability check did not apply to these diagonal strategies in European-settled options.

in certain classes (which were European-settled) with debit prices, which were consistent with market conditions, but the System was rejecting those orders because they did not satisfy the debit/credit price reasonability check (as the buffer was set to $0).

This issue became exacerbated beginning on March 16, when the Exchange suspended open outcry trading due to the coronavirus pandemic. When the trading floor was open, market participants had the option to submit orders that the System rejected to the trading floor for execution in open outcry. However, that requires additional time, which may introduce price risk to the execution, which is heightened when the markets are volatile. With the closure of the trading floor, market participants have no way to execute these orders with legitimate strategies on the Exchange, except by submitting them as separate orders, which introduces market and execution risk. Between March 16 and April 9, the System rejected an average of approximately 215 SPX complex orders with two legs and a diagonal strategy each trading day, with a low of fewer than 100 and a high above 500.[17] This range demonstrates the impact of market conditions on the pricing on this strategy in SPX. On trading days with higher volatility, more SPX orders were submitted with this strategy as credits rather than debits, which were consistent with market conditions but unable to execute on the Exchange. However, these orders were unable to execute on the Exchange, because they did not satisfy the debit/credit price reasonability check. The proposed rule change will permit the Exchange to modify the buffer of these strategies to

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[17] SPX options have been impacted by backwardation given recent market conditions. As a European style option, the Exchange notes diagonal pairs in SPX were excluded from the debit/credit reasonability check. The Exchange intends to widen the buffer for SPX diagonal pairs upon effectiveness of this filing based on market conditions, the characteristics of SPX options, and data reviewed by the Exchange, which increased buffer corresponds to the exclusion of these options under the prior version of the reasonability check.

provide execution opportunities to these legitimately priced orders (while providing continued protection to other strategies in the class (and other classes) not impacted by current market conditions).

Under normal market conditions, these prices would be considered erroneous.[18] However, during unusual market conditions, these prices are consistent with those market conditions, and the Exchange believes such orders should have electronic execution opportunities at prices consistent with the market. Under the current rule, the Exchange could have changed the buffer, but that change would have applied to all classes and all strategies. Given that backwardation does not impact pricing for all classes, and all strategies, the Exchange did not make that change, as it believes the System would have accepted many erroneously priced orders in addition to the legitimately priced orders in the impacted classes and strategies. The proposed rule change would permit the Exchange in similar circumstances to modify the buffer in classes and strategies whose pricing was impacted by changed market conditions, while maintaining the same level of protection for classes and strategies whose pricing was not impacted by those market conditions. The Exchange would consider market conditions, investor demand, and other relevant factors when determining whether to modify a buffer amount to attempt to create an appropriate balance between protection against executions at potentially erroneous prices and provision of execution opportunities for legitimately priced orders.

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[18] As noted above, under the prior version of the rule, the diagonal pairs in European-style options were always excluded from the debit/credit price reasonability check (and thus two-legged complex orders with a diagonal pair in European-settled classes were always accepted into the System in all market conditions). Applying a widened buffer to diagonal pairs in European-style options under the current rule would be consistent with the prior version of the rule.

The Exchange offers a suite of risk controls, as described in Rule 5.34, which are designed to prevent trades at potentially erroneous prices. The debit/credit price reasonability check is an example of one of these risk controls. If the Exchange modified the debit/credit check buffer for a class or strategy in response to changes in market conditions, there are other risk controls that would separately apply to incoming orders to provide other protections against executions at potentially erroneous prices. The Exchange regularly monitors the application of the debit/credit price reasonability check, including the number of orders rejected as a result of the check. Additionally, the Exchange monitors orders that may be executed at erroneous prices pursuant to Rule 6.5. The Exchange considers all of these factors, and the factors described above, when determining whether to modify the parameters of the available risk controls, including the debit/credit check buffer.

The Exchange announces any changes to these parameters to market participants by Exchange notice pursuant to Rule 1.5. As noted above, market participants requested that we modify the buffer in certain classes with respect to diagonal pairs (as would be permitted by the proposed rule change) in connection with recent volatility. The proposal was presented to Trading Permit Holders at a town hall held on March 12, 2020 (which was available to all Trading Permit Holders and attended in person or by phone by hundreds of participants), at which the Exchange indicated, among other things, that it was seeking a rule change to permit such a modification. While requests for the change have decreased in recent weeks given the calming of the markets, the Exchange believes the proposed rule change will permit it to respond efficiently to any future changes in market conditions that may occur in connection with the ongoing coronavirus pandemic or other potential events.

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the "Act") and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.[19] Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[20] requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[21] requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

In particular, the proposed rule change expands the applicability of the current debit/credit price reasonability check to additional complex order strategies for which the Exchange can determine whether the order is a debit or credit. By expanding the orders to which these checks apply, the Exchange can further assist with the maintenance of a fair and orderly market by mitigating the potential risks associated with additional complex orders trading at prices that are inconsistent with their strategies (which may result in executions at prices that are extreme and potentially erroneous), which

[19] 15 U.S.C. 78f(b).

[20] 15 U.S.C. 78f(b)(5).

[21] Id.

ultimately protects investors. This proposed expansion of the debit/credit price reasonability check promotes just and equitable principles of trade, as it is based on the same general option and volatility pricing principles the System currently uses to pair calls and puts, which principles the Exchange understands are used by market participants in their option pricing models. As discussed above, the Exchange previously applied the debit/credit price reasonability check to pairs for which the exercise price for the call (put) with the farther expiration date is lower (higher) than the exercise price for the nearer expiration as proposed (until less than six months ago). However, this price check did not apply to orders with these strategies in option classes with European-style settlement. Therefore, to the extent the Exchange determines to increase the pre-set buffer for a class with European-style settlement, the Exchanges notes these orders were not subject to this price check under the previous version of the rules.

Additionally, until less than six months ago, the Exchange previously had flexibility to apply this check on a class-by-class basis, and the proposed rule change to permit the Exchange to determine buffers on a class-by-class basis is consistent with that previous authority. The Exchange believe class flexibility is appropriate to permit the Exchange to apply reasonable buffers to classes, which may exhibit different trading characteristics and have different market models. The proposed rule change to permit the Exchange to determine buffers for different strategies will further permit the Exchange to modify this parameter in response to market conditions, which may create pricing conditions that are contrary to the general pricing principles described above. In such conditions, the System may reject legitimately priced complex strategies given volatile market conditions that would generally be erroneously priced in normal market conditions. The Exchange believes this flexibility is appropriate, as it will provide additional execution opportunities given then-current market conditions, which will ultimately benefit investors.

This price check does apply to market orders that can be defined as a net credit or debit,[22] which if within the pre-set buffer, will execute upon entry at the price of the market. With a wider buffer, the Exchange understands that market orders may execute within a wider price range. However, the Exchange believes the proposed rule change to permit wider buffers by class and strategy will still protect investors and the public interest, even with its application to market orders. The purpose of a market order is to execute at the then-current market. As noted above, the then-current market for a market order submitted as a debit strategy may be a credit price rather than a debit price. Therefore, an investor may want to enter a market order with that strategy so that it executes at a credit price, and the proposed rule change may provide that order with an execution opportunity. The Exchange believes it is appropriate that a market order be permitted to execute at such a price, as a market participant that submits a market order in that market may expect execution at such a price. While a market participant generally takes on more market risk when submitting a market order rather than a limit order, particularly when markets are volatile, the Exchange believes that even if it sets a wider buffer in a class, it has other risk controls in place to help prevent complex market orders

[22] Therefore, currently market orders the System cannot define as a credit or debit do not receive any protection from the debit/credit price reasonability check. Additionally, the Exchange notes that market orders in options that are European-settled that had a diagonal strategy were not subject to the previous version of the debit/credit price reasonability check.

from erroneous executions.[23] Given that market participants will receive sufficient advance notice of any changes the Exchange makes to the pre-set buffers, the Exchange believes the proposed rule change will continue to protect investors that submit complex market orders, as they will know the price range within which their market orders may execute. Additionally, the proposed flexibility to apply buffers by strategy as well as class will permit the Exchange to continue to apply the check with a narrower buffer to orders, including market orders, based on market conditions. In other words, only market orders submitted in classes and strategies with wider buffers would be eligible for executions within a wider price range.

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

The proposed rule change will not impose any burden on intramarket competition, because the debit/credit price reasonability check will continue to apply to all incoming complex orders of all Trading Permit Holders in the same manner. The proposed rule change expands the applicability of the current check to additional complex orders for which the Exchange can determine whether the order is a debit or credit, which will help further prevent potentially erroneous executions and benefits all market participants. Any Exchange-determination of different pre-set buffers for different classes and different strategies will similarly apply to complex orders of all Trading Permit Holders. The proposed rule change does not impose any burden on intermarket competition, as it is intended to prevent potentially erroneously priced orders from entering Cboe Options'

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23 See, e.g., Rule 5.34(b)(2) (which prevents a market order from executing at a net debit price after receiving execution at a net credit price), (b)(5) (which prevents orders (including market orders) with certain strategies from executing outside of an acceptable price range), and (b)(6) (which prevents orders from executing more than a buffer amount outside of the then-current SNBBO).

System and executing on Cboe Options' market, while providing the Exchange with sufficient flexibility to provide execution opportunities to orders that may not be erroneously priced in certain market conditions. The Exchange believes the proposed rule change would ultimately provide all market participants with additional protection from anomalous or erroneous executions and additional execution opportunities when appropriate.

The Exchange believes the proposal will enhance risk protections, the individual firm benefits of which flow downstream to counterparties both at the Exchange and at other options exchanges, which increases systemic protections as well. The Exchange believes enhancing risk protections will allow Trading Permit Holders to enter orders and quotes with further reduced fear of inadvertent exposure to excessive risk, which will benefit investors through increased liquidity for the execution of their orders. Without adequate risk management tools, such as the one proposed to be enhanced in this filing, Trading Permit Holders could reduce the amount of order flow and liquidity they provide. Such actions may undermine the quality of the markets available to customers and other market participants. Accordingly, the proposed rule change is designed to encourage Trading Permit Holders to submit additional order flow and liquidity to the Exchange, which may ultimately promote competition. The proposed flexibility may similar provide additional execution opportunities, which further benefits liquidity in potentially volatile markets. In addition, providing Trading Permit Holders with more tools for managing risk will facilitate transactions in securities because, as noted above, Trading Permit Holders will have more confidence protections are in place that reduce the risks from potential system errors and market events.

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

The Exchange neither solicited nor received comments on the proposed rule change.

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

Because the foregoing proposed rule change does not:

A. significantly affect the protection of investors or the public interest;

B. impose any significant burden on competition; and

C. become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A) of the Act[24] and Rule 19b-4(f)(6)[25] 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 will institute proceedings to determine whether the proposed rule change 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:

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[24] 15 U.S.C. 78s(b)(3)(A).

[25] 17 CFR 240.19b-4(f)(6).

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-CBOE-2020-046 on the subject line.

Paper comments:

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

All submissions should refer to File Number SR-CBOE-2020-046. 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 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, D.C. 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-CBOE-2020-046 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.[26]

Secretary

[26] 17 CFR 200.30-3(a)(12).