

## OMB APPROVAL

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Required fields are shown with yellow backgrounds and asterisks.

Page 1 of \* 80

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

File No.\* SR - 2019 - \* 057

Amendment No. (req. for Amendments \*)

Filing by Cboe Exchange, Inc.

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

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

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

Section 806(e)(1) \*

☐

Section 806(e)(2) \*

☐

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

Section 3C(b)(2) \*

☐

Exhibit 2 Sent As Paper Document



Exhibit 3 Sent As Paper Document



### Description

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

The Exchange proposes to amend rules regarding price protections and risk controls, and moves those Rules from the currently effective Rulebook to the shell Rulebook for Oct. 7, 2019 migration.

### Contact Information

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

First Name *	Rebecca	Last Name *	Tenuta
Title *	Counsel		
E-mail *	rtenuta@cboe.com		
Telephone *	(312) 786-7068	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.

(Title \*)

Date 09/05/2019

By Rebecca Tenuta

(Name \*)

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.

rtenuta@cboe.com

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

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

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

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

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

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

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

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The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change, 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**

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Exhibit Sent As Paper Document

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

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

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Exhibit Sent As Paper Document

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

**Exhibit 4 - Marked Copies**

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

**Exhibit 5 - Proposed Rule Text**

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

**Partial Amendment**

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

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

(a)     Cboe Exchange, Inc. (the “Exchange” or “Cboe Options”) proposes to amend the Exchange’s Rules regarding price protections and risk controls, and moves those Rules from the currently effective Rulebook (“current Rulebook”) to the shell structure for the Exchange’s Rulebook that will become effective upon the migration of the Exchange’s trading platform to the same system used by the Cboe Affiliated Exchanges (as defined below) (“shell Rulebook”). The text of the proposed rule change is provided in Exhibit 5.

(b)     Not applicable.

(c)     Not applicable.

**Item 2.        Procedures of the Self-Regulatory Organization**

(a)     The Exchange’s President (or designee) pursuant to delegated authority approved the proposed rule change on August 15, 2019. The proposed rule change would become operative on the date on which Cboe Options completes the migration of its trading platform to the same system used by the Cboe Affiliated Exchanges (as defined below), which is expected to occur on October 7, 2019.

(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 Rebecca Tenuta, (312) 786-7068, Cboe Exchange, Inc., 400 South LaSalle, Chicago, Illinois 60605.

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

(a)     Purpose

In 2016, the Exchange’s parent company, Cboe Global Markets, Inc. (formerly named CBOE Holdings, Inc.) (“Cboe Global”), which is also the parent company of Cboe C2

Exchange, Inc. (“C2”), acquired Cboe EDGA Exchange, Inc. (“EDGA”), Cboe EDGX Exchange, Inc. (“EDGX” or “EDGX Options”), Cboe BZX Exchange, Inc. (“BZX” or “BZX Options”), and Cboe BYX Exchange, Inc. (“BYX” and, together with Cboe Options, C2, EDGX, EDGA, and BZX, the “Cboe Affiliated Exchanges”). The Cboe Affiliated Exchanges are working to align certain system functionality, retaining only intended differences between the Cboe Affiliated Exchanges, in the context of a technology migration. Cboe Options intends to migrate its trading platform to the same system used by the Cboe Affiliated Exchanges, which the Exchange expects to complete on October 7, 2019. In connection with this technology migration, the Exchange has a shell Rulebook that resides alongside its current Rulebook, which shell Rulebook will contain the Rules that will be in place upon completion of the Cboe Options technology migration.

The Exchange proposes to harmonize its rules in connection with the risk control and price protection functions on the Exchange to that of its affiliated Exchanges. Specifically, the Exchange proposes to consolidate all order and quote price protection mechanisms and risk controls into a single rule, proposed Rule 5.34 (and subsequently delete the relevant price protection mechanism and risk control provisions in current Rules 6.12, 6.13, 6.14, 6.23C, and 6.53C.08 upon migration). Proposed Rule 5.34 is substantively identical to C2 Rule 6.14, as well as substantially the same as corresponding EDGX Options Rules 21.16, 21.17 and 22.11. In line with C2 Rule 6.14, proposed Rule 5.34 categorizes these mechanisms and controls as ones applicable to simple orders (proposed paragraph (a)), complex orders (proposed paragraph (b)), and all (i.e. simple and complex) orders (proposed paragraph (c)). The following table identifies the Exchange’s current price protection mechanisms and risk controls, the current Exchange Rule, the proposed Exchange Rule, the corresponding C2 Rule

and EDGX rule, where applicable, and any proposed changes, if any. The Exchange notes that much of the proposed functionality is substantially similar to the current price protections and risk controls functionality. The Exchange also proposes to make non-substantive changes by updating cross-references to rules in the shell Rulebook and rules not yet in the shell Rulebook but that in the Exchange intends to move to the shell Rulebook, updating Exchange-specific references for consistency throughout the rules, and, as a result of consolidating and conforming the proposed rule to the rules of affiliated options exchanges, simplifies, clarifies, and updates the rule text to read in plain English, and reformats the paragraph lettering and/or numbering.

Price Protection/ Risk Control	Current Cboe Options Rule	Proposed Rule	Affiliated Exchange Rule	Proposed Changes
Handling of market orders received in no-bid series	6.13(b)(vi)	5.34(a)(1)	C2 Rule 6.14(a)(1); EDGX Rule 21.17(a)(5)	Pursuant to the proposed rule change, the System cancels or rejects a market order if there is no-bid and the best offer is less than or equal to \$0.50. Under current functionality, the System would treat the sell order as a limit order with a price equal to the minimum increment in this situation. The proposed rule change also expands the same protection to market orders in no-offer series. The Exchange believes the proposed rule change will provide protection for these orders to prevent execution at potentially erroneous prices when a market order is entered in a series with no bid or offer.
Market order NBBO width protection	6.13(b)(v)(A)	5.34(a)(2)	C2 Rule 6.14(a)(2); EDGX 21.17(a)(1)	The proposed functionality is generally the same as current functionality, except the acceptable amount away from NBBO that a market order may execute will be determined by a percentage away from the NBBO midpoint (subject to a minimum and maximum dollar amount) rather than specified dollar ranges based on premium, providing the Exchange with flexibility it

				believes is appropriate given previous experience with risk controls.
Buy order put check	6.14(a)	5.34(a)(3)	C2 6.14(a)(3); EDGX 21.17(a)(3)	The proposed rule change will apply to market order executions during the Opening Process, and deletes the call underlying value check in current Rule 6.17(a)(i)(B), as this functionality will not be available on the Exchange's new system following the technology migration.
Drill-through protection (simple)	6.13(b)(v)(B)	5.34(a)(4)	C2 6.14(a)(4); EDGX 21.17(a)(4)	The proposed functionality is generally the same as current functionality, except the drill-through amount is a buffer amount determined by class and premium rather than a number ticks. The proposed rule change deletes the distinction between orders exposed via HAL, which is in line with current functionality on EDGX, which provides for the HAL equivalent, SUM. The proposed functionality applies to Day orders, as well as Good-til-Date ("GTD") and Good-til-Cancel ("GTC") <sup>1</sup> orders that reenter the Book from the prior trading day, but not an Immediate-or-Cancel ("IOC") or Fill-or-Kill ("FOK") order, as resting in the Book for a period of time is inconsistent with their purpose (which is to cancel if not executed immediately).
Bulk message fat finger check	N/A	5.34(a)(5)	C2 6.14(a)(5); EDGX 21.17(a)(6)	The proposed functionality adds a price protection mechanism for bulk messages similar to the fat finger check the Exchange currently provides for orders. The proposed rule states the System cancels or rejects any bulk message bid (offer) above (below) the NBO (NBB) by more than a specified amount

<sup>1</sup> See Rule 5.6 in the shell Rulebook. For an order designated as a GTD order, if after entry into the System, the order is not fully executed, the order (or unexecuted portion) remains available for potential display or execution (with the same timestamp) until a date and time specified by the entering User unless cancelled by the entering User. For an order designated as a GTC order, if after entry into the System, the order is not fully executed, the order (or unexecuted portion) remains available for potential display or execution (with the same timestamp) unless cancelled by the entering User, or until the option expires, whichever comes first.

				determined by the Exchange. The proposed check also will not apply to bulk messages submitted prior to the conclusion of the Opening Process or when no NBBO is available, which is appropriate during the pre-open or opening rotation so that the check does not impact the determination of the opening price, and also when there is no NBBO, as the Exchange believes that it is the most reliable measure against which to compare the price of the bulk message to determine its reasonability.
Definitions of vertical spread, butterfly spread, and box spread	6.53C.08	5.34(b)(1)	C2 6.14(b)(1); EDGX 21.17(b)(1)	No substantive changes
Credit-to-debit parameters	6.53C.08(b)	5.34(b)(2)	C2 6.14(b)(2); EDGX 21.17(b)(2)	No substantive changes
Debit/credit price reasonability checks	6.53C.08(c)	5.34(b)(3)	C2 6.14(b)(3); EDGX 21.17(b)(3)	The proposed functionality is generally the same as current functionality, except the acceptable price is subject to a pre-set buffer amount, which flexibility is consistent with C2 and EDGX functionality. The proposed rule also adopts language that accounts for the stock component of a stock-option order, which is consistent with EDGX Rule 21.17 (and not found within C2 Rule 6.14 because C2 does not currently provide for this functionality) The check will apply to multi-class spreads because, upon migration, such orders will be routed to PAR to which the price protections and risk controls under the proposed rule will apply.
Buy strategy parameters	6.53C.08(d)	5.34(b)(4)	C2 6.14(b)(4); EDGX 21.17(b)(4)	The proposed functionality is generally the same as current functionality, except the net credit price is subject to a buffer amount (consistent with C2 and EDGX functionality). The proposed rule change deletes the mechanism's applicability to sell strategies, as that functionality will not be available on the Exchange following the technology migration. The Exchange

				also uses proposed term “minimum increment” as opposed to “\$0.01” as some classes move in increments that differ from a penny.
Maximum value acceptable price range	6.53C.08(g)	5.34(b)(5)	C2 6.14(b)(5); EDGX 21.17(b)(5)	The proposed functionality is generally the same as current functionality, except the price range is calculated using a buffer amount (consistent with C2 and EDGX functionality) rather than a percentage amount.
Drill-through protection (complex)	N/A	5.34(b)(6)	C2 6.14(b)(6); EDGX 21.17(b)(6)	The proposed functionality is generally the same as current functionality that applies to simple orders, and expands it to complex orders. The proposed rule change replaces market width parameter protection and acceptable percentage range parameter in current Rule 6.53C.08(a) and (e), respectively, which currently protect Cboe Options complex orders from executing at potentially erroneous prices too far away from the order’s price or the market’s best price. The proposed rule is identical to the corresponding C2 and EDGX rules, which adds the concept that an order eligible for complex order request for responses auction process (“COA”) would initiate a COA at the drill-through price as the prices for complex strategy executions may be subject to the drill-through protection, and the price of a COA may be impacted by the drill-through protection; and (2) describes how a change in the SBBO prior to the end of the time period but the complex order cannot Leg, and the new SBO (SBB) crosses the drill-through price, the System changes the displayed price of the complex order to the new SBO (SBB) minus (plus) \$0.01, and the order will not be cancelled at the end of the time period. The proposed rule change merely permits an order to remain on the complex order book (“COB”) since the market reflects interest to trade (but not currently executable due to Legging Restrictions) that was not there at the beginning of the time period, providing additional



				execution opportunities prior to cancellation.
Limit Order Fat Finger Check	6.12(a)(3) and 6.12(b)	5.34(c)(1)	C2 6.14(c)(1); EDGX 21.17(a)(2) & (b)(7)	The proposed functionality is generally the same as current functionality, except the amount away from the NBBO a limit order price may be is a buffer amount rather than a number of ticks with no minimum, and Exchange may determine whether the check applies to simple orders prior to the conclusion of the RTH opening auction process (current rules codify pre-open application), providing the Exchange with flexibility it believes appropriate given previous experience with risk controls. The proposed rule change does not apply to GTC or GTD orders that reenter the Book from the prior trading day, as this check only applies to orders when the System receives them. The proposed rule change provides Users with the ability to set a different buffer amount to accommodate its own risk modeling; does not apply to adjusted series prior to the RTH opening auction process, as prices may reflect the corporate action for the underlying but the previous day's NBBO would not reflect that action. If the check applies prior to the RTH opening auction process, the System compares the last disseminated NBBO on that trading day, or the midpoint of the prior trading day's closing NBBO, if no NBBO has been disseminated on that trading day, which the Exchange believes is another reasonable price comparison.
Maximum contract size	6.14(e)	5.34(c)(2)	C2 6.14(c)(2); EDGX 21.17(b)(8)	The proposed functionality is generally the same as current functionality, except the Exchange will set a default amount rather than permit User to set amount. The proposed rule change applies per port rather than acronym or login. The functionality to cancel a resting order or quote if replacement order or quote is entered will not be available on the Exchange following the technology migration (however, a User can enable cancel on reject functionality

				described below to receive same result).
Maximum notional value	N/A	5.34(c)(3)	C2 6.14(c)(3); EDGX Technical specifications	Voluntary functionality similar to maximum contract size, except the System cancels or rejects an incoming order or quote with a notional value that exceeds the maximum notional value a User establishes for each of its ports. The proposed rule change provides an additional, voluntary control for Users to manage their order and execution risk on the Exchange.
Daily risk limits	N/A	5.34(c)(4)	C2 6.14(c)(4); EDGX Technical specifications	Voluntary functionality pursuant to which a User may establish limits for cumulative notional booked bid (“CBB”) or offer (“CBO”) value, and cumulative notional executed bid (“CEB”) or offer (“CEO”) value for each of its ports on a net or gross basis, or both, and may establish limits for market or limit orders (counting both simple and complex), or both. If a User exceeds a cutoff value (by aggregating amounts across the User’s ports), the System cancels or rejects incoming limit or market orders, or both, as applicable. <sup>2</sup>
Risk monitor mechanism	6.14(d) and 8.18	5.34(c)(5)	C2 6.14(c)(5); EDGX 21.16	Similar functionality to current quote risk monitor and order entry, execution, and price parameter rate checks on the Exchange, which will not be available on the Exchange following migration (discussed below)
Cancel on reject	N/A	5.34(c)(6)	C2 6.14(c)(6); EDGX 6.14(a)(7)	Additional, voluntary control for Users to manage their order and execution risk on the Exchange, pursuant to which the System cancels a resting order or quote if the System rejects a cancel or modification instruction (because, for example, it had an invalid instruction) for that resting order or quote. The proposed

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<sup>2</sup>

The System calculates a notional cutoff on a gross basis by summing CBB, CBO, CEB, and CEO. The System calculates a notional cutoff on a net basis by summing CEO and CBO, then subtracting the sum of CEB and CBB, and then taking the absolute value of the resulting amount.

				rule change is consistent with the purpose of a cancel or modification, which is to cancel the resting order or quote, and carries out this purpose despite an erroneous instruction on the cancel/modification message.
Kill switch	6.14(f)	5.34(c)(7)	C2 6.14(c)(7); EDGX 22.11	The proposed functionality is generally the same as current functionality, except Users may apply it to different categories of orders by EFID rather than acronym or login (consistent with new System functionality for migration), and block of incoming orders or quotes is a separate request by Users.
Cancel on disconnect	6.23C	5.34(c)(8)	C2 6.14(c)(8); EDGX Technical Specifications	The proposed functionality is generally the same as current technical disconnect functionality, except it is the same for both APIs on the new System. The proposed rule change will continue to protect Users against erroneous executions if it appears they are experiencing a system disruption. The proposed functionality will no longer provide TPHs with the ability to determine length of interval, but does provide additional flexibility with respect to which order types may be cancelled – current functionality permits a choice of market-maker quotes and day orders, while the proposed functionality permits a choice of day and GTC/GTD orders, or just day orders.
Block new orders	N/A	5.34(c)(9)	C2 6.14(c)(9); EDGX 22.11	Similar to automatic functionality that occurs on the Exchange currently when a Trading Permit Holder uses kill switch functionality. The proposed rule change merely provides a separate way to achieve this result on the new System, providing Users with flexibility regarding how to manage their resting orders and quotes.
Duplicate order protection	N/A	5.34(c)(10)	C2 6.14(c)(10); EDGX Technical specifications	Additional, voluntary control for Users to manage their order and execution risk on the Exchange. The proposed rule change protects Users against execution of multiple orders

				that may have been erroneously entered.
Buy-Write/Married Put Check	6.53C.08(a)(5)	5.34(c)(11)	EGDX 21.17(b)(9)	The proposed functionality is generally the same as current functionality, the acceptable price range is based on the price of the call (put) plus (minus) an Exchange-determined buffer amount.

The price protection mechanisms and risk controls under proposed Rule 5.34 are applicable to the System's acceptance and execution of orders and quotes pursuant to the Rules, including Rules 5.31 through 5.33,<sup>3</sup> and to and orders routed to the Exchange's Public Automated Routing System ("PAR") pursuant to Rule 5.82.<sup>4</sup> The Exchange notes that the proposed rule's inclusion of PAR orders is an intended difference made between its proposed rule and C2's rule, as PAR is unique to the Exchange. Upon migration, all orders routed to PAR will also be subject to price protection mechanisms and risk controls. This will provide the same protections for User's PAR routed order as for User's order and quotes sent through and executed by the System. Currently, PAR functions outside of the System, therefore not all risk controls are currently applicable to PAR orders. Upon migration, PAR orders will be entered into the System in the same manner as all other orders, and will route to PAR per User instruction, after going through the System, therefore, the same price protection mechanisms and risk controls will apply.

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<sup>3</sup> Rules to be effective on October 7, 2019 and cover the opening auction process, order and quote book processing, display, priority, and execution, as well as complex orders.

<sup>4</sup> Rule to be effective on October 7, 2019 and governs the operation of the Exchange's Public Automated Routing System ("PAR").

The proposed rule change also deletes the mechanisms related to execution of quotes that lock or cross the NBBO and quotes inverting the NBBO (current Rule 6.14(b) and (c)). The Exchange's current quote functionality will be replaced with bulk message functionality<sup>5</sup> upon migration; however, orders and bulk messages (the equivalent of current quotes) submitted by Market-Makers will be subject to the same protections, except for those that do not apply to bulk messages (e.g. for market orders in no-bid (offer) series, market order NBBO width and drill-through protections, limit order fat finger checks, and daily risk limits) as described above.

Under the current C2 and EDGX debit/credit price reasonability check (see C2 Rule 6.14(b)(3) and EDGX Rule 21.17(b)(3)), 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. Under the Exchange's current debit/credit reasonability check, with respect to pairs with different expiration the System pairs of 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. The proposed rule change amends this check to pair orders in the same manner as C2 and EDGX, which is to pair calls (puts) if they have the same expiration date but different exercise prices or the same

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<sup>5</sup> See Rule 1.1 in shell Rulebook, which states that "bulk message" means a single electronic message a User submits to the Exchange in which the User may enter, modify, or cancel up to an Exchange-specified number of bids and offers. Upon migration the System will handle a bulk message bid or offer in the same manner as it handles an order or quote, unless the Rules specify otherwise. The proposed rule change accounts for bulk message functionality and makes explicit the price protections that will not apply to such messages. This is consistent with C2 Rule 6.14.

exercise price but different expiration dates. Additionally, the proposed rule change deletes the exception for complex orders with European-style exercise. This aligns with the corresponding rules of C2 and EDGX and the Exchange no longer believes this exception is necessary and will expand this check to index options with all exercise styles.

The proposed Risk Monitor Mechanism is identical to the current functionality on C2 and substantively the same as the functionality currently available on EDGX. Because there will no longer be separate order and quote functionality on the Exchange following the technology migration, there will no longer be separate mechanisms to monitor entry and execution rates, as there are on the Exchange today. Each User may establish limits for the following parameters in the Exchange's counting program. The System counts each of the following within a class ("class limit")<sup>6</sup> and across all classes for an EFID<sup>7</sup> ("firm limit") and/or across all classes for a group of EFIDs ("EFID Group") ("EFID Group limit") over a User-established time period ("interval") on an absolute basis for a trading day ("absolute limits"):

- (i) number of contracts executed ("volume");
- (ii) notional value of executions ("notional");
- (iii) number of executions ("count");
- (iv) number of contracts executed as a percentage of number of contracts outstanding within an Exchange-designated time period or during the trading day,

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<sup>6</sup> The Exchange also changes the term "underlying" and "underlying limit" currently in the C2 rule to "class" and "class limit" which more accurately reflect this Risk Monitor Mechanism limit and the language in the current Exchange rule.

<sup>7</sup> The Exchange will use EFIDs (i.e. Executing Firm IDs) upon migration. See Rule 1.1 in the shell Rulebook.

as applicable (“percentage”), which the System determines by calculating the percentage of a User’s outstanding contracts that executed on each side of the market during the time period or trading day, as applicable, and then summing the series percentages on each side in the class; and

(v) number of times the limits established by the parameters under the above-listed are reached (“risk trips”).

Also, when the System determines the volume, notional, count, percentage, or risk trips limits have been reached:

(i) a User’s class limit within the interval or the absolute limit for the class, the Risk Monitor Mechanism cancels or rejects such User’s orders or quotes in all series of the class and cancels or rejects any additional orders or quotes from the User in the class until the counting program resets (as described below).

(ii) a User’s firm limit within the interval or the absolute limit for the firm, the Risk Monitor Mechanism cancels or rejects such User’s orders or quotes in all classes and cancels or rejects any additional orders or quotes from the User in all classes until the counting program resets (as described below).

(iii) a User’s EFID Group limit within the interval or the absolute limit for the EFID Group, the Risk Monitor Mechanism cancels or rejects such User’s orders or quotes in all classes and cancels or rejects any additional orders or quotes from any EFID within the EFID Group in all classes until the counting program resets (as described below).

The Risk Monitor Mechanism will also attempt to cancel or reject any orders routed away to other exchanges. The System processes messages in the order in which they are

received. Therefore, it will execute any marketable orders or quotes that are executable against a User's order or quote and received by the System prior to the time the Risk Monitor Mechanism is triggered at the price up to the size of the User's order or quote, even if such execution results in executions in excess of the User's parameters. The System will not accept new orders or quotes from a User after a class limit is reached until the User submits an electronic instruction to the System to reset the counting program for the class. The System will not accept new orders or quotes from a User after an EFID limit or EFID Group limit is reached until the User manually notifies the Trade Desk to reset the counting program for the firm, unless the User instructs the Exchange to permit it to reset the counting program by submitting an electronic message to the System. The Exchange may restrict the number of User class and firm resets per second. The System counts executed COA responses as part of the Risk Monitor Mechanism. The System counts individual trades executed as part of a complex order when determining whether the volume, notional, count, or risk trips limit has been reached. The System counts the percentage executed of a complex order when determining whether the percentage limit has been reached. In addition, a User may also engage the Risk Monitor Mechanism to cancel resting bids and offers, as well as order set forth in the kill switch protection provision. The Risk Monitor Mechanism provides Users with similar ability to manage their order and execution risk to the quote risk monitor and rate checks currently available on the Exchange, and merely uses different parameters and modifies the functionality to conform the new System to that of C2 and EDGX upon migration.

With respect to various price protections and risk controls in current Rules 6.12.01, 6.13, and 6.53C.08, the Exchange has the authority to provide intraday relief by widening



or inactivating one or more of the parameter settings for the mechanisms in those rules. This authority is included in proposed Interpretation and Policy .01, to provide this flexibility for all price protections and risk controls for which the Exchange sets parameters, providing the Exchange with flexibility it believes appropriate given previous experience with risk controls. This is consistent with corresponding C2 Rule 6.14.01. The Exchange will continue to make and keep records to document all determinations to grant intraday relief, and periodically review these determinations for consistency with the interest of a fair and orderly market.

The proposed rule change makes a non-substantive change in moving the provision regarding the Exchange's ability to share User-designated risk settings in the System with a Clearing Trading Permit Holder that clears Exchange transactions on behalf of the User from the introduction of current Rule 6.14 to proposed Rule 5.34.02. Also, the proposed change makes non-substantive changes in that it updates all provisions to account for "User" as opposed to Trading Permit Holder ("TPH"), which is consistent with the definition under Rule 1.1 the shell Rulebook, and the use of the term throughout the Exchange Rules upon migration.

(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.<sup>8</sup> Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)<sup>9</sup>

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

<sup>9</sup> 15 U.S.C. 78f(b)(5).

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)<sup>10</sup> requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

The proposed rule change is generally intended to add or align certain System functionality in connection with price protection mechanisms and risk controls with functionality currently offered by C2 and EDGX in order to provide a consistent technology offering for the Cboe Affiliated Exchanges. A consistent technology offering, in turn, will simplify the technology implementation, changes and maintenance by Users of the Exchange that are also participants on Cboe Affiliated Exchanges. The proposed rule changes would also provide Users with access to functionality that is generally available on markets other than the Cboe Affiliated Exchanges and may result in the efficient execution of such orders and will provide additional flexibility as well as increased functionality to the Exchange's System and its Users. The proposed rule change seeks to provide greater harmonization between the rules of the Cboe Affiliated Exchanges, which would result in greater uniformity and less burdensome and more efficient regulatory compliance. As such, the proposed rule change would foster cooperation and coordination

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<sup>10</sup> Id.

with persons engaged in facilitating transactions in securities and would remove impediments to and perfect the mechanism of a free and open market and a national market system. The Exchange also believes that consistent rules will increase the understanding of the Exchange's operations for Trading Permit Holders that are also participants on the Cboe Affiliated Exchanges, thereby contributing to the protection of investors and the public interest. The proposed rule change does not propose to implement new or unique functionality that has not been previously filed with the Commission or is not available on Cboe Affiliated Exchanges. The Exchange notes that the proposed rule text mirrors C2 Rules, save for intended differences that account for PAR (unique to the Exchange), Exchange-specific cross-references and references to certain terms (i.e. User throughout the proposed rule).

Overall, the Exchange believes the additional and enhanced price protection mechanisms and risk controls will protect investors and the public interest and maintain fair and orderly markets by mitigating potential risks associated with market participants entering orders and quotes at unintended prices, and risks associated with orders and quotes trading at prices that are extreme and potentially erroneous, which may likely have resulted from human or operational error. The Exchange notes that the proposed rule change is substantially similar to the current Cboe Options Rules, and, while the Exchange currently offers many similar protections and controls, as described above, the Exchange believes Users will benefit from the additional functionality that will be available following the technology migration.

As indicated in the table above, the proposed price protection and risk control mechanisms no longer establish outer boundaries or limits to the levels at which

mechanisms are set (save for the proposed no-bid provision, noted below), but instead, the proposed rule change amends the price protection mechanisms and risk controls to account for Exchange-determined and/or User-determined buffer or default amounts. The Exchange believes this removes impediments to and perfects the mechanism of a free and open market and national market system because it affords the Exchange and Users reasonable and necessary flexibility to establish and modify the default parameters, which, in turn, protects investors and the public interest, and maintains a fair and orderly market. The Exchange notes any Exchange-determined parameters will always be available on the Exchange's website via specification or Notice.<sup>11</sup> The Exchange also believes the proposed rule change to the no-bid provisions, that the System cancels or rejects a market order if there is no-bid and the best offer is less than or equal to \$0.50, as well as a market order where there is no-offer, is designed to protect User's as it will provide protection for market orders to prevent execution at potentially erroneous prices when a market order is entered in a series with no bid or offer.

The proposed drill-through protections for complex orders removes impediments to and perfect the mechanism of a free and open market and national market system and facilitates transactions in securities by adding detail to the rules regarding complex order price protections. Particularly, by adding that a COA-eligible order would initiate a COA at the drill-through price because the prices for complex strategy executions may be subject to the drill-through protection and permitting an order that is not currently executable due to Legging restrictions to remain on the COB if the SBBO changes during the set time-

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<sup>11</sup> See Rule 1.5 in the shell Rulebook.

period will provide additional execution opportunities, for Users' orders participating in the COA and/or prior to cancellation.

The proposed provision in connection with the Risk Monitor Mechanism will not alter the function of this mechanism for market participants as it provides Users with the ability to manage their order and execution risk to the quote risk monitor and rate checks similar to that which is currently available on the Exchange, and merely uses different parameters and modifies the functionality to conform the new System to that of C2 and EDGX upon migration. The Exchange also notes that this functionality is optional; it is User-enabled and the parameters are User-established.

The proposed rule change also removes functionality, and reference to such functionality, that will not exist upon migration in order to align the Exchange's System with that of its affiliated options exchanges, which will serve to remove impediments to and perfect the mechanism of a free and open market and national market system by providing market participants with rules that accurately reflect functionality post-migration and effectively harmonize Exchange functionality with that of C2 and EDGX. Moreover, the Exchange does not believe that the proposed change that removes functionality that will no longer be available upon migration will impact investors because the proposed change provides substantially similar alternative mechanisms and controls that result in the same protections as current Exchange functionality. The Exchange believes that the proposed rule provides a full suite of price protection mechanisms and risk controls, the same as those currently in effect on its affiliated options exchanges, which will sufficiently mitigate risks associated with market participants entering orders and quotes at unintended prices, and risks associated with orders and quotes trading at prices that are extreme and

potentially erroneous, as a likely result of human or operational error. The Exchange also notes that a majority of the proposed price protection mechanisms and risks controls are voluntary and/or User-determined, which benefits market participants by providing Users with additional control and flexibility in connection with their orders.

As stated, the Exchange notes the proposed price protection mechanisms and risk controls provisions do not present any new or unique rules or functionality for market participants as the proposed rule is substantially similar to the Exchange's current rules, identical to C2 Rule 6.14, as well as substantively the same as corresponding EDGX rules and technical specifications, as discussed above. The proposed rule change makes various non-substantive changes throughout the rules by updating cross-references and Exchange-specific terms, and by means of conforming language to C2 Rule 6.14, as well as corresponding EDGX rules, that will protect investors and benefit market participants as these changes simplify or clarify rules, delete duplicative rule provisions, conform paragraph numbering and lettering throughout the rules, and use plain English.

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

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange reiterates that the proposed rule change is being proposed in the context of the technology integration of the Cboe Affiliated Exchanges. Thus, the Exchange believes this proposed rule change is necessary to permit fair competition among national securities exchanges.

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

purposes of the Act. Rather, the proposed rule change is designed to benefit Exchange participants in that it will provide a consistent technology offering for Users by the Cboe Affiliated Exchanges. Following the technology migration, the Exchange's System, as described in this proposed rule change, will apply to all Users and order and quotes submitted by Users in the same manner. The Exchange also notes that many of the proposed price protections and risk controls are either User-determined or altogether voluntary.

In addition to this, the Exchange does not believe that the proposed rule change will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because the basis for the majority of the proposed rule changes in this filing are the rules of C2 and EDGX, which have previously been filed with the Commission. The Exchange also notes that market participants on other exchanges are welcome to become participants on the Exchange if they determine that this proposed rule change has made Cboe Options a more attractive or favorable venue. As stated, the proposed changes to the rules that accurately reflect functionality that will be in place come October 7, 2019, will not impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act but rather provide clear, consistent rules for market participants surrounding the completion of migration.

**Item 5.            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.

**Item 6.            Extension of Time Period for Commission Action**

Not applicable.

**Item 7. 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)**

(a) The proposed rule change is filed for immediate effectiveness pursuant to Section 19(b)(3)(A) of Act<sup>12</sup> and Rule 19b-4(f)(6)<sup>13</sup> 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 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 does not believe the proposed rule change will significantly affect the protection of investors or the public interest and, instead, will serve to benefit, overall, investors and the public interest. As described above in further detail, the proposed rule change is identical to C2 Rule 6.14 in all material respects, and is substantially similar to the corresponding EDGX rules, all of which have been previously filed with the Commission. The proposed rule change aligns the Exchange's System functionality across these affiliated options exchanges, simplifying the technology implementation, changes, and maintenance by Users of the Exchange that are also participants on other Cboe

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<sup>12</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>13</sup> 17 CFR 240.19b-4(f)(6).



Affiliated Exchanges. The proposed rule change is consistent with the protection of investors and the public interest because it will allow the Exchange to continue to strive towards a complete technology integration of the Cboe Affiliated Exchanges in a timely manner to ensure stability of the System. All proposed System functionality will be available to all Users. The proposed rule change will not significantly affect the protection of investors or the public interest because it does not propose to implement new or unique functionality that has not been previously filed with the Commission or is not available on Cboe Affiliated Exchanges. The proposed change adopts the price protection mechanisms and risk control rule currently in place on C2, and is also consistent with the same rules on EDGX. As a result, the proposed rule change will benefit investors and the public interest by providing greater harmonization between the rules of the Cboe Affiliated Exchanges, which will result in greater uniformity and less burdensome and more efficient regulatory compliance, as well as bolstered collective understanding for investors.

Overall, the Exchange believes the additional and enhanced price protection mechanisms and risk controls will not significantly affect the protection of investors and the public interest, but rather are intended to protect investors and the public interest and maintain fair and orderly markets by mitigating potential risks associated with market participants entering orders and quotes at unintended prices, and risks associated with orders and quotes trading at prices that are extreme and potentially erroneous, which may likely have resulted from human or operational error.

Further, the proposed rule will not significantly affect the protection of investors and the public interest because the proposed rule change is substantially similar to the Exchange's current functionality, and is based on and identical to in all material respects,

C2 Rule 6.14, as well as substantially similar to corresponding EDGX rules, therefore does not present new or unique rules or functionality that has not already been filed with the Commission. The Exchange believes that the proposed changes will benefit investors by providing them with additional functionality that will be available following the technology migration.

The Exchange does not believe that the proposed rule change will significantly affect the protection of investors and the public interest because the Exchange-determined and/or User-determine buffer and default amounts affords the Exchange and Users reasonable and necessary flexibility to establish and modify the default parameters, which, maintains fair and orderly markets by mitigating such risks as described above, thereby protecting investors and the public interest. As stated, the any Exchange-determined parameters will always be available to investors and the public on the Exchange's website via specification or Notice.<sup>14</sup> Likewise, the proposed no-bid provisions will protect investors and the public interest by preventing executions at potentially erroneous prices when a market order is entered in a series with no bid or offer.

The proposed drill-through protections for complex orders will benefit investors and the public interest by adding detail to the rules regarding complex order price protections and additional executions opportunities for orders participating in the COA and prior to cancellation for orders not currently executable during a time-period in which the SBBO changes.

The proposed provision in connection with the Risk Monitor Mechanism will not significantly affect the protection of investors and the public interest because it does not

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<sup>14</sup> See supra note 11.

alter the function of this mechanism and provides investors with the ability to manage their order and execution risk to the quote risk monitor and rate checks in a manner similar to Exchange functionality currently available. The proposed change will benefit investors by allowing them to use the same parameters and functionality available to participants on C2 and EDGX upon migration. The Exchange also notes that this functionality is optional; it is User-enabled and the parameters are User-established.

The proposed rule change to remove functionality, and references to such functionality, that will not exist upon migration will protect investors and the public interest by providing them with rules that accurately reflect functionality post-migration and that effectively harmonize Exchange functionality with that of C2 and EDGX. The Exchange also notes that the proposed change will not significantly impact investors because it provides substantially similar alternative mechanisms and controls that result in the same protections as current Exchange functionality, and that the proposed rule provides a full suite of price protection mechanisms and risk controls, the same as those currently in effect on its affiliated options exchanges, which will sufficiently mitigate risks associated with market participants entering orders and quotes at unintended prices, and risks associated with orders and quotes trading at prices that are extreme and potentially erroneous, as a likely result of human or operational error. Additionally, the majority of the proposed price protection mechanisms and risks controls are voluntary and/or User-determined, which benefits market participants by providing Users with additional control and flexibility in connection with their orders.

As stated, the Exchange notes the proposed price protection mechanisms and risk controls provisions do not present any new or unique rules or functionality for market

participants as the proposed rule is substantially similar to the Exchange's current rules, identical to C2 Rule 6.14, as well as substantively the same as corresponding EDGX rules and technical specifications, as discussed above. The Exchange believes the proposed reorganization of and non-substantive changes to the Rules add detail and transparency to the Rules, update the rules to accurately reflect practices and functions of the Exchange and its participants which will be in place upon migration, as well as simplify the Rules, which also benefits investors.

The Exchange believes the proposed rule change will not impose any significant burden on competition. The Exchange reiterates that the proposed rule change is being proposed in the context of a technology migration of the Cboe Affiliated Exchanges. As stated, the proposed changes to the rules that reflect functionality that will be in place come October 7, 2019 provide clear, consistent rules for market participants upon the completion of migration. The Exchange believes the proposed rule change will benefit Exchange participants in that it will provide a consistent technology offering for Users by the Cboe Affiliated Exchanges. The proposed rule change will apply to all Users and order and quotes submitted by Users in the same manner. In addition to this, many of the proposed price protections and risk controls are either User-determined or altogether voluntary. Again, the Exchange notes that the basis for the proposed rule changes in this filing are the rules of C2 and EDGX Options, which have already been filed with the Commission. The Exchange also notes that market participants on other exchanges are welcome to become participants on the Exchange if they determine that this proposed rule change has made Cboe Options a more attractive or favorable venue.

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.

(c) Not applicable.

(d) Not applicable.

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

As described above, proposed Rule 5.34 is change is based on and identical in all material respects to C2 Rule 6.14, except for proposed Rules 5.34(b)(3)(B)(iii) (in part, regarding stock-option orders) and 5.34(b)(11) which are not provided for in C2 Rule 6.14 because C2 does not currently have stock-option strategy order functionality, but are identical to EDGX Rules 21.17(b)(3)(B)(iv) and 21.17(b)(9), respectively. Proposed Rule 5.34 is also as substantively the same as EDGX Rules 21.16, 21.17 and 22.11.

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

Not applicable.

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

Not applicable.

**Item 11.      Exhibits**

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

Exhibit 5A.      Proposed rule text – current Rulebook.

Exhibit 5B.      Proposed rule text – shell Rulebook.

EXHIBIT 1**SECURITIES AND EXCHANGE COMMISSION**

[Release No. 34-       ; File No. SR-CBOE-2019-057]

[Insert date]

Self-Regulatory Organizations; Cboe Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Relating to Amend the Exchange's Rules Regarding Price Protections and Risk Controls, and Moves those Rules from the Currently Effective Rulebook ("Current Rulebook") to the Shell Structure for the Exchange's Rulebook that will Become Effective Upon the Migration of the Exchange's Trading Platform to the Same System Used by the Cboe Affiliated Exchanges (as Defined Below) ("Shell Rulebook")

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> 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<sup>3</sup> and Rule 19b-4(f)(6) thereunder.<sup>4</sup> 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 the Exchange's Rules regarding price protections and risk controls, and moves those Rules from the currently effective Rulebook ("current Rulebook") to the shell structure for the

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

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

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

<sup>4</sup> 17 CFR 240.19b-4(f)(6).

Exchange's Rulebook that will become effective upon the migration of the Exchange's trading platform to the same system used by the Cboe Affiliated Exchanges (as defined below) ("shell Rulebook"). The text of the proposed rule change is provided in Exhibit 5.

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**

In 2016, the Exchange's parent company, Cboe Global Markets, Inc. (formerly named CBOE Holdings, Inc.) ("Cboe Global"), which is also the parent company of Cboe C2 Exchange, Inc. ("C2"), acquired Cboe EDGA Exchange, Inc. ("EDGA"), Cboe EDGX Exchange, Inc. ("EDGX" or "EDGX Options"), Cboe BZX Exchange, Inc. ("BZX" or "BZX Options"), and Cboe BYX Exchange, Inc. ("BYX" and, together with Cboe Options, C2, EDGX, EDGA, and BZX, the "Cboe Affiliated Exchanges"). The Cboe Affiliated Exchanges are working to align certain system functionality, retaining only intended differences between the Cboe Affiliated Exchanges, in the context of a technology



migration. Cboe Options intends to migrate its trading platform to the same system used by the Cboe Affiliated Exchanges, which the Exchange expects to complete on October 7, 2019. In connection with this technology migration, the Exchange has a shell Rulebook that resides alongside its current Rulebook, which shell Rulebook will contain the Rules that will be in place upon completion of the Cboe Options technology migration.

The Exchange proposes to harmonize its rules in connection with the risk control and price protection functions on the Exchange to that of its affiliated Exchanges. Specifically, the Exchange proposes to consolidate all order and quote price protection mechanisms and risk controls into a single rule, proposed Rule 5.34 (and subsequently delete the relevant price protection mechanism and risk control provisions in current Rules 6.12, 6.13, 6.14, 6.23C, and 6.53C.08 upon migration). Proposed Rule 5.34 is substantively identical to C2 Rule 6.14, as well as substantially the same as corresponding EDGX Options Rules 21.16, 21.17 and 22.11. In line with C2 Rule 6.14, proposed Rule 5.34 categorizes these mechanisms and controls as ones applicable to simple orders (proposed paragraph (a)), complex orders (proposed paragraph (b)), and all (i.e. simple and complex) orders (proposed paragraph (c)). The following table identifies the Exchange's current price protection mechanisms and risk controls, the current Exchange Rule, the proposed Exchange Rule, the corresponding C2 Rule and EDGX rule, where applicable, and any proposed changes, if any. The Exchange notes that much of the proposed functionality is substantially similar to the current price protections and risk controls functionality. The Exchange also proposes to make non-substantive changes by updating cross-references to rules in the shell Rulebook and rules not yet in the shell Rulebook but that in the Exchange intends to move to the shell Rulebook, updating Exchange-specific references for consistency throughout the rules, and,

as a result of consolidating and conforming the proposed rule to the rules of affiliated options exchanges, simplifies, clarifies, and updates the rule text to read in plain English, and reformats the paragraph lettering and/or numbering.

Price Protection/ Risk Control	Current Cboe Options Rule	Proposed Rule	Affiliated Exchange Rule	Proposed Changes
Handling of market orders received in no-bid series	6.13(b)(vi)	5.34(a)(1)	C2 Rule 6.14(a)(1); EDGX Rule 21.17(a)(5)	Pursuant to the proposed rule change, the System cancels or rejects a market order if there is no-bid and the best offer is less than or equal to \$0.50. Under current functionality, the System would treat the sell order as a limit order with a price equal to the minimum increment in this situation. The proposed rule change also expands the same protection to market orders in no-offer series. The Exchange believes the proposed rule change will provide protection for these orders to prevent execution at potentially erroneous prices when a market order is entered in a series with no bid or offer.
Market order NBBO width protection	6.13(b)(v)(A)	5.34(a)(2)	C2 Rule 6.14(a)(2); EDGX 21.17(a)(1)	The proposed functionality is generally the same as current functionality, except the acceptable amount away from NBBO that a market order may execute will be determined by a percentage away from the NBBO midpoint (subject to a minimum and maximum dollar amount) rather than specified dollar ranges based on premium, providing the Exchange with flexibility it believes is appropriate given previous experience with risk controls.
Buy order put check	6.14(a)	5.34(a)(3)	C2 6.14(a)(3); EDGX 21.17(a)(3)	The proposed rule change will apply to market order executions during the Opening Process, and deletes the call underlying value check in current Rule 6.17(a)(i)(B), as this functionality will not be available on the Exchange's new system following the technology migration.
Drill-through protection (simple)	6.13(b)(v)(B)	5.34(a)(4)	C2 6.14(a)(4); EDGX	The proposed functionality is generally the same as current functionality, except the drill-through amount is a

			21.17(a)(4)	buffer amount determined by class and premium rather than a number ticks. The proposed rule change deletes the distinction between orders exposed via HAL, which is in line with current functionality on EDGX, which provides for the HAL equivalent, SUM. The proposed functionality applies to Day orders, as well as Good-til-Date (“GTD”) and Good-til-Cancel (“GTC”) <sup>5</sup> orders that reenter the Book from the prior trading day, but not an Immediate-or-Cancel (“IOC”) or Fill-or-Kill (“FOK”) order, as resting in the Book for a period of time is inconsistent with their purpose (which is to cancel if not executed immediately).
Bulk message fat finger check	N/A	5.34(a)(5)	C2 6.14(a)(5); EDGX 21.17(a)(6)	The proposed functionality adds a price protection mechanism for bulk messages similar to the fat finger check the Exchange currently provides for orders. The proposed rule states the System cancels or rejects any bulk message bid (offer) above (below) the NBO (NBB) by more than a specified amount determined by the Exchange. The proposed check also will not apply to bulk messages submitted prior to the conclusion of the Opening Process or when no NBBO is available, which is appropriate during the pre-open or opening rotation so that the check does not impact the determination of the opening price, and also when there is no NBBO, as the Exchange believes that it is the most reliable measure against which to compare the price of the bulk message to determine its reasonability.

<sup>5</sup> See Rule 5.6 in the shell Rulebook. For an order designated as a GTD order, if after entry into the System, the order is not fully executed, the order (or unexecuted portion) remains available for potential display or execution (with the same timestamp) until a date and time specified by the entering User unless cancelled by the entering User. For an order designated as a GTC order, if after entry into the System, the order is not fully executed, the order (or unexecuted portion) remains available for potential display or execution (with the same timestamp) unless cancelled by the entering User, or until the option expires, whichever comes first.

Definitions of vertical spread, butterfly spread, and box spread	6.53C.08	5.34(b)(1)	C2 6.14(b)(1); EDGX 21.17(b)(1)	No substantive changes
Credit-to-debit parameters	6.53C.08(b)	5.34(b)(2)	C2 6.14(b)(2); EDGX 21.17(b)(2)	No substantive changes
Debit/credit price reasonability checks	6.53C.08(c)	5.34(b)(3)	C2 6.14(b)(3); EDGX 21.17(b)(3)	The proposed functionality is generally the same as current functionality, except the acceptable price is subject to a pre-set buffer amount, which flexibility is consistent with C2 and EDGX functionality. The proposed rule also adopts language that accounts for the stock component of a stock-option order, which is consistent with EDGX Rule 21.17 (and not found within C2 Rule 6.14 because C2 does not currently provide for this functionality) The check will apply to multi-class spreads because, upon migration, such orders will be routed to PAR to which the price protections and risk controls under the proposed rule will apply.
Buy strategy parameters	6.53C.08(d)	5.34(b)(4)	C2 6.14(b)(4); EDGX 21.17(b)(4)	The proposed functionality is generally the same as current functionality, except the net credit price is subject to a buffer amount (consistent with C2 and EDGX functionality). The proposed rule change deletes the mechanism's applicability to sell strategies, as that functionality will not be available on the Exchange following the technology migration. The Exchange also uses proposed term "minimum increment" as opposed to "\$0.01" as some classes move in increments that differ from a penny.
Maximum value acceptable price range	6.53C.08(g)	5.34(b)(5)	C2 6.14(b)(5); EDGX 21.17(b)(5)	The proposed functionality is generally the same as current functionality, except the price range is calculated using a buffer amount (consistent with C2 and EDGX functionality) rather than a percentage amount.
Drill-through protection (complex)	N/A	5.34(b)(6)	C2 6.14(b)(6); EDGX 21.17(b)(6)	The proposed functionality is generally the same as current functionality that applies to simple orders, and expands it to complex orders. The proposed rule

				<p>change replaces market width parameter protection and acceptable percentage range parameter in current Rule 6.53C.08(a) and (e), respectively, which currently protect Cboe Options complex orders from executing at potentially erroneous prices too far away from the order's price or the market's best price. The proposed rule is identical to the corresponding C2 and EDGX rules, which adds the concept that an order eligible for complex order request for responses auction process ("COA") would initiate a COA at the drill-through price as the prices for complex strategy executions may be subject to the drill-through protection, and the price of a COA may be impacted by the drill-through protection; and (2) describes how a change in the SBBO prior to the end of the time period but the complex order cannot Leg, and the new SBO (SBB) crosses the drill-through price, the System changes the displayed price of the complex order to the new SBO (SBB) minus (plus) \$0.01, and the order will not be cancelled at the end of the time period. The proposed rule change merely permits an order to remain on the complex order book ("COB") since the market reflects interest to trade (but not currently executable due to Legging Restrictions) that was not there at the beginning of the time period, providing additional execution opportunities prior to cancellation.</p>
Limit Order Fat Finger Check	6.12(a)(3) and 6.12(b)	5.34(c)(1)	C2 6.14(c)(1); EDGX 21.17(a)(2) & (b)(7)	<p>The proposed functionality is generally the same as current functionality, except the amount away from the NBBO a limit order price may be is a buffer amount rather than a number of ticks with no minimum, and Exchange may determine whether the check applies to simple orders prior to the conclusion of the RTH opening auction process (current rules codify pre-open application), providing the Exchange with flexibility it believes appropriate given previous experience with risk controls. The proposed rule change does not apply to GTC or GTD orders that reenter the Book from the prior</p>

				trading day, as this check only applies to orders when the System receives them. The proposed rule change provides Users with the ability to set a different buffer amount to accommodate its own risk modeling; does not apply to adjusted series prior to the RTH opening auction process, as prices may reflect the corporate action for the underlying but the previous day's NBBO would not reflect that action. If the check applies prior to the RTH opening auction process, the System compares the last disseminated NBBO on that trading day, or the midpoint of the prior trading day's closing NBBO, if no NBBO has been disseminated on that trading day, which the Exchange believes is another reasonable price comparison.
Maximum contract size	6.14(e)	5.34(c)(2)	C2 6.14(c)(2); EDGX 21.17(b)(8)	The proposed functionality is generally the same as current functionality, except the Exchange will set a default amount rather than permit User to set amount. The proposed rule change applies per port rather than acronym or login. The functionality to cancel a resting order or quote if replacement order or quote is entered will not be available on the Exchange following the technology migration (however, a User can enable cancel on reject functionality described below to receive same result).
Maximum notional value	N/A	5.34(c)(3)	C2 6.14(c)(3); EDGX Technical specifications	Voluntary functionality similar to maximum contract size, except the System cancels or rejects an incoming order or quote with a notional value that exceeds the maximum notional value a User establishes for each of its ports. The proposed rule change provides an additional, voluntary control for Users to manage their order and execution risk on the Exchange.
Daily risk limits	N/A	5.34(c)(4)	C2 6.14(c)(4); EDGX Technical specifications	Voluntary functionality pursuant to which a User may establish limits for cumulative notional booked bid ("CBB") or offer ("CBO") value, and cumulative notional executed bid ("CEB") or offer ("CEO") value for each of its ports on a net or gross basis, or both, and may establish limits for

				market or limit orders (counting both simple and complex), or both. If a User exceeds a cutoff value (by aggregating amounts across the User's ports), the System cancels or rejects incoming limit or market orders, or both, as applicable. <sup>6</sup>
Risk monitor mechanism	6.14(d) and 8.18	5.34(c)(5)	C2 6.14(c)(5); EDGX 21.16	Similar functionality to current quote risk monitor and order entry, execution, and price parameter rate checks on the Exchange, which will not be available on the Exchange following migration (discussed below)
Cancel on reject	N/A	5.34(c)(6)	C2 6.14(c)(6); EDGX 6.14(a)(7)	Additional, voluntary control for Users to manage their order and execution risk on the Exchange, pursuant to which the System cancels a resting order or quote if the System rejects a cancel or modification instruction (because, for example, it had an invalid instruction) for that resting order or quote. The proposed rule change is consistent with the purpose of a cancel or modification, which is to cancel the resting order or quote, and carries out this purpose despite an erroneous instruction on the cancel/modification message.
Kill switch	6.14(f)	5.34(c)(7)	C2 6.14(c)(7); EDGX 22.11	The proposed functionality is generally the same as current functionality, except Users may apply it to different categories of orders by EFID rather than acronym or login (consistent with new System functionality for migration), and block of incoming orders or quotes is a separate request by Users.
Cancel on disconnect	6.23C	5.34(c)(8)	C2 6.14(c)(8); EDGX Technical Specifications	The proposed functionality is generally the same as current technical disconnect functionality, except it is the same for both APIs on the new System. The proposed rule change will continue to protect Users against erroneous executions if it appears they are experiencing a system disruption. The

<sup>6</sup> The System calculates a notional cutoff on a gross basis by summing CBB, CBO, CEB, and CEO. The System calculates a notional cutoff on a net basis by summing CEO and CBO, then subtracting the sum of CEB and CBB, and then taking the absolute value of the resulting amount.

				proposed functionality will no longer provide TPHs with the ability to determine length of interval, but does provide additional flexibility with respect to which order types may be cancelled – current functionality permits a choice of market-maker quotes and day orders, while the proposed functionality permits a choice of day and GTC/GTD orders, or just day orders.	
Block orders	new	N/A	5.34(c)(9)	C2 6.14(c)(9); EDGX 22.11	Similar to automatic functionality that occurs on the Exchange currently when a Trading Permit Holder uses kill switch functionality. The proposed rule change merely provides a separate way to achieve this result on the new System, providing Users with flexibility regarding how to manage their resting orders and quotes.
Duplicate order protection		N/A	5.34(c)(10)	C2 6.14(c)(10); EDGX Technical specifications	Additional, voluntary control for Users to manage their order and execution risk on the Exchange. The proposed rule change protects Users against execution of multiple orders that may have been erroneously entered.
Buy-Write/Married Put Check		6.53C.08(a)(5)	5.34(c)(11)	EGDX 21.17(b)(9)	The proposed functionality is generally the same as current functionality, the acceptable price range is based on the price of the call (put) plus (minus) an Exchange-determined buffer amount.

The price protection mechanisms and risk controls under proposed Rule 5.34 are applicable to the System’s acceptance and execution of orders and quotes pursuant to the Rules, including Rules 5.31 through 5.33,<sup>7</sup> and to and orders routed to the Exchange’s Public Automated Routing System (“PAR”) pursuant to Rule 5.82.<sup>8</sup> The Exchange notes

<sup>7</sup> Rules to be effective on October 7, 2019 and cover the opening auction process, order and quote book processing, display, priority, and execution, as well as complex orders.

<sup>8</sup> Rule to be effective on October 7, 2019 and governs the operation of the Exchange’s Public Automated Routing System (“PAR”).



that the proposed rule's inclusion of PAR orders is an intended difference made between its proposed rule and C2's rule, as PAR is unique to the Exchange. Upon migration, all orders routed to PAR will also be subject to price protection mechanisms and risk controls. This will provide the same protections for User's PAR routed order as for User's order and quotes sent through and executed by the System. Currently, PAR functions outside of the System, therefore not all risk controls are currently applicable to PAR orders. Upon migration, PAR orders will be entered into the System in the same manner as all other orders, and will route to PAR per User instruction, after going through the System, therefore, the same price protection mechanisms and risk controls will apply.

The proposed rule change also deletes the mechanisms related to execution of quotes that lock or cross the NBBO and quotes inverting the NBBO (current Rule 6.14(b) and (c)). The Exchange's current quote functionality will be replaced with bulk message functionality<sup>9</sup> upon migration; however, orders and bulk messages (the equivalent of current quotes) submitted by Market-Makers will be subject to the same protections, except for those that do not apply to bulk messages (e.g. for market orders in no-bid (offer) series, market order NBBO width and drill-through protections, limit order fat finger checks, and daily risk limits) as described above.

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<sup>9</sup> See Rule 1.1 in shell Rulebook, which states that "bulk message" means a single electronic message a User submits to the Exchange in which the User may enter, modify, or cancel up to an Exchange-specified number of bids and offers. Upon migration the System will handle a bulk message bid or offer in the same manner as it handles an order or quote, unless the Rules specify otherwise. The proposed rule change accounts for bulk message functionality and makes explicit the price protections that will not apply to such messages. This is consistent with C2 Rule 6.14.

Under the current C2 and EDGX debit/credit price reasonability check (see C2 Rule 6.14(b)(3) and EDGX Rule 21.17(b)(3)), 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. Under the Exchange's current debit/credit reasonability check, with respect to pairs with different expiration the System pairs of 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. The proposed rule change amends this check to pair orders in the same manner as C2 and EDGX, which is to pair calls (puts) if they have the same expiration date but different exercise prices or the same exercise price but different expiration dates. Additionally, the proposed rule change deletes the exception for complex orders with European-style exercise. This aligns with the corresponding rules of C2 and EDGX and the Exchange no longer believes this exception is necessary and will expand this check to index options with all exercise styles.

The proposed Risk Monitor Mechanism is identical to the current functionality on C2 and substantively the same as the functionality currently available on EDGX. Because there will no longer be separate order and quote functionality on the Exchange following the technology migration, there will no longer be separate mechanisms to monitor entry and execution rates, as there are on the Exchange today. Each User may establish limits for the following parameters in the Exchange's counting program. The System counts each of the following within a class ("class limit")<sup>10</sup> and across all classes

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<sup>10</sup> The Exchange also changes the term "underlying" and "underlying limit"

for an EFID<sup>11</sup> (“firm limit”) and/or across all classes for a group of EFIDs (“EFID Group”) (“EFID Group limit”) over a User-established time period (“interval”) on an absolute basis for a trading day (“absolute limits”):

- (i) number of contracts executed (“volume”);
- (ii) notional value of executions (“notional”);
- (iii) number of executions (“count”);
- (iv) number of contracts executed as a percentage of number of contracts outstanding within an Exchange-designated time period or during the trading day, as applicable (“percentage”), which the System determines by calculating the percentage of a User’s outstanding contracts that executed on each side of the market during the time period or trading day, as applicable, and then summing the series percentages on each side in the class; and
- (v) number of times the limits established by the parameters under the above-listed are reached (“risk trips”).

Also, when the System determines the volume, notional, count, percentage, or risk trips limits have been reached:

- (i) a User’s class limit within the interval or the absolute limit for the class, the Risk Monitor Mechanism cancels or rejects such User’s orders or quotes in all series of the class and cancels or rejects any additional orders or quotes from the User in the class until the counting program resets (as described below).

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currently in the C2 rule to “class” and “class limit” which more accurately reflect this Risk Monitor Mechanism limit and the language in the current Exchange rule.

<sup>11</sup> The Exchange will use EFIDs (i.e. Executing Firm IDs) upon migration. See Rule 1.1 in the shell Rulebook.

(ii) a User's firm limit within the interval or the absolute limit for the firm, the Risk Monitor Mechanism cancels or rejects such User's orders or quotes in all classes and cancels or rejects any additional orders or quotes from the User in all classes until the counting program resets (as described below).

(iii) a User's EFID Group limit within the interval or the absolute limit for the EFID Group, the Risk Monitor Mechanism cancels or rejects such User's orders or quotes in all classes and cancels or rejects any additional orders or quotes from any EFID within the EFID Group in all classes until the counting program resets (as described below).

The Risk Monitor Mechanism will also attempt to cancel or reject any orders routed away to other exchanges. The System processes messages in the order in which they are received. Therefore, it will execute any marketable orders or quotes that are executable against a User's order or quote and received by the System prior to the time the Risk Monitor Mechanism is triggered at the price up to the size of the User's order or quote, even if such execution results in executions in excess of the User's parameters. The System will not accept new orders or quotes from a User after a class limit is reached until the User submits an electronic instruction to the System to reset the counting program for the class. The System will not accept new orders or quotes from a User after an EFID limit or EFID Group limit is reached until the User manually notifies the Trade Desk to reset the counting program for the firm, unless the User instructs the Exchange to permit it to reset the counting program by submitting an electronic message to the System. The Exchange may restrict the number of User class and firm resets per second. The System counts executed COA responses as part of the Risk Monitor Mechanism.

The System counts individual trades executed as part of a complex order when determining whether the volume, notional, count, or risk trips limit has been reached. The System counts the percentage executed of a complex order when determining whether the percentage limit has been reached. In addition, a User may also engage the Risk Monitor Mechanism to cancel resting bids and offers, as well as order set forth in the kill switch protection provision. The Risk Monitor Mechanism provides Users with similar ability to manage their order and execution risk to the quote risk monitor and rate checks currently available on the Exchange, and merely uses different parameters and modifies the functionality to conform the new System to that of C2 and EDGX upon migration.

With respect to various price protections and risk controls in current Rules 6.12.01, 6.13, and 6.53C.08, the Exchange has the authority to provide intraday relief by widening or inactivating one or more of the parameter settings for the mechanisms in those rules. This authority is included in proposed Interpretation and Policy .01, to provide this flexibility for all price protections and risk controls for which the Exchange sets parameters, providing the Exchange with flexibility it believes appropriate given previous experience with risk controls. This is consistent with corresponding C2 Rule 6.14.01. The Exchange will continue to make and keep records to document all determinations to grant intraday relief, and periodically review these determinations for consistency with the interest of a fair and orderly market.

The proposed rule change makes a non-substantive change in moving the provision regarding the Exchange's ability to share User-designated risk settings in the System with a Clearing Trading Permit Holder that clears Exchange transactions on behalf of the User from the introduction of current Rule 6.14 to proposed Rule 5.34.02.

Also, the proposed change makes non-substantive changes in that it updates all provisions to account for “User” as opposed to Trading Permit Holder (“TPH”), which is consistent with the definition under Rule 1.1 the shell Rulebook, and the use of the term throughout the Exchange Rules upon migration.

## 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.<sup>12</sup> Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)<sup>13</sup> 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)<sup>14</sup> requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

The proposed rule change is generally intended to add or align certain System functionality in connection with price protection mechanisms and risk controls with functionality currently offered by C2 and EDGX in order to provide a consistent

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

<sup>13</sup> 15 U.S.C. 78f(b)(5).

<sup>14</sup> Id.

technology offering for the Cboe Affiliated Exchanges. A consistent technology offering, in turn, will simplify the technology implementation, changes and maintenance by Users of the Exchange that are also participants on Cboe Affiliated Exchanges. The proposed rule changes would also provide Users with access to functionality that is generally available on markets other than the Cboe Affiliated Exchanges and may result in the efficient execution of such orders and will provide additional flexibility as well as increased functionality to the Exchange's System and its Users. The proposed rule change seeks to provide greater harmonization between the rules of the Cboe Affiliated Exchanges, which would result in greater uniformity and less burdensome and more efficient regulatory compliance. As such, the proposed rule change would foster cooperation and coordination with persons engaged in facilitating transactions in securities and would remove impediments to and perfect the mechanism of a free and open market and a national market system. The Exchange also believes that consistent rules will increase the understanding of the Exchange's operations for Trading Permit Holders that are also participants on the Cboe Affiliated Exchanges, thereby contributing to the protection of investors and the public interest. The proposed rule change does not propose to implement new or unique functionality that has not been previously filed with the Commission or is not available on Cboe Affiliated Exchanges. The Exchange notes that the proposed rule text mirrors C2 Rules, save for intended differences that account for PAR (unique to the Exchange), Exchange-specific cross-references and references to certain terms (i.e. User throughout the proposed rule).

Overall, the Exchange believes the additional and enhanced price protection mechanisms and risk controls will protect investors and the public interest and maintain

fair and orderly markets by mitigating potential risks associated with market participants entering orders and quotes at unintended prices, and risks associated with orders and quotes trading at prices that are extreme and potentially erroneous, which may likely have resulted from human or operational error. The Exchange notes that the proposed rule change is substantially similar to the current Cboe Options Rules, and, while the Exchange currently offers many similar protections and controls, as described above, the Exchange believes Users will benefit from the additional functionality that will be available following the technology migration.

As indicated in the table above, the proposed price protection and risk control mechanisms no longer establish outer boundaries or limits to the levels at which mechanisms are set (save for the proposed no-bid provision, noted below), but instead, the proposed rule change amends the price protection mechanisms and risk controls to account for Exchange-determined and/or User-determined buffer or default amounts. The Exchange believes this removes impediments to and perfects the mechanism of a free and open market and national market system because it affords the Exchange and Users reasonable and necessary flexibility to establish and modify the default parameters, which, in turn, protects investors and the public interest, and maintains a fair and orderly market. The Exchange notes any Exchange-determined parameters will always be available on the Exchange's website via specification or Notice.<sup>15</sup> The Exchange also believes the proposed rule change to the no-bid provisions, that the System cancels or rejects a market order if there is no-bid and the best offer is less than or equal to \$0.50, as well as a market order where there is no-offer, is designed to protect User's as it will

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<sup>15</sup> See Rule 1.5 in the shell Rulebook.



provide protection for market orders to prevent execution at potentially erroneous prices when a market order is entered in a series with no bid or offer.

The proposed drill-through protections for complex orders removes impediments to and perfect the mechanism of a free and open market and national market system and facilitates transactions in securities by adding detail to the rules regarding complex order price protections. Particularly, by adding that a COA-eligible order would initiate a COA at the drill-through price because the prices for complex strategy executions may be subject to the drill-through protection and permitting an order that is not currently executable due to Legging restrictions to remain on the COB if the SBBO changes during the set time-period will provide additional execution opportunities, for Users' orders participating in the COA and/or prior to cancellation.

The proposed provision in connection with the Risk Monitor Mechanism will not alter the function of this mechanism for market participants as it provides Users with the ability to manage their order and execution risk to the quote risk monitor and rate checks similar to that which is currently available on the Exchange, and merely uses different parameters and modifies the functionality to conform the new System to that of C2 and EDGX upon migration. The Exchange also notes that this functionality is optional; it is User-enabled and the parameters are User-established.

The proposed rule change also removes functionality, and reference to such functionality, that will not exist upon migration in order to align the Exchange's System with that of its affiliated options exchanges, which will serve to remove impediments to and perfect the mechanism of a free and open market and national market system by providing market participants with rules that accurately reflect functionality post-

migration and effectively harmonize Exchange functionality with that of C2 and EDGX. Moreover, the Exchange does not believe that the proposed change that removes functionality that will no longer be available upon migration will impact investors because the proposed change provides substantially similar alternative mechanisms and controls that result in the same protections as current Exchange functionality. The Exchange believes that the proposed rule provides a full suite of price protection mechanisms and risk controls, the same as those currently in effect on its affiliated options exchanges, which will sufficiently mitigate risks associated with market participants entering orders and quotes at unintended prices, and risks associated with orders and quotes trading at prices that are extreme and potentially erroneous, as a likely result of human or operational error. The Exchange also notes that a majority of the proposed price protection mechanisms and risks controls are voluntary and/or User-determined, which benefits market participants by providing Users with additional control and flexibility in connection with their orders.

As stated, the Exchange notes the proposed price protection mechanisms and risk controls provisions do not present any new or unique rules or functionality for market participants as the proposed rule is substantially similar to the Exchange's current rules, identical to C2 Rule 6.14, as well as substantively the same as corresponding EDGX rules and technical specifications, as discussed above. The proposed rule change makes various non-substantive changes throughout the rules by updating cross-references and Exchange-specific terms, and by means of conforming language to C2 Rule 6.14, as well as corresponding EDGX rules, that will protect investors and benefit market participants

as these changes simplify or clarify rules, delete duplicative rule provisions, conform paragraph numbering and lettering throughout the rules, and use plain English.

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

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange reiterates that the proposed rule change is being proposed in the context of the technology integration of the Cboe Affiliated Exchanges. Thus, the Exchange believes this proposed rule change is necessary to permit fair competition among national securities exchanges.

The Exchange does not believe that the proposed rule change will impose any burden on intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act. Rather, the proposed rule change is designed to benefit Exchange participants in that it will provide a consistent technology offering for Users by the Cboe Affiliated Exchanges. Following the technology migration, the Exchange's System, as described in this proposed rule change, will apply to all Users and order and quotes submitted by Users in the same manner. The Exchange also notes that many of the proposed price protections and risk controls are either User-determined or altogether voluntary.

In addition to this, the Exchange does not believe that the proposed rule change will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because the basis for the majority of the proposed rule changes in this filing are the rules of C2 and EDGX, which have previously been filed with the Commission. The Exchange also notes that market participants on other

exchanges are welcome to become participants on the Exchange if they determine that this proposed rule change has made Cboe Options a more attractive or favorable venue. As stated, the proposed changes to the rules that accurately reflect functionality that will be in place come October 7, 2019, will not impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act but rather provide clear, consistent rules for market participants surrounding the completion of migration.

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<sup>16</sup> and Rule 19b-4(f)(6)<sup>17</sup> thereunder. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or

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

<sup>17</sup> 17 CFR 240.19b-4(f)(6).

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:

##### Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-CBOE-2019-057 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-2019-057. 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-2019-057 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>18</sup>

Secretary

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

## EXHIBIT 5A

(additions are underlined; deletions are [bracketed])

\* \* \* \* \*

Rules of Cboe Exchange, Inc.

(currently effective)

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[Rule 6.12. Cboe Options Hybrid Order Handling System]

\* \* \* \* \*

(a) Orders may route through the order handling system for electronic processing in the Hybrid System or to a designated order management terminal or PAR Workstation in any of the circumstances described below. Routing designations may be established based on various parameters defined by the Exchange, order entry firm or Trading Permit Holder, as applicable.

\* \* \* \* \*

[(3) Limit Order Price Parameter for Simple Orders: The System rejects back to a Trading Permit Holder an order to buy (sell) at more than an acceptable tick distance above (below) if:

(i) prior to the opening of a series (including during any pre-opening period and opening rotation), (A) the last disseminated NBO (NBB), if a series is open on another exchange(s), or (B) the Exchange's previous day's closing price, if a series is not yet open on any other exchange; if the NBBO is locked, crossed or unavailable; or if there is no NBO (NBB) and the previous day's closing price is greater (less) than or equal to the NBB (NBO). However, this does not apply to orders of Exchange Market-Makers or away Market-Makers; if there is no NBO (NBB) and the Exchange's previous day's closing price is less (greater) than the NBB (NBO); or if there is no NBBO and no Exchange previous day's closing price;

(ii) intraday, (A) the last disseminated NBO (NBB) or (B) the Exchange's best offer (bid), if the NBBO is locked, crossed or unavailable. However, this does not apply if there is no NBBO and no BBO; or

(iii) during a halt (including during any pre-opening period or opening rotation prior to re-opening following the halt), the last disseminated NBO (NBB). However, this does not apply to a buy (sell) order if the NBBO is locked, crossed or unavailable or if there is no NBO (NBB).

For purposes of this subparagraph (a)(3): An “acceptable tick distance” (which is referred to as an “ATD”), as determined by the Exchange on a class-by-class and premium basis and announced to the Trading Permit Holders via Regulatory Circular, shall be no less than 2 minimum increment ticks for simple orders. The Exchange may determine to apply a different ATD to orders entered during the pre-opening, a trading rotation, or a trading halt. The checks in subparagraphs (i) through (iii) do not apply to orders with a stop contingency or to orders routed from a PAR workstation or order management terminal. The limit order price parameter will take precedence over another routing parameter to the extent that both are applicable to an incoming limit order.

(b) Limit Order Price Parameter for Complex Orders: The System rejects back to a Trading Permit Holder a complex limit order with a net debit (credit) price more than a specified amount above (below):

(i) prior to the opening (including during any pre-opening period and opening rotation) the derived net market using the Exchange’s previous day’s closing prices in the individual series legs comprising the complex order. However, this does not apply to stock-option orders, to orders for the account of Exchange Market-Makers or away Market-Makers, or if there is no Exchange previous day’s closing price in any leg; or

(ii) intraday, the opposite side of the national spread market. This applies to stock-option orders, but does not apply if the NBBO in any leg is locked, crossed or unavailable or if there is no Exchange spread market.

For purposes of this subparagraph (a)(4), the Exchange determines the amount, which may be no less than \$0.02, on a class-by-class and net premium basis and announces the amount to Trading Permit Holders via Regulatory Circular. The Exchange may determine to apply a different amount to orders entered during the pre-opening or a trading rotation. No limit order price parameter applies to complex orders submitted during a halt (including during any pre-opening period and opening rotation prior to re-opening following the halt) or to pairs of orders submitted to AIM and SAM. The checks in subparagraphs (i) and (ii) do not apply to complex orders routed from a PAR workstation or order management terminal, or to multi-class spreads. The limit order price parameter will take precedence over another routing parameter to the extent that both are applicable to an incoming limit order.]

\* \* \* \* \*

**[. . . Interpretations and Policies:**

.01 For purposes of subparagraphs (a)(3) and (4), the senior official on the Exchange Help Desk or two Floor Officials may grant relief on any trading day (including prior to opening) by widening or inactivating one or more of the applicable amount parameter settings in the interest of a fair and orderly market.

(a) Notification of this relief will be announced as soon as reasonably practical via verbal message to the trading floor, order management terminal message to TPH organizations on



the trading floor, and electronic message to Trading Permit Holders that request to receive such messages. Such relief will not extend beyond the trade day on which it is granted, unless a determination to extend such relief is announced to Trading Permit Holders via Regulatory Circular. The Exchange will make and keep records to document all determinations to grant this relief under this Rule, and shall maintain those records in accordance with Rule 17a-1 under the Exchange Act.

(b) The Exchange will periodically review determinations to grant relief on any trading day for consistency with the interest of a fair and orderly market.]

\* \* \* \* \*

[Rule 6.13. Hybrid Trading System Automatic Execution Feature]

\* \* \* \* \*

(b) Automatic Execution: Orders eligible for automatic execution through the Hybrid Trading System may be automatically executed in accordance with the provisions of this Rule or Rule 6.14A, as applicable. This section governs automatic executions and split-price automatic executions. The allocation of orders or quotes that automatically execute through the Hybrid Trading System is governed by Rule 6.45.

\* \* \* \* \*

[(v) Market-Width and Drill Through Price Check Parameters:

(A) Market-Width Price Check Parameter. The Hybrid Trading System will route via the order handling system pursuant to Rule 6.12 an eligible market order if the width between the NBBO is not within an acceptable price range (“APR”). The Exchange will determine the APR on a class-by-class basis, which the Exchange will announce by Regulatory Circular and will be no less than: \$0.375 between the bid and offer for each option contract for which the bid is less than \$2, \$0.60 where the bid is at least \$2 but does not exceed \$5, \$0.75 where the bid is more than \$5 but does not exceed \$10, \$1.20 where the bid is more than \$10 but does not exceed \$20, and \$1.50 where the bid is more than \$20.

(B) Drill Through Price Check Parameter.

(I) If a buy (sell) order not exposed via HAL (pursuant to Rule 6.14A) partially executes, and the System determines the unexecuted portion of the order would execute at a subsequent price higher (lower) than the price that is an acceptable tick distance (“ATD”) above (below) the NBO (NBB) (“drill through price”), the System will not automatically execute that portion and will expose that portion via HAL at the better of the NBBO and the drill through price (if eligible for HAL). The Exchange will determine the ATD on a class and premium basis (which may be no less than two minimum increment ticks), which the Exchange will announce via Regulatory Circular.

(II) If a buy (sell) order is exposed via HAL (other than pursuant to subparagraph (I)) and, following the exposure period pursuant to Rule 6.14A, the System determines the order (or any unexecuted portion) would execute at a price higher (lower) than the drill through price, the System will not automatically execute that order (or unexecuted portion).

(III) Any order (or portion) not executed pursuant to subparagraphs (I) or (II) above will rest in the book (based on the time at which it enters the book for priority purposes) for a time period in milliseconds (which the Exchange will determine and announce via Regulatory Circular and will not exceed three seconds) with a price equal to the drill through price (except orders (or any unexecuted portions) that by their terms cancel if they do not execute immediately (such as immediate-or-cancel, fill-or-kill, intermarket sweep, and market-maker trade prevention orders) will be cancelled). If any order (or any unexecuted portion) does not execute during that time period, the System cancels it.

(IV) Notwithstanding subparagraphs (I) to (III), if the System determines a buy (sell) order (or any unexecuted portion) not eligible for HAL pursuant to Rule 6.14A would execute at a subsequent price higher (lower) than the drill through price, the System will not automatically execute that order (or unexecuted portion) and will route it via the order handling system pursuant to Rule 6.12 (except orders (or any unexecuted portions) that by their terms cancel if they do not execute immediately (such as immediate-or-cancel, fill- or-kill, intermarket sweep, and market-maker trade prevention orders) will be cancelled).

(V) This subparagraph (B) does not apply to executions of orders following an exposure via HAL at the open, which are subject to the drill through protection in Rule 6.2(d)(ii).

(C) A senior Help Desk official or two Floor Officials may grant intra-day relief by widening or inactivating one or more of the applicable APR and/or ATD parameter settings for subparagraphs (A) and (B) in the interest of a fair and orderly market, which the Exchange will announce as soon as reasonably practical via verbal message to the trading floor, order management terminal message to TPH organizations on the trading floor, and electronic message to Trading Permit Holders that request to receive such messages. Such intra-day relief may not extend beyond the trade day on which it is granted, unless a determination to extend such relief is announced to Trading Permit Holders via Regulatory Circular. The Exchange will make and keep records to document all determinations to grant intra-day relief under this Rule, and maintain those records in accordance with Rule 17a-1 under the Exchange Act. The Exchange will periodically review determinations to grant intra-day relief for consistency with the interest of a fair and orderly market.

(vi) No-Bid Series: Notwithstanding Rule 6.13(b)(v), if the System receives during a trading session or has resting in the electronic book after the opening of a trading session a market order to sell in an option series when the NBB in such series is zero:

(A) if the Exchange best offer in such series is less than or equal to \$0.50, then the Cboe Options Hybrid System will consider, for the remainder of the trading day, the market order as a limit order to sell with a limit price equal to the minimum trading increment applicable to such series and enter the order into the electronic book behind limit orders to sell at the minimum increment that are already resting in the book; or

(B) if the Exchange best offer in such series is greater than \$0.50, then the order entry firm has the discretion to have the market order to sell via the order handling system pursuant to Rule 6.12.]

\* \* \* \* \*

[Rule 6.14. Price Protections and Risk Controls

The System's acceptance and execution of orders and quotes are subject to the price protection mechanisms and risk controls in this Rule 6.14 and otherwise set forth in the Rules. The Exchange may share any Trading Permit Holder-designated risk settings in the Hybrid Trading System with a Clearing Trading Permit Holder that clears Exchange transactions on behalf of the Trading Permit Holder.

(a) Put Strike Price and Call Underlying Value Checks.

(i) The System rejects back to the Trading Permit Holder a quote or buy order for:

(A) a put if the price of the quote bid or a buy limit order, or the price at which a buy market order (or any remaining size after partial execution), is greater than or equal to the strike price of the option; or

(B) a call if the price of the quote bid or a buy limit order, or the price at which a buy market order (or any remaining size after partial execution) would execute, is greater than or equal to the consolidated last sale price of the underlying security, with respect to equity and ETF options, or the last disseminated value of the underlying index, with respect to index options.

If the System rejects a Market-Maker's quote pursuant to either check in the above subparagraphs, the System cancels any resting quote of the Market-Maker in the same series.

(ii) The Exchange may determine not to apply to a class either the put check in subparagraph (i)(A) or the call check in subparagraph (i)(B) above if a senior official at the Exchange's Help Desk determines the applicable check should not apply in the interest of maintaining a fair and orderly market, which the Exchange will announce by electronic

message to Trading Permit Holders that request to receive such messages. The Exchange does not apply the call check in subparagraph (i)(B) to a class during Global Trading Hours, to adjusted classes or if market data for the underlying is unavailable. The checks in subparagraphs (i)(A) and (B) do not apply to market orders executed during an opening rotation.

(iii) These checks apply to buy auction responses in the same manner as it does to orders and quotes.

(iv) The checks in subparagraph (i) above apply to pairs of orders submitted to AIM, SAM or as a QCC order. If the System rejects either order in the pair pursuant to the applicable check, then the System also cancels the paired order. Notwithstanding the foregoing, with respect to an AIM order that instructs the System to process the agency order as an unpaired order if an AIM auction cannot be initiated, if the System rejects the agency order pursuant to the applicable check, then the System also rejects the contra-side order; however, if the System rejects the contra-side order pursuant to the applicable check, the System still accepts the agency order if it satisfies the applicable check.

(b) Quote Inverting NBBO Check. If Cboe Options is at the NBO (NBB), the System rejects a quote back to a Market-Maker if the quote bid (offer) crosses the NBO (NBB) by more than a number of ticks specified by the Exchange (which will be no less than three minimum increment ticks and announced to Trading Permit Holders by Regulatory Circular). If Cboe Options is not at the NBO (NBB), the System rejects a quote back to a Market-Maker if the quote bid (offer) locks or crosses the NBO (NBB). If the System rejects a Market-Maker's quote pursuant to this check, the System also cancels any resting quote of the Market-Maker in the same series.

(i) When a series is open for trading, if the NBBO is unavailable, locked or crossed, then this check compares the quote to the BBO (if available). If the BBO is also unavailable, then the System does not apply this check to incoming quotes.

(ii) Prior to the opening of a series (including during any pre-opening period and opening rotation), the System does not apply this check to incoming quotes if the series is not open on another exchange.

(iii) During a trading halt, the System does not apply this check to incoming quotes.

(iv) A senior official at the Exchange's Help Desk may determine not to apply this check in the interest of maintaining a fair and orderly market.

(c) Execution of Quotes That Lock or Cross NBBO. If the System accepts a quote that locks or crosses the NBBO, the System executes the quote bid (offer) against quotes and orders in the Book at a price(s) that is the same or better than the best price disseminated by an away exchange(s) up to the size available on the Exchange and either (i) cancels any remaining size of the quote, if the price of the quote locks or crosses the price disseminated by the away exchange(s)

or (ii) books any remaining size of the quote, if the price of the quote does not lock or cross the price of the away exchange(s).

(1) If the NBBO is locked, crossed or unavailable, then the System does not apply this check to incoming quotes. Additionally, a senior official at the Exchange's Help Desk may determine not to apply this check in the interest of maintaining a fair and orderly market.

(2) If the Exchange has established a counting period for a class pursuant to Rule 6.45(c)(i), then notwithstanding Rule 6.45(c), if Cboe Options (represented by a Market-Maker quote offer (bid)) and an away exchange(s) are each at the NBO (NBB), the System rejects an incoming Market-Maker quote bid (offer) (or unexecuted portion after the quote trades against any orders resting in the Book at the NBO (NBB)) that locks or crosses the resting Market-Maker quote offer (bid) at the NBO (NBB).

(d) Order Entry, Execution and Price Parameter Rate Checks.

(i) Each Trading Permit Holder must provide to the Exchange parameters for an acronym or, if the Trading Permit Holder requests, a login, for each of the following rate checks. The System counts each of the following over rolling time intervals, which the Exchange will set and announce via Regulatory Circular:

(A) the total number of orders (of all order types) and auction responses entered and accepted by the Hybrid Trading System ("orders entered");

(B) the total number of contracts (from orders and auction responses) executed on the Hybrid Trading System, which does not count executed contracts from orders submitted from a PAR workstation or an order management terminal or stock contracts executed as part of stock-option orders ("contracts executed");

(C) the total number of orders the Hybrid Trading System books or routes via the order handling system pursuant to the drill through price check parameter in Rule 6.13(b)(v)(B) ("drill through events"); and

(D) the total number of orders the Hybrid Trading System cancels or routes via the order handling system due to the limit order price parameter in Rule 6.12(a)(3) through (5) ("price reasonability events").

(ii) When the System determines the orders entered, contracts executed, drill through order events or price reasonability events within the applicable time interval exceeds a Trading Permit Holder's parameter, the System (A) rejects all subsequent incoming orders and quotes, (B) cancels all resting quotes (if the acronym or login is for a Market-Maker), and (C) for the orders entered and contracts executed checks, if the Trading Permit Holder requests, cancels resting orders (either all orders, orders with time-in-force of day, or orders entered on that trading day) for the acronym or login, as applicable.

(iii) The System will not accept new orders or quotes from a restricted acronym or login, as applicable, until the Exchange receives the Trading Permit Holder's manual notification (in a form and manner determined by the Exchange, which will be announced by Regulatory Circular) to reactivate its ability to send orders and quotes for the acronym or login. While an acronym or login is restricted, a Trading Permit Holder may continue to interact with orders entered prior to its acronym or login becoming restricted, including receiving trade execution reports and canceling resting orders.

(e) Maximum Contract Size. The System rejects a Trading Permit Holder's incoming order or quote (including both sides of a two-sided quote) if its size exceeds the maximum contract size designated by the Trading Permit Holder. Each Trading Permit Holder must provide a maximum contract size for each of simple orders, complex orders (the contract size for which equals the contract size of the largest option leg of the order) and quotes applicable to an acronym or, if the Trading Permit Holder requests, a login.

(i) If a Trading Permit Holder enters an order or quote to replace a resting order or update a resting quote, respectively, and the System rejects the incoming order or quote because it exceeds the applicable maximum contract size, the System also cancels the resting order or any resting quote in the same series.

(ii) This check also applies to pairs of orders submitted to AIM, SAM or as a QCC order. If the System rejects either order in the pair, then the System also rejects the paired order. Notwithstanding the foregoing, with respect to an A:AIR order, if the System rejects the Agency Order, then the System rejects the contra-side order; however, if the System rejects the contra-side order, the System still accepts the Agency Order.

(f) Kill Switch.

(i) A Trading Permit Holder may send a message to the Hybrid Trading System to, or contact the Exchange Help Desk to request that the Exchange, cancel all its resting quotes (if the acronym or login is for a Market-Maker), resting orders (either all orders, orders with time-in-force of day, or orders entered on that trading day), or both, for an acronym or login. The System will send a Trading Permit Holder an automated message when it has processed a kill switch request for an acronym or login.

(ii) Once a Trading Permit Holder initiates the kill switch for an acronym or login, the System rejects all subsequent incoming orders and quotes for the acronym or login, as applicable. The System will not accept new orders or quotes from a restricted acronym or login until the Exchange receives the Trading Permit Holder's manual notification (in a form and manner determined by the Exchange, which will be announced by Regulatory Circular) to reactivate its ability to send orders and quotes for the acronym or login. While an acronym or login is restricted, a Trading Permit Holder may continue to interact with orders entered prior to its acronym or login becoming restricted, including receiving trade execution reports and canceling resting orders.]

\* \* \* \* \*

[Rule 6.23C. Technical Disconnect

(a) When a Cboe Options Application Server (“CAS”) loses communication with a Client Application such that a CAS does not receive an appropriate response to a Heartbeat Request within “x” period of time, the Technical Disconnect Mechanism will automatically logoff the Trading Permit Holder’s affected Client Application and automatically cancel all the Trading Permit Holder’s Market-Maker quotes, if applicable, and open orders with a time-in-force of “day” resting in the Book (which excludes orders resting on a PAR workstation or order management terminal) (“day orders”), if the Trading Permit Holder enables that optional service, posted through the affected Client Application. The following describes how the Technical Disconnect Mechanism works for each of the Exchange’s APIs:

(i) Cboe Market Interface 2.0 (“CMi 2”) API. A CAS shall generate a Heartbeat Request to a Client Application (i) after the CAS does not receive any messages from a particular Client Application for “n” period of time or (ii) after every “n” period of time. A Trading Permit Holder shall determine the value of “n.” In no event shall “n” be less than three (3) seconds or exceed twenty (20) seconds. If a CAS generates a Heartbeat Request only after it does not receive any messages from a particular Client Application for “n” period of time, the value of “x” shall be set at a half (.5) second. If a CAS generates a Heartbeat Request every “n” period of time, the value of “x” shall be equal to the value of “n.”

(ii) Financial Information eXchange (“FIX”) Protocol API. A CAS shall generate a Heartbeat Message to a Client Application after the CAS does not receive any messages from a particular Client Application for “n” period of time. If the CAS does not receive a response to the Heartbeat Message from the Client Application for “n” period of time, the CAS shall generate a Heartbeat Request to the Client Application. A Trading Permit Holder shall determine the value of “n” at logon. In no event shall “n” be less than five (5) seconds. The value of “x” shall be equal to the value of “n.”

(b) The Technical Disconnect Mechanism is enabled for all Trading Permit Holders and may not be disabled by Trading Permit Holders, except the automatic cancellation of a Trading Permit Holder’s day orders is an optional service that the Trading Permit Holder may enable or disable through the API.

(c) The trigger of the Technical Disconnect Mechanism is event- and Client Application- specific. The automatic cancellation of a Market-Maker’s quotes (if applicable) or a Trading Permit Holder’s day orders (if enabled by the Trading Permit Holder) entered into a CAS via a particular Client Application will neither impact nor determine the treatment of the quotes of the same or other Market-Makers or orders of the same Trading Permit Holder entered into the CAS via a separate and distinct Client Application. Except for day orders the Technical Disconnect Mechanism automatically cancels if a Trading Permit Holder enables that optional service, the Technical Disconnect Mechanism will not impact or determine the treatment of orders a Trading Permit Holder previously entered into the CAS.

**. . . Interpretations and Policies:**

.01 For purposes of this Rule 6.23C:

(i) A “Cboe Options Application Server” or “CAS” sits between a Client Application and the trading platform for the Cboe Options Hybrid Trading System. Messages are passed between a Client Application and a CAS.

(ii) A “Client Application” is the system component, such as a Cboe Options-supported workstation or a Trading Permit Holder’s custom trading application, through which a Trading Permit Holder communicates its quotes and/or orders to a CAS.

(iii) A “Heartbeat Request” shall refer to a message from a CAS to a Client Application to check connectivity and which requires a response from the Client Application in order to avoid logoff. The Heartbeat Request is a communication which acts as a virtual pulse between a CAS and a Client Application.

(iv) A “Heartbeat Message” shall refer to a message from a CAS to a Client Application to check connectivity. If a response to a Heartbeat Message is not received, the CAS shall generate a Heartbeat Request. The Heartbeat Message is a communication which acts as a virtual pulse between a CAS and a Client Application.]

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Rule 6.53C. Complex Orders on the Hybrid Trading System

\* \* \* \* \*

**. . . Interpretations and Policies:**

\* \* \* \* \*

[.08 Price Check Parameters: On a class-by-class basis, the Exchange may determine (and announce to the Trading Permit Holders via Regulatory Circular) which of the following price check parameters will apply to eligible complex orders. Paragraph (b) will not be applicable to stock-option orders.

For purposes of this Interpretation and Policy .08:

Vertical Spread. A “vertical” 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 expiration date but different exercise prices.

Butterfly Spread. A “butterfly” spread is a three-legged complex order with two legs to buy (sell) the same number of calls (puts) and one leg to sell (buy) twice as many calls (puts), all with the



same expiration date but different exercise prices, and the exercise price of the middle leg is between the exercise prices of the other legs. If the exercise price of the middle leg is halfway between the exercise prices of the other legs, it is a “true” butterfly; otherwise, it is a “skewed” butterfly.

Box Spread. A “box” spread is a four-legged complex order with one leg to buy calls and one leg to sell puts with one strike price, and one leg to sell calls and one leg to buy puts with another strike price, all of which have the same expiration date and are for the same number of contracts.

To the extent a price check parameter is applicable, the Exchange will not automatically execute an eligible complex order that is:

(a) Market Width Parameters: An order that is marketable if (i) the width between the Exchange’s best bid and best offer in any individual series leg is not within an acceptable price range or (ii) the width between the Exchange’s best net priced bid and best net priced offer in the individual series legs comprising the complex order is not within an acceptable price range. For purpose of this paragraph (a):

(1) An “acceptable price range” shall be determined by the Exchange (and announced to the Trading Permit Holders via Regulatory Circular) on a series-by-series basis for market orders and/or marketable limit orders for each series comprising the complex order (or, in the case of subparagraph (a)(ii), based on the sum of each individual series leg of a complex order) and be no less than \$0.375 between the bid and offer for each option contract for which the bid is less than \$2, \$0.60 where the bid is at least \$2 but does not exceed \$5, \$0.75 where the bid is more than \$5 but does not exceed \$10, \$1.20 where the bid is more than \$10 but does not exceed \$20, and \$1.50 where the bid is more than \$20; and

(2) The senior official in the Control Room or two Floor Officials may grant intra-day relief by widening the acceptable price range.

(3) A market order under this paragraph (a) will route via the order handling system pursuant to Rule 6.12. A marketable limit order under this paragraph (a) will be held in the Hybrid System, displayed in the COB if applicable, and not be eligible for automatic execution until the market width condition is resolved.

(4) Notwithstanding paragraph (a) above, if part of a marketable order may be executed within an acceptable price range, that part of the order will be executed automatically and the part of the order that would execute at a price outside the acceptable price range will route as described in subparagraph (a)(3) above.

(5) The Exchange may also determine on a class-by-class basis to make the price check parameter in paragraph (a)(i) above available for stock-option orders. Such a stock-option order will be subject to the processing described in this paragraph (a).

(b) Credit-to-Debit Parameter: A market order that would be executed at a net debit price after receiving a partial execution at a net credit price. Such a complex order under this paragraph (b) will route via the order handling system pursuant to Rule 6.12.

(c) Debit/Credit Price Reasonability Checks:

(1) A limit order for a debit strategy with a net credit price, a limit order for a credit strategy with a net debit price, or a market order for a credit strategy that would be executed at a net debit price.

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

(A) a call butterfly spread for which the middle leg is to sell (buy) and twice the exercise price of that leg is greater than or equal to the sum of the exercise prices of the buy (sell) legs is a debit (credit);

(B) a put butterfly spread for which the middle leg is to sell (buy) and twice the exercise price of that leg is less than or equal to the sum of the exercise prices of the buy (sell) legs is a debit (credit); and

(C) 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 or, for all options except European-style index options, 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. A “loner” is any leg in an order that the System cannot pair with another leg in the order (including legs in orders for European-style index options that have the same exercise price but different expiration dates). The System treats the stock leg of a stock-option order as a loner.

(i) 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.

(ii) The System then, for options except European-style index options, pairs legs to the extent possible across expiration dates, pairing one call (put) with the call (put) that has the next nearest expiration date and the same or next lower (higher) exercise price.

(iii) 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 exercise price of the sell (buy) leg is the same as or lower than the exercise price of the buy (sell) leg).

(iv) 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 exercise price of the sell (buy) leg is the same as or higher than the exercise price of the buy (sell) leg).

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

The System does not apply the check in subparagraph (1) to an order for which the System cannot define whether it is a debit or credit.

(3) The System rejects back to the Trading Permit Holder any limit order, and cancels any market order (or any remaining size after partial execution of the order), that does not satisfy this check.

(4) This check applies to auction responses in the same manner as it does to orders.

(5) This check applies to pairs of orders submitted to AIM, SAM or as a QCC order. If the System rejects either order in the pair pursuant to this check, then the System also cancels the paired order. Notwithstanding the foregoing, with respect to an AIM Retained ("A:AIR") order as defined in Interpretation and Policy .09 to Rule 6.74A, if the System rejects the Agency Order pursuant to this check, then the System also rejects the contra-side order; however, if the System rejects the contra-side order pursuant to this check, the System still accepts the Agency Order if it satisfies the check.

(6) This check does not apply to multi-class spreads or to orders routed from a PAR workstation or order management terminal.

(d) Buy-Buy (Sell-Sell) Strategy Parameters: A limit order where (1) all the components of the strategy are to buy and the order is priced at zero, any net credit price, or a net debit price that is less than the number of individual option series legs in the strategy (or applicable ratio) multiplied by the applicable minimum net price increment for the complex order; or (2) all the components of the strategy are to sell and the order is priced at zero, any net debit price, or a net credit price that is less than the number of individual option series legs in the strategy (or applicable ratio) multiplied by the applicable minimum net price increment for the complex order. Such complex orders under this paragraph (d) will not be accepted. In classes where this price check parameter is available, it will also be available for stock-option orders (and the minimum net price increment calculation above will only apply to the individual option series legs). In addition, in classes where this price check parameter is available, it will also be available for COA responses under Rule 6.53C(d), AIM and Solicitation Auction Mechanism complex orders and responses under Rule 6.74A and 6.74B, customer-to-customer immediate cross complex orders under Rule 6.74A.08, and QCC orders. Such paired complex orders and responses under these provisions will not be accepted except that, to the extent that only a paired contra-side order subject to an auction under Rule 6.74A or 6.74B exceeds this price check parameter, the contra-side order will not be accepted and the paired original Agency Order will not be accepted or, at the order

entry firm's discretion (i.e. an AIM Retained ("A:AIR") order, as defined in Interpretation and Policy .09 to Rule 6.74A), continue processing as an unpaired complex order.

(e) Acceptable Percentage Range Parameter:

(i) An incoming complex order (including a stock-option order) after all leg series are open for trading that is marketable and would execute immediately upon submission to the COB or following a COA if the execution would be at a price outside an acceptable percentage range. The "acceptable percentage range" is the national spread market (or Exchange spread market if the NBBO in any leg is locked, crossed or unavailable and for pairs of orders submitted to AIM or SAM) that existed when the System received the order or at the start of the COA, as applicable, plus/minus:

(A) the amount equal to a percentage (which may not be less than 3%) of the national spread market (the "percentage amount") if that amount is not less than a minimum amount or greater than a maximum amount (the Exchange will determine the percentage and minimum and maximum amounts on a class-by-class basis and announce them to Trading Permit Holders by Regulatory Circular);

(B) the minimum amount, if the percentage amount is less than the minimum amount; or

(C) the maximum amount, if the percentage amount is greater than the maximum amount.

(ii) The System cancels an order (or any remaining size after partial execution of the order) that would execute or rest in the COB at a price outside the acceptable price range.

(iii) If the System rejects either order in a pair of orders submitted to AIM or SAM pursuant to this parameter, then the System also cancels the paired order. Notwithstanding the foregoing, with respect to an AIM Retained ("A:AIR") order as defined in Interpretation and Policy .09 to Rule 6.74A, if the System rejects the Agency Order pursuant to this check, then the System also rejects the contra-side order; however, if the System rejects the contra-side order pursuant to this check, the System still accepts the Agency Order if it satisfies the check.

(iv) This parameter applies to auction responses in the same manner as it does orders.

(f) Reserved.

(g) Maximum Value Acceptable Price Range: If an order is a vertical, true butterfly or box spread, a limit order for a net credit or debit price, or a market order for a debit strategy if it would execute at a net debit price, that is outside of an acceptable price range.

(1) The System determines the acceptable price range as follows:

(i) The maximum possible value of a vertical, true butterfly and box spread is the difference between the exercise prices of (A) the two legs; (B) the middle leg and the legs on either side; and (C) each pair of legs, respectively.

(ii) The minimum possible value of the spread is zero.

(iii) The System calculates the amount that is a percentage of the maximum possible value of the spread (the “percentage amount”), which percentage is between 1% and 5% and which the Exchange will determine and announce to Trading Permit Holders by Regulatory Circular.

(iv) The acceptable price range is zero to the maximum possible value of the spread plus:

(A) the percentage amount, if that amount is not outside a pre-set range (the Exchange will determine the pre-set range minimum and maximum amounts (the “pre-set minimum” and “pre-set maximum,” respectively) and announce them to Trading Permit Holders by Regulatory Circular);

(B) the pre-set minimum, if the percentage amount is less than the pre-set minimum; or

(C) the pre-set maximum, if the percentage amount is greater than the pre-set maximum.

(2) The System rejects back to the Trading Permit Holder any limit order, and cancels any market order (or any remaining size after partial execution of the order), that does not satisfy this check.

(3) This check applies to auction responses in the same manner as it does to orders.

(4) This check applies to pairs of orders submitted to AIM, SAM or as a QCC order. If the System rejects either order in the pair pursuant to this check, then the System also cancels the paired order. Notwithstanding the foregoing, with respect to an AIM Retained (“A:AIR”) order as defined in Interpretation and Policy .09 to Rule 6.74A, if the System rejects the Agency Order pursuant to this check, then the System also rejects the contra- side order; however, if the System rejects the contra-side order pursuant to this check, the System still accepts the Agency Order if it satisfies the check.]

\* \* \* \* \*

#### [Rule 8.18. Quote Risk Monitor Mechanism

Each Market-Maker who is obligated to provide and maintain continuous electronic quotes in any option class traded on the Exchange, or the TPH organization with which the Market-Maker is

associated, must establish parameters for an acronym or firm, as applicable, for each function below applicable to each trading session by which the Exchange will activate the Quote Risk Monitor (“QRM”) Mechanism.

The functionality of the QRM Mechanism that is available to Market-Makers includes, for each such option class in which the Market-Maker is engaged in trading: (i) a maximum number of contracts for such option class (the “Contract Limit”) and a rolling time period in milliseconds within which such Contract Limit is to be measured (the “Measurement Interval”); (ii) a maximum cumulative percentage that the Market-Maker is willing to trade (the “Cumulative Percentage Limit”), where the cumulative percentage is the sum of the percentages of the original quoted size of each side of each series that traded, and a Measurement Interval; and (iii) the maximum number of series for which either side of the quote is fully traded (the “Number of Series Fully Traded”) and a Measurement Interval.

When the Exchange determines that the Market-Maker has traded at least the Contract Limit or Cumulative Percentage Limit for such option class during any rolling Measurement Interval, or has traded at least the Number of Series Fully Traded on an option class during any rolling Measurement Interval, the QRM Mechanism shall cancel all electronic quotes being disseminated with respect to that Market-Maker in that option class and any other classes with the same underlying security until the Market-Maker refreshes those electronic quotes.

Such action by the Exchange is referred to herein as a QRM Incident. Once the QRM Mechanism is triggered, all counters that determine whether the QRM Mechanism is triggered and a QRM Incident occurs will be reset for all classes for which quotes were canceled for all parties for whom such quotes were canceled.

A Market-Maker or a TPH organization may also specify a maximum number of QRM Incidents on an Exchange-wide basis. When the Exchange determines that such Market-Maker or TPH organization has reached its QRM Incident limit during any rolling Measurement Interval, the QRM Mechanism shall cancel all of the Market-Maker’s or TPH organization’s electronic quotes and Market-Maker orders resting in the Book in all option classes on the Exchange and prevent the Market-Maker or TPH organization from sending additional quotes or orders to the Exchange until the Market-Maker or TPH organization reactivates its ability to send quotes or orders in a manner prescribed by the Exchange. Once the QRM Mechanism is triggered and quotes and orders are cancelled, all counters that determine whether the QRM Mechanism is triggered and a QRM Incident occurs will be reset for all parties for whom the QRM Mechanism was triggered and for all classes for which quotes and orders were canceled. If the Exchange cancels all of the Market-Maker’s or TPH organization’s electronic quotes and Market-Maker orders resting in the Book, and the Market-Maker or TPH organization does not reactivate its ability to send quotes or orders, the block will be in effect only for the trading day that the Market-Maker or TPH organization reached its QRM Incident limit.]

## EXHIBIT 5B

(additions are underlined; deletions are [bracketed])

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Rules of Cboe Exchange, Inc.

(effective as of October 7, 2019)

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**Rule 5.34. Order and Quote Price Protection 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) Simple Orders.

(1) Market Orders in No-Bid (Offer) Series.

(A) If the System receives a sell market order in a series after it is open for trading with an NBB of zero:

(i) if the NBO in the series is less than or equal to \$0.50, then the System converts the market order to a limit order with a limit price equal to the minimum trading increment applicable to the series and enters the order into the Book with a timestamp based on the time it enters the Book. If the order has a Time-in-Force of GTC or GTD that expires on a subsequent day, the order remains on the Book as a limit order until it executes, expires, or the User cancels it.

(ii) if the NBO in the series is greater than \$0.50, then the System cancels or rejects the market order.

(B) If the System receives a buy market order in a series after it is open for trading with an NBO of zero, the System cancels or rejects the market order.

(C) This protection does not apply to bulk messages.

(2) Market Order NBBO Width Protection. If a User submits a market order to the System when the NBBO width is greater than x% of the midpoint of the NBBO, subject to a minimum and maximum dollar value (the Exchange determines "x" and the minimum and maximum dollar values on a class-by-class basis), the System cancels or rejects the market order. This protection does not apply to bulk messages.

(3) Buy Order Put Check. If a User enters a buy limit order for a put with, or if a buy market order (or unexecuted portion) for a put would execute at, a price higher than or equal to the strike price of the option, the System cancels or rejects the order (or unexecuted portion) or quote. This check does not apply to adjusted series or bulk messages.

(4) Drill-Through Protection.

(A) If a buy (sell) order enters the Book at the conclusion of the opening auction process, the System executes the order up to a buffer amount (established by the Exchange) above (below) the offer (bid) limit of the Opening Collar (the “drill-through price”).

(B) If a buy (sell) order would execute or post to the Book at the time of order entry, the System executes the order up to a buffer amount (the Exchange determines the amount on a class and premium basis) above (below) the NBO (NBB) that existed at the time of order entry (“the drill-through price”).

(C) The System cancels or rejects any limit order or market order with a Time-in-Force of IOC or FOK (or unexecuted portion) not executed pursuant to subparagraph (A).

(D) The System enters a market order with Time-in-Force of Day, GTC, or GTD (or unexecuted portion) not executed pursuant to subparagraph (A) in the Book with a price equal to the drill-through price (with a timestamp based on the time it enters the Book for priority purposes) for a time period in milliseconds (the Exchange determines the length of the time period, which may not exceed three seconds). The System cancels or rejects the order (or unexecuted portion) not executed during that time period.

(E) This protection does not apply to bulk messages.

(5) Bulk Message Fat Finger Check. The System cancels or rejects any bulk message bid (offer) above (below) the NBO (NBB) by more than a specified amount determined by the Exchange. This check does not apply to bulk messages submitted prior to the conclusion of the Opening Process or when no NBBO is available.

(b) Complex Orders.

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

(A) Vertical Spread. A “vertical” 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 expiration date but different exercise prices.

(B) Butterfly Spread. A “butterfly” spread is a three-legged complex order with two legs to buy (sell) the same number of calls (puts) and one leg to sell (buy)



twice as many calls (puts), all with the same expiration date but different exercise prices, and the exercise price of the middle leg is between the exercise prices of the other legs. If the exercise price of the middle leg is halfway between the exercise prices of the other legs, it is a “true” butterfly; otherwise, it is a “skewed” butterfly.

(C) Box Spread. A “box” spread is a four-legged complex order with one leg to buy calls and one leg to sell puts with one strike price, and one leg to sell calls and one leg to buy puts with another strike price, all of which have the same expiration date and are for the same number of contracts.

(2) Credit-to-Debit Parameters. The System cancels or rejects a market order that would execute at a net debit price after receiving a partial execution at a net credit price.

(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).

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

(i) a call butterfly spread for which the middle leg is to sell (buy) and twice the exercise price of that leg is greater than or equal to the sum of the exercise prices of the buy (sell) legs is a debit (credit);

(ii) a put butterfly spread for which the middle leg is to sell (buy) and twice the exercise price of that leg is less than or equal to the sum of the exercise prices of the buy (sell) legs is a debit (credit); and

(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 or the same exercise price but different expiration dates. 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) 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.

(b) 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.

(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).

(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).

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

(C) The System does not apply this check to an order it cannot define as a debit or credit.

(D) This check applies to COA Responses in the same manner as it does to orders.

(4) *Buy Strategy Parameters.* The System cancels or rejects a limit complex order where all the components of the strategy are to buy and the order has (A) a price of zero, (B) a net credit price that exceeds a pre-set buffer (which the Exchange determines), or (C) a net debit price that is less than the number of individual legs in the strategy (or applicable ratio) multiplied by the minimum increment.

(5) *Maximum Value Acceptable Price Range.* The System cancels or rejects an order that is a vertical, true butterfly, or box spread and is a limit order with, or a market order that would execute at, a price that is outside of an acceptable price range, set by the minimum and maximum possible value of the spread, subject to an additional buffer amount (which the Exchange determines).

(A) The maximum possible value of a vertical, true butterfly, and box spread is the difference between the exercise prices of (1) the two legs; (2) the middle leg and the legs on either side; and (3) each pair of legs, respectively.

(B) The minimum possible value of the spread is zero.

(C) This check applies to COA Responses in the same manner as it does to orders.

(6) *Drill-Through Protection.* If a User enters a buy (sell) complex order into the System, the System executes the order pursuant to Rule 5.33(e) up to a buffer amount above (below) the SNBO (SNBB) that existed at the time of order entry (the “drill-through price”), or

initiates a COA at the drill-through price if the order would initiate a COA pursuant to Rule 5.33(d). The Exchange determines a default buffer amount; however, a User may establish a higher or lower amount than the Exchange default amount.

(A) If a buy (sell) complex order (or unexecuted portion) would execute or enter the COB at a price higher (lower) than the drill-through price, the System enters the order in the COB at the drill-through price (receiving a timestamp based on the time it enters the COB for priority purposes), unless the terms of the order instruct otherwise.

(B) Any unexecuted order (or unexecuted portion) with a displayed price equal to the drill-through price (unless the drill-through price equals the order's limit price) will rest in the COB for a time period in milliseconds (the Exchange determines the time period, which may not exceed three seconds). If the order (or unexecuted portion) does not execute during that time period, the System cancels or rejects it. However, if the SBBO changes prior to the end of the time period but the complex order cannot Leg, and the new SBO (SBB) crosses the drill-through price, the System changes the displayed price of the complex order to the new SBO (SBB) minus (plus) \$0.01, and the order is not cancelled at the end of the time period.

(c) All Orders.

(1) Limit Order Fat Finger Check. If a User submits a buy (sell) limit order to the System with a price that is more than a buffer amount above (below) the NBO (NBB) for simple orders or the SNBO (SNBB) for complex orders, the System cancels or rejects the order. The Exchange determines a default buffer amount; however, a User may establish a higher or lower amount than the Exchange default.

(A) For simple buy (sell) orders, the Exchange may determine to apply this check on a class-by-class basis and not apply it to limit orders entered prior to the conclusion of the RTH opening auction process. If the check applies prior to the conclusion of the RTH opening auction process, it uses (i) the last disseminated NBBO on that trading day, or (ii) the midpoint of the prior trading day's closing NBBO, if no NBBO has been disseminated on that trading day. The Exchange or User, as applicable, may establish a different default amount prior to the conclusion of the RTH opening auction process than it does after trading is open. If the check applies prior to the conclusion of the RTH opening auction process, it does not apply (i) if there is a corporate action impacting the corporate stock price, (ii) if there is no NBBO from the prior trading day, (iii) to orders with origin code M or N, or (iv) to GTC and GTD orders that reenter the Book from the prior trading session.

(B) The check does not apply to complex orders prior to the conclusion of the Opening Process.

(C) The check does not apply when no NBBO or SNBBO, as applicable, is available.

(D) This check does not apply to bulk messages.

(2) Maximum Contract Size. The System cancels or rejects an incoming order or quote with a size that exceeds the maximum contract size (which the Exchange determines). The size of a complex order for purposes of this check is the size of the largest leg of the order.

(3) Maximum Notional Value. If a User enables this functionality, the System cancels or rejects an incoming order or quote with a notional value that exceeds the maximum notional value a User establishes for each of its ports.

(4) Daily Risk Limits. If a User enables this functionality:

(A) A User may establish one or more of the following values for each of its ports, which the System aggregates (for simple and complex orders) across all of a User's ports (i.e., applies on a firm basis):

(i) cumulative notional booked bid value ("CBB");

(ii) cumulative notional booked offer value ("CBO");

(iii) cumulative notional executed bid value ("CEB"); and

(iv) cumulative notional executed offer value ("CEO").

(B) The User may then establish a limit order notional cutoff, a market order notional cutoff, or both, each of which it may establish on a net basis, gross basis, or both. If a User exceeds a cutoff value, the System cancels or rejects all incoming limit orders or market orders, respectively. If a User establishes a limit order notional cutoff but does not establish (or sets as zero) the market order notional cutoff, the System cancels or rejects all market orders.

(i) The System calculates a notional cutoff on a gross basis by summing CBB, CBO, CEB, and CEO.

(ii) The System calculates a notional cutoff on a net basis by summing CEO and CBO, then subtracting the sum of CEB and CBB, and then taking the absolute value of the resulting amount.

(C) This functionality does not apply to bulk messages.

(5) Risk Monitor Mechanism. If a User enables this functionality:

(A) Each User may establish limits for the following parameters in the Exchange's counting program. The System counts each of the following within a class for an EFID ("class limit") and across all classes for an EFID ("EFID limit") and/or across

all classes for a group of EFIDs (“EFID Group”) (“EFID Group limit”), over a User-established time period (“interval”) and on an absolute basis for a trading day (“absolute limits”):

(i) number of contracts executed (“volume”);

(ii) notional value of executions (“notional ”);

(iii) number of executions (“count”);

(iv) number of contracts executed as a percentage of number of contracts outstanding within an Exchange-designated time period or during the trading day, as applicable (“percentage”), which the System determines by calculating the percentage of a User’s outstanding contracts that executed on each side of the market during the time period or trading day, as applicable, and then summing the series percentages on each side in the class; and

(v) number of times the limits established by the parameters under (A)(i)-(iv) above are reached (“risk trips”).

(B) When the System determines that the volume, notional, count, percentage, or risk trips limits have been reached:

(i) a User’s class limit within the interval or the absolute limit for the class, the Risk Monitor Mechanism cancels or rejects such User’s orders or quotes in all series of the class and cancels or rejects any additional orders or quotes from the User in the class until the counting program resets (as described below).

(ii) a User’s EFID limit within the interval or the absolute limit for the EFID, the Risk Monitor Mechanism cancels or rejects such User’s orders or quotes in all classes and cancels or rejects any additional orders or quotes from the EFID in all classes until the counting program resets (as described below).

(iii) a User’s EFID Group limit within the interval or the absolute limit for the EFID Group, the Risk Monitor Mechanism cancels or rejects such User’s orders or quotes in all classes and cancels or rejects any additional orders or quotes from any EFID within the EFID Group in all classes until the counting program resets (as described below).

The Risk Monitor Mechanism will also attempt to cancel or reject any orders routed away to other exchanges.

(C) The System will execute any marketable orders or quotes that are executable against a User’s order or quote and received prior to the time the Risk Monitor

Mechanism is triggered at the price up to the size of the User's order or quote, even if such execution results in executions in excess of the User's parameters.

(D) Counting Program Reset.

(i) Class Limit. The System will not accept new orders or quotes from a User after a class limit is reached until the User submits an electronic instruction System to reset the counting program for the class.

(ii) EFID Limit. The System will not accept new orders or quotes from the EFID after its EFID limit is reached until the User manually notifies the Trade Desk to reset the counting program for the EFID, unless the User instructs the Exchange to permit it to reset the counting program by submitting an electronic message to the System.

(iii) EFID Group Limit. The System will not accept new orders or quotes from any EFID within the EFID Group after an EFID Group limit is reached until the User manually notifies the Trade Desk to reset the counting program for the EFID Group, unless the User instructs the Exchange to permit it to reset the counting program by submitting an electronic message to the System.

(iv) Reset Limit. The Exchange may restrict the number of User class, EFID and EFID Group resets per second.

(v) Failure to Reset. If the Exchange cancels all of a User's quotes and orders resting in the Book, and the User does not reactivate its ability to send quotes or orders, the block will be in effect only for the trading day that the User reached its class, EFID and/or EFID Group limit.

(vi) Other Resets. The System will reset the counting period for absolute limits when a User refreshes its risk limit thresholds. The System will reset the counting program and commence a new interval time period when (i) a previous interval time period has expired and a transaction occurs in any series of a class or (ii) a User refreshes its risk limit thresholds prior to the expiration of the interval time period.

(E) Complex Orders. The System counts individual trades executed as part of a complex order (or COA response) when determining whether the volume, notional, count, or risk trips limit has been reached. The System counts the percentage executed of a complex order (or COA response) when determining whether the percentage limit has been reached.

(F) A User may also engage the Risk Monitor Mechanism to cancel resting bids and offers, as well as subsequent orders as set forth in Rule 5.34(c)(7).

(6) Cancel on Reject.

(A) Orders and Quotes. If a User enables this functionality for a port, the System cancels a resting order or quote if the System rejects (pursuant to the Rules) a cancel or modification instruction for that resting order or quote.

(B) Bulk Messages. If, pursuant to the Rules, the System cancels or rejects a bulk message bid (offer) to update a resting bulk message bid (offer) submitted for the same EFID and bulk port, the System also cancels the resting bulk message bid (offer).

(7) Kill Switch. If a User enables this functionality, the User may instruct the System to simultaneously cancel or reject all (or all orders except GTCs and GTDs if the User requests) or a subset of resting orders and quotes for an EFID. A User may also request the Exchange block all (or all orders except GTC and GTD orders if the User requests) or a subset of its new incoming bids, offers, and orders for an EFID, which block will remain in effect until the User contacts the Trade Desk to request it remove the block. The User may continue to submit cancel requests for resting orders while the block is in effect.

(8) Cancel on Disconnect. If a User enables this functionality, the User may instruct the System to cancel or reject all resting orders and quotes (or all orders except GTC and GTD orders if the User requests) for a port, when the System receives no response from a port within two “heartbeat intervals” (the length of which interval the Exchange determines). If the User does not provide this instruction for a port, the System cancels or rejects all incoming M and N orders and quotes for the port when the System receives no response from a port within two heartbeat intervals.

(9) Block New Orders. If a User enables this functionality, the User may instruct the System to block all of the User’s inbound orders and quotes. The User may continue to submit cancel requests for resting orders while its incoming orders and quotes are blocked.

(10) Duplicate Order Protection. If a User enables this functionality for a port, after the System receives a specified number of duplicate orders with the same EFID, side, price, quantity, and class within a specified time period (the User determines the number and length of the time period), the System will (A) reject additional duplicate orders until it receives instructions from the User to reset this control or (B) reject all incoming orders submitted through that port for that EFID until the User contacts the Trade Desk to request it reset this control. The User may continue to submit cancel requests prior to reset.

(11) Buy-Write/Married Put Check. If the Exchange applies this check to a class, the System cancels or rejects a stock-option order to buy the stock leg and sell a call (buy a put) for the option leg with a price that is more than the strike price of the call (put) plus (minus) a buffer amount (which the Exchange determines on a class-by-class basis ).

**... Interpretations and Policies:**

.01 An Exchange official may grant intraday relief by modifying or inactivating one or more of the applicable parameter settings applicable to this Rule in the interest of a fair and orderly market, which the Exchange will announce via electronic message to Users. Such intra-day relief will not extend beyond the trade day on which it is granted, unless the Exchange determines to extend such relief. The Exchange makes and keeps records to document all determinations to grant intraday relief under this Rule, and maintains those records in accordance with Rule 17a-1 under the Exchange Act. The Exchange periodically reviews determinations to grant intraday relief for consistency with the interest of a fair and orderly market.

.02 The Exchange may share any User-designated risk settings in the System with a Clearing Trading Permit Holder that clears Exchange transactions on behalf of the User.