

Martha Redding Associate General Counsel Corporate Secretary

March 23, 2022

VIA E-MAIL

Secretary Securities and Exchange Commission 100 F Street, N.E. Washington, DC 20549-1090

Re: Securities Exchange Act Rel. 34-92563 (SR-NYSEArca-2021-68)

Dear Secretary:

NYSE Arca, Inc. filed the attached Amendment No. 1 to the above-referenced filing on March 22, 2022.

Sincerely,

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Encl. (Amendment No. 1 to SR-NYSEArca-2021-68)

Required fields are shown with yellow backgrounds and asterisks.

Page 1 of * 153		SECURITIES AND EXCH WASHINGTON Form 1	HANGE COMMIS , D.C. 20549 9b-4	SION	F e No. * SR 2021 No. (req. for Amendmer	* 68 nts *) 1		
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Inta *	Amendment *	W thdrawa	Sect on 19(t	b)(2) * Sect on 19(b)	(3)(A) * Sect on	19(b)(3)(B) *		
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Contact Information Prov de the name, te ephone number, and e ma address of the person on the staff of the se f regu atory organ zat on prepared to respond to quest ons and comments on the act on.								
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For	r complete Form 19b-4 instructions please refer to the FFFS website			
Form 19b-4 Information *	The se f regu atory organ zat on must prov de a required information, presented in a clear and comprehens ble manner, to enable the public to provide mean ngfu comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and required at ons under the Act.			
SR NYSEArca 2021 68 Am no 1 19b4				
Exhibit 1 - Notice of Proposed Rule Change * Add Remove V ew SR NYSEArca 2021 68 Am no 1 Ex 1	The Not ce sect on of th s Form 19b 4 must comp y with the guide nes for publication in the Federa Register as we as any requirements for electron c f ing as published by the Commission (f applicable). The Office of the Federa Register (OFR) offers guidance on Federa Register publication requirements in the Federa Register Document Drafting Handbook, October 1998 Revision. For example, a references to the federa securities aws must include the corresponding cite to the United States Code in a footnote. A references to SEC rules must include the corresponding cite to the Code of Federa Regulations in a footnote. A references to Securities Exchange Act Releases must include the release number, release date, Federa Register cite, Federa Register date, and corresponding f enumber (e.g., SR [SRO] xx xx). A materia falure to comply with these guide nes w result in the proposed rule change being deemed not propering field. See a so Rule 0.3 under the Act (17 CFR 240.0.3)			
Exhibit 1A - Notice of Proposed Rule Change, Security-Based Swap Submission, or Advanced Notice by Clearing Agencies * Add Remove V ew	The Not ce sect on of th s Form 19b 4 must comp y w th the gu de nes for pub cat on n the Federa Reg ster as we as any requirements for electron c f ing as pub shed by the Commission (f applicable). The Office of the Federa Reg ster (OFR) offers gu dance on Federa Reg ster pub cat on requirements in the Federa Reg ster Document Drafting Handbook, October 1998 Revision. For example, a references to the federa securities aws must include the corresponding cite to the United States Code in a footnote. A references to SEC rules must include the corresponding cite to the Code of Federa Regulations in a footnote. A references to Securities Exchange Act Releases must include the release number, release date, Federa Register cite, Federa Register date, and corresponding f enumber (e.g., SR [SRO] xx xx). A materia falure to comply with these guide nesw result in the proposed rule change being deemed not propering field. See a so Rule 0.3 under the Act (17 CFR 240.0.3)			
Add Remove V ew	Cop es of not ces, wr tten comments, transcr pts, other commun cat ons. If such documents cannot be f ed e ectron ca y n accordance w th Instruct on F, they sha be f ed n accordance w th Instruct on G.			
Exhibit 3 - Form, Report, or Questionnaire Add Remove V ew	Cop es of any form, report, or quest onna re that the se f regu atory organ zat on proposes to use to he p mp ement or operate the proposed ru e change, or that s referred to by the proposed ru e change.			
	Exh b t Sent As Paper Document			
Exhibit 4 - Marked Copies Add Remove V ew SR NYSEArca 2021 68 Am no 1 Ex 4 V ex	The fu text sha be marked, n any conven ent manner, to nd cate add t ons to and de et ons from the mmed ate y preced ng f ng. The purpose of Exh b t 4 s to perm t the staff to dent fy mmed ate y the changes made from the text of the ru e w th wh ch t has been work ng.			
Add Remove V ew SR NYSEArca 2021 68 Am no 1 Ex 5	The se f regu atory organ zat on may choose to attach as Exh b t 5 proposed changes to ru e text n p ace of prov d ng t n Item I and wh ch may otherw se be more eas y readable f prov ded separately from Form 19b 4. Exh b t 5 shall be considered part of the proposed ru e change			
Add Remove V ew	If the sef regu atory organ zat on s amend ng on y part of the text of a engthy proposed ru e change, t may, w th the Comm ss on's perm ss on, f e on y those port ons of the text of the proposed ru e change n wh ch changes are be ng made f the f ng (.e. part a amendment) s c ear y understandab e on ts face. Such part a amendment sha be c ear y dent f ed and marked to show de et ons and add t ons.			

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

(a) Pursuant to the provisions of Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹ and Rule 19b-4 thereunder,² NYSE Arca, Inc. ("NYSE Arca" or the "Exchange"), proposes new Rule 6.91P-O (Electronic Complex Order Trading) to reflect the implementation of the Exchange's Pillar trading technology on its options market and to make conforming amendments to Rule 6.47A-O (Order Exposure Requirements — OX). This Amendment No. 1 supersedes the original filing in its entirety.

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

- (b) The Exchange does not believe that the proposed rule change will have any direct effect, or any significant indirect effect, on any other Exchange rule in effect at the time of this filing.
- (c) Not applicable.

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

Senior management has approved the proposed rule change pursuant to authority delegated to it by the Board of the Exchange. No further action by the Board of Directors or the membership of the Exchange is required. Therefore, the Exchange's internal procedures with respect to the proposed change are complete.

The person on the Exchange staff prepared to respond to questions and comments on the proposed rule change is:

Kathleen Murphy Senior Counsel NYSE Group, Inc.

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

Background

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

The Exchange plans to transition its options trading platform to its Pillar technology platform. The Exchange's and its national securities exchange affiliates'³ (together with the Exchange, the "NYSE Exchanges") cash equity markets are currently operating on Pillar. For this transition, the Exchange proposes to use the same Pillar technology already in operation for its cash equity markets. In doing so, the Exchange will be able to offer not only common specifications for connecting to both of its cash equity and equity options markets, but also common trading functions. The Exchange plans to roll out the new technology platform over a period of time based on a range of symbols, anticipated for the second quarter of 2022.

In this regard, the Exchange recently filed a proposal to add new rules to reflect how options, particularly single-leg options, would trade on the Exchange once Pillar is implemented.⁴ The current proposal sets forth how Electronic Complex Orders⁵ would trade on the Exchange once Pillar is implemented. As noted in the Single-Leg Pillar Filing, as the Exchange transitions to Pillar, certain rules would continue to be applicable to symbols trading on the current trading platform, but would not be applicable to symbols that have transitioned to trading on Pillar.⁶ Consistent with the Single-Leg Pillar Filing, proposed Rule 6.91P-O would have the same number as the current Electronic Complex Order Trading rule, but with the modifier "P" appended to the rule number. Current Rule 6.91-O, governing Electronic Complex Order Trading, would remain unchanged and continue to apply to any trading in symbols on the current system. Proposed Rule 6.91P-O would govern Electronic Complex Orders for trading in options symbols migrated to the Pillar platform. This Amendment No. 1 supersedes the original filing in its entirety.⁷

⁴ <u>See</u> Securities Exchange Act Release No. 94072 (January 26, 2022), 87 FR 5592 (February 1, 2022) (Notice of filing Notice of Filing of Amendment No. 4 and Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment No. 4) (SR-NYSEArca-2021-47) ("Single-Leg Pillar Filing").

⁵ The term "Electronic Complex Order" is currently defined in the preamble to Rule 6.91-O to mean any Complex Order, as defined in Rule 6.62-O(e) or any Stock/Option Order or Stock/Complex Order as defined in Rule 6.62-O(h) that is entered into the NYSE Arca System (the "System").

⁶ <u>See Single-Leg Pillar Filing (providing that, once a symbol is trading on the Pillar trading platform, a rule with the same number as a rule with a "P" modifier would no longer be operative for that symbol and the Exchange would announce by Trader Update when symbols are trading on the Pillar trading platform).</u>

⁷ This Amendment No. 1 makes certain non-substantive clarifying changes from the original filing (including alphabetizing the proposed definitions and relocating the description of Complex Only Orders), and makes the following substantive

³ The Exchange's national securities exchange affiliates are the New York Stock Exchange LLC ("NYSE"), NYSE American LLC ("NYSE American"), NYSE National, Inc. ("NYSE National"), and NYSE Chicago, Inc. ("NYSE Chicago").

Similar to the Single-Leg Pillar Filing, proposed Rule 6.91P-O would (1) use Pillar terminology based on Pillar terminology that the Exchange uses for cash equities trading, as described in Exchange Rule 7-E; and (2) introduce new functionality for Electronic Complex Order trading (e.g., adopting a DBBO and Away Market Deviation price check as well as enhancing the opening process for ECOs as described below).

Finally, as discussed in the Single-Leg Pillar Filing, the Exchange will announce by Trader Update when symbols are trading on the Pillar trading platform. The Exchange intends to transition Electronic Complex Order trading on Pillar at the same time that single-leg trading is transitioned to Pillar.

Proposed Rule 6.91P-O: Electronic Complex Order Trading

Current Rule 6.91-O (Electronic Complex Order Trading) specifies how the Exchange processes Electronic Complex Orders submitted to the Exchange. The Exchange proposes new Rule 6.91P-O to establish how such orders would be processed after the transition to Pillar. To promote clarity and transparency, the Exchange proposes to add a preamble to current Rule 6.91-O specifying that it would not be applicable to trading on Pillar.

As discussed in greater detail below and unless otherwise specified herein, the Exchange is not proposing fundamentally different functionality regarding how Electronic Complex Orders would trade on Pillar than is currently available on the Exchange. However, with Pillar, the Exchange would use Pillar terminology to describe functionality that is not changing and also introduce certain new or updated functionality for Electronic Complex Orders (i.e., enhancing the opening auction process, including introducing the "ECO Auction Collars") that will also be available for outright options trading on the Pillar platform.

Definitions. Proposed Rule 6.91P-O(a) would set forth the definitions applicable

changes from the original filing: (1) adds new definitions of Away Market Deviation and Leg Ratios; (2) revises the definition of DBBO to add crossreference to ABBO, as that term is defined in the Single-Leg Pillar Filing, and to include details regarding market conditions that impact the trading of complex strategies; (3) revises the definition of an ECO to remove reference to Stock/Option Orders and Stock/Complex Orders; (4) adds Complex QCCs as an ECO order type and specifies that an ECO designated as FOK must also be designated as a Complex Only Order; (5) specifies that an ECO will not trade with leg market orders designated as FOK; (6) specifies circumstances when an ECO may trade with another ECO at the leg market price and when an ECO must price improve at least a portion of the leg markets when there is displayed Customer interest on the Exchange; and (7) modifies the description of how a COA Order trades on arrival and prior to initiating a COA.

to trading on Pillar under the new rule.

- Proposed Rule 6.91P-O(a)(1) would define the term "Away Market • Deviation" as the difference between the Exchange BB (BO) for a series and the ABB (ABO) for that same series when the Exchange BB (BO) is lower (higher) than the ABB (ABO).⁸ The maximum allowable Away Market Deviation is the greater of \$0.05 or 5% below (above) the ABB (ABO) (rounded down to the nearest whole penny). As further proposed, no ECO on the Exchange would execute at a price that would exceed the maximum allowable Away Market Deviation on any component of the complex strategy. The maximum allowable Away Market Deviation is designed to protect market participants from having their complex strategies execute at prices that are significantly outside of (and inferior to) the market for the individual legs. The proposed functionality provides the Exchange with flexibility in determining the acceptable execution range by allowing that it be calculated using either a percentage amount or a dollar amount. This proposed risk protection is not new or novel as it is available on other options exchanges.⁹ As discussed further below, the Exchange proposes that its calculation of the DBBO (for each leg of a complex strategy) as well as trading of ECOs with the leg markets would be bound by the maximum allowable Away Market Deviation as an additional protection against ECOs being executed on the Exchange at prices too far away from the current market. This proposed definition is new and would promote clarity and transparency.
- Proposed Rule 6.91P-O(a)(2) would define the term "Complex NBBO" to mean the derived national best net bid and derived national best net offer

⁸ In the Single-Leg Pillar Filing, the Exchange defines the (new) term "Away Market BBO ('ABBO')" as referring to the best bid(s) or offer(s) disseminated by Away Markets and calculated by the Exchange based on market information the Exchange receives from OPRA and the terms "ABB" and "ABO" as referring to the best Away Market bid and best Away Market offer, respectively. <u>See</u> Single-Leg Pillar Filing (defining Away Market BBO in proposed Rule 1.1).

See, e.g., BOX Options Exchange LLC ("BOX") Rule 7240(b)(3)(iii)(A) (providing that each leg of a complex strategy trade equal to or better than the "Extended cNBBO," which has a default setting (per Rule 7240(a)(5)) of 5% of the cNBB or cNBO (per Rule 7240(a)(2) and (4), respectively) as applicable, or \$0.05); Nasdaq ISE, LLC ("Nasdaq ISE"), Options 3, Section 16 (a) (providing that, in regard to "Price limits for Complex Orders, "[n]otwithstanding, the System will not permit any leg of a complex strategy to trade through the NBBO for the series or any stock component by a configurable amount calculated as the lesser of (i) an absolute amount not to exceed \$0.10, and (ii) a percentage of the NBBO not to exceed 500%, as determined by the [ISE] Exchange on a class, series or underlying basis").

for a complex strategy calculated using the NBB and NBO for each component leg of a complex strategy. This definition is based on current Rule 6.1A-O(a)(11)(b), without any substantive differences.

 Proposed Rule 6.91P-O(a)(3) would define "Complex Order Auction" or "COA" to mean an auction of an ECO as set forth in proposed Rule 6.91P-O(f) (discussed below). This definition is based on the title of paragraph (c) of current Rule 6.91-O, which sets forth the COA Process for ECOs without any substantive differences. Proposed Rule 6.91P-O(a)(3) would also state that the terms defined in paragraphs (a)(3)(A)-(D) would be used for purposes of a COA.

Proposed Rule 6.91P-O(a)(3)(A) would define a "COA Order" to mean an ECO that is designated by the OTP Holder as eligible to initiate a COA. This definition is based on the definition of a "COA-eligible order" as set forth in current Rule 6.91-O(c)(1) and (c)(1)(i), with a difference that the proposed definition would not require that an option class be designated as COA-eligible because all option classes that trade on Pillar would be COA-eligible.

Proposed Rule 6.91P-O(a)(3)(B) would define the term "Request for Response" or "RFR" to refer to the message disseminated to the Exchange's proprietary complex data feed announcing that the Exchange has received a COA Order and that a COA has begun. As further proposed, the definition would provide that each RFR message would identify the component series, the price, the size and side of the market of the COA Order. This definition is based on the description of RFR in Rule 6.91-O(c)(3) without any substantive differences. The Exchange proposes a clarifying difference to make clear that RFR messages would be sent over the Exchange's proprietary complex data feed, which is based on current functionality.

Proposed Rule 6.91P-O(a)(3)(C) would define the term "RFR Response" to mean any ECO received during the Response Time Interval (defined below) that is in the same complex strategy, on the opposite side of the market of the COA Order that initiated the COA, and marketable against the COA Order.¹⁰ This definition is based in part on the description of RFR Responses in Rule 6.91-O(c)(5). However, unlike the current definition, an RFR Response would not have a time-in-force contingency for the duration of the COA. Instead, the Exchange would consider any ECOs received during the Response Time Interval (defined below) that are marketable against the COA Order as an RFR Response. As described below, the Exchange proposes to define separately the term "ECO GTX

¹⁰ The term "marketable" is defined in proposed Rule 1.1 of the Single-Leg Pillar Filing.

Order," which would be more akin to the current definition of RFR Response. In addition, the proposed definition omits the current rule description that an RFR Response may be entered in \$0.01 increments or that such responses may be modified or cancelled because these features are applicable to all ECOs and therefore not necessary to separately state in connection with RFR Responses.

Proposed Rule 6.91P-O(a)(3)(D) would define the term "Response Time Interval" to mean the period of time during which RFR Responses for a COA may be entered and would provide that the Exchange would determine and announce by Trader Update the length of the Response Time Interval; provided, however, that the duration of the Response Time Interval would not be less than 100 milliseconds and would not exceed one (1) second. This definition is based in part on the description of Response Time Interval in Rule 6.91-O(c)(4), with a difference that the Exchange proposes to reduce the minimum time from 500 milliseconds to 100 milliseconds. While other options exchanges do not establish a minimum duration for a COA, the Exchange notes that the proposed 100 millisecond minimum is consistent with the minimum auction length for electronic-paired auctions on NYSE American and for auctions on other markets.¹¹ Given that other options exchanges have (for years) offered electronic auction mechanisms with a Response Time Interval of at least 100 milliseconds, the Exchange believes that the proposed Response Time Interval of at least this length would provide OTP Holders and OTP Firms adequate time to respond to a COA.¹²

• Proposed Rule 6.91P-O(a)(4) would define the term "Complex strategy" to mean a particular combination of leg components and their ratios to one another. The proposed definition would further provide that new complex strategies can be created when the Exchange receives either a request to

¹² See, e.g., Securities Exchange Act Release Nos. 82498 (January 12, 2018), 83 FR 2823 (January 19, 2018) (SR-NYSEAmer-2017-26) (Notice of filing and immediate effectiveness of proposed rule change to reduce the response time interval for a CUBE Auction to no less than 100 milliseconds); 83384 (June 5, 2018), 83 FR 27061 (June 11, 2018) (SR-NYSEAMER-2018-05) (Order approving Complex CUBE functionality, including Rule 971.2NY(c)(1)(B), providing that "[t]he minimum/maximum parameters for the Response Time Interval will be no less than 100 milliseconds and no more than one (1) second")).

¹¹ See, e.g., NYSE American Rules 971.1NY(c)(2)(B) (providing that for a Customer Best Execution Auction "[t]he minimum/maximum parameters for the Response Time Interval will be no less than 100 milliseconds and no more than one (1) second") and 971.2NY(c)(1)(B) (same); Cboe Exchange Inc. ("Cboe") Rule 5.33(d)(3) (providing that Cboe "determines the duration of the Response Time Interval on a class-by-class basis, which may not exceed 3000 milliseconds").

create a new complex strategy or an ECO with a new complex strategy. This proposed definition is new and is consistent with how this concept is defined on other options exchanges and would promote clarity and transparency.¹³

Proposed Rule 6.91P-O(a)(5) would define the term "DBBO" to address situations where it is necessary to derive a (theoretical) bid or offer for a particular complex strategy. As proposed, "DBBO" would mean the derived best net bid ("DBB") and derived best net offer ("DBO") for a complex strategy. The bid (offer) price used to calculate the DBBO on each leg would be the Exchange BB (BO)¹⁴ (if available), bound by the maximum allowable Away Market Deviation (as defined above). If a leg of a complex strategy does not have an Exchange BB (BO), the bid (offer) price used to calculate the DBBO would be the ABB (ABO) for that leg. Thus, the "bid (offer)" prices used to calculate the DBBO would be based on the Exchange BB (BO) for each leg when available, and, absent an Exchange BB (BO) for a given leg, the ABB (ABO). The proposed definition would also provide that the DBBO would be updated as the Exchange BBO or ABBO, as applicable, is updated.

Proposed Rule 6.91P-O(a)(5)(A) would provide further detail about how the DBBO would be derived when, for a leg, there is no Exchange BB (BO) and no ABB (ABO). As proposed, in such circumstances, the bid (offer) price used to calculate the DBBO would be the offer (bid) price for that leg (i.e., Exchange BO (BB), bound by the maximum allowable Away Market Deviation (or the ABO (ABB) for that leg if no Exchange BO (BB) is available)), minus (plus) "one collar value," which would be (i) 0.25 where the offer (bid) is priced 1.00 or lower, or the lesser of 2.50or 25% of the offer (bid) where the offer (bid) is priced above 1.00(rounded down to the nearest whole penny); or (ii) 0.01, if the offer is equal to or less than one collar value. The proposed values used to generate a DBBO in the absence of local or Away Market interest is consistent with the values used in the Trading Collars for single-leg orders, per Rule 6.62P-O(a)(4)(C).¹⁵ In addition, such values are within

¹³ <u>See, e.g.</u>, Cboe Rule 5.33(a) (defining "complex strategy" as "a particular combination of components and their ratios to one another" and further providing that "[n]ew complex strategies can be created as the result of the receipt of a complex instrument creation request or complex order for a complex strategy that is not currently in the System"); MIAX Options Exchange ("MIAX") Rule 518(a)(6) (same).

¹⁴ The term BBO when used with respect to options traded on the Exchange would mean "the best displayed bid or best displayed offer on the Exchange." <u>See</u> Single-Leg Pillar Filing (defining BBO in Rule 1.1, which definition is substantially identical to the current definition of BBO in Rule 6.1A-O(a)(2)(a)).

¹⁵ <u>See Single-Leg Pillar Filing (describing the calculation of Trading Collars, per Rule 6.62P-O(a)(4)(C), which "for an order to buy (sell) will be a specified</u>

the current parameters for determining whether a trade is an Obvious Error or Catastrophic Error.¹⁶ This proposed definition of the DBBO is new and is based, in part, on the current definition of Complex BBO set forth in Rule 6.1A-O(a)(2)(b), as well as on how this concept is defined on other options exchanges, including on NYSE American.¹⁷ The Exchange believes that providing an alternative means of calculating the DBBO (i.e., by looking to the contra-side best bid (offer) in the absence of same-side interest) would benefit market participants as it should increase opportunities for trading. For example, absent this proposed functionality, the Exchange would not be able to trade complex strategies when, for at least one leg of such strategy, the Exchange has no displayed interest on one or both sides of such component leg. Allowing the Exchange to look to the ABBO to calculate the DBBO in such circumstances would increase trading opportunities for ECOs to the benefit of all market participants. The Exchange believes that the additional detail about how the DBBO would be calculated in the absence of an Exchange BB (BO) and ABB (ABO), including that it would be rounded down to the nearest whole penny, would promote clarity and transparency. As noted above and herein, the Exchange believes that binding the DBBO (when calculated using the Exchange BBO) to the maximum allowable Away Market Deviation would help prevent ECOs from executing on the Exchange at prices too far away from the current market.

Proposed Rule 6.91P-O(a)(5)(B) would provide that, if for a leg of a complex strategy, there is neither an Exchange BBO nor an ABBO, the Exchange would not allow the complex strategy to trade until, for that leg, there is either an Exchange BB or BO, or an ABB or ABO, on at least one side of the market. The Exchange believes that preventing a complex strategy from trading when, for a leg, there is no reliable pricing indication

¹⁶ <u>See</u> Rules 6.87-O(c)(1) (thresholds for Obvious Errors) and 6.87-O(d)(1) (thresholds for Catastrophic Errors).

¹⁷ See, e.g., NYSE American Rule 900.2NY(7)(b) (providing that the Derived BBO "is calculated using the BBO from the Consolidated Book for each of the options series comprising a given complex order strategy"); Cboe Rule 5.33(a) (defining "Synthetic Bed Bid or Offer and SBBO" for complex orders as "the best bid and offer on the Exchange for a complex strategy calculated using" the "BBO for each component (or the NBBO for a component if the BBO for that component is not available) of a complex strategy from the [Cboe] Simple Book").

amount above (below) the Reference Price, as follows: (1) for orders with a Reference Price of \$1.00 or lower, \$0.25; or (2) for orders with a Reference Price above \$1.00, the lower of \$2.50 or 25%)"). The Reference Price for calculating the Trading Collar for an order to buy (sell) will be the NBO (NBB), except in certain enumerated circumstances. <u>See id.</u> (setting forth the applicable Reference Price, per Rule 6.62P-O(a)(4)(B)).

-- either on the Exchange or in Away Markets, would benefit market participants by preventing potentially erroneous executions. Moreover, including this additional detail in the proposed rule about when a complex strategy would not trade would benefit market participants as it would promote clarity and transparency in Exchange rules regarding ECO trading.

Proposed Rule 6.91P-O(a)(5)(C) would provide that if the best bid and offer prices (when not based solely on the Exchange BBO) for a component leg of a complex strategy are locked or crossed, the Exchange would not allow an ECO for that strategy to execute against another ECO until the condition resolves. The Exchange notes that, as described above, the DBBO may be calculated using leg prices derived either exclusively from, or a combination of, the Exchange BBO, the ABBO, or the Exchange BBO as adjusted to be priced within the maximum allowable Away Market Deviation. As such, if the best bid and offer prices (when not based solely on Exchange BBO) for a component leg of a complex strategy are locked or crossed, a DBBO calculated when using those prices could be erroneous.¹⁸ Accordingly, the Exchange believes that it is appropriate to not permit an ECO to execute against another ECO under these circumstances until the locked or crossed market resolves. The Exchange believes preventing ECO-to-ECO trading in this circumstance would benefit market participants by preventing potentially erroneous ECO executions. Moreover, including this additional detail in the proposed rule about when an ECO would be prevented from trading with another ECO would benefit market participants as it would promote clarity and transparency in Exchange rules regarding ECO trading.

Further, per proposed Rule 6.91P-O(a)(5)(C), if an Away Market quote updates to lock or cross the current Exchange BB (BO) or ABB (ABO) for a component leg of a complex strategy, the Exchange would allow an ECO for that strategy to execute against leg market interest on the Exchange. Allowing an eligible ECO to execute against leg market interest in these circumstances is consistent with the way single-leg orders trade. In this regard, the Exchange notes that, to the extent that leg prices are locked or crossed as a result of updates to the ABBO, such updates do

¹⁸ The reliability of the Exchange's calculated DBBO is essential to ECO trading on the Exchange as this concept permeates all aspects of complex trading, including to determine price parameters at the opening of each series and in determining when, and at what price, a COA Order may initiate a COA as well as market events impacting the DBBO that would result in an early end to a COA. <u>See, e.g.</u>, proposed Rule 6.91P-O(d)(3) (relying on the DBBO to determine ECO Auction Collars for the ECO Opening Auction Process) and 6.91P-O(f)(2)(A) and (f)(3) (relying on the DBBO to both initiate and price a COA Order as well as to terminate a COA early under certain market conditions)).

not prevent resting leg market interest from trading at its resting price with all eligible contra-side interest, which includes incoming ECOs in the same complex strategy.¹⁹ Moreover, to the extent that an ECO trades with leg market interest in a complex strategy when interest in the leg markets is crossed, such executions are not deemed as trade-throughs.²⁰ As such, the Exchange believes that allowing an ECO to trade with leg market interest in this circumstance would maximize the execution opportunities of such ECO while respecting price-time priority of the leg markets.

- Proposed Rule 6.91P-O(a)(6) would define the term "ECO Order Instruction" to mean a request to cancel, cancel and replace, or modify an ECO. As described further below, this concept relates to order processing when a series opens or reopens for trading and is based on the term "order instruction" as used in Rule 7.35-E(g) and proposed to be used in Rules 6.64P-O(e) and (f), which (similarly) would define an "order instruction" for options as a request to cancel, cancel and replace, or modify an order or quote.²¹
- Proposed Rule 6.91P-O(a)(7) would define the term "Electronic Complex Order" or "ECO" to mean a Complex Order as defined in Rule 6.62P-O(f) that would be submitted electronically to the Exchange.²² This proposed definition is based on the preamble to Rule 6.91-O, except that, under Pillar, an ECO would not include Stock/Option Orders and Stock/Complex Order²³ and the Exchange proposes to replace reference to

- ²¹ <u>See Single-Leg Pillar Filing (describing opening Auction Process rule per Rule 6.64P-O).</u>
- ²² The proposed definition of Complex Order under Pillar is set forth in Rule 6.62P-O(f), as described in the Single-Leg Pillar Filing, and is substantially identical to the current definition.
- ²³ <u>See Single-Leg Pillar Filing (describing Stock/Option Orders and Stock/Complex</u> Orders, per Rule 6.642-O(H)(6)(A) and (B) respectively, as open outcry only orders). Although current Rule 6.91-O provides that Stock/Option Orders and

¹⁹ <u>See Single-Leg Pillar Filing (discussing Rules 6.76P-O(b)(3) providing that "[i]f an Away Market locks or crosses the Exchange BBO, the Exchange will not change the display price of any Limit Orders or quotes ranked Priority 2 - Display Orders and any such orders will be eligible to be displayed as the Exchange's BBO").</u>

²⁰ See Rule 6.94-O(b)(3) (exempting from trade-through liability transactions that occur "when there was a Crossed Market"). See also the Options Order Protection And Locked/Crossed Market Plan, dated April 14, 2009, available here, https://www.theocc.com/getmedia/7fc629d9-4e54-4b99-9f11-c0e4db1a2266/options_order_protection_plan.pdf.

the "NYSE Arca System" with the term "Exchange" and to update crossreference to the definition of a Complex Order as proposed in the Single-Leg Pillar Filing.

- Proposed Rule 6.91P-O(a)(8) would define the term "leg" or "leg market" to mean each of the component option series that comprise an ECO. This definition is consistent with the concept of leg markets as used in current Rule 6.91-O(a), which defines legs as individual orders and quotes in the Consolidated Book. The Exchange believes the proposed definition would add clarity regarding how the terms "leg" and "leg market" would be used in connection with ECO trading on Pillar.
- Proposed Rule 6.91P-O(a)(9) would define "Ratio" or "leg ratio" to mean the quantity of each leg of an ECO broken down to the least common denominator such that the "smallest leg ratio" is the portion of the ratio represented by the leg with the fewest contracts. The Exchange believes the proposed definition would add clarity regarding how the terms "ratio" and "leg ratio" would be used in connection with ECOs trading on Pillar, which definition is consistent with how this concept is described on other options exchanges.²⁴

Types of ECOs. Proposed Rule 6.91P-O(b) would set forth the types of ECOs that would trade on Pillar. Proposed Rule 6.91P-O(b)(1) would provide that ECOs may be entered as Limit Orders, Limit Orders designated as Complex Only Orders, or as Complex QCCs.²⁵ This proposed text is based on current Rule 6.91-O(b)(1), with a difference to provide that the Exchange would offer Complex Only Orders and Complex QCCs on Pillar. Allowing ECOs to be designated as Complex QCCs (which order type is described in the Single-Leg Pillar Filing) is consistent with current functionality not described in the rule and the Exchange believes that this additional specificity to the proposed rule would add clarity and transparency. Complex Only Orders (as described below) are based on existing functionality for PNP Plus orders, with updated functionality available on Pillar.²⁶

 $\frac{25}{25}$ Single-Leg Pillar Filing (describing Limit Orders and Complex QCC Orders per Rule 6.62P-O(a)(2) and (g)(1)(A), (C) and (D)).

²⁶ <u>See, infra</u>, for discussion of proposed Rule 6.91P-O(e)(1)(C) (discussing Complex Only Order functionality).

Stock/Complex Orders may trade as ECOs, under current functionality (and consistent with Pillar) such orders only trade in open outcry.

See, e.g., Cboe, US Options Complex Book Process, Complex Order Basics, Section 2.1, Ratios, available here:
https://cdn.batstrading.com/resources/membership/US-Options-Complex-Book-Process.pdf (providing that "[t]he quantity of each leg of a complex order broken down to the lowest terms will determine the ratio of the complex order").

- Proposed Rule 6.91P-O(b)(2) would set forth the time-in-force contingencies available to ECOs, which would be Day, IOC, FOK, or GTC, as those terms are defined in the Single-Leg Pillar Filing in Rule 6.62P-O(b), and GTX (per proposed Rule 6.91P-O(b)(2)(C) as described below). The proposed text is based on current Rules 6.91-O(b)(2) and (3), except that it adds GTX (as described below). The proposed text also omits AON because the Exchange would not offer AONs for ECO trading on Pillar.
- Proposed Rule 6.91P-O(b)(2)(A) would provide that an ECO designated as IOC or FOK would be rejected if entered during a pre-open state,²⁷ which is consistent with the time-in-force of the order (because they could not be traded when a complex strategy is not open for trading) as well as with current functionality.
- Proposed Rule 6.91P-O(b)(2)(B) would provide that an ECO designated as FOK must also be designated as a Complex Only Order (per proposed Rule 6.91P-O(b)(1) and described further below). This proposed rule, which is new under Pillar, would simplify the operation of electronic complex order trading and would add clarity and transparency that ECOs designated as FOK (i.e., that have conditional size-related instructions) would not be eligible to trade with the leg markets.
- Proposed Rule 6.91P-O(b)(2)(C) would provide that an ECO designated as GTX would be defined as an "ECO GTX Order" and would have the following features: it would not be displayed; it may be entered only during the Response Time Interval of a COA; it must be on the opposite side of the market as the COA Order; and it must specify the price, size, and side of the market. As further proposed, ECO GTX Orders may be modified or cancelled during the Response Time Interval and any remaining size that does not trade with the COA Order would be cancelled at the end of the COA. This definition is based on the description of an RFR Response in current Rule 6.91-O(c)(5)(A) (C), which likewise are not displayed and expire at the end of the COA.

Priority and Pricing of ECOs. Proposed Rule 6.91P-O(c) would set forth how ECOs would be prioritized and priced under Pillar. The proposed priority scheme for ECOs under Pillar is consistent with current functionality, with the differences and clarifications noted below. As proposed, an ECO received by the Exchange that is not immediately executed (or cancelled), including an ECO that cannot

²⁷ The term "pre-open state" is defined in Rule 6.64P-O(a)(12), as described in the Single-Leg Pillar Filing, to mean "the period before a series is opened or reopened."

trade due to conditions described in paragraphs (a)(5)(B)-(C) (above)²⁸ and (c)(1) - (2) of this proposed Rule (below) or does not initiate a COA per paragraph (f)(1) (below), would be ranked in the Consolidated Book according to price-time priority based on the total net price and the time of entry of the order. This proposed rule adds cross-references to new rule text but is otherwise based on Rule 6.91-O(a)(1), without any substantive differences. The Exchange proposes a non-substantive difference to refer simply to a "net price" rather than a "net debit or credit price," which streamlined terminology is consistent with the use of the term "net price" on other options exchanges.²⁹ The proposed rule also incorporates the first sentence of Rule 6.91-O(a)(2)(iii)(A), regarding the ranking and priority of ECOs not immediately executed, with additional detail regarding the time-in-force modifier of the ECO, which adds clarity and transparency to the proposed Rule.³⁰

Proposed Rule 6.91P-O(c) would further provide that, unless otherwise specified in this Rule, ECOs would be processed as follows:

• Proposed Rule 6.91P-O(c)(1) would provide that when trading with the leg markets, an ECO would trade at the price(s) of the leg markets provided the leg markets are priced no more than the maximum allowable Away Market Deviation (as defined herein). The proposed rule requiring that when trading with the leg markets, the components of the ECO would trade at the prices of the leg markets is consistent with current functionality, per Rule 6.91-O(a)(2)(ii); requiring that such prices be bound by the Away Market Deviation for an ECO to trade with the leg markets is new under Pillar, as discussed further below).³¹

For example, if there is sell interest in a leg market at \$1.00, and a leg of

- ³⁰ For example, an ECO designated as IOC that does not immediately execute would cancel rather than be ranked on the Consolidated Book, whereas an ECO designated as Day or GTC that does not immediately execute would be ranked on the Consolidated Book.
- ³¹ <u>See</u> Rule 6.91-O(a)(2)(ii) (providing that "[i]f, at a price, the leg markets can execute against an incoming [ECO] in full (or in a permissible ratio), the leg markets will have first priority at that price and will trade with the incoming [ECO] pursuant to Rule 6.76A before [ECO] resting in the Consolidated Book can trade at that price").

Proposed Rule 6.91P-O(a)(5)(B)-(C) describe conditions related to the leg markets when complex strategies will not trade.

See, e.g., Cboe Rule 5.33(f)(2) (setting forth parameters for the "net price" of complex orders traded on Cboe); Nasdaq ISE, Options 3, Section 14 (c) (providing, in relevant part, that "[c]omplex strategies will not be executed at prices inferior to the best net price achievable from the best ISE bids and offers for the individual legs").

an ECO to buy could trade up to \$1.05, the ECO would trade with such leg market at \$1.00. This would result in the ECO receiving price improvement and is consistent with the ECO trading as the Aggressing Order.³² The proposed functionality that an ECO would trade with leg markets only if the prices of the leg markets are within (and do not exceed the maximum allowable) Away Market Deviation would be new under Pillar and is designed to operate as an additional protection against ECOs being executed on the Exchange at prices too far away from the current market.

- Proposed Rule 6.91P-O(c)(2) would provide that when trading with another ECO, each component leg of the ECO must trade at a price at or within the Exchange BBO for that series, and no leg of the ECO may trade at a price of zero.³³ This provision is based in part on current Rule 6.91-O(a)(2), which provides that no leg of an ECO will be executed outside of the Exchange BBO.³⁴ This proposed rule, which ensures that ECOs would never trade through interest in the leg markets, is consistent with current functionality and adds clarity and transparency to the proposed Rule. This proposed rule is also consistent with how ECOs are processed on other options exchanges.³⁵
- Proposed Rule 6.91P-O(c)(3) would provide that an ECO may trade without consideration of prices of the same complex strategy available on other exchanges, which is based on the same text as contained in current Rule 6.91-O(a)(2) without any substantive differences.
- ³² The term "Aggressing Order" is defined in Rule 1.1, as described in the Single-Leg Pillar Filing, to mean "a buy (sell) order or quote that is or becomes marketable against sell (buy) interest on the Consolidated Book".
- ³³ <u>See, infra</u>, for discussion of proposed Rule 6.91P-O(e)(1) (discussing "Execution of ECOs During Core Trading Hours," including the treatment of ECOs that have executed, at a price, to the extent possible with the leg markets and of ECOs designated as Complex Only).
- ³⁴ As noted herein, no ECO on the Exchange would execute at a price that would exceed the maximum allowable Away Market Deviation on any component of the complex strategy. <u>See</u> proposed Rule 6.91P-O(a)(1) (defining Away Market Deviation).
- ³⁵ See, e.g., BOX Rule 7240(b)(3)(ii). See also Securities Exchange Act Release Nos. 69027 (March 4, 2013), 78 FR 15093, 15094 (March 8, 2013) (SR-BOX-2013-01) (providing that "where two Complex Orders trade against each other, the resulting execution prices will be at a price equal to or better than NBBO and BOX best bid or offer ("BBO") for each of the component Legs," per proposed Rule 7240(b)(3)(ii)). See, e.g., Cboe Rule 5.33(f)(2) (providing that complex orders may not execute at a net price that would cause any component of the complex strategy to be executed at a price of zero).

• Proposed Rule 6.91P-O(c)(4) would provide that an ECO may trade in one cent (\$0.01) increments regardless of the MPV otherwise applicable to any leg of the complex strategy, which is based on current Rule 6.91-O, Commentary .01 without any substantive differences.

Execution of ECOs at the Open (or Reopening after a Trading Halt). Current Rule 6.91-O(a)(2)(i) sets forth how ECOs are executed upon opening or reopening of trading. Proposed Rule 6.91P-O(d) would set forth details about how ECOs would be executed at the open or reopen following a trading halt.

With the transition to Pillar, the Exchange proposes new functionality regarding the "ECO Opening Auction Process" on the Exchange, which would be applicable both to openings and reopenings following a trading halt. The Exchange proposes to incorporate into the ECO Opening Auction Process certain functionality currently available on the Exchange's cash equity platform, which the Exchange has similarly proposed to include in the Auction Process for single-leg options.³⁶ Accordingly, proposed Rule 6.91P-O(d) would use Pillar terminology relating to auctions that is based in part on Pillar terminology set forth in Rule 7.35-E for cash equity trading and in part on Rule 6.64P-O for single-leg options.

- Proposed Rule 6.91P-O(d)(1) would set forth the conditions required for the commencement of an ECO Opening Auction Process. Specifically, as proposed, the Exchange would initiate an ECO Opening Auction Process for a complex strategy only if all legs of the complex strategy have opened or reopened for trading, which text is based on current Rule 6.91-O(a)(2)(i)(A) without any substantive differences. Proposed Rule 6.91P-O(d)(1)(A)-(B) would set forth conditions that would prevent the opening of a complex strategy, as follows:
 - Any leg of the complex strategy has neither an Exchange BO nor an ABO; or
 - The complex strategy cannot trade per proposed Rule 6.91P-O(a)(5)(B)-(C).

The proposal to detail these conditions for opening (and reopening) are consistent with current functionality not set forth in the current rule. The Exchange believes that this added detail would not only add clarity and transparency to Exchange rules but would also protect market participants from potentially erroneous executions when there is a lack of reliable information regarding the price at which a complex strategy should execute, thereby promoting a fair and orderly ECO Opening Auction

³⁶ <u>See Single-Leg Pillar Filing (describing opening Auction Process rule per Rule 6.64P-O).</u>

Process.

Proposed Rule 6.91P-O(d)(2) would provide that any ECOs in a complex . strategy with prices that lock or cross one another would be eligible to trade in the ECO Opening Auction Process. This proposed rule is based on current Rule 6.91-O(a)(2)(i)(B), which provides than an opening process will be used if there are ECOs that "are marketable against each other." The Exchange proposes a difference in Pillar not to require that such ECOs be "priced within the Complex NBBO" because the proposed ECO Opening Auction Process under Pillar would instead rely on the DBBO (as described below).³⁷ As such, the Exchange may open a series based on the Exchange BBO, bound by the Away Market Deviation (or, the ABBO if the Exchange BBO is not available), which is consistent with ECO handling during Core Trading (per proposed Rule 6.91P-O(e)). The Exchange believes this proposed change would better align the permissible opening price for a series with the permissible execution price during Core Trading, which adds consistency to ECO order handling to the benefit of investors.

Proposed Rule 6.91P-O(d)(2)(A) would provide that an ECO received during a pre-open state would not participate in the Auction Process for the leg markets pursuant to Rule 6.64P-O, which is based on the same text (in the second sentence) of current Rule 6.91-O(a)(2)(i)(A) without any substantive differences.

Proposed Rule 6.91P-O(d)(2)(B) would provide that a complex strategy created intra-day when all leg markets are open would not be subject to an ECO Opening Auction Process and would instead trade pursuant to paragraph (e) of the proposed Rule (discussed below) regarding the handling of ECOs during Core Trading Hours.

Proposed Rule 6.91P-O(d)(2)(C) would provide that the ECO Opening Auction Process would be used to reopen trading in ECOs after a trading halt. This proposed rule is consistent with current Rule 6.64-O(e) and makes clear that the ECO Opening Auction Process would be applicable to reopenings, which would add internal consistency to Exchange rules and promote a fair and orderly ECO Opening Auction Process following a trading halt.

³⁷ See Rule 6.91-O(a)(2)(i)(B) (providing that "[t]he CME will use an opening auction process if there are Electronic Complex Orders in the Consolidated Book that are marketable against each other and priced within the Complex NBBO"). Per Rule 6.1A-O(a)(11)(b) (and proposed Rule 6.91P-O(a)(2), the "Complex NBBO" for each complex strategy is derived from the national best bid and national best offer for each leg.

Proposed Rule 6.91P-O(d)(3) would describe each aspect of the ECO Opening Auction Process. First, proposed Rule 6.91P-O(d)(3)(A) would describe the "ECO Auction Collars," which terminology would be new for ECO trading and is based on the term "Auction Collars" used in Rule 7.35-E for trading cash equity securities as well as in Rule 6.64P-O(a)(2) for single-leg options trading.³⁸

As proposed, the upper (lower) price of an ECO Auction Collar for a complex strategy would be the DBO (DBB); provided, however, that if the DBO (DBB) is calculated using the Exchange BBO for all legs of the complex strategy and all such Exchange BBOs have displayed Customer interest, the upper (lower) price of an ECO Auction Collar would be one penny (\$0.01) times the smallest leg ratio inside the DBO (DBB). This new functionality on Pillar would ensure that if there is displayed Customer interest on the Exchange on all legs of the strategy, the opening price for the complex strategy would price improve the DBBO, which the Exchange believes is consistent with fair and orderly markets and investor protection.

Next, proposed Rule 6.91P-O(d)(3)(B) would describe the "ECO Auction Price." As proposed, the ECO Auction Price would be the price at which the maximum volume of ECOs can be traded in an ECO Opening Auction, subject to the proposed ECO Auction Collar. As further proposed, if there is more than one price at which the maximum volume of ECOs can be traded within the ECO Auction Collar, the ECO Auction Price would be the price closest to the midpoint of the ECO Auction Collar, or, if the midpoint falls within such prices, the ECO Auction Price would be the midpoint, provided that the ECO Auction Price would not be lower (higher) than the highest (lowest) price of an ECO to buy (sell) that is eligible to trade in the ECO Opening (or Reopening) Auction Process. The concept of an ECO Auction Price is consistent with the concept of "single market clearing price" set forth in current Rule 6.91-O(a)(2)(i)(B). For Pillar, the Exchange proposes to determine the ECO Auction Price in a manner that is based in part on how an Indicative Match Price is determined for trading of cash equity securities, as set forth in Rule 7.35-E(a)(8)(A), and how the Exchange proposes to determine the price for Auctions on Pillar for single-leg options trading.³⁹

Finally, as proposed, if the ECO Auction Price would be a sub-penny price, it would be rounded to the nearest whole penny, which text is based on current Rule 6.91-O(a)(2)(i)(B), with a difference that the current rule refers to the midpoint of the Complex NBBO (which could be a sub-penny

³⁸ <u>See Single-Leg Pillar Filing (defining Auction Collars in Rule 6.64P-O(a)(2)).</u>

³⁹ <u>See Single-Leg Pillar Filing (describing Rule 6.64P-O(a)(9)).</u>

price and if so, is rounded down to the nearest penny) as opposed to referring to the ECO Auction Price, which would be a new Pillar term for trading ECOs, which price, if in sub-pennies, would be rounded (up or down) to the nearest MPV.

Proposed Rule 6.91P-O(d)(3)(B)(i) would provide that an ECO to buy (sell) with a limit price at or above (below) the upper (lower) ECO Auction Collar would be included in the ECO Auction Price calculation at the price of the upper (lower) ECO Auction Collar, but ranked for participation in the ECO Opening (or Reopening) Auction Process in price-time priority based on its limit price. This proposed text is based in part on current Rule 6.91-O(a)(2)(i)(B). The proposed rule is also based on how the Exchange processes auctions for cash equity trading, as described in Rules 7.35-E(a)(10)(B) and (a)(6) and how the Exchange proposes to process Auctions on Pillar for single-leg options trading.⁴⁰

Proposed Rule 6.91P-O(d)(3)(B)(ii) would provide that locking and crossing ECOs in a complex strategy would trade at the ECO Auction Price. As further proposed, if there are no locking or crossing ECOs in a complex strategy at or within the ECO Auction Collars, the Exchange would open the complex strategy without a trade. This proposed text would be new and is based in part on Rule 6.64P-O(d)(2)(B) for single-leg options, which describes when an option series could open without a trade.⁴¹

• Proposed Rule 6.91P-O(d)(4) would describe the "ECO Order Processing during ECO Opening Auction Process." Because the Exchange would be using the same Pillar auction functionality for ECO trading that is used for its cash equity market and that the Exchange is proposing for single-leg options trading, the Exchange proposes to apply existing Pillar auction functionality regarding how to process ECOs that may be received during the period when an ECO Auction Process is ongoing.

Accordingly, as proposed, new ECOs and ECO Order Instructions (as defined in proposed Rule 6.91P-O(a)(6), described above) that are received when the Exchange is conducting the ECO Opening Auction Process for the complex strategy would be accepted but would not be processed until after the conclusion of this process. As further proposed, when the Exchange is conducting the ECO Opening Auction Process, ECO Order Instructions would be processed as follows:

⁴⁰ See Single-Leg Pillar Filing (describing Rules 6.64P-O(a)(9)(B)(i) and 6.64P-O(b)).

⁴¹ <u>See Single-Leg Pillar Filing (describing Rule 6.64P-O(d)(2)(B)).</u>

- Proposed Rule 6.91P-O(d)(4)(A) would provide that an ECO Order Instruction received during the ECO Opening Auction Process would not be processed until after this process concludes if it relates to an ECO that was received before the process begins and that any subsequent ECO Order Instruction(s) relating to such ECO would be rejected if received during the ECO Opening Auction Process when a prior ECO Order Instruction is pending.
- Proposed Rule 6.91P-O(d)(4)(B) would provide that an ECO Order Instruction received during the ECO Opening Auction Process would be processed on arrival if it relates to an order that was received during this process.

Proposed Rule 6.91P-O(d)(4) and sub-paragraphs (A) and (B) are based on both current Rule 7.35-E(g) and its sub-paragraphs (1) and (2) and Rule 6.64P-O(e) and its sub-paragraphs (1) and (2) (as described in the Single-Leg Pillar Filing) with differences only to reference the defined term ECO Order Instruction and to refer to the ECO Opening Auction Process. The Exchange believes that the proposed rule text would provide transparency regarding how ECO Order Instructions that arrived during the ECO Opening Auction Process would be processed.

- Proposed Rule 6.91P-O(d)(5) would describe the "Transition to continuous trading" after the ECO Opening Auction Process. As proposed, after the ECO Opening Auction, ECOs would be subject to ECO Price Protection, per proposed Rule 6.91P-O(g)(2) (as described below) and, if eligible to trade, would trade as follows:
 - Proposed Rule 6.91P-O(d)(5)(A) would provide that ECOs received before the complex strategy was opened that did not trade in whole in the ECO Opening Auction Process and that lock or cross other ECOs or leg markets in the Consolidated Book would trade pursuant to proposed Rule 6.91P-O(e) (discussed below) regarding the handling of ECOs during Core Trading Hours; otherwise, such ECOs would be added to the Consolidated Book. This provision is based on the (last sentence) of current Rule 6.91-O(a)(2)(i)(B) and (C), with non-substantive differences to use Pillar terminology.
 - Proposed Rule 6.91P-O(d)(5)(B) would provide that ECOs received during the ECO Opening Auction Process would be processed in time sequence relative to one another based on original entry time. This proposed rule is based on both current functionality and how the Exchange proposes to process orders in an option series that were received during an Auction Processing

Period, as described in the Single-Leg Pillar Filing for Rule 6.64P-O(a)(6).

Execution of ECOs During Core Trading Hours. Proposed Rule 6.91P-O(e) would describe how ECOs would be processed during Core Trading Hours.

Proposed Rule 6.91P-O(e)(1) would provide that once a complex strategy is open for trading, an ECO would trade with the best-priced contra-side interest as follows:

Proposed Rule 6.91P-O(e)(1)(A) relates to ECOs that are permitted to • trade with the leg markets and would provide that if, at a price, the leg markets can trade with an eligible ECO,⁴² in full or in a permissible ratio, the leg markets would trade first at that price, pursuant to proposed Rule 6.76AP-O,⁴³ until the quantities on the leg markets are insufficient to trade with the ECO, at which time such ECO would trade with contra-side ECOs resting in the Consolidated Book at that price, which is based on Rule 6.91-O(a)(2)(ii).⁴⁴ Although the current rule makes clear that the leg markets have first priority, at a price, to trade with an ECO in full or in a permissible ratio, the proposed rule would add text to specify that an ECO may trade with another ECO at the leg market price only after such ECO has executed to the extent possible with the leg markets at that price. In other words, such ECO must first exhaust any available interest in the leg markets at that price that can satisfy the ECO, in full or in a permissible ratio, before it may trade with another ECO at that price.

This proposed description regarding how ECOs would trade with other ECOs is consistent with the rules of the BOX, and is therefore not new or novel.⁴⁵ Per BOX Rule 7240(b)(2)(ii), "[a] Complex Order for which a

⁴² <u>See proposed Rule 6.91P-O(e)(1)(C) and (D) (for description of ECOs that are not eligible to trade with the leg markets).</u>

⁴³ <u>See Single-Leg Pillar Filing (describing Rule 6.76AP-O, Order Execution and Routing, which is the substantively identical Pillar version of current Rule 6.76AP-O).</u>

⁴⁴ See Rule 6.91-O(a)(2)(ii) (providing that "[i]f, at a price, the leg markets can execute against an incoming [ECO] in full (or in a permissible ratio), the leg markets will have first priority at that price and will trade with the incoming [ECO]pursuant to Rule 6.76A before [ECO] resting in the Consolidated Book can trade at that price").

⁴⁵ See BOX Rule 7240(b)(2)(ii). See also Securities Exchange Act Release Nos. 69027 (March 4, 2013) 78 FR 15093 (March 8, 2013) (Notice of Proposed Rule Change, as Modified by Amendment No. 1, regarding, among other things, allowing the execution of certain Complex Orders to trading at the same price as best-priced interest in the BOX Book after such eligible leg interest has been

leg of such Complex Order 's underlying Strategy is not in a one-to-one ratio with each other leg of such Strategy" must first trade with all eligible interest in the leg markets, i.e., "for all of the quantity available at the best price in a permissible ratio until the quantities remaining on the BOX Book are insufficient to execute against the Complex Order while respecting the ratio."⁴⁶ And, after such execution on the BOX Book, "the remaining quantity of the Complex Order may execute against other Complex Orders and the component Legs of the Complex Order may trade at prices equal to the corresponding prices on the BOX Book."⁴⁷

Consistent with BOX Rule 7240(b)(2)(ii), proposed Rule 6.91P-O(e)(1)(A) would provide that an ECO that is eligible to trade with the leg markets must first trade with the leg markets, at a price, to the extent possible (i.e., in full or in a permissible ratio) before that ECO can trade at the same price with another ECO.⁴⁸ As proposed, such ECO would never trade ahead of interest (Customer or otherwise) in the leg markets if that interest is sufficient to satisfy the ECO in full or in a permissible ratio. However, such ECO may execute with another ECO, at a price, after exhausting eligible leg market interest -- Customer or otherwise -- at that price if the leg markets cannot satisfy the ratio spread of the ECO).⁴⁹ Thus, per proposed Rule 6.91P-O(e)(1)(A), such ECO would be eligible to trade with contra-side ECOs resting in the Consolidated Book at the same price, which is consistent with BOX's rules.⁵⁰

- ⁴⁷ <u>See BOX Rule 7240(b)(2)(ii).</u>
- $\frac{48}{2}$ See proposed Rule 6.91P-O(e)(1)(A).
- ⁴⁹ <u>See id.</u> Unlike BOX, the Exchange has deemed it unnecessary to refer to ECOs with other than one-to-one ratios and believes the proposed rule text is clear and concise in stating that if the leg markets have sufficient quantity to satisfy an ECO in full or in a permissible ratio, such leg markets have first priority to trade with such ECO (ahead of any ECOs resting in the Consolidated Book at that price) unless or until the leg market interest cannot satisfy the ECO ratio spread.
- ⁵⁰ The Exchange does not propose to copy into Rule 6.91P-O(e)(1)(A) the requirement of current Commentary .02 to Rule 6.91-O that at least one leg of an ECO must execute at a price better than the corresponding leg market price containing Customer interest because this requirement would be incorporated into how Complex Only Orders would function on the Exchange, and therefore the Exchange no longer needs to separately specify that requirement. <u>See</u> proposed

exhausted) ("BOX Notice"); 69419 (April 19, 2013) 78 FR 24449 (April 25, 2013) (Order Approving BOX Notice) ("BOX Approval Order") (SR-BOX-2013-01).

⁴⁶ <u>See BOX Rule 7240(b)(2)(ii)</u>. The "BOX Book" is conceptually the same as the leg markets and are defined as "the electronic book of orders on each single series of options maintained by the BOX Trading Host." <u>See BOX Rule 100(a)(10)</u>.

The Exchange believes this proposed Rule makes clear that the priority of the leg markets remains primary -- as such interest is afforded the opportunity to trade at the best price, but also ensures that ECO trading opportunities are maximized. As noted by BOX, the Exchange proposes to apply the "straightforward principle" of allowing the execution of an ECO against another ECO once any eligible interest on the leg markets at the same net price has already been executed.⁵¹

The following example illustrates how proposed Rule 6.91P-O(e)(1)(A) would be applied.

EXAMPLE: Assume an ECO consisting of the simultaneous purchase of one Option A instrument and two Option B instruments (A+2B).

The interest in the leg markets is initially as follows:

Leg market for Option A is:

Order to buy 2 at \$1.00	Order to sell 20 at \$1.06
Order to buy 5 at \$0.99	Order to sell 2 at \$1.10

Leg market for Option B is:

Order to buy 3 at \$1.00 Order to sell 3 at \$1.1	Order to sell 3 at \$1.10
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Complex Order Book for Strategy A+2B:

ECO to buy 5 at \$2.90

The DBBO is \$3.00 bid, \$3.26 offered.

In this example, an ECO is received to sell 2 A+2B at \$3.00. This order can match with either the existing \$3.00 bid on A+2B in the Complex Order Book or with the interest on the leg markets for \$3.00. However, as the Exchange proposes to give priority to interest on the leg markets over executable ECOs, 1 unit of the incoming order to sell A+2B at \$3.00 will execute against the orders on the respective legs (selling 1 A and 2 B at

Rule 6.91P-O(a)(1)(C) (requiring of Complex Only Order that, when there is displayed Customer interest on all legs of the complex strategy, such Complex Only Order must price improve at least a portion of such displayed Customer interest).

⁵¹ <u>See BOX Notice</u>, 78 FR, at 15093.

 $1.00 \operatorname{each} (1.00 + 2(1.00) = 3.00)).$ After this initial execution against the leg markets, the leg markets are as follows:

Leg Market for Option A is:

Order to buy 1 at \$1.00	Order to sell 20 at \$1.06		
Order to buy 5 at \$0.99	Order to sell 2 at \$1.10		
Leg Market for Option B is:			
Order to buy 1 at \$1.00	Order to sell 3 at \$1.10		

Complex Order Book for Strategy A+2B:

ECO to buy 2 at \$3.00	ECO to sell 10 at \$3.20
ECO to buy 5 at \$2.90	

One ECO to sell A+2B at \$3.00 remains

Because insufficient quantity remains on the bid of B at \$1.00 to combine with the bid on A (of \$1.00) to respect the ECO ratio(i.e., the incoming ECO seeks to sell 2B, but the remaining leg market bid is for 1B), the remaining order to sell 1 A+2B at \$3.00 would be executed against the resting ECO to buy at \$3.00. In the above scenario, consistent with proposed Rule (e)(1)(A), the Exchange may trade two ECOs without at least one leg having a price better than the best prices on the leg markets.⁵²

The Exchange believes that proposed Rule 6.91P-O(e)(1)(A) would benefit market participants because it is designed to protect the priority of orders on the leg markets by requiring an ECO to execute first against interest on the leg markets at the best price to the extent possible, i.e., in full or in a permissible ratio, and only then permitting an ECO to execute against another ECO at that price. Thus, following the executions against the best-priced interest on the leg markets, an ECO would no longer be executable against interest on the leg markets at the best price because the leg markets would lack sufficient quantity to fill the ECO in a permissible ratio at that price. Absent this provision in Rule 6.91P-O(e)(1)(A), the Exchange believes that otherwise executable ECOs at the leg market price would lose execution opportunities without any benefit to interest on the leg markets, which is unable to trade with the ECO at that price.⁵³

⁵² See proposed Rule 6.91P-O(e)(1)(A); see also BOX Rule 7240(b)(2)(ii)).

⁵³ <u>See BOX Notice</u>, 78 FR at 15093.

Because "orders are executable against each other only when both the price and the quantity of the orders match," the Exchange believes it is appropriate (and does not deny leg markets priority) to allow ECOs to trade with other ECOs at the leg market price when such eligible leg market interest at that price has been exhausted.⁵⁴

- Proposed Rule 6.91P-O(e)(1)(B) would provide that an ECO would not trade with orders in the leg markets designated as AON, FOK, or with an MTS modifier. This proposed text would be new and is based in part on existing functionality (for AON and FOK) and also reflects the Exchange's proposed treatment under Pillar of its new MTS modifier for orders in the leg markets.⁵⁵ Consistent with current functionality, orders with an AON, FOK, or (new) MTS modifier are conditional and, by design, will miss certain execution opportunities. The Exchange believes that this proposed rule would simplify the operation of electronic complex order trading and would add clarity and transparency that ECOs would not trade with orders that have conditional size-related instructions.
- Proposed Rule 6.91P-O(e)(1)(C) would provide that an ECO designated as Complex Only would be eligible to trade solely with another ECO and would not trade with the leg markets. The proposed Complex Only Orders are based on existing functionality for PNP Plus orders, with updated functionality available on Pillar.⁵⁶ The Exchange proposes on Pillar not to use the term "PNP Plus Order" and instead rename this order type as a Complex Only Order, which is more aptly named, and is consistent with similar order types available on other options exchanges.⁵⁷

⁵⁴ <u>See</u> BOX Approval Order, 78 FR, at 24449.

⁵⁵ <u>See Single-Leg Pillar Filing (describing Minimum Trade Size or MTS Modifier in Rule 6.62P-O(i)(3)(B)).</u>

See Rule 6.91-O(b)(1) (providing that ECOs may be designated as Limit Orders designated as PNP Plus); Rule 6.62-O(y) (describing PNP Plus orders as ECOs that may only trade with other ECOs, but which will continuously be repriced if locking or crossing the Complex BBO). Unlike the PNP Plus Order, which trades inside the Complex BBO (conceptual equivalent to the DBBO), the Complex Only Order may trade with another ECO at the DBBO, unless there is certain displayed Customer interest on the Exchange (as described herein), in which case the Complex Only Order must trade inside the DBBO.

⁵⁷ See proposed Rule 6.91P-O(e)(1)(C). Other options exchanges likewise offer Complex Orders that trade only with Complex Orders. See, e.g., Cboe Rule 5.33(a) (defining "Complex Only" order as an ECO "that a [Cboe] Market-Maker may designate to execute only against complex orders in the COB and not Leg into the Simple Book"). The proposed Complex Only Order (like its predecessor PNP Plus Order) would be available to all market participants.

As further proposed, an ECO designated as Complex Only must trade at a price at or within the DBBO; provided that, if the DBB (DBO) is calculated using the Exchange BBO for all legs of the complex strategy and all such Exchange BBOs have displayed Customer interest, the Complex Only Order would not trade below (above) one penny (\$0.01) times the smallest leg ratio inside the DBB (DBO), regardless of whether there is sufficient quantity on such leg markets to satisfy the ECO.⁵⁸ This proposed requirement is designed to ensure that, if there is displayed Customer interest on all legs of the strategy on the Exchange, a Complex Only Order would price improve at least some portion of such interest making up the DBBO. Thus, a Complex Only Order does not get the benefit of the priority treatment set out in proposed Rule 6.91P-O(e)(1)(A). If a Complex Only Order is unable to trade within the aforementioned price parameters, it would remain on the Consolidated Book until it can trade with another ECO per the requirements of proposed Rule 6.91P-O(e)(1)(C).

As noted above, the (renamed) Complex Only Order type is based on existing PNP Plus Order functionality, with updated functionality for trading on Pillar. Specifically, unlike the operation of the PNP Plus Order, the Exchange would not reprice a resting Complex Only Order and instead would restrict a Complex Only Order from trading until such order could trade at a price at or inside the DBBO, as described above. The Exchange believes that allowing Complex Only Orders to trade up to the DBBO unless there is displayed Customer interest on all legs of the strategy on the Exchange at the DBBO (as described above), provides market participants additional trading opportunities while still protecting displayed Customer interest on the Exchange.

The proposed operation of the Complex Only Order, insofar as it protects displayed Customer interest in the leg markets when an ECO trades with another ECO, is consistent with the rules of NYSE American and is therefore not new or novel.⁵⁹

⁵⁸ <u>See</u> proposed Rule 6.91P-O(e)(1)(C). Because Complex Only Orders would never trade with the leg markets, whether or not there is sufficient quantity at the displayed Customer price is irrelevant to the operation of this order type.

⁵⁹ <u>See</u> NYSE American Rule 980NY, Commentary .02(i) (providing that, when executing an ECO, if each leg of the contra-side Derived BBO --calculated using the BBO from the Consolidated Book for each of the options series comprising a given complex order strategy per Rule 900.2NY(7)(a)(b)-- for the components of the ECO includes Customer interest, the price of at least one leg of the order must "trade at a price that is better than the corresponding price of all customer bids or offers in the Consolidated Book for the same series, by at least one standard trading increment as defined in Rule 960NY," which minimum trading increment is one cent (\$0.01). <u>See</u> NYSE American Rule 960NY(b).

- Proposed Rule 6.91P-O(e)(1)(D) would provide that ECOs with any one of the following complex strategies would be ineligible to trade with the leg markets and would be processed as a Complex Only Order:
 - a complex strategy with more than five legs;
 - a complex strategy with two legs and both legs are buying or both legs are selling, and both legs are calls or both legs are puts; or
 - a complex strategy with three or more legs and all legs are buying or all legs are selling.

The proposal to restrict ECOs with more than five legs from trading with the leg markets (and being treated as Complex Only Orders), per proposed Rule 6.91P-O(e)(1)(D)(i), would be new functionality under Pillar and is designed to help Market Makers manage risk. The Exchange currently requires Market Makers to utilize certain risk controls for quoting to help mitigate risk particularly during periods of market volatility, and would require Market Makers to continue to use risk controls on Pillar.⁶⁰ Because the execution of a multi-legged ECO is a single transaction, comprising discrete legs that must all trade simultaneously, allowing ECOs with more than five legs to trade with the leg markets may allow a multi-legged transaction to occur before a Market Maker's risk settings would be triggered. This proposed limitation is designed to prevent such multi-legged transactions, which would help ensure that Market Makers continue to provide liquidity and do not trade above their established risk tolerance levels. The Exchange notes that this restriction is consistent with similar limits established on other options exchanges.⁶¹

Proposed Rule 6.91P-O(e)(1)(D)(ii)-(iii), which treats ECOs with certain complex strategies as Complex Only Orders, is based in part on current Rule 6.91-O(b)(4)(i)-(ii), with a difference that currently, such so-called "directional strategies" are rejected. The proposed handling under Pillar would be less restrictive than the current rule because such strategies

⁶⁰ <u>See Single-Leg Pillar Filing (describing the activity-based controls with updated functionality under Pillar that Market Makers would be required to use to manage risk in connection with their quotes, per Rule 6.40P-O(a)(3) and (b)(2)). The proposed Pillar risk controls are substantively identical to the existing risk controls set forth in Rules 6.40-O(b)(2), (c)(2) and (d)(2) and Commentary .04 to Rule 6.40-O.</u>

⁶¹ <u>See, e.g.</u>, Cboe Rule 5.33(g) (providing the ECOs may be restricted from trading with the leg markets if such ECO has more than a maximum number of legs, which maximum the Exchange determines on a class-by-class basis and may be two, three, or four).

would not be rejected and is consistent with the treatment of such complex strategies on other options exchanges.⁶² As with the proposal to restrict ECOs with more than five legs trading with the leg markets, this proposed restriction is also designed to ensure that Market Maker risk settings would not be bypassed. Because ECOs with directional strategies are typically geared towards an aggressive directional capture of volatility, such ECOs can represent significantly more risk than trading any one of the legs in isolation. As such, because Market Maker risk settings are only triggered after the entire ECO package has traded, the Exchange believes this proposed rule change would help ensure fair and orderly markets by preventing such orders from trading with the leg markets, which would minimize risk to Market Makers.

Proposed Rule 6.91P-O(e)(2) would provide that the Exchange would evaluate trading opportunities for a resting ECO when the leg markets comprising a complex strategy update, provided that during periods of high message volumes, such evaluation may be done less frequently. The Exchange believes that this proposed rule promotes transparency of the frequency with which the Exchange would be evaluating the leg markets for updates.

The Exchange believes the proposed handling of ECOs during Core Trading is reasonably designed to facilitate increased interaction between orders on the leg markets and ECOs, and to do so in such a manner as to ensure a dynamic, real-time trading mechanism that maximizes the opportunity for trade executions for both ECOs and orders on single option series.

Execution of ECOs During a COA. Proposed Rule 6.91P-O(f) would describe how ECOs would trade during a COA. The COA Process is currently described in Rule 6.91-O(c). Under Pillar, the Exchange proposes to modify the COA process, including by relying on the DBBO (as described above) for pricing, allowing a COA Order to initiate a COA only on arrival, and streamlining the rule text describing the circumstances that would cause an early end to a COA.

As proposed, a COA Order received when a complex strategy is open for trading and that satisfies the requirements of paragraph (f)(1) of the proposed Rule would initiate a COA only on arrival after trading with eligible interest per proposed Rule 6.91P-O(f)(2)(A) (described below). As further proposed, a COA Order would be rejected if entered during a pre-open state or if entered during Core Trading Hours with a time-in-force of FOK or GTX. This proposed order handling is based in part on current Rule 6.91-O(c)(1)(ii), which requires that COA Orders be submitted during Core Trading Hours. The proposed rejection of

⁶² <u>See, e.g.</u>, Nasdaq ISE Options 3, Section 14 (d)(3)(A)-(B) (providing that ECOs with these complex strategies may trade only with other ECOs).

such orders during a pre-open state would be new under Pillar and is consistent with the Exchange's proposed functionality that a COA Order would initiate a COA only on arrival. In addition, the proposal would clarify that COA Orders designated as FOK or GTX would be rejected, even if submitted during Core Trading Hours, is based on current functionality and this addition would add further detail and clarification to the rule text. Finally, as further proposed, only one COA may be conducted at a time in a complex strategy, which is identical to text in current Rule 6.91-O(c)(3).

Proposed Rule 6.91P-O(f)(1) would describe the conditions required for the "Initiation of a COA." As proposed, to initiate a COA, the limit price of the COA Order to buy (sell) must be higher (lower) than the best-priced, same-side ECOs resting on the Consolidated Book and equal to or higher (lower) than the midpoint of the DBBO, which is designed to encourage aggressively-priced COA Orders and, in turn, to attract a meaningful number of RFR Responses to potentially provide price improvement of the COA Order's limit price. This proposed text is based in part on current Rule 6.91-O(c)(3)(i), with a difference to add a new "midpoint of the DBBO" requirement to reflect this new concept under Pillar. As further proposed, a COA Order that does not satisfy these pricing parameters would not initiate a COA and, unless it is cancelled (i.e., if an IOC), such order would be ranked in Consolidated Book and processed as an ECO, per proposed Rule 6.91P-O(e) (described above). This would be new under Pillar, as current Rule 6.91-O(c)(3) allows an order designated for COA to reside on the Consolidated Book unless or until such order meets the requisite pricing conditions to initiate a COA. The Exchange believes this proposed change would simplify the COA process and promote the orderly initiation of COAs, which is essential to maintaining a fair and orderly market for ECOs.

Finally, as proposed, once a COA is initiated, the Exchange would disseminate a Request for Response message, the Response Time Interval would begin and, during such interval, the Exchange would accept RFR Responses, including ECO GTX Orders. This proposed text is based on current functionality set forth in Rule 6.91-O(c), with non-substantive differences to use Pillar terminology, including using the new Pillar term for ECO GTX Orders.

Proposed Rule 6.91P-O(f)(2) would describe the "Pricing of a COA." As proposed, a COA Order to buy (sell) would initiate a COA at its limit price, unless its limit price locks or crosses the DBO (DBB), in which case it would initiate a COA at a price equal to one penny (\$0.01) times the smallest leg ratio inside the DBO (DBB) (the "COA initiation price"). This proposed functionality utilizes the new concept of a DBBO, is consistent with current functionality (that relies on substantively similar concept of Complex BBO), and ensures (consistent with current functionality) that interest on the leg markets maintain priority.

• Proposed Rule 6.91P-O(f)(2)(A) would provide that prior to initiating a COA, a COA Order to buy (sell) would trade with any ECO to sell (buy)

resting in the Consolidated Book that is priced equal to or lower (higher) than the DBO (DBB), unless the DBO (DBB) is calculated using the Exchange BBO for all legs of the complex strategy and all such Exchange BBOs have displayed Customer interest, in which case the COA Order will trade up (down) to one penny (0.01) times the smallest leg ratio inside the DBO (DBB) (i.e., priced better than the leg markets) and any unexecuted portion of such COA Order would initiate a COA. This proposed rule is based on current Rule 6.91-O(c)(2) with a difference to use the Pillar concept of DBBO rather than refer to the contra-side Complex BBO and to specify that the COA Order must price improve the DBBO when there is displayed Customer interest on the Exchange leg markets, as noted above.

- Proposed Rule 6.91P-O(f)(2)(B) would provide that a COA Order would not be eligible to trade with the leg markets until after the COA ends, which added detail, while not explicitly stated in the current rule, is consistent with current functionality described in Rules 6.91-O(c)(7)(A) and (B) that only RFR Responses (i.e., GTX orders) and ECOs will be allocated in a COA and that the COA Order would not trade with the leg markets until after the COA allocations.
- Proposed Rule 6.91P-O(f)(3) would set forth the conditions that would result in the "Early End to a COA" (i.e., a COA ending prior to the expiration of the Response Time Interval), which conditions are consistent with current Rule 6.91-O(c)(6) as described below. Currently, as described in Rule 6.91-O(c)(3), the Exchange takes a snapshot of the Complex BBO at the start of a COA and uses that snapshot as the basis for determining whether to end a COA early. Under Pillar, the Exchange would no longer use a snapshot of the Complex BBO as the basis for determining whether to end a COA early but would instead rely on the DBBO (calculated per proposed Rule 6.91P-O(a)(5)), which is updated as market conditions change (including during the Response Time Interval).⁶³ The Exchange believes relying on the DBBO is appropriate and would benefit investors as it would provide real-time trading information that includes an additional layer of price protection for ECO trading as the DBBO is based on Exchange BBOs, when available, or the ABBO. The Exchange proposes a COA would end early under the following conditions:
 - Proposed Rule 6.91P-O(f)(3)(A) would provide that a COA would end early if the Exchange receives an incoming ECO or COA Order to buy (sell) in the same complex strategy that is priced

⁶³ As discussed <u>infra</u> regarding proposed Rule 6.91P-O(a)(5) and the definition of the Derived BBO, "the DBBO will be updated as the Exchange BBO or ABBO, as applicable, is updated").

higher (lower) than the initiating COA Order to buy (sell), which proposed text is based on current Rule 6.91-O(c)(6)(B)(i) without any substantive differences.

- Proposed Rule 6.91P-O(f)(3)(B) would provide that a COA would end early if the Exchange receives an RFR Response that locks or crosses the DBBO on the same-side as the COA Order, which proposed text is based on current Rule 6.91-O(c)(6)(A)(i), except (as noted above) it refers to the DBBO rather than the "initial Complex BBO."
- Proposed Rule 6.91P-O(f)(3)(C) would provide that a COA would end early if the leg markets update causing the DBBO on the sameside as the COA Order to lock or cross (i) any RFR Response(s) or (ii) if no RFR Responses have been received, the best-priced, contra-side ECOs. This proposed rule is based in part on current Rule 6.91-O(c)(6)(C)(i), with differences to use Pillar terminology, including reference to the DBBO.
- Proposed Rule 6.91P-O(f)(3)(D) would provide that a COA would end early if the leg markets update causing the contra-side DBBO to lock or cross the COA initiation price. This proposed rule is based in part on current Rule 6.91-O(c)(6)(C)(ii), except that it would refer to the DBBO and the COA initiation price, which would be new concepts under Pillar.

Because the DBBO may be calculated using the ABBO for a given leg, the Exchange notes that it would be new under Pillar to have a COA end early based on (locking or crossing) market conditions outside of the Exchange. The Exchange believes this proposed functionality would benefit market participants by preventing COA Orders from executing at prices too far away from the prevailing market for that complex strategy. In addition, the Exchange believes this proposed functionality would promote internal consistency and benefit market participants because, as proposed, the execution of ECOs on the Exchange, including whether such ECO may initiate a COA as a COA Order, is based on the DBBO. As such, the Exchange believes it is appropriate and to the benefit of market participants that the early termination of a COA likewise be based on the DBBO -- regardless of whether the prices used to calculate such DBBO include (or consist entirely of) ABBO prices.

• Proposed Rule 6.91P-O(f)(4) would set forth the "Allocation of COA Orders" after a COA either ends early or after the expiration of the Response Time Interval. Current Rule 6.91-O(c)(7)(A) sets forth that the COA-eligible orders are allocated against the best-priced interest received in the COA at each price on a "Size Pro Rata Basis," as that concept is

defined in Rule 6.75-O(f)(6). Under Pillar, the allocation of the COA Order would be based on price-time priority, rather than Size Pro Rata, which would align the allocation of ECOs in a COA with standard processing of ECOs on the Exchange, which adds transparency and consistency to ECO processing on the Exchange as well as internal consistency to Exchange rules, all to the benefit of market participants.

Proposed Rule 6.91P-O(f)(4)(A) would provide that RFR Responses to sell (buy) that are priced lower (higher) than a COA Order to buy (sell) would trade in price-time priority up (down) to the DBBO; provided, however, that if all legs of the DBB (DBO) are calculated using Exchange BBOs and all such Exchange BBOs have displayed Customer interest, RFR Responses to sell (buy) would not trade below (above) one penny (\$0.01) times the smallest leg ratio inside the DBB (DBO). This proposed rule would ensure that the COA Order would not trade at a worse price than the leg markets and would price improve the DBBO where there is displayed Customer interest on all legs of the complex strategy on the Exchange. The proposed text is based in part on current Rule 6.91-O(c)(7)(A) insofar as it ensures that the COA Order would trade with the best-priced RFR Responses received in the COA and differs substantively because the COA Order would not trade ahead of certain displayed Customer interest and, as discussed above, the COA Order would trade with RFR Responses in price-time priority (and not Size Pro Rata).

Proposed Rule 6.91P-O(f)(4)(B) would provide that after COA allocations pursuant to paragraph (f)(4)(A) of this proposed Rule, any unexecuted balance of a COA Order (including COA Orders designated as IOC) would be eligible to trade with any contra-side interest, including the leg markets unless the COA Order is designated or treated as a Complex Only Order. This proposed text is based on existing functionality and makes explicit that a COA Order would trade solely with complex interest (and not the leg markets) during a COA. This proposed rule is designed to provide clarity and transparency that the remaining balance of a COA Order would be eligible to trade with the leg markets after the COA ends.

Proposed Rule 6.91P-O(f)(4)(C) would provide that after a COA Order trades pursuant to proposed Rule 6.91P-O(f)(4)(B), any unexecuted balance of a COA Order that is not cancelled (i.e., if an IOC) would be ranked in the Consolidated Book and processed as an ECO pursuant to paragraph (e) of this Rule. The proposed text is based on current Rule 6.91-O(c)(7)(B) without any substantive differences.

Proposed Rule 6.91P-O(f)(5) would set forth "Prohibited Conduct related to COAs," and is based on the first sentence of current Commentary .04 to Rule 6.91-O with one substantive differences: to add reference to quotes, and would provide that a pattern or practice of submitting "unrelated *quotes or* orders that

cause a COA to conclude early would be deemed conduct inconsistent with just and equitable principles of trade,"⁶⁴ which addition would broaden the scope of "Prohibited Conduct" to the benefit of market participants and would also add clarity and transparency to Exchange rules.

ECO Risk Checks. Proposed Rule 6.91P-O(g) would describe the "ECO Risk Checks," which are designed to help OTP Holders and OTP Firms to effectively manage risk when trading ECOs. Current Commentaries .03, .05, and .06 of Rule 6.91-O set forth the existing risk checks for ECOs. With the transition to Pillar, the Exchange proposes to modify and enhance its existing risk checks for ECOs, as follows:

• Proposed Rule 6.91P-O(g)(1) would set forth the "Complex Strategy Limit." As proposed, the Exchange would establish a limit on the maximum number of new complex strategies that may be requested to be created per MPID, which limit would be announced by Trader Update.⁶⁵ As further proposed, when an MPID reaches the limit on the maximum number of new complex strategies, the Exchange would reject all requests to create new complex strategies from that MPID for the rest of the trading day. In addition, and notwithstanding the established Complex Strategy Limit, the Exchange proposes that it may reject a request to create a new complex strategy from any MPID whenever the Exchange determines it is necessary in the interests of a fair and orderly market.

This is new functionality proposed under Pillar but is conceptually similar to the Complex Order Table Cap (the "Cap"), set forth in Commentary .03 to Rule 6.91-O, which Cap (like the Complex Strategy Limit), would help maintain a fair and orderly market because it would operate as a system protection tool that enables the Exchange to prevent any single MPID from creating more than a limited number of complex strategies during the

⁶⁵ The Exchange has proposed to add the definition of MPID to proposed Rule 1.1, which would refer to "the identification number(s) assigned to the orders and quotes of a single ETP Holder, OTP Holder, or OTP Firm for the execution and clearing of trades on the Exchange by that permit holder. An ETP Holder, OTP Holder, or OTP Firm may obtain multiple MPIDs and each such MPID may be associated with one or more sub-identifiers of that MPID." <u>See</u> Single-Leg Pillar Filing.

⁶⁴ <u>See</u> proposed Rule 6.91P-O(f)(5) (emphasis added). In addition, rather than copy into proposed Rule 6.91P-O the second sentence of current Rule 6.91-O, Commentary .04, which provides that dissemination of information related to COA Orders to third parties would also be deemed as conduct inconsistent with just and equitable principles of trade, the Exchange proposes to add more expansive language regarding this prohibited conduct to the order exposure rule. <u>See infra</u> for discussion of proposed change to Rule 6.47A-O.

trading day. The Exchange also notes that other options exchanges likewise impose a limit on new complex order strategies.⁶⁶

Proposed Rule 6.91P-O(g)(2) would set forth the ECO Price Protection. The existing ECO "Price Protection Filter" is set forth in Commentary .05 to current Rule 6.91-O (the "ECO Filter"). The proposed "ECO Price Protection" on Pillar would work similarly to how the current ECO price protection mechanism functions on the Exchange because an ECO would be rejected if it is priced a specified percentage away from the contra-side Complex NBB or NBO.⁶⁷ However, on Pillar, the Exchange proposes to use new thresholds and reference prices, which would not only simplify the existing price check, but it would also align the proposed functionality with the proposed "Limit Order Price Protection" for single-leg interest, thus adding uniformity to Exchange rules.⁶⁸ Although the mechanics of the ECO Price Protection would vary slightly from the existing Price Protection Filter, the goal of this feature would remain the same: to prevent the execution of ECOs that are priced too far away from the prevailing market for the same strategy and therefore potentially erroneous. Whereas the Away Market Deviation (vis a vis a DBBO based on an Exchange BBO) is designed to make sure that ECOs do not trade too far away from the prevailing market, the ECO Order Protection as proposed (and as is the case today) is to prevent the execution of ECOs that were potentially (inadvertently) entered at prices too far away from the prevailing market and, as such, this mechanism protects the order sender from itself.

Proposed Rule 6.91P-O(g)(2)(A) would provide that each trading day, an ECO to buy (sell) would be rejected or cancelled (if resting) if it is priced a Specified Threshold amount or more above (below) the Reference Price (as described below), subject to proposed paragraphs (g)(2)(A)(i)-(v) of the Rule as described below. Because ECO Price Protection would be applied each trading day, an ECO designated GTC would be re-evaluated

⁶⁷ As noted above, the Exchange proposes to define the Complex NBBO as the derived national best bid and derived national best offer for a complex strategy calculated using the NBB and NBO for each component leg of a complex strategy. <u>See</u> proposed Rule 6.91P-O(a)(2).

⁶⁸ <u>See Single-Leg Pillar Filing (Rule 6.62P-O(a)(3) sets forth the Limit Order Price</u> Protection applicable to Limit Orders and quotes).

⁶⁶ <u>See, e.g.</u>, Cboe Rule 5.33(a) (providing, in its definition of "complex strategy" that Cboe "may limit the number of new complex strategies that may be in the [Cboe] System at a particular time") and MIAX Rule 518(a)(6) (providing, in its definition of "complex strategy" that MIAX "may limit the number of new complex strategies that may be in the System at a particular time and will communicate this limitation to Members via Regulatory Circular").
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for ECO Price Protection on each day that it is eligible to trade and would be cancelled if the limit price is equal to or through the Specified Threshold.

- Proposed Rule 6.91P-O(g)(2)(A)(i) would provide that an ECO that arrives when a complex strategy is open for trading would be evaluated for ECO Price Protection on arrival. The Exchange has proposed similar functionality for single-leg options.⁶⁹
- Proposed Rule 6.91P-O(g)(2)(A)(ii) would provide that an ECO received during a pre-open state would be evaluated for ECO Price Protection after the ECO Opening Auction Process concludes.⁷⁰ The Exchange has proposed similar functionality for single-leg options.⁷¹
- Proposed Rule 6.91P-O(g)(2)(A)(iii) would provide that an ECO resting on the Consolidated Book before a trading halt would be reevaluated for ECO Price Protection after the ECO Opening Auction Process concludes. The Exchange has proposed similar functionality for single-leg options.⁷²
- Proposed Rule 6.91P-O(g)(2)(A)(iv) would provide that QCC Orders (per Rule 6.62P-O(g)(1)) would not be subject to ECO Price Protection, as the Exchange subjects such paired orders to distinct price validations.⁷³ The Exchange has proposed similar functionality for single-leg options.⁷⁴
- Proposed Rule 6.91P-O(g)(2)(A)(v) would provide that ECO Price Protection would not be applied if there is no Reference Price for

- ⁷¹ <u>See Single-Leg Pillar Filing (discussion regarding Rule 6.62P-O(a)(3)(A)(ii)).</u>
- ⁷² <u>See Single-Leg Pillar Filing (discussion regarding Rule 6.62P-O(a)(3)(A)(iii)).</u>
- ⁷³ <u>See Single-Leg Pillar Filing (discussion regarding Rule 6.62P-O(g)(1)(C) and (D) regarding price requirements for execution of QCC Orders and Complex QCC Orders, respectively).</u>
- ⁷⁴ <u>See Single-Leg Pillar Filing (discussion regarding Rule 6.62P-O(a)(3)(A)</u> excluding Cross Orders).

⁶⁹ See Single-Leg Pillar Filing (discussion regarding Rule 6.62P-O(a)(3)(A)(i)).

⁷⁰ <u>See discussion infra</u> regarding proposed Rule 6.91P-O(d), which describes the ECO Opening Auction Process (or Reopening after a Trading Halt) as well as the concepts of ECO Auction Collars and ECO Auction Price.

an ECO. The Exchange has proposed similar functionality for single-leg options.⁷⁵

Proposed Rule 6.91P-O(g)(2)(B) would specify the "Reference Price" used in connection with the ECO Price Protection. As proposed, the Reference Price for calculating ECO Price Protection for an ECO to buy (sell) would be the Complex NBO (NBB), provided that, immediately following an ECO Opening Auction Process, the Reference Price would be the ECO Auction Price or, if none, the Complex NBO (NBB). The Exchange believes that adjusting the Reference Price for ECO Price Protection immediately following an ECO Opening Auction would ensure that the most up-to-date price would be used to assess whether to cancel an ECO that was received during a pre-open state, including during a Trading Halt. The Exchange notes this functionality is consistent with the proposed operation of the Limit Order Price Protection for single-leg options.⁷⁶

As further proposed, there would be no Reference Price for an ECO if there is no NBBO for any leg of such ECO (i.e., the Exchange would not calculate a Complex NBB (NBO)), which text is based on current Rule 6.91-O, Commentary .05(c), except that the proposed rule would not reference OPRA because, as further proposed, for purposes of determining a Reference Price, the Exchange would not use an adjusted NBBO (i.e., such NBBO is implicitly reliant on information from OPRA).⁷⁷ The Exchange notes that using an unadjusted NBBO to calculate the Reference Price is based on how Limit Order Price Protection currently functions on the Exchange's cash equity market, as described in Rule 7.31-E(a)(2)(B) and is also consistent with the proposed operation of the Limit Order Price Protection for single-leg options.⁷⁸

⁷⁷ <u>See Single-Leg Pillar Filing (discussion regarding the definition of "NBBO" in</u> Rule 1.1 describing that the "NBBO" for purposes of options trading as referring to the national best bid or offer and that "[u]nless otherwise specified, the Exchange may adjust its calculation of the NBBO based on information about orders it sends to Away Markets, execution reports received from those Away Markets, and certain orders received by the Exchange").

⁷⁸ References to the NBBO, NBB, and NBO in Rule 7.31-E refer to using a determination of the national best bid and offer that has not been adjusted. <u>See</u>

⁷⁵ See Single-Leg Pillar Filing (discussion regarding Rule 6.62P-O(a)(3)(A)).

⁷⁶ See Single-Leg Pillar Filing (discussion regarding Rule 6.62P-O(a)(3)(B) describing that the Reference Price for Limit Order Price Protection would be adjusted immediately following an Auction would ensure that the most up-to-date price would be used to assess whether to cancel a Limit Order that was received during a pre-open state or would be reevaluated after a Trading Halt Auction).

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Proposed Rule 6.91P-O(g)(2)(C) would set forth the "Specified Threshold" used in connection with the ECO Price Protection. As proposed, the Specified Threshold for calculating ECO Price Protection would be \$1.00, unless determined otherwise by the Exchange and announced to OTP Holders and OTP Firms by Trader Update.

The Exchange believes that the proposed Specified Threshold of \$1.00 simplifies how the Reference Price would be calculated as compared to the calculations currently specified in Commentary .05 to Rule 6.91-O. In addition, consistent with Commentary .05(d), the Exchange proposes that the Specified Threshold could change, subject to announcing the changes by Trader Update. Providing flexibility in Exchange rules regarding how the Specified Threshold would be set is consistent with the rules of other options exchanges as well as the proposed functionality for the single-leg Limit Order Price Protection feature.⁷⁹

• Proposed Rule 6.91P-O(g)(3) would set forth the "Complex Strategy" Protections." The proposed protections are based on current Rule 6.91-O, Commentary .06, which are referred to as the "Debit/Credit Reasonability Checks." The Exchange believes this name change is appropriate because it more accurately conveys that the check applies solely to certain complex strategies and because (as discussed above), the Exchange proposes to refer simply to a "net price" as opposed to the "total net debit or credit price." The proposed Pillar Complex Strategy Protections would function similarly to the current Debit/Credit Reasonability Checks because potentially erroneously priced incoming ECOs would be rejected. However, rather than to refer to specified debit or credit amounts as a way to determine whether a given strategy is erroneously priced, the proposed rule would instead focus on the expectation of the order sender and what would result if the ECO were not rejected. Consistent with current functionality, the proposed Complex Strategy Protections are designed to prevent the execution of ECOs at prices that are inconsistent with/not aligned with their strategies.

As proposed, to protect an OTP Holder or OTP Firm that sends an ECO (each an "ECO sender") with the expectation that it would receive (or pay) a net premium but has priced the ECO such that the ECO sender would instead pay (or receive) a net premium, the Exchange would reject any

Single-Leg Pillar Filing (describing use of unadjusted NBBO for single-leg Limit Order Price Protection in Rule 6.62P-O(a)(3)(B)).

⁷⁹ See, e.g., Cboe Rule 5.34(b)(6) (describing the "Drill-Through Protection" and that Cboe "determines a default buffer amount on a class-by-class basis). See Single-Leg Pillar Filing (describing use of Trader Update to modify Specified Thresholds in Rule 6.62P-O (a)(3)(C)).

ECO that is comprised of the erroneously-priced complex strategies as set forth in proposed Rule 6.91P-O(g)(3)(A)-(C) and described below.

Proposed Rule 6.91P-O(g)(3)(A) would provide that "All buy' or 'all sell' strategies" would be rejected as erroneously-priced if it is an ECO for a complex strategy where all legs are to buy (sell) and it is entered at a price less than one penny (\$0.01) times the sum of the number of options in the ratio of each leg of such strategy (e.g., a complex strategy to buy (sell) 2 calls and buy (sell) 1 put with a price less than \$0.03). The proposed text is based on Rule 6.91-O, Commentary .06(a)(1), with no substantive differences, except that the Exchange has streamlined the text and set forth the minimum price (i.e., \$0.03) for any "all buy" or "all sell" strategies.

Proposed Rule 6.91P-O(g)(3)(B) would provide for the rejection of erroneously-priced "Vertical spreads," which are defined as complex strategies that consists of a leg to sell a call (put) option and a leg to buy a call (put) option in the same option class with the same expiration but at different strike prices. As proposed, the Exchange would reject as erroneously-priced: (i) an ECO for a vertical spread to buy a lower (higher) strike call and sell a higher (lower) strike call and the ECO sender would receive (pay) a net premium (proposed Rule 6.91P-O(g)(3)(B)(i)); and (ii) an ECO for a vertical spread to buy a higher (lower) strike put and sell a lower (higher) strike put and the ECO sender would receive (pay) a net premium (proposed Rule 6.91P-O(g)(3)(B)(ii)). The proposed strategy protections for vertical spreads are based on current Rule 6.91-O, Commentary .06(a)(2), except that, as noted above, the proposed Rule is written from the standpoint of the expectation of the ECO sender as opposed to reviewing total net debit or credit price of the strategy.

Proposed Rule 6.91P-O(g)(3)(C) would provide for the rejection of erroneously-priced "Calendar spreads," which are defined as consisting of a leg to sell a call (put) option and a leg to buy a call (put) option in the same option class at the same strike price but with different expirations. As proposed, the Exchange would reject as erroneously-priced: (i) an ECO for a calendar spread to buy a call leg with a shorter (longer) expiration while selling a call leg with a longer (shorter) expiration and the ECO sender would pay (receive) a net premium (proposed Rule 6.91P-O(g)(3)(C)(i); and (ii) an ECO for a calendar spread to buy a put leg with a shorter (longer) expiration while selling a put leg with a longer (shorter) expiration and the ECO sender would pay (receive) a net premium (proposed Rule 6.91P-O(g)(3)(C)(ii)). The proposed strategy protections for calendar spreads are based on current Rule 6.91-O, Commentary .06(a)(3), except that, as noted above, the proposed Rule is written from the standpoint of the expectation of the ECO sender as opposed to reviewing the total net debit or credit price of the strategy. The Exchange

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has also not retained discretion to disable the strategy protections for calendar spreads (as contained in Commentary .06(a)(3)(i) of the current Rule) because since adopting this provision in 2017, the Exchange has never exercised this discretion and therefore has determined that such discretion is no longer needed.

Proposed Rule 6.91P-O(g)(3)(D) would provide that any ECO that is not rejected by the complex strategy protections would still be subject to the ECO Price Protection, per paragraph (g)(2) of this Rule, which proposed text is based on Rule 6.91-O, Commentary .06(b) without any substantive difference.

Rule 6.47A-O: Order Exposure Requirements — OX

The Exchange also proposes conforming, non-substantive amendments to Rule 6.47A-O, regarding order exposure, to add a cross-reference to new Pillar Rule 6.91P-O. Current Rule 6.47A-O(iii) exempts orders submitted to the COA Process, (per current Rule 6.91-O) from its one-second order exposure requirements. This proposed amendment would extend the exemption from the order exposure requirements to orders submitted to a COA on Pillar.⁸⁰ The Exchange also proposes to modify the reference to "Complex Order Auction Process ('COA')" to simply "Complex Order Auction ('COA')" (i.e., removing the word Process) consistent with how this concept is defined in proposed Rule 6.91P-O(a)(3). As previously stated, the Exchange believes that the proposed Response Time Interval for a COA (with a duration of no less than 100 milliseconds) is of sufficient length to allow OTP Holders and OTP Firms time to respond to a COA. As such, the proposal is designed to promote timely execution of the COA Order, while ensuring adequate exposure of such orders. Accordingly, the Exchange proposes to amend Rule 6.47A-O(iii) to extend the exemption from the one-second exposure requirement to COA Orders under Pillar, which exemption is consistent with the treatment of similar orders on other options exchanges.⁸¹ Consistent with Rule 6.47A-O, Commentary .01, OTP Holders and OTP Firms would only utilize the COA where there is a genuine intention to execute a bona fide transaction.⁸²

⁸⁰ See proposed Rule 6.47A-O(iii). Consistent with the Single-Leg Pillar Filing, the Exchange also proposes to replace reference to "OX" with "the Exchange." See id. (preamble).

⁸¹ <u>See, e.g.</u>, NYSE American Rule 935NY(iii) (exempting from the one-second order exposure requirement orders submitted to the Customer Best Execution Auction (or CUBE) process per Rules 971.1NY (for single-leg CUBE) and 971.2NY(for Complex CUBE)).

⁸² <u>See</u> Rule 6.47A-O, Commentary .01 ("Rule 6.47A-O prevents a User from executing agency orders to increase its economic gain from trading against the order without first giving other trading interest on the Exchange an opportunity to

The Exchange also proposes to modify Commentary .03 to Rule 6.47A-O, which is currently Reserved, to provide that "[p]rior to or after submitting an order to the Exchange, an OTP Holder or OTP Firm cannot inform another OTP Holder or OTP Firm or any other third party of any of the terms of the order." The proposed provision is designed to prevent OTP Holders or OTP Firms from providing material, non-public information to third parties and is consistent with similar provisions on other options exchanges.⁸³

As discussed above, because of the technology changes associated with the migration to the Pillar trading platform, subject to approval of this proposed rule change, the Exchange will announce by Trader Update when rules with a "P" modifier will become operative and for which symbols. The Exchange believes that keeping existing rules on the rulebook pending the full migration of Pillar will reduce confusion because it will ensure that the rules governing trading on the Exchange's current system will continue to be available pending the full migration to Pillar.

(b) <u>Statutory Basis</u>

The proposed rule change is consistent with Section 6(b) of the Securities Exchange Act of 1934 (the "Act"),⁸⁴ in general, and furthers the objectives of Section 6(b)(5),⁸⁵ in particular, because it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in 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. The Exchange believes that proposed Rule 6.91P-O to support electronic complex trading on Pillar would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed rule would promote transparency in Exchange rules by using consistent terminology governing trading on both the Exchange's cash equity and options Pillar trading platforms, thereby ensuring that members, regulators, and the public can more easily navigate the Exchange's rulebook and better understand how options trading is conducted on the

either trade with the agency order or to trade at the execution price when the User was already bidding or offering on the book").

⁸⁴ 15 U.S.C. 78f(b).

⁸⁵ 15 U.S.C. 78f(b)(5).

⁸³ <u>See, e.g.</u>, NYSE American Rule 935NY, Commentary .04 (providing that "[p]rior to or after submitting an order to the System, an ATP Holder cannot inform another ATP Holder or any other third party of any of the terms of the order").

Exchange.

The Exchange believes that adding new Rule 6.91P-O with the modifier "P" to denote that this rule would be operative for the Pillar trading platform would remove impediments to and perfect the mechanism of a free and open market and a national market system by providing transparency of which rules would govern trading once a symbol has been migrated to the Pillar platform. The Exchange similarly believes that adding a preamble to current Rule 6.91-O stating that it would not be applicable to trading on Pillar would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote transparency regarding which rules would govern trading on the Exchange during and after the transition to Pillar.

The Exchange believes that incorporating Pillar functionality currently available on the Exchange's cash equity market (and recently proposed for single-leg options),⁸⁶ for trading of electronic complex orders on its options market in proposed Rule 6.91P-O would remove impediments to and perfect the mechanism of a free and open market and a national market system because the Exchange would be able to offer consistent functionality across both its options and cash equity trading platforms, adapted as applicable for trading of electronic complex orders. As discussed herein, and unless otherwise specified herein, the Exchange is not proposing fundamentally different functionality regarding how ECOs would trade on Pillar than is currently available on the Exchange. Accordingly, with the transition to Pillar, the Exchange would use Pillar terminology to describe functionality that is not changing and also introduce certain new or updated functionality for Electronic Complex Orders (i.e., enhancing the opening auction process, including introducing the "ECO Auction Collars") that will also be available for outright options trading on the Pillar platform. As such, the Exchange believes that using Pillar terminology and incorporating updated functionality for the proposed new rule would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote consistency in the Exchange's rules across both its options and cash equity platforms.

Definitions, Types of ECOs and Priority and Pricing of ECOs

The Exchange believes that the proposed definitions in Rule 6.91P-O(a) would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed changes are designed to promote clarity and transparency by consolidating existing defined terms related to electronic complex trading into one section of the proposed rule. The Exchange believes that the proposed non-substantive amendments to those terms currently defined in Rule 6.91-O would promote clarity and transparency by using Pillar terminology. The Exchange further believes consolidating defined terms in

⁸⁶ <u>See generally</u> the Single-Leg Pillar Filing.

proposed Rule 6.91P-O(a) (including alphabetizing the proposed terms) would make the proposed rule more transparent and easier to navigate.

The Exchange believes that the proposed new definition of Away Market Deviation would further remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote clarity and transparency to market participants regarding how the Exchange would calculate this additional protection against ECOs being executed on the Exchange at prices too far away from the current market.

The Exchange believes that the proposed new definition of DBBO (and related terms of DBB and DBO) would further remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote clarity and transparency to market participants regarding how the DBBO would be calculated under Pillar. The proposed definition is not novel and is based in part on similarly defined terms used on NYSE American and Cboe. The Exchange believes that providing an alternative means of calculating the DBBO (i.e., by looking to the contra-side best bid (offer) in the absence of sameside interest) would remove impediments to and perfect the mechanism of a free and open market and a national market system thereby benefitting as it should increase opportunities for trading. This proposed definition of Away Market Derivation is new and would promote clarity and transparency In addition, the proposal to use the Away Market Deviation as a means of binding the Exchange's calculation of the DBBO as well as trading of ECOs with the leg markets would remove impediments to and perfect the mechanism of a free and open market and a national market system because such limitation would benefit market participants by providing an additional protection against ECOs being executed on the Exchange at prices too far away from the current market.

In addition, the Exchange believes that setting forth additional definitions in proposed Rule 6.91P-O(a), including those that are used on other options exchanges (e.g., "complex strategy" and "ratio") and clarifying terms (e.g., "leg" and "leg markets"), would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote clarity and transparency to market participants regarding electronic complex trading under Pillar. Finally, the proposed definition of "ECO Order Instruction" would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would incorporate for ECOs existing Pillar order handling functionality in an auction that is currently available on the Exchange's cash equity platform, as described in Rule 7.35-E(g) and is proposed for options trading in Rule 6.64P-O(e) and its sub-paragraphs (1) and (2) (as described in the Single-Leg Pillar Filing). The Exchange similarly proposes this functionality for the ECO Opening Auction Process, with nonsubstantive differences only to use an ECO-specific defined term and to refer to the ECO Opening Auction Process.

The Exchange believes that the proposed types of ECOs available per Rule 6.91P-O(b) would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would describe the ECOs and time-in-force modifiers that would be available on Pillar, as well as specifying additional ECO types. The Exchange is not proposing any new ECO order types or time-in-force modifiers on Pillar and believes that the non-substantive differences to use Pillar terminology to describe the available ECO order types would promote transparency and clarity in Exchange rules. The Exchange believes that the proposed Complex Only Order is not novel because it is based in part on the existing PNP Plus order functionality as both order types only interact with other ECOs. In addition, the proposed ECO GTX Order uses Pillar terminology to describe what is referred to as an "RFR Response" in the current rules, and therefore is not novel.

The Exchange believes that proposed new Rule 6.91P-O(c), and subparagraphs (2), (3), and (4), would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed rules would set forth a price-time priority model for Pillar and pricing requirements for ECO trading that are substantively the same as the Exchange's current price-time priority model and pricing requirements as set forth in Rule 6.91-O(a)(1) and Commentaries .01 and .02(i) to Rule 6.91-O. The Exchange proposes certain modified functionality, including the Complex Only Order as noted above, and regarding ECO trading vis a vis the DBBO (and binding such DBBO by the maximum allowable Away Market Deviation when the Exchange BBO is used to calculate the DBBO for a leg), which would benefit market participants as the proposes features would provide additional price protection in ECO trading and would add clarity and transparency to the rules. The Exchange believes that proposed Rule 6.91P-O(c)(1) - (4) would remove impediments to and perfect the mechanism of a free and open market and a national market system because they would promote transparency and clarity in Exchange rules regarding how ECOs would trade with the leg markets and with other ECOs.

Execution of ECOs at the Open (or Reopening after a Trading Halt).

The Exchange believes that proposed Rule 6.91P-O(d) regarding the ECO Opening Auction Process would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed rule maintains the fundamentals of an auction process that the Exchange currently uses for ECOs, as described in Rule 6.91-O(a)(2)(i)(B), while at the same time enhancing the process by incorporating Pillar auction functionality that is currently available on the Exchange's cash equity platform, as described in Rule 7.35-E as well as proposed for single-leg options in Rule 6.64P-O. For example, the Exchange proposes to use Pillar functionality to determine how to price an ECO Opening Auction Process, as described in proposed Rule 6.91P-O(d)(3), including using proposed "ECO Auction Collars" and an "ECO Auction Price," which are consistent with the core functionality for opening ECOs, with additional detail that would promote clarity and transparency to market participants regarding this process. The Exchange believes it is appropriate to refrain from opening a series when there is a lack of reliable pricing indication(s) regarding the price at which a complex strategy should execute because doing so would protect market participants from potentially erroneous executions, thereby promoting a fair and orderly ECO Opening Auction Process.

Moreover, the Exchange believes that the proposal to use the DBBO (as opposed to the currently used Complex NBBO) for the ECO Opening Process would allow the Exchange to open a series based on the Exchange BBO, bound by the Away Market Deviation (or, the ABBO if the Exchange BBO is not available), which is consistent with ECO handling during Core Trading (per proposed Rule 6.91P-O(e)). The Exchange believes this proposed change would better align the permissible opening price for a series with the permissible execution price during Core Trading, which adds consistency to ECO order handling (as well as internal consistency to Exchange rules) to the benefit of investors. As such, this proposed change would remove impediments to and perfect the mechanism of a free and open market and a national market system.

In addition, the Exchange believes that requiring that the opening price for a complex strategy must improve the DBBO if there is displayed Customer interest on all legs of the strategy on the Exchange would protect displayed Customer interest, and protect investors in general, while ensuring a fair and orderly ECO Opening Process.

The Exchange also proposes to process ECOs received during an ECO Opening Auction Process, as described in proposed Rule 6.91P-O(d)(4), and transition to continuous trading following an ECO Opening Auction Process, as described in proposed Rule 6.91P-O(d)(5), in a manner similar to how the Exchange's cash equity market processes orders that are received during an Auction Processing Period and transitions to continuous trading following a cash equity Trading Halt Auction, which the Exchange also proposes for single-leg options in Rule 6.64P-O. The Exchange believes that using similar functionality for different types of auctions would promote consistency across the Exchange's options and cash equity trading platforms. Because the Exchange would be harnessing Pillar technology to support the ECO Opening Auction Process for electronic complex options trading, the Exchange believes that structuring proposed Rule 6.91P-O(d) based on Rule 7.35-E and Rule 6.64P-O would promote transparency in the Exchange's trading rules.

The Exchange further believes that the proposed Rules 6.91P-O(d)(1) and (2), which describe when the Exchange would initiate an ECO Opening Auction Process and which ECOs would be eligible to trade in that process, would remove impediments to and perfect the mechanism of a free and open market and a national market system because they would provide clarity and transparency of the conditions required before the Exchange would initiate an ECO Opening

Auction Process. The Exchange further believes that those conditions are not novel and are based on existing conditions specified in Rule 6.91-O(a)(2)(i)(A) and (B), with additional specificity designed to promote clarity and transparency. Accordingly, the Exchange believes that the ECO Opening Auction Process for ECOs trading on Pillar would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed process is based on the current opening process, including that orders would be matched based on price-time priority at a price at which the maximum volume can be traded.

Execution of ECOs During Core Trading Hours

The Exchange believes that proposed Rule 6.91P-O(e), setting forth the execution of ECOs during Core Trading Hours, would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed functionality would incorporate the Exchange's existing price-time priority model for trading ECOs, including providing that the leg markets would have priority at a price. The Exchange believes that the proposed rule change to add text to specify that an ECO may trade with another ECO at the leg market price if the interest in the leg markets is insufficient to trade at that price (i.e., the leg markets cannot trade at that price in full or in a permissible ratio), would continue to respect the priority of the leg markets at a price, but would also ensures that ECO trading opportunities are maximized after eligible interest in the leg markets is exhausted at that price resulting in more efficient executions. The Exchange note that this proposed functionality is consistent with the rule of at least one options exchange and is therefore not new or novel.⁸⁷ Once interest in the leg markets is exhausted at a price, such interest is no longer executable as "orders are executable against each other only when both the price and the quantity of the orders match."88

In addition, the Exchange believes that allowing Complex Only Orders to trade up to the DBBO unless there is displayed Customer interest on each leg on the Exchange at the DBBO (as described above) would provide market participants additional trading opportunities while still protecting Customer interest on the Exchange, which would, in turn, remove impediments to and perfect the mechanism of a free and open market and national market system.

The Exchange believes that it would remove impediments to and perfect the mechanism of a free and open market and national market system to specify that ECOs will not trade with orders in the leg markets designated AON, FOK or with an MTS modifier (as described in the Single-Leg Pillar Filing) because it would add clarity and transparency to the proposed Rule regarding the handling of ECO

⁸⁷ <u>See BOX Rule 7240(b)(2)(ii); see also BOX Notice</u>, 78 FR at 15093 and BOX Approval, 78 FR, at 24449.

⁸⁸ <u>See BOX Approval Order</u>, 78 FR, at 24449.

vis a vis these single-leg order types that are conditional based on order size. The Exchange further believes that it would remove impediments to and perfect the mechanism of a free and open market and a national market system for ECOs to trade as Complex Only Orders (rather than be rejected as they would under current rules) if they have a complex strategy that could result in a Market Maker breaching their established risk settings.⁸⁹ This proposed process is also consistent with the treatment of similar ECOs on other options markets.⁹⁰ The Exchange further believes that it would remove impediments to and perfect the mechanism of a free and open market and a national market system to specify the frequency with which the Exchange would evaluate trading opportunities for an ECO with the leg markets update because it would promote clarity and transparency in Exchange rules.

Overall, the Exchange believes the proposal for ECO trading during Core Trading would help maintain a fair and orderly market and would benefit investors by facilitating increased interaction between ECOs (not designated as Complex Only) and leg markets interest. In particular, such ECOs would execute against interest in the leg markets for all of the quantity available at the best price in a permissible ratio until the quantities remaining on such leg markets are insufficient to execute against the ECO while respecting the spread ratio. The Exchange believes that requiring Complex Only Orders to improve at least a portion of the displayed Customer interest on the leg markets when all legs of a complex strategy contain displayed Customer interest would provide market participants with additional trading opportunities while still protecting displayed Customer interest on the Exchange during for Trading results in greater liquidity (because of increased opportunity for order execution) this increased liquidity should, in turn, enhance execution quality.

Execution of ECOs During a COA

The Exchange believes that proposed Rule 6.91P-O(f), setting forth the execution of ECOs during a COA, would remove impediments to and perfect the mechanism of a free and open market and a national market system and promote just and equitable principles of trade because the proposed functionality would both incorporate existing functionality to provide that COA Orders would trade solely with other ECOs (and not the leg markets) during the auction and that a COA Order would be allocated on price-time priority, which is consistent with the Exchange's priority scheme. The Exchange believes that relying on the DBBO (and binding such DBBO by the maximum allowable Away Market Deviation

⁸⁹ <u>See discussion infra</u> regarding rationale for proposed Rule 6.91P-O(e) to restrict certain ECOs from executing as a package and bypassing Market Maker risk settings.

See supra notes 61 and 62 (citing to Cboe Rule 5.33(g) and Nasdaq ISE Options
3, Section 14 (d)(3)(A)-(B) regarding similar functionality).

when the Exchange BBO is used to calculate the DBBO for a leg) as opposed to an initial snapshot of the Complex BBO (as is currently the case), would benefit market participants as the proposed operation of the DBBO would provide additional price protection in ECO trading, including during a COA, and would add clarity and transparency to the rules. The Exchange also believes that the proposed change to add reference to quotes (in addition to orders) to Rule 6.91P-O(f)(5) (Prohibited Conduct) regarding the COA Process, would benefit market participants as it would broaden the scope of such the prohibition. Overall, the Exchange believes the proposed rule would add clarity and transparency to OTP Holders and OTP Firms utilizing the COA process.

In addition, the Exchange further believes that the proposed changes to the COA process on Pillar that either differ from current functionality or that would be new would remove impediments to and perfect the mechanism of a free and open market and national market system because:

- Requiring that a COA Order initiate a COA on arrival, else be treated as a standard ECO, is new under Pillar as, per the current Rule, a COA Order may sit on the Consolidated Book until market conditions change such that it may initiate a COA. The Exchange believes the proposed change would provide OTP Holders and OTP Firms with a higher level of transparency and determinism of when a COA Order could initiate a COA and would also encourage market participants to submit aggressively-priced orders in order to qualify for initiation of a COA, which better-priced interest benefits all investors and improves market quality.
- Making explicit that COA Orders may only execute with ECOs (and not the leg markets) until after the COA ends is consistent with current functionality, per Rule 6.91-O(c)(2), but is designed to make clear that ECOs have priority during a COA.
- Streamlining the rule text that would describe the market events that, under Pillar, would cause an early end to a COA would simplify the COA process and would provide OTP Holders and OTP Firms with a higher level of transparency and determinism regarding the handling of COA Orders.
- Allowing a COA to end early based on the DBBO, which may be calculated using ABBO leg prices, would benefit market participants and promote internal consistency because, as proposed, such early termination would prevent COA Orders from executing at prices too far away from the prevailing market for that complex strategy. In addition, the DBBO is used to determine the execution of ECOs on the Exchange, including whether such ECO may initiate a COA as a COA Order. As such, the Exchange believes it is appropriate and to the benefit of market participants that the early termination of a COA likewise be based on the DBBO -- regardless of whether the prices used to calculate such DBBO include (or consist entirely of) ABBO prices.

ECO Risk Checks

The Exchange believes that proposed Rule 6.91P-O(g), setting forth ECO Risk Checks, would remove impediments to and perfect the mechanism of a free and open market and a national market system and promote just and equitable principles of trade because the proposed functionality would incorporate existing risk controls, without any substantive differences. The Exchange further believes that the proposed changes to ECO Risk Checks on Pillar that either differ from current functionality or would be new would remove impediments to and perfect the mechanism of a free and open market and national market system because:

- The Exchange believes that the new Complex Strategy Limit (which is conceptually similar to the Complex Order Table Cap under the current Rule) would help maintain a fair and orderly market because it would operate as a system protection tool that enables the Exchange to prevent any single MPID from creating more than a limited number of complex strategies during the trading day,. The proposed limits are not novel and are based on limits imposed by other options exchanges on new complex order strategies.⁹¹
- The proposed ECO Price Protection on Pillar would work similarly to how the current ECO price protection mechanism functions on the Exchange because an ECO would be rejected if it is priced a specified percentage away from the contra-side Complex NBB or NBO.⁹² The Exchange believes that the proposed differences on Pillar, to use new thresholds and reference prices, would not only simplify the existing price check, but it would also align the proposed functionality with the proposed "Limit Order Price Protection" for single-leg interest, thus adding uniformity to Exchange rules.⁹³ Although the mechanics of the ECO Price Protection would vary slightly from the existing Price Protection Filter, the goal of this feature would remain the same: prevent the execution of ECOs that are priced too far away from the prevailing market for the same strategy and therefore potentially erroneous to be benefit of market participants.

⁹³ <u>See Single-Leg Pillar Filing (Rule 6.62P-O(a)(3) sets forth the Limit Order Price</u> Protection Filter applicable to Limit Orders and quotes).

⁹¹ <u>See supra note 66 (citing Cboe Rule 5.33(a) and MIAX Rule 518(a)(6) regarding</u> each exchange's ability to limit the number of new complex strategies in their systems at any particular time).

⁹² As noted above, the Exchange proposes to define the Complex NBBO as the derived national best bid and derived national best offer for a complex strategy calculated using the NBB and NBO for each component leg of a complex strategy. <u>See</u> proposed Rule 6.91P-O(a)(2).

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• The proposed Pillar Complex Strategy Protections would function similarly to the current Debit/Credit Reasonability Checks because erroneously priced incoming ECOs would be rejected. Consistent with current functionality, the proposed Complex Strategy Protections are designed to prevent the execution of ECOs at prices that are inconsistent with/not aligned with their strategies to the benefit of market participants. The Exchange believes that the non-substantive differences to focus on the expectation of the ECO sender and what would result if the ECO were not rejected rather than refer to specified debit or credit amounts as a way to determine whether a given strategy is erroneously priced would remove impediments to and perfect the mechanism of a free and open market system because it would promote clarity and transparency in Exchange rules.

Rule 6.47A-O

The Exchange believes that the proposed non-substantive change to Rule 6.47A-O to update references to "COA" (versus COA Process) and "the Exchange," to delete reference to "OX," and add the reference to Rule 6.91P-O would remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, protect investors and the public interest because the proposed conforming changes would add clarity, transparency and consistency to the Exchange's rules. The Exchange believes that market participants would benefit from the increased clarity, thereby reducing potential confusion. Similarly, the Exchange believes that adding a cross-reference to proposed Rule 6.91P-O(f) and extending the exemption from the one-second order exposure requirement of Rule 6.47A-O would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote clarity and transparency of which Pillar rules would be eligible for the exception specified in that Rule.

As previously stated, the Exchange believes that the proposed Response Time Interval for a COA (i.e. no less than 100 milliseconds) is of sufficient length so as to permit OTP Holders and OTP Firms time to respond to a COA. As such, the Exchange believes the proposed rule change would provide the order sender with a timely execution of its COA Order, while ensuring that there is an adequate exposure of such order. Accordingly, the Exchange proposes to amend Rule 6.47A-O(iii) to extend the exemption from the one-second order exposure requirement to COA Orders under Pillar, which exemption is consistent with the treatment of similar orders on other options exchanges.⁹⁴ Consistent with Rule 6.47A-O, Commentary .01, OTP Holders and OTP Firms would only utilize the COA where there is a genuine intention to execute a bona fide transaction.⁹⁵

⁹⁴ <u>See supra note 81 (regarding NYSE American Rule 935NY(iii)).</u>

⁹⁵ <u>See supra note 82 (regarding Rule 6.47A-O, Commentary .01).</u>

The Exchange believes that the proposed prohibition that OTP Holder and OTP Firms not inform another OTP Holder or OTP Firm or any other third party of any of the terms of the order, per proposed Commentary .03 to Rule 6.47A-O, would remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, protect investors and the public interest because the proposed change is designed to prevent OTP Holders or OTP Firms from providing material, non-public information to third parties and consistent with similar provisions on other options exchanges.⁹⁶

For the reasons set forth above, the Exchange believes proposed Rule 6.91P-O, regarding ECO trading, including the priority and execution of such ECOs vis a vis the leg markets, is consistent with the goals of the Act to remove impediments to and to perfect the mechanism of a free and open market and a national market system, and to protect investors and the public interest.

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

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 operates in a competitive market and regularly competes with other options exchanges for order flow. The Exchange believes that the transition to Pillar for trading of ECOs on its options trading platform would promote competition among options exchanges by offering a lowlatency platform that offers more deterministic outcomes for trading interest, which, in turn, facilities ECO trading on a continuous and real-time basis on the Exchange.

The proposed rule changes would support that inter-market competition by allowing the Exchange to offer additional functionality to its OTP Holders and OTP Firms, thereby potentially attracting additional order flow to the Exchange. Otherwise, the proposed changes are not designed to address any competitive issues, but rather to amend the Exchange's rules relating to trading of ECOs to support the transition to Pillar. As discussed in detail above, with this rule filing, the Exchange is not proposing to change its core functionality regarding the treatment of ECOs. Rather, the Exchange believes that the proposed rule changes would promote consistent use of terminology to support options (both single-leg and complex) and cash equity trading on the Exchange, making the Exchange's rules easier to navigate. The Exchange does not believe that the proposed rule changes would be applicable to all OTP Holders and OTP Firms, and reflects the Exchange's existing treatment of ECOs, without proposing any material substantive changes.

See supra note 83 (regarding similarly provision contained in NYSE American Rule 935NY, Commentary .04).

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

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

6. Extension of Time Period for Commission Action

The Exchange does not consent at this time to an extension of any time period for Commission action.

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

The Exchange believes that Amendment No. 1 qualifies for accelerated effectiveness in accordance with Section 19(b)(2) of the Act. The Exchange's proposal to adopt new Rule 6.91P-O (Electronic Complex Order Trading) to reflect the implementation of the Exchange's Pillar trading technology on its options market and to make conforming amendments to Rule 6.47A-O (Order Exposure Requirements — OX) (the "original filing"), was published in the Federal Register on September 24, 2021 and, as of the date of this Amendment No. 1, no comments regarding the original filing were submitted.

Amendment No. 1, which supersedes and replaces the original filing in its entirety, makes certain non-substantive clarifying changes from the original filing (including alphabetizing the proposed definitions and relocating the description of Complex Only Orders), and makes the following substantive changes from the original filing: (1) adds new definitions of Away Market Deviation and Leg Ratios; (2) revises the definition of DBBO to add cross-reference to ABBO, as that term is defined in the Single-Leg Pillar Filing, and to include details regarding market conditions that impact the trading of complex strategies; (3) revises the definition of an ECO to remove reference to Stock/Option Orders and Stock/Complex Orders; (4) adds Complex QCCs as an ECO order type and specifies that an ECO designated as FOK must also be designated as a Complex Only Order; (5) specifies that an ECO will not trade with leg market orders designated as FOK; (6) specifies circumstances when an ECO may trade with another ECO at the leg market price and when an ECO must price improve at least a portion of the leg markets when there is displayed Customer interest on the Exchange; and (7) modifies the description of how a COA Order trades on arrival and prior to initiating a COA.

The Exchange believes that there is good cause for the Commission to accelerate effectiveness because the changes set forth in Amendment No 1 are intended to provide greater clarity and specificity to the proposed rule text as well as additional information for the basis of the proposal. With respect to the proposed changes in Amendment No. 1 to make clarifying changes, the Exchange believes

such changes are non-substantive (i.e., they do not alter the functionality of the proposed rule changes) and would add granularity to the proposal. Similarly, with respect to the substantive changes in Amendment No. 1 (as enumerated above), such proposed changes would improve the original filing by including additional details about, or modifications to, functionality already described in the original filing (i.e., adding definitions of "Away Market Deviation" and "Leg Ratio"; revising the definition of DBBO to include reference to ABBO and detail regarding conditions that prevent the Exchange from calculating the DBBO and the downstream impact on ECO trading; specifying that ECOs will not trade with leg market orders designated as FOK; and modifying the description of how a COA Order trades on arrival and prior to initiating a COA). Thus, the Exchange believes the changes proposed in Amendment No. 1 would make it easier for market participants to navigate and comprehend the proposed rule changes for options trading under Pillar.

The Exchange believes the added detail (to the DBBO definition) to specify market conditions that impact the trading of complex strategies, including allowing ECOs to trade with the leg markets when an Away Market quote updates to lock or cross the current Exchange BB (BO) or ABB (ABO) for a component leg of a complex strategy, would benefit investors by adding clarity, transparency and internal consistency to Exchange rules. Specifically, allowing an eligible ECO to execute against leg market interest in these circumstances is consistent with the way single-leg orders trade. As such, to the extent that leg prices are locked or crossed as a result of updates to the ABBO, such updates do not prevent resting leg market interest from trading at its resting price with all eligible contraside interest, which includes incoming ECOs in the same complex strategy.⁹⁷ Moreover, to the extent that an ECO trades with leg market interest in a complex strategy when interest in the leg markets is crossed, such executions are not deemed as trade-throughs.⁹⁸ Therefore the Exchange believes that the proposal to allow an ECO to trade with leg market interest in this circumstance would maximize the execution opportunities of such ECO while respecting price-time priority of the leg markets.

The Exchange believes that the proposed rule change to add text to specify that an ECO (that is not a Complex Only Order) may trade with another ECO at the leg

⁹⁷ <u>See Single-Leg Pillar Filing (discussing Rules 6.76P-O(b)(3) providing that "[i]f an Away Market locks or crosses the Exchange BBO, the Exchange will not change the display price of any Limit Orders or quotes ranked Priority 2 - Display Orders and any such orders will be eligible to be displayed as the Exchange's BBO").</u>

See Rule 6.94-O(b)(3) (exempting from trade-through liability transactions that occur "when there was a Crossed Market"). See also the Options Order Protection And Locked/Crossed Market Plan, dated April 14, 2009, available here, https://www.theocc.com/getmedia/7fc629d9-4e54-4b99-9f11-c0e4db1a2266/options order protection plan.pdf.

market price if the interest in the leg markets is insufficient to trade at that price (i.e., the leg markets cannot trade at that price in full or in a permissible ratio), would continue to respect the priority of the leg markets at a price, but would also ensures that trading opportunities for such ECOs are maximized after eligible interest in the leg markets is exhausted at that price resulting in more efficient executions. The Exchange notes that the proposed Complex Only Order functionality would not get the benefit of this priority treatment (i.e., per proposed Rule 6.91P-O(e)(1)(A)) but, as described herein, would instead be required to price improve interest on the leg markets if all legs of a complex strategy contained displayed Customer interest. The Exchange notes that this proposed functionality for ECOs that are not designated as Complex Only Orders is consistent with the rule of at least one options exchange and is therefore not new or novel.⁹⁹ And, as noted herein, the Exchange currently offers PNP Plus functionality to all market participants, which optional functionality allows the sender of an ECO to limit its trading interest to other ECOs (i.e., not the leg markets), thus the Complex Only Order type is consistent with current functionality and is therefore not new or novel.¹⁰⁰

In addition, the Exchange believes that Amendment No. 1 is non-controversial, does not pose an undue burden on competition, and does not raise any novel issues because the proposed changes would add clarity and provide additional explanations related to the proposed rule changes.

The Exchange believes that the changes proposed in Amendment No. 1 would not significantly affect the protection of investors or the public interest but would instead provide greater clarity to the original filing and provide greater transparency about the application of the rule change being adopted for options trading under Pillar.

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

Not applicable.

- Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act Not applicable.
- 10. Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing and

⁹⁹ See BOX Rule 7240(b)(2)(ii); see also BOX Notice, 78 FR at 15093 and BOX Approval, 78 FR, at 24449.

¹⁰⁰ The Exchange also notes that Cboe offers Complex Only orders to Market Makers that trade on Cboe. <u>See supra</u> note 57 (regarding Complex Only orders available per Cboe Rule 5.33(a)).

Settlement Supervision Act

Not applicable.

11. Exhibits

Exhibit 1 – Form of Notice of Proposed Rule Change for <u>Federal Register</u>

Exhibit 4 – Proposed Rule Text Marked to Show Changes to Exhibit 5 Made in Amendment No. 1

Exhibit 5 – Text of Proposed Rule Change

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EXHIBIT 1

SECURITIES AND EXCHANGE COMMISSION (Release No. 34- ; File No. SR-NYSEARCA-2021-68, Amendment No. 1)

[Date]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing of Proposed Rule Change Proposes New Rule 6.91P-O (Electronic Complex Order Trading) to Reflect the Implementation of the Exchange's Pillar Trading Technology on its Options Market and to Make Conforming Amendments to Rule 6.47A-O (Order Exposure Requirements — OX). This Amendment No. 1 Supersedes the Original Filing in its Entirety

Pursuant to Section $19(b)(1)^1$ of the Securities Exchange Act of 1934 (the "Act")²

and Rule 19b-4 thereunder,³ notice is hereby given that, on March 22, 2022, NYSE Arca,

Inc. ("NYSE Arca" or the "Exchange") 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 self-regulatory organization. The

Commission is publishing this notice to solicit comments on the proposed rule change

from interested persons.

I. <u>Self-Regulatory Organization's Statement of the Terms of Substance of the</u> <u>Proposed Rule Change</u>

The Exchange proposes new Rule 6.91P-O (Electronic Complex Order Trading)

to reflect the implementation of the Exchange's Pillar trading technology on its options

market and to make conforming amendments to Rule 6.47A-O (Order Exposure

Requirements — OX). This Amendment No. 1 supersedes the original filing in its

entirety. The proposed rule change is available on the Exchange's website at

¹ 15 U.S.C. 78s(b)(1).

² 15 U.S.C. 78a.

³ 17 CFR 240.19b-4.

<u>www.nyse.com</u>, at the principal office of the Exchange, and at the Commission's Public Reference Room.

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

In its filing with the Commission, the self-regulatory organization 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 those 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 parts of such statements.

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

1. <u>Purpose</u>

Background

The Exchange plans to transition its options trading platform to its Pillar technology platform. The Exchange's and its national securities exchange affiliates'⁴ (together with the Exchange, the "NYSE Exchanges") cash equity markets are currently operating on Pillar. For this transition, the Exchange proposes to use the same Pillar technology already in operation for its cash equity markets. In doing so, the Exchange will be able to offer not only common specifications for connecting to both of its cash equity and equity options markets, but also common trading functions. The Exchange plans to roll out the new technology platform over a period of time based on a range of

⁴ The Exchange's national securities exchange affiliates are the New York Stock Exchange LLC ("NYSE"), NYSE American LLC ("NYSE American"), NYSE National, Inc. ("NYSE National"), and NYSE Chicago, Inc. ("NYSE Chicago").

symbols, anticipated for the second quarter of 2022.

In this regard, the Exchange recently filed a proposal to add new rules to reflect how options, particularly single-leg options, would trade on the Exchange once Pillar is implemented.⁵ The current proposal sets forth how Electronic Complex Orders⁶ would trade on the Exchange once Pillar is implemented. As noted in the Single-Leg Pillar Filing, as the Exchange transitions to Pillar, certain rules would continue to be applicable to symbols trading on the current trading platform, but would not be applicable to symbols that have transitioned to trading on Pillar.⁷ Consistent with the Single-Leg Pillar Filing, proposed Rule 6.91P-O would have the same number as the current Electronic Complex Order Trading rule, but with the modifier "P" appended to the rule number. Current Rule 6.91-O, governing Electronic Complex Order Trading, would remain unchanged and continue to apply to any trading in symbols on the current system. Proposed Rule 6.91P-O would govern Electronic Complex Orders for trading in options symbols migrated to the Pillar platform. This Amendment No. 1 supersedes the original filing in its entirety.⁸

⁵ See Securities Exchange Act Release No. 94072 (January 26, 2022), 87 FR 5592 (February 1, 2022) (Notice of filing Notice of Filing of Amendment No. 4 and Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment No. 4) (SR-NYSEArca-2021-47) ("Single-Leg Pillar Filing").

⁶ The term "Electronic Complex Order" is currently defined in the preamble to Rule 6.91-O to mean any Complex Order, as defined in Rule 6.62-O(e) or any Stock/Option Order or Stock/Complex Order as defined in Rule 6.62-O(h) that is entered into the NYSE Arca System (the "System").

⁷ <u>See Single-Leg Pillar Filing (providing that, once a symbol is trading on the Pillar trading platform, a rule with the same number as a rule with a "P" modifier would no longer be operative for that symbol and the Exchange would announce by Trader Update when symbols are trading on the Pillar trading platform).</u>

⁸ This Amendment No. 1 makes certain non-substantive clarifying changes from the original filing (including alphabetizing the proposed definitions and relocating the description of Complex Only Orders), and makes the following substantive

Similar to the Single-Leg Pillar Filing, proposed Rule 6.91P-O would (1) use Pillar terminology based on Pillar terminology that the Exchange uses for cash equities trading, as described in Exchange Rule 7-E; and (2) introduce new functionality for Electronic Complex Order trading (e.g., adopting a DBBO and Away Market Deviation price check as well as enhancing the opening process for ECOs as described below).

Finally, as discussed in the Single-Leg Pillar Filing, the Exchange will announce by Trader Update when symbols are trading on the Pillar trading platform. The Exchange intends to transition Electronic Complex Order trading on Pillar at the same time that single-leg trading is transitioned to Pillar.

Proposed Rule 6.91P-O: Electronic Complex Order Trading

Current Rule 6.91-O (Electronic Complex Order Trading) specifies how the Exchange processes Electronic Complex Orders submitted to the Exchange. The Exchange proposes new Rule 6.91P-O to establish how such orders would be processed after the transition to Pillar. To promote clarity and transparency, the Exchange proposes to add a preamble to current Rule 6.91-O specifying that it would not be applicable to trading on Pillar.

changes from the original filing: (1) adds new definitions of Away Market Deviation and Leg Ratios; (2) revises the definition of DBBO to add crossreference to ABBO, as that term is defined in the Single-Leg Pillar Filing, and to include details regarding market conditions that impact the trading of complex strategies; (3) revises the definition of an ECO to remove reference to Stock/Option Orders and Stock/Complex Orders; (4) adds Complex QCCs as an ECO order type and specifies that an ECO designated as FOK must also be designated as a Complex Only Order; (5) specifies that an ECO will not trade with leg market orders designated as FOK; (6) specifies circumstances when an ECO may trade with another ECO at the leg market price and when an ECO must price improve at least a portion of the leg markets when there is displayed Customer interest on the Exchange; and (7) modifies the description of how a COA Order trades on arrival and prior to initiating a COA.

As discussed in greater detail below and unless otherwise specified herein, the Exchange is not proposing fundamentally different functionality regarding how Electronic Complex Orders would trade on Pillar than is currently available on the Exchange. However, with Pillar, the Exchange would use Pillar terminology to describe functionality that is not changing and also introduce certain new or updated functionality for Electronic Complex Orders (i.e., enhancing the opening auction process, including introducing the "ECO Auction Collars") that will also be available for outright options trading on the Pillar platform.

Definitions. Proposed Rule 6.91P-O(a) would set forth the definitions applicable to trading on Pillar under the new rule.

• Proposed Rule 6.91P-O(a)(1) would define the term "Away Market Deviation" as the difference between the Exchange BB (BO) for a series and the ABB (ABO) for that same series when the Exchange BB (BO) is lower (higher) than the ABB (ABO).⁹ The maximum allowable Away Market Deviation is the greater of \$0.05 or 5% below (above) the ABB (ABO) (rounded down to the nearest whole penny). As further proposed, no ECO on the Exchange would execute at a price that would exceed the maximum allowable Away Market Deviation on any component of the complex strategy. The maximum allowable Away Market Deviation is designed to protect market participants from having their complex

⁹ In the Single-Leg Pillar Filing, the Exchange defines the (new) term "Away Market BBO ('ABBO')" as referring to the best bid(s) or offer(s) disseminated by Away Markets and calculated by the Exchange based on market information the Exchange receives from OPRA and the terms "ABB" and "ABO" as referring to the best Away Market bid and best Away Market offer, respectively. <u>See</u> Single-Leg Pillar Filing (defining Away Market BBO in proposed Rule 1.1).

strategies execute at prices that are significantly outside of (and inferior to) the market for the individual legs. The proposed functionality provides the Exchange with flexibility in determining the acceptable execution range by allowing that it be calculated using either a percentage amount or a dollar amount. This proposed risk protection is not new or novel as it is available on other options exchanges.¹⁰ As discussed further below, the Exchange proposes that its calculation of the DBBO (for each leg of a complex strategy) as well as trading of ECOs with the leg markets would be bound by the maximum allowable Away Market Deviation as an additional protection against ECOs being executed on the Exchange at prices too far away from the current market. This proposed definition is new and would promote clarity and transparency.

• Proposed Rule 6.91P-O(a)(2) would define the term "Complex NBBO" to mean the derived national best net bid and derived national best net offer for a complex strategy calculated using the NBB and NBO for each component leg of a complex strategy. This definition is based on current Rule 6.1A-O(a)(11)(b), without any substantive differences.

¹⁰ See, e.g., BOX Options Exchange LLC ("BOX") Rule 7240(b)(3)(iii)(A) (providing that each leg of a complex strategy trade equal to or better than the "Extended cNBBO," which has a default setting (per Rule 7240(a)(5)) of 5% of the cNBB or cNBO (per Rule 7240(a)(2) and (4), respectively) as applicable, or \$0.05); Nasdaq ISE, LLC ("Nasdaq ISE"), Options 3, Section 16 (a) (providing that, in regard to "Price limits for Complex Orders, "[n]otwithstanding, the System will not permit any leg of a complex strategy to trade through the NBBO for the series or any stock component by a configurable amount calculated as the lesser of (i) an absolute amount not to exceed \$0.10, and (ii) a percentage of the NBBO not to exceed 500%, as determined by the [ISE] Exchange on a class, series or underlying basis").

Proposed Rule 6.91P-O(a)(3) would define "Complex Order Auction" or "COA" • to mean an auction of an ECO as set forth in proposed Rule 6.91P-O(f) (discussed below). This definition is based on the title of paragraph (c) of current Rule 6.91-O, which sets forth the COA Process for ECOs without any substantive differences. Proposed Rule 6.91P-O(a)(3) would also state that the terms defined in paragraphs (a)(3)(A)-(D) would be used for purposes of a COA. Proposed Rule 6.91P-O(a)(3)(A) would define a "COA Order" to mean an ECO that is designated by the OTP Holder as eligible to initiate a COA. This definition is based on the definition of a "COA-eligible order" as set forth in current Rule 6.91-O(c)(1) and (c)(1)(i), with a difference that the proposed definition would not require that an option class be designated as COA-eligible because all option classes that trade on Pillar would be COA-eligible. Proposed Rule 6.91P-O(a)(3)(B) would define the term "Request for Response" or "RFR" to refer to the message disseminated to the Exchange's proprietary complex data feed announcing that the Exchange has received a COA Order and that a COA has begun. As further proposed, the definition would provide that each RFR message would identify the component series, the price, the size and side of the market of the COA Order. This definition is based on the description of RFR in Rule 6.91-O(c)(3) without any substantive differences. The Exchange proposes a clarifying difference to make clear that RFR messages would be sent over the Exchange's proprietary complex data feed, which is based on current functionality.

Proposed Rule 6.91P-O(a)(3)(C) would define the term "RFR Response" to mean

any ECO received during the Response Time Interval (defined below) that is in the same complex strategy, on the opposite side of the market of the COA Order that initiated the COA, and marketable against the COA Order.¹¹ This definition is based in part on the description of RFR Responses in Rule 6.91-O(c)(5). However, unlike the current definition, an RFR Response would not have a timein-force contingency for the duration of the COA. Instead, the Exchange would consider any ECOs received during the Response Time Interval (defined below) that are marketable against the COA Order as an RFR Response. As described below, the Exchange proposes to define separately the term "ECO GTX Order," which would be more akin to the current definition of RFR Response. In addition, the proposed definition omits the current rule description that an RFR Response may be entered in \$0.01 increments or that such responses may be modified or cancelled because these features are applicable to all ECOs and therefore not necessary to separately state in connection with RFR Responses. Proposed Rule 6.91P-O(a)(3)(D) would define the term "Response Time Interval" to mean the period of time during which RFR Responses for a COA may be entered and would provide that the Exchange would determine and announce by Trader Update the length of the Response Time Interval; provided, however, that the duration of the Response Time Interval would not be less than 100 milliseconds and would not exceed one (1) second. This definition is based in part on the description of Response Time Interval in Rule 6.91-O(c)(4), with a

¹¹ The term "marketable" is defined in proposed Rule 1.1 of the Single-Leg Pillar Filing.

difference that the Exchange proposes to reduce the minimum time from 500 milliseconds to 100 milliseconds. While other options exchanges do not establish a minimum duration for a COA, the Exchange notes that the proposed 100 millisecond minimum is consistent with the minimum auction length for electronic-paired auctions on NYSE American and for auctions on other markets.¹² Given that other options exchanges have (for years) offered electronic auction mechanisms with a Response Time Interval of at least 100 milliseconds, the Exchange believes that the proposed Response Time Interval of at least this length would provide OTP Holders and OTP Firms adequate time to respond to a COA.¹³

• Proposed Rule 6.91P-O(a)(4) would define the term "Complex strategy" to mean a particular combination of leg components and their ratios to one another. The proposed definition would further provide that new complex strategies can be created when the Exchange receives either a request to create a new complex strategy or an ECO with a new complex strategy. This proposed definition is new

¹² See, e.g., NYSE American Rules 971.1NY(c)(2)(B) (providing that for a Customer Best Execution Auction "[t]he minimum/maximum parameters for the Response Time Interval will be no less than 100 milliseconds and no more than one (1) second") and 971.2NY(c)(1)(B) (same); Cboe Exchange Inc. ("Cboe") Rule 5.33(d)(3) (providing that Cboe "determines the duration of the Response Time Interval on a class-by-class basis, which may not exceed 3000 milliseconds").

¹³ See, e.g., Securities Exchange Act Release Nos. 82498 (January 12, 2018), 83 FR 2823 (January 19, 2018) (SR-NYSEAmer-2017-26) (Notice of filing and immediate effectiveness of proposed rule change to reduce the response time interval for a CUBE Auction to no less than 100 milliseconds); 83384 (June 5, 2018), 83 FR 27061 (June 11, 2018) (SR-NYSEAMER-2018-05) (Order approving Complex CUBE functionality, including Rule 971.2NY(c)(1)(B), providing that "[t]he minimum/maximum parameters for the Response Time Interval will be no less than 100 milliseconds and no more than one (1) second")).

and is consistent with how this concept is defined on other options exchanges and would promote clarity and transparency.¹⁴

Proposed Rule 6.91P-O(a)(5) would define the term "DBBO" to address situations where it is necessary to derive a (theoretical) bid or offer for a particular complex strategy. As proposed, "DBBO" would mean the derived best net bid ("DBB") and derived best net offer ("DBO") for a complex strategy. The bid (offer) price used to calculate the DBBO on each leg would be the Exchange BB (BO)¹⁵ (if available), bound by the maximum allowable Away Market Deviation (as defined above). If a leg of a complex strategy does not have an Exchange BB (BO), the bid (offer) price used to calculate the DBBO would be the ABB (ABO) for that leg. Thus, the "bid (offer)" prices used to calculate the DBBO would be based on the Exchange BB (BO) for each leg when available, and, absent an Exchange BB (BO) for a given leg, the ABB (ABO). The proposed definition would also provide that the DBBO would be updated as the Exchange BBO or ABBO, as applicable, is updated.

Proposed Rule 6.91P-O(a)(5)(A) would provide further detail about how the DBBO would be derived when, for a leg, there is no Exchange BB (BO) and no ABB (ABO). As proposed, in such circumstances, the bid (offer) price used to

 ¹⁴ See, e.g., Cboe Rule 5.33(a) (defining "complex strategy" as "a particular combination of components and their ratios to one another" and further providing that "[n]ew complex strategies can be created as the result of the receipt of a complex instrument creation request or complex order for a complex strategy that is not currently in the System"); MIAX Options Exchange ("MIAX") Rule 518(a)(6) (same).
¹⁵ The term BBO when used with respect to options traded on the Exchange would mean "the best displayed bid or best displayed offer on the Exchange." <u>See</u> Single-Leg Pillar Filing (defining BBO in Rule 1.1, which definition is substantially identical to the current definition of BBO in Rule 6.1A-O(a)(2)(a)).

calculate the DBBO would be the offer (bid) price for that leg (i.e., Exchange BO (BB), bound by the maximum allowable Away Market Deviation (or the ABO (ABB) for that leg if no Exchange BO (BB) is available)), minus (plus) "one collar value," which would be (i) \$0.25 where the offer (bid) is priced \$1.00 or lower, or the lesser of \$2.50 or 25% of the offer (bid) where the offer (bid) is priced above \$1.00 (rounded down to the nearest whole penny); or (ii) \$0.01, if the offer is equal to or less than one collar value. The proposed values used to generate a DBBO in the absence of local or Away Market interest is consistent with the values used in the Trading Collars for single-leg orders, per Rule 6.62P-O(a)(4)(C).¹⁶ In addition, such values are within the current parameters for determining whether a trade is an Obvious Error or Catastrophic Error.¹⁷ This proposed definition of the DBBO is new and is based, in part, on the current definition of Complex BBO set forth in Rule 6.1A-O(a)(2)(b), as well as on how this concept is defined on other options exchanges, including on NYSE American.¹⁸ The Exchange believes that providing an alternative means of

¹⁶ See Single-Leg Pillar Filing (describing the calculation of Trading Collars, per Rule 6.62P-O(a)(4)(C), which "for an order to buy (sell) will be a specified amount above (below) the Reference Price, as follows: (1) for orders with a Reference Price of \$1.00 or lower, \$0.25; or (2) for orders with a Reference Price above \$1.00, the lower of \$2.50 or 25%)"). The Reference Price for calculating the Trading Collar for an order to buy (sell) will be the NBO (NBB), except in certain enumerated circumstances. See id. (setting forth the applicable Reference Price, per Rule 6.62P-O(a)(4)(B)).

¹⁷ <u>See</u> Rules 6.87-O(c)(1) (thresholds for Obvious Errors) and 6.87-O(d)(1) (thresholds for Catastrophic Errors).

See, e.g., NYSE American Rule 900.2NY(7)(b) (providing that the Derived BBO "is calculated using the BBO from the Consolidated Book for each of the options series comprising a given complex order strategy"); Cboe Rule 5.33(a) (defining "Synthetic Bed Bid or Offer and SBBO" for complex orders as "the best bid and offer on the Exchange for a complex strategy calculated using" the "BBO for each of the "BBO for each offer and strategy"); Cboe Rule 5.33(a) (defining "Synthetic Bed Bid or Offer and SBBO" for complex orders as "the best bid and offer on the Exchange for a complex strategy calculated using" the "BBO for each offer each

calculating the DBBO (i.e., by looking to the contra-side best bid (offer) in the absence of same-side interest) would benefit market participants as it should increase opportunities for trading. For example, absent this proposed functionality, the Exchange would not be able to trade complex strategies when, for at least one leg of such strategy, the Exchange has no displayed interest on one or both sides of such component leg. Allowing the Exchange to look to the ABBO to calculate the DBBO in such circumstances would increase trading opportunities for ECOs to the benefit of all market participants. The Exchange believes that the additional detail about how the DBBO would be calculated in the absence of an Exchange BB (BO) and ABB (ABO), including that it would be rounded down to the nearest whole penny, would promote clarity and transparency. As noted above and herein, the Exchange believes that binding the DBBO (when calculated using the Exchange BBO) to the maximum allowable Away Market Deviation would help prevent ECOs from executing on the Exchange at prices too far away from the current market.

Proposed Rule 6.91P-O(a)(5)(B) would provide that, if for a leg of a complex strategy, there is neither an Exchange BBO nor an ABBO, the Exchange would not allow the complex strategy to trade until, for that leg, there is either an Exchange BB or BO, or an ABB or ABO, on at least one side of the market. The Exchange believes that preventing a complex strategy from trading when, for a leg, there is no reliable pricing indication -- either on the Exchange or in Away

component (or the NBBO for a component if the BBO for that component is not available) of a complex strategy from the [Cboe] Simple Book").

Markets, would benefit market participants by preventing potentially erroneous executions. Moreover, including this additional detail in the proposed rule about when a complex strategy would not trade would benefit market participants as it would promote clarity and transparency in Exchange rules regarding ECO trading.

Proposed Rule 6.91P-O(a)(5)(C) would provide that if the best bid and offer prices (when not based solely on the Exchange BBO) for a component leg of a complex strategy are locked or crossed, the Exchange would not allow an ECO for that strategy to execute against another ECO until the condition resolves. The Exchange notes that, as described above, the DBBO may be calculated using leg prices derived either exclusively from, or a combination of, the Exchange BBO, the ABBO, or the Exchange BBO as adjusted to be priced within the maximum allowable Away Market Deviation. As such, if the best bid and offer prices (when not based solely on Exchange BBO) for a component leg of a complex strategy are locked or crossed, a DBBO calculated when using those prices could be erroneous.¹⁹ Accordingly, the Exchange believes that it is appropriate to not permit an ECO to execute against another ECO under these circumstances until the locked or crossed market resolves. The Exchange believes preventing ECO-

¹⁹ The reliability of the Exchange's calculated DBBO is essential to ECO trading on the Exchange as this concept permeates all aspects of complex trading, including to determine price parameters at the opening of each series and in determining when, and at what price, a COA Order may initiate a COA as well as market events impacting the DBBO that would result in an early end to a COA. <u>See, e.g.</u>, proposed Rule 6.91P-O(d)(3) (relying on the DBBO to determine ECO Auction Collars for the ECO Opening Auction Process) and 6.91P-O(f)(2)(A) and (f)(3) (relying on the DBBO to both initiate and price a COA Order as well as to terminate a COA early under certain market conditions)).

to-ECO trading in this circumstance would benefit market participants by preventing potentially erroneous ECO executions. Moreover, including this additional detail in the proposed rule about when an ECO would be prevented from trading with another ECO would benefit market participants as it would promote clarity and transparency in Exchange rules regarding ECO trading. Further, per proposed Rule 6.91P-O(a)(5)(C), if an Away Market quote updates to lock or cross the current Exchange BB (BO) or ABB (ABO) for a component leg of a complex strategy, the Exchange would allow an ECO for that strategy to execute against leg market interest on the Exchange. Allowing an eligible ECO to execute against leg market interest in these circumstances is consistent with the way single-leg orders trade. In this regard, the Exchange notes that, to the extent that leg prices are locked or crossed as a result of updates to the ABBO, such updates do not prevent resting leg market interest from trading at its resting price with all eligible contra-side interest, which includes incoming ECOs in the same complex strategy.²⁰ Moreover, to the extent that an ECO trades with leg market interest in a complex strategy when interest in the leg markets is crossed, such executions are not deemed as trade-throughs.²¹ As such, the Exchange believes

²⁰ <u>See Single-Leg Pillar Filing (discussing Rules 6.76P-O(b)(3) providing that "[i]f an Away Market locks or crosses the Exchange BBO, the Exchange will not change the display price of any Limit Orders or quotes ranked Priority 2 - Display Orders and any such orders will be eligible to be displayed as the Exchange's BBO").</u>

²¹ <u>See</u> Rule 6.94-O(b)(3) (exempting from trade-through liability transactions that occur "when there was a Crossed Market"). <u>See also</u> the Options Order Protection And Locked/Crossed Market Plan, dated April 14, 2009, available here, <u>https://www.theocc.com/getmedia/7fc629d9-4e54-4b99-9f11-</u> <u>c0e4db1a2266/options_order_protection_plan.pdf</u>.

that allowing an ECO to trade with leg market interest in this circumstance would maximize the execution opportunities of such ECO while respecting price-time priority of the leg markets.

- Proposed Rule 6.91P-O(a)(6) would define the term "ECO Order Instruction" to mean a request to cancel, cancel and replace, or modify an ECO. As described further below, this concept relates to order processing when a series opens or reopens for trading and is based on the term "order instruction" as used in Rule 7.35-E(g) and proposed to be used in Rules 6.64P-O(e) and (f), which (similarly) would define an "order instruction" for options as a request to cancel, cancel and replace, or modify an order or quote.²²
- Proposed Rule 6.91P-O(a)(7) would define the term "Electronic Complex Order" or "ECO" to mean a Complex Order as defined in Rule 6.62P-O(f) that would be submitted electronically to the Exchange.²³ This proposed definition is based on the preamble to Rule 6.91-O, except that, under Pillar, an ECO would not include Stock/Option Orders and Stock/Complex Order²⁴ and the Exchange proposes to replace reference to the "NYSE Arca System" with the term "Exchange" and to update cross-reference to the definition of a Complex Order as proposed in the

²² <u>See Single-Leg Pillar Filing (describing opening Auction Process rule per Rule 6.64P-O).</u>

²³ The proposed definition of Complex Order under Pillar is set forth in Rule 6.62P-O(f), as described in the Single-Leg Pillar Filing, and is substantially identical to the current definition.

See Single-Leg Pillar Filing (describing Stock/Option Orders and Stock/Complex Orders, per Rule 6.642-O(H)(6)(A) and (B) respectively, as open outcry only orders). Although current Rule 6.91-O provides that Stock/Option Orders and Stock/Complex Orders may trade as ECOs, under current functionality (and consistent with Pillar) such orders only trade in open outcry.

Single-Leg Pillar Filing.

- Proposed Rule 6.91P-O(a)(8) would define the term "leg" or "leg market" to mean each of the component option series that comprise an ECO. This definition is consistent with the concept of leg markets as used in current Rule 6.91-O(a), which defines legs as individual orders and quotes in the Consolidated Book. The Exchange believes the proposed definition would add clarity regarding how the terms "leg" and "leg market" would be used in connection with ECO trading on Pillar.
- Proposed Rule 6.91P-O(a)(9) would define "Ratio" or "leg ratio" to mean the quantity of each leg of an ECO broken down to the least common denominator such that the "smallest leg ratio" is the portion of the ratio represented by the leg with the fewest contracts. The Exchange believes the proposed definition would add clarity regarding how the terms "ratio" and "leg ratio" would be used in connection with ECOs trading on Pillar, which definition is consistent with how this concept is described on other options exchanges.²⁵

Types of ECOs. Proposed Rule 6.91P-O(b) would set forth the types of ECOs that would trade on Pillar. Proposed Rule 6.91P-O(b)(1) would provide that ECOs may be entered as Limit Orders, Limit Orders designated as Complex Only Orders, or as Complex QCCs.²⁶ This proposed text is based on current Rule 6.91-O(b)(1), with a

See, e.g., Cboe, US Options Complex Book Process, Complex Order Basics, Section 2.1, Ratios, available here: <u>https://cdn.batstrading.com/resources/membership/US-Options-Complex-Book-Process.pdf</u> (providing that "[t]he quantity of each leg of a complex order broken down to the lowest terms will determine the ratio of the complex order").
See Single Leg Biller Filing (describing Limit Orders and Complex OCC Orders)

²⁶ <u>See Single-Leg Pillar Filing (describing Limit Orders and Complex QCC Orders per Rule 6.62P-O(a)(2) and (g)(1)(A), (C) and (D)).</u>
difference to provide that the Exchange would offer Complex Only Orders and Complex QCCs on Pillar. Allowing ECOs to be designated as Complex QCCs (which order type is described in the Single-Leg Pillar Filing) is consistent with current functionality not described in the rule and the Exchange believes that this additional specificity to the proposed rule would add clarity and transparency. Complex Only Orders (as described below) are based on existing functionality for PNP Plus orders, with updated functionality available on Pillar.²⁷

- Proposed Rule 6.91P-O(b)(2) would set forth the time-in-force contingencies available to ECOs, which would be Day, IOC, FOK, or GTC, as those terms are defined in the Single-Leg Pillar Filing in Rule 6.62P-O(b), and GTX (per proposed Rule 6.91P-O(b)(2)(C) as described below). The proposed text is based on current Rules 6.91-O(b)(2) and (3), except that it adds GTX (as described below). The proposed text also omits AON because the Exchange would not offer AONs for ECO trading on Pillar.
- Proposed Rule 6.91P-O(b)(2)(A) would provide that an ECO designated as IOC or FOK would be rejected if entered during a pre-open state,²⁸ which is consistent with the time-in-force of the order (because they could not be traded when a complex strategy is not open for trading) as well as with current functionality.
- Proposed Rule 6.91P-O(b)(2)(B) would provide that an ECO designated as FOK must also be designated as a Complex Only Order (per proposed Rule 6.91P-

²⁷ <u>See, infra</u>, for discussion of proposed Rule 6.91P-O(e)(1)(C) (discussing Complex Only Order functionality).

²⁸ The term "pre-open state" is defined in Rule 6.64P-O(a)(12), as described in the Single-Leg Pillar Filing, to mean "the period before a series is opened or reopened."

O(b)(1) and described further below). This proposed rule, which is new under Pillar, would simplify the operation of electronic complex order trading and would add clarity and transparency that ECOs designated as FOK (i.e., that have conditional size-related instructions) would not be eligible to trade with the leg markets.

Proposed Rule 6.91P-O(b)(2)(C) would provide that an ECO designated as GTX would be defined as an "ECO GTX Order" and would have the following features: it would not be displayed; it may be entered only during the Response Time Interval of a COA; it must be on the opposite side of the market as the COA Order; and it must specify the price, size, and side of the market. As further proposed, ECO GTX Orders may be modified or cancelled during the Response Time Interval and any remaining size that does not trade with the COA Order would be cancelled at the end of the COA. This definition is based on the description of an RFR Response in current Rule 6.91-O(c)(5)(A) - (C), which likewise are not displayed and expire at the end of the COA.

Priority and Pricing of ECOs. Proposed Rule 6.91P-O(c) would set forth how ECOs would be prioritized and priced under Pillar. The proposed priority scheme for ECOs under Pillar is consistent with current functionality, with the differences and clarifications noted below. As proposed, an ECO received by the Exchange that is not immediately executed (or cancelled), including an ECO that cannot trade due to conditions described in paragraphs (a)(5)(B)-(C) (above)²⁹ and (c)(1) - (2) of this

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Proposed Rule 6.91P-O(a)(5)(B)-(C) describe conditions related to the leg markets when complex strategies will not trade.

proposed Rule (below) or does not initiate a COA per paragraph (f)(1) (below), would be ranked in the Consolidated Book according to price-time priority based on the total net price and the time of entry of the order. This proposed rule adds cross-references to new rule text but is otherwise based on Rule 6.91-O(a)(1), without any substantive differences. The Exchange proposes a non-substantive difference to refer simply to a "net price" rather than a "net debit or credit price," which streamlined terminology is consistent with the use of the term "net price" on other options exchanges.³⁰ The proposed rule also incorporates the first sentence of Rule 6.91-O(a)(2)(iii)(A), regarding the ranking and priority of ECOs not immediately executed, with additional detail regarding the time-in-force modifier of the ECO, which adds clarity and transparency to the proposed Rule.³¹

Proposed Rule 6.91P-O(c) would further provide that, unless otherwise specified in this Rule, ECOs would be processed as follows:

Proposed Rule 6.91P-O(c)(1) would provide that when trading with the leg markets, an ECO would trade at the price(s) of the leg markets provided the leg markets are priced no more than the maximum allowable Away Market Deviation (as defined herein). The proposed rule requiring that when trading with the leg markets, the components of the ECO would trade at the prices of the leg markets

³⁰ <u>See, e.g.</u>, Cboe Rule 5.33(f)(2) (setting forth parameters for the "net price" of complex orders traded on Cboe); Nasdaq ISE, Options 3, Section 14 (c) (providing, in relevant part, that "[c]omplex strategies will not be executed at prices inferior to the best net price achievable from the best ISE bids and offers for the individual legs").

³¹ For example, an ECO designated as IOC that does not immediately execute would cancel rather than be ranked on the Consolidated Book, whereas an ECO designated as Day or GTC that does not immediately execute would be ranked on the Consolidated Book.

is consistent with current functionality, per Rule 6.91-O(a)(2)(ii); requiring that such prices be bound by the Away Market Deviation for an ECO to trade with the leg markets is new under Pillar, as discussed further below).³² For example, if there is sell interest in a leg market at \$1.00, and a leg of an ECO to buy could trade up to \$1.05, the ECO would trade with such leg market at \$1.00. This would result in the ECO receiving price improvement and is consistent with the ECO trading as the Aggressing Order.³³ The proposed functionality that an ECO would trade with leg markets only if the prices of the leg markets are within (and do not exceed the maximum allowable) Away Market Deviation would be new under Pillar and is designed to operate as an additional protection against ECOs being executed on the Exchange at prices too far away from the current market.

Proposed Rule 6.91P-O(c)(2) would provide that when trading with another ECO, each component leg of the ECO must trade at a price at or within the Exchange BBO for that series, and no leg of the ECO may trade at a price of zero.³⁴ This provision is based in part on current Rule 6.91-O(a)(2), which provides that no leg

³² <u>See</u> Rule 6.91-O(a)(2)(ii) (providing that "[i]f, at a price, the leg markets can execute against an incoming [ECO] in full (or in a permissible ratio), the leg markets will have first priority at that price and will trade with the incoming [ECO] pursuant to Rule 6.76A before [ECO] resting in the Consolidated Book can trade at that price").

³³ The term "Aggressing Order" is defined in Rule 1.1, as described in the Single-Leg Pillar Filing, to mean "a buy (sell) order or quote that is or becomes marketable against sell (buy) interest on the Consolidated Book".

³⁴ <u>See, infra</u>, for discussion of proposed Rule 6.91P-O(e)(1) (discussing "Execution of ECOs During Core Trading Hours," including the treatment of ECOs that have executed, at a price, to the extent possible with the leg markets and of ECOs designated as Complex Only).

of an ECO will be executed outside of the Exchange BBO.³⁵ This proposed rule, which ensures that ECOs would never trade through interest in the leg markets, is consistent with current functionality and adds clarity and transparency to the proposed Rule. This proposed rule is also consistent with how ECOs are processed on other options exchanges.³⁶

- Proposed Rule 6.91P-O(c)(3) would provide that an ECO may trade without consideration of prices of the same complex strategy available on other exchanges, which is based on the same text as contained in current Rule 6.91-O(a)(2) without any substantive differences.
- Proposed Rule 6.91P-O(c)(4) would provide that an ECO may trade in one cent (\$0.01) increments regardless of the MPV otherwise applicable to any leg of the complex strategy, which is based on current Rule 6.91-O, Commentary .01 without any substantive differences.

Execution of ECOs at the Open (or Reopening after a Trading Halt). Current Rule

6.91-O(a)(2)(i) sets forth how ECOs are executed upon opening or reopening of trading.

Proposed Rule 6.91P-O(d) would set forth details about how ECOs would be executed at

³⁵ As noted herein, no ECO on the Exchange would execute at a price that would exceed the maximum allowable Away Market Deviation on any component of the complex strategy. <u>See</u> proposed Rule 6.91P-O(a)(1) (defining Away Market Deviation).

See, e.g., BOX Rule 7240(b)(3)(ii). See also Securities Exchange Act Release Nos. 69027 (March 4, 2013), 78 FR 15093, 15094 (March 8, 2013) (SR-BOX-2013-01) (providing that "where two Complex Orders trade against each other, the resulting execution prices will be at a price equal to or better than NBBO and BOX best bid or offer ("BBO") for each of the component Legs," per proposed Rule 7240(b)(3)(ii)). See, e.g., Cboe Rule 5.33(f)(2) (providing that complex orders may not execute at a net price that would cause any component of the complex strategy to be executed at a price of zero).

the open or reopen following a trading halt.

With the transition to Pillar, the Exchange proposes new functionality regarding the "ECO Opening Auction Process" on the Exchange, which would be applicable both to openings and reopenings following a trading halt. The Exchange proposes to incorporate into the ECO Opening Auction Process certain functionality currently available on the Exchange's cash equity platform, which the Exchange has similarly proposed to include in the Auction Process for single-leg options.³⁷ Accordingly, proposed Rule 6.91P-O(d) would use Pillar terminology relating to auctions that is based in part on Pillar terminology set forth in Rule 7.35-E for cash equity trading and in part on Rule 6.64P-O for single-leg options.

- Proposed Rule 6.91P-O(d)(1) would set forth the conditions required for the commencement of an ECO Opening Auction Process. Specifically, as proposed, the Exchange would initiate an ECO Opening Auction Process for a complex strategy only if all legs of the complex strategy have opened or reopened for trading, which text is based on current Rule 6.91-O(a)(2)(i)(A) without any substantive differences. Proposed Rule 6.91P-O(d)(1)(A)-(B) would set forth conditions that would prevent the opening of a complex strategy, as follows:
 - Any leg of the complex strategy has neither an Exchange BO nor an ABO;
 or
 - The complex strategy cannot trade per proposed Rule 6.91P-O(a)(5)(B)-(C).

³⁷ <u>See Single-Leg Pillar Filing (describing opening Auction Process rule per Rule 6.64P-O).</u>

The proposal to detail these conditions for opening (and reopening) are consistent with current functionality not set forth in the current rule. The Exchange believes that this added detail would not only add clarity and transparency to Exchange rules but would also protect market participants from potentially erroneous executions when there is a lack of reliable information regarding the price at which a complex strategy should execute, thereby promoting a fair and orderly ECO Opening Auction Process.

Proposed Rule 6.91P-O(d)(2) would provide that any ECOs in a complex strategy with prices that lock or cross one another would be eligible to trade in the ECO Opening Auction Process. This proposed rule is based on current Rule 6.91-O(a)(2)(i)(B), which provides than an opening process will be used if there are ECOs that "are marketable against each other." The Exchange proposes a difference in Pillar not to require that such ECOs be "priced within the Complex NBBO" because the proposed ECO Opening Auction Process under Pillar would instead rely on the DBBO (as described below).³⁸ As such, the Exchange may open a series based on the Exchange BBO, bound by the Away Market Deviation (or, the ABBO if the Exchange BBO is not available), which is consistent with ECO handling during Core Trading (per proposed Rule 6.91P-O(e)). The Exchange believes this proposed change would better align the permissible

See Rule 6.91-O(a)(2)(i)(B) (providing that "[t]he CME will use an opening auction process if there are Electronic Complex Orders in the Consolidated Book that are marketable against each other and priced within the Complex NBBO"). Per Rule 6.1A-O(a)(11)(b) (and proposed Rule 6.91P-O(a)(2), the "Complex NBBO" for each complex strategy is derived from the national best bid and national best offer for each leg.

opening price for a series with the permissible execution price during Core Trading, which adds consistency to ECO order handling to the benefit of investors.

Proposed Rule 6.91P-O(d)(2)(A) would provide that an ECO received during a pre-open state would not participate in the Auction Process for the leg markets pursuant to Rule 6.64P-O, which is based on the same text (in the second sentence) of current Rule 6.91-O(a)(2)(i)(A) without any substantive differences. Proposed Rule 6.91P-O(d)(2)(B) would provide that a complex strategy created intra-day when all leg markets are open would not be subject to an ECO Opening Auction Process and would instead trade pursuant to paragraph (e) of the proposed Rule (discussed below) regarding the handling of ECOs during Core Trading Hours.

Proposed Rule 6.91P-O(d)(2)(C) would provide that the ECO Opening Auction Process would be used to reopen trading in ECOs after a trading halt. This proposed rule is consistent with current Rule 6.64-O(e) and makes clear that the ECO Opening Auction Process would be applicable to reopenings, which would add internal consistency to Exchange rules and promote a fair and orderly ECO Opening Auction Process following a trading halt.

 Proposed Rule 6.91P-O(d)(3) would describe each aspect of the ECO Opening Auction Process. First, proposed Rule 6.91P-O(d)(3)(A) would describe the "ECO Auction Collars," which terminology would be new for ECO trading and is based on the term "Auction Collars" used in Rule 7.35-E for trading cash equity securities as well as in Rule 6.64P-O(a)(2) for single-leg options trading.³⁹ As proposed, the upper (lower) price of an ECO Auction Collar for a complex strategy would be the DBO (DBB); provided, however, that if the DBO (DBB) is calculated using the Exchange BBO for all legs of the complex strategy and all such Exchange BBOs have displayed Customer interest, the upper (lower) price of an ECO Auction Collar would be one penny (\$0.01) times the smallest leg ratio inside the DBO (DBB). This new functionality on Pillar would ensure that if there is displayed Customer interest on the Exchange on all legs of the strategy, the opening price for the complex strategy would price improve the DBBO, which the Exchange believes is consistent with fair and orderly markets and investor protection.

• Next, proposed Rule 6.91P-O(d)(3)(B) would describe the "ECO Auction Price." As proposed, the ECO Auction Price would be the price at which the maximum volume of ECOs can be traded in an ECO Opening Auction, subject to the proposed ECO Auction Collar. As further proposed, if there is more than one price at which the maximum volume of ECOs can be traded within the ECO Auction Collar, the ECO Auction Price would be the price closest to the midpoint of the ECO Auction Collar, or, if the midpoint falls within such prices, the ECO Auction Price would be the midpoint falls within such price would not be lower (higher) than the highest (lowest) price of an ECO to buy (sell) that is eligible to trade in the ECO Opening (or Reopening) Auction Process. The

³⁹ <u>See Single-Leg Pillar Filing (defining Auction Collars in Rule 6.64P-O(a)(2)).</u>

concept of an ECO Auction Price is consistent with the concept of "single market clearing price" set forth in current Rule 6.91-O(a)(2)(i)(B). For Pillar, the Exchange proposes to determine the ECO Auction Price in a manner that is based in part on how an Indicative Match Price is determined for trading of cash equity securities, as set forth in Rule 7.35-E(a)(8)(A), and how the Exchange proposes to determine the price for Auctions on Pillar for single-leg options trading.⁴⁰ Finally, as proposed, if the ECO Auction Price would be a sub-penny price, it would be rounded to the nearest whole penny, which text is based on current Rule 6.91-O(a)(2)(i)(B), with a difference that the current rule refers to the midpoint of the Complex NBBO (which could be a sub-penny price and if so, is rounded down to the nearest penny) as opposed to referring to the ECO Auction Price, which would be a new Pillar term for trading ECOs, which price, if in sub-pennies, would be rounded (up or down) to the nearest MPV.

Proposed Rule 6.91P-O(d)(3)(B)(i) would provide that an ECO to buy (sell) with a limit price at or above (below) the upper (lower) ECO Auction Collar would be included in the ECO Auction Price calculation at the price of the upper (lower) ECO Auction Collar, but ranked for participation in the ECO Opening (or Reopening) Auction Process in price-time priority based on its limit price. This proposed text is based in part on current Rule 6.91-O(a)(2)(i)(B). The proposed rule is also based on how the Exchange processes auctions for cash equity trading,

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See Single-Leg Pillar Filing (describing Rule 6.64P-O(a)(9)).

as described in Rules 7.35-E(a)(10)(B) and (a)(6) and how the Exchange proposes to process Auctions on Pillar for single-leg options trading.⁴¹

Proposed Rule 6.91P-O(d)(3)(B)(ii) would provide that locking and crossing ECOs in a complex strategy would trade at the ECO Auction Price. As further proposed, if there are no locking or crossing ECOs in a complex strategy at or within the ECO Auction Collars, the Exchange would open the complex strategy without a trade. This proposed text would be new and is based in part on Rule 6.64P-O(d)(2)(B) for single-leg options, which describes when an option series could open without a trade.⁴²

Proposed Rule 6.91P-O(d)(4) would describe the "ECO Order Processing during ECO Opening Auction Process." Because the Exchange would be using the same Pillar auction functionality for ECO trading that is used for its cash equity market and that the Exchange is proposing for single-leg options trading, the Exchange proposes to apply existing Pillar auction functionality regarding how to process ECOs that may be received during the period when an ECO Auction Process is ongoing.

Accordingly, as proposed, new ECOs and ECO Order Instructions (as defined in proposed Rule 6.91P-O(a)(6), described above) that are received when the Exchange is conducting the ECO Opening Auction Process for the complex strategy would be accepted but would not be processed until after the conclusion of this process. As further proposed, when the Exchange is conducting the ECO

⁴¹ <u>See Single-Leg Pillar Filing (describing Rules 6.64P-O(a)(9)(B)(i) and 6.64P-O(b)).</u>

⁴² <u>See Single-Leg Pillar Filing (describing Rule 6.64P-O(d)(2)(B)).</u>

Opening Auction Process, ECO Order Instructions would be processed as follows:

- Proposed Rule 6.91P-O(d)(4)(A) would provide that an ECO Order
 Instruction received during the ECO Opening Auction Process would not
 be processed until after this process concludes if it relates to an ECO that
 was received before the process begins and that any subsequent ECO
 Order Instruction(s) relating to such ECO would be rejected if received
 during the ECO Opening Auction Process when a prior ECO Order
 Instruction is pending.
- Proposed Rule 6.91P-O(d)(4)(B) would provide that an ECO Order
 Instruction received during the ECO Opening Auction Process would be
 processed on arrival if it relates to an order that was received during this
 process.

Proposed Rule 6.91P-O(d)(4) and sub-paragraphs (A) and (B) are based on both current Rule 7.35-E(g) and its sub-paragraphs (1) and (2) and Rule 6.64P-O(e) and its sub-paragraphs (1) and (2) (as described in the Single-Leg Pillar Filing) with differences only to reference the defined term ECO Order Instruction and to refer to the ECO Opening Auction Process. The Exchange believes that the proposed rule text would provide transparency regarding how ECO Order Instructions that arrived during the ECO Opening Auction Process would be processed.

• Proposed Rule 6.91P-O(d)(5) would describe the "Transition to continuous trading" after the ECO Opening Auction Process. As proposed, after the ECO

Opening Auction, ECOs would be subject to ECO Price Protection, per proposed Rule 6.91P-O(g)(2) (as described below) and, if eligible to trade, would trade as follows:

- Proposed Rule 6.91P-O(d)(5)(A) would provide that ECOs received before the complex strategy was opened that did not trade in whole in the ECO Opening Auction Process and that lock or cross other ECOs or leg markets in the Consolidated Book would trade pursuant to proposed Rule 6.91P-O(e) (discussed below) regarding the handling of ECOs during Core Trading Hours; otherwise, such ECOs would be added to the Consolidated Book. This provision is based on the (last sentence) of current Rule 6.91-O(a)(2)(i)(B) and (C), with non-substantive differences to use Pillar terminology.
- Proposed Rule 6.91P-O(d)(5)(B) would provide that ECOs received during the ECO Opening Auction Process would be processed in time sequence relative to one another based on original entry time. This proposed rule is based on both current functionality and how the Exchange proposes to process orders in an option series that were received during an Auction Processing Period, as described in the Single-Leg Pillar Filing for Rule 6.64P-O(a)(6).

Execution of ECOs During Core Trading Hours. Proposed Rule 6.91P-O(e) would describe how ECOs would be processed during Core Trading Hours.

Proposed Rule 6.91P-O(e)(1) would provide that once a complex strategy is open for trading, an ECO would trade with the best-priced contra-side interest as follows: • Proposed Rule 6.91P-O(e)(1)(A) relates to ECOs that are permitted to trade with the leg markets and would provide that if, at a price, the leg markets can trade with an eligible ECO,⁴³ in full or in a permissible ratio, the leg markets would trade first at that price, pursuant to proposed Rule 6.76AP-O,⁴⁴ until the quantities on the leg markets are insufficient to trade with the ECO, at which time such ECO would trade with contra-side ECOs resting in the Consolidated Book at that price, which is based on Rule 6.91-O(a)(2)(ii).⁴⁵ Although the current rule makes clear that the leg markets have first priority, at a price, to trade with an ECO in full or in a permissible ratio, the proposed rule would add text to specify that an ECO may trade with another ECO *at* the leg markets at that price. In other words, such ECO must first exhaust any available interest in the leg markets at that price that can satisfy the ECO, in full or in a permissible ratio, before it may trade with another ECO at that price.

This proposed description regarding how ECOs would trade with other ECOs is consistent with the rules of the BOX, and is therefore not new or novel.⁴⁶ Per

⁴³ <u>See proposed Rule 6.91P-O(e)(1)(C) and (D) (for description of ECOs that are not eligible to trade with the leg markets).</u>

⁴⁴ <u>See Single-Leg Pillar Filing (describing Rule 6.76AP-O, Order Execution and Routing, which is the substantively identical Pillar version of current Rule 6.76AP-O).</u>

⁴⁵ <u>See</u> Rule 6.91-O(a)(2)(ii) (providing that "[i]f, at a price, the leg markets can execute against an incoming [ECO] in full (or in a permissible ratio), the leg markets will have first priority at that price and will trade with the incoming [ECO]pursuant to Rule 6.76A before [ECO] resting in the Consolidated Book can trade at that price").

 ⁴⁶ See BOX Rule 7240(b)(2)(ii). See also Securities Exchange Act Release Nos.
 69027 (March 4, 2013) 78 FR 15093 (March 8, 2013) (Notice of Proposed Rule Change, as Modified by Amendment No. 1, regarding, among other things,

BOX Rule 7240(b)(2)(ii), "[a] Complex Order for which a leg of such Complex Order 's underlying Strategy is not in a one-to-one ratio with each other leg of such Strategy" must first trade with all eligible interest in the leg markets, i.e., "for all of the quantity available at the best price in a permissible ratio until the quantities remaining on the BOX Book are insufficient to execute against the Complex Order while respecting the ratio."⁴⁷ And, after such execution on the BOX Book, "the remaining quantity of the Complex Order may execute against other Complex Orders and the component Legs of the Complex Order may trade at prices equal to the corresponding prices on the BOX Book."⁴⁸

Consistent with BOX Rule 7240(b)(2)(ii), proposed Rule 6.91P-O(e)(1)(A) would provide that an ECO that is eligible to trade with the leg markets must first trade with the leg markets, at a price, to the extent possible (i.e., in full or in a permissible ratio) before that ECO can trade at the same price with another ECO.⁴⁹ As proposed, such ECO would never trade ahead of interest (Customer or otherwise) in the leg markets if that interest is sufficient to satisfy the ECO in full or in a permissible ratio. However, such ECO may execute with another ECO, at a price, after exhausting eligible leg market interest -- Customer or otherwise -- at

allowing the execution of certain Complex Orders to trading at the same price as best-priced interest in the BOX Book after such eligible leg interest has been exhausted) ("BOX Notice"); 69419 (April 19, 2013) 78 FR 24449 (April 25, 2013) (Order Approving BOX Notice) ("BOX Approval Order") (SR-BOX-2013-01).

⁴⁷ <u>See BOX Rule 7240(b)(2)(ii). The "BOX Book" is conceptually the same as the leg markets and are defined as "the electronic book of orders on each single series of options maintained by the BOX Trading Host." <u>See BOX Rule 100(a)(10).</u></u>

 $[\]frac{48}{2}$ <u>See</u> BOX Rule 7240(b)(2)(ii).

⁴⁹ See proposed Rule 6.91P-O(e)(1)(A).

that price if the leg markets cannot satisfy the ratio spread of the ECO 50 Thus, per proposed Rule 6.91P-O(e)(1)(A), such ECO would be eligible to trade with contra-side ECOs resting in the Consolidated Book at the same price, which is consistent with BOX's rules.⁵¹

The Exchange believes this proposed Rule makes clear that the priority of the leg markets remains primary -- as such interest is afforded the opportunity to trade at the best price, but also ensures that ECO trading opportunities are maximized. As noted by BOX, the Exchange proposes to apply the "straightforward principle" of allowing the execution of an ECO against another ECO once any eligible interest on the leg markets at the same net price has already been executed.⁵²

The following example illustrates how proposed Rule 6.91P-O(e)(1)(A) would be applied.

EXAMPLE: Assume an ECO consisting of the simultaneous purchase of one Option A instrument and two Option B instruments (A+2B).

⁵⁰ <u>See id.</u> Unlike BOX, the Exchange has deemed it unnecessary to refer to ECOs with other than one-to-one ratios and believes the proposed rule text is clear and concise in stating that if the leg markets have sufficient quantity to satisfy an ECO in full or in a permissible ratio, such leg markets have first priority to trade with such ECO (ahead of any ECOs resting in the Consolidated Book at that price) unless or until the leg market interest cannot satisfy the ECO ratio spread.

⁵¹ The Exchange does not propose to copy into Rule 6.91P-O(e)(1)(A) the requirement of current Commentary .02 to Rule 6.91-O that at least one leg of an ECO must execute at a price better than the corresponding leg market price containing Customer interest because this requirement would be incorporated into how Complex Only Orders would function on the Exchange, and therefore the Exchange no longer needs to separately specify that requirement. <u>See</u> proposed Rule 6.91P-O(a)(1)(C) (requiring of Complex Only Order that, when there is displayed Customer interest on all legs of the complex strategy, such Complex Only Order must price improve at least a portion of such displayed Customer interest).

⁵² <u>See BOX Notice</u>, 78 FR, at 15093.

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The interest in the leg markets is initially as follows:

Leg market for Option A is:

Order to buy 2 at \$1.00	Order to sell 20 at \$1.06
Order to buy 5 at \$0.99	Order to sell 2 at \$1.10

Leg market for Option B is:

Order to buy 3 at \$1.00	Order to sell 3 at \$1.10
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Complex Order Book for Strategy A+2B:

ECO to buy 2 at \$3.00	ECO to sell 10 at \$3.20
ECO to buy 5 at \$2.90	

The DBBO is \$3.00 bid, \$3.26 offered.

In this example, an ECO is received to sell 2 A+2B at \$3.00. This order can match with either the existing \$3.00 bid on A+2B in the Complex Order Book or with the interest on the leg markets for \$3.00. However, as the Exchange proposes to give priority to interest on the leg markets over executable ECOs, 1 unit of the incoming order to sell A+2B at \$3.00 will execute against the orders on the respective legs (selling 1 A and 2 B at \$1.00 each (\$1.00 + 2(\$1.00) = \$3.00)). After this initial execution against the leg markets, the leg markets are as follows:

Leg Market for Option A is:

Order to buy 1 at \$1.00	Order to sell 20 at \$1.06
Order to buy 5 at \$0.99	Order to sell 2 at \$1.10

Leg Market for Option B is:

Order to buy 1 at $\mathfrak{p}1.00$ Order to set 5 at $\mathfrak{p}1.1$	Order to buy 1 at \$1.00	Order to sell 3 at \$1.10
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Complex Order Book for Strategy A+2B:

ECO to buy 2 at \$3.00 ECO to sell 10 at \$3.20 ECO to buy 5 at \$2.90

One ECO to sell A+2B at \$3.00 remains

Because insufficient quantity remains on the bid of B at \$1.00 to combine with the bid on A (of \$1.00) to respect the ECO ratio(i.e., the incoming ECO seeks to sell 2B, but the remaining leg market bid is for 1B), the remaining order to sell 1 A+2B at \$3.00 would be executed against the resting ECO to buy at \$3.00. In the above scenario, consistent with proposed Rule (e)(1)(A), the Exchange may trade two ECOs without at least one leg having a price better than the best prices on the leg markets.⁵³

The Exchange believes that proposed Rule 6.91P-O(e)(1)(A) would benefit market participants because it is designed to protect the priority of orders on the leg markets by requiring an ECO to execute first against interest on the leg markets at the best price to the extent possible, i.e., in full or in a permissible ratio, and only then permitting an ECO to execute against another ECO at that price. Thus, following the executions against the best-priced interest on the leg markets, an ECO would no longer be executable against interest on the leg markets at the best price because the leg markets would lack sufficient quantity to fill the ECO in a permissible ratio at that price. Absent this provision in Rule 6.91P-O(e)(1)(A), the Exchange believes that otherwise executable ECOs at the leg market price would lose execution opportunities without any benefit to

⁵³ See proposed Rule 6.91P-O(e)(1)(A); see also BOX Rule 7240(b)(2)(ii)).

interest on the leg markets, which is unable to trade with the ECO at that price.⁵⁴ Because "orders are executable against each other only when both the price and the quantity of the orders match," the Exchange believes it is appropriate (and does not deny leg markets priority) to allow ECOs to trade with other ECOs at the leg market price when such eligible leg market interest at that price has been exhausted.⁵⁵

- Proposed Rule 6.91P-O(e)(1)(B) would provide that an ECO would not trade with orders in the leg markets designated as AON, FOK, or with an MTS modifier. This proposed text would be new and is based in part on existing functionality (for AON and FOK) and also reflects the Exchange's proposed treatment under Pillar of its new MTS modifier for orders in the leg markets.⁵⁶ Consistent with current functionality, orders with an AON, FOK, or (new) MTS modifier are conditional and, by design, will miss certain execution opportunities. The Exchange believes that this proposed rule would simplify the operation of electronic complex order trading and would add clarity and transparency that ECOs would not trade with orders that have conditional size-related instructions.
- Proposed Rule 6.91P-O(e)(1)(C) would provide that an ECO designated as Complex Only would be eligible to trade solely with another ECO and would not trade with the leg markets. The proposed Complex Only Orders are based on existing functionality for PNP Plus orders, with updated functionality available on

⁵⁴ <u>See</u> BOX Notice, 78 FR at 15093.

⁵⁵ See BOX Approval Order, 78 FR, at 24449.

⁵⁶ <u>See Single-Leg Pillar Filing (describing Minimum Trade Size or MTS Modifier in Rule 6.62P-O(i)(3)(B)).</u>

Pillar.⁵⁷ The Exchange proposes on Pillar not to use the term "PNP Plus Order" and instead rename this order type as a Complex Only Order, which is more aptly named, and is consistent with similar order types available on other options exchanges.⁵⁸

As further proposed, an ECO designated as Complex Only must trade at a price at or within the DBBO; provided that, if the DBB (DBO) is calculated using the Exchange BBO for all legs of the complex strategy and all such Exchange BBOs have displayed Customer interest, the Complex Only Order would not trade below (above) one penny (\$0.01) times the smallest leg ratio inside the DBB (DBO), regardless of whether there is sufficient quantity on such leg markets to satisfy the ECO.⁵⁹ This proposed requirement is designed to ensure that, if there is displayed Customer interest on all legs of the strategy on the Exchange, a Complex Only Order would price improve at least some portion of such interest making up the DBBO. Thus, a Complex Only Order does not get the benefit of the priority

⁵⁷ <u>See</u> Rule 6.91-O(b)(1) (providing that ECOs may be designated as Limit Orders designated as PNP Plus); Rule 6.62-O(y) (describing PNP Plus orders as ECOs that may only trade with other ECOs, but which will continuously be repriced if locking or crossing the Complex BBO). Unlike the PNP Plus Order, which trades inside the Complex BBO (conceptual equivalent to the DBBO), the Complex Only Order may trade with another ECO at the DBBO, unless there is certain displayed Customer interest on the Exchange (as described herein), in which case the Complex Only Order must trade inside the DBBO.

See proposed Rule 6.91P-O(e)(1)(C). Other options exchanges likewise offer Complex Orders that trade only with Complex Orders. See, e.g., Cboe Rule 5.33(a) (defining "Complex Only" order as an ECO "that a [Cboe] Market-Maker may designate to execute only against complex orders in the COB and not Leg into the Simple Book"). The proposed Complex Only Order (like its predecessor PNP Plus Order) would be available to all market participants.

⁵⁹ <u>See proposed Rule 6.91P-O(e)(1)(C)</u>. Because Complex Only Orders would never trade with the leg markets, whether or not there is sufficient quantity at the displayed Customer price is irrelevant to the operation of this order type.

treatment set out in proposed Rule 6.91P-O(e)(1)(A). If a Complex Only Order is unable to trade within the aforementioned price parameters, it would remain on the Consolidated Book until it can trade with another ECO per the requirements of proposed Rule 6.91P-O(e)(1)(C).

As noted above, the (renamed) Complex Only Order type is based on existing PNP Plus Order functionality, with updated functionality for trading on Pillar. Specifically, unlike the operation of the PNP Plus Order, the Exchange would not reprice a resting Complex Only Order and instead would restrict a Complex Only Order from trading until such order could trade at a price at or inside the DBBO, as described above. The Exchange believes that allowing Complex Only Orders to trade up to the DBBO unless there is displayed Customer interest on all legs of the strategy on the Exchange at the DBBO (as described above), provides market participants additional trading opportunities while still protecting displayed Customer interest on the Exchange.

The proposed operation of the Complex Only Order, insofar as it protects displayed Customer interest in the leg markets when an ECO trades with another ECO, is consistent with the rules of NYSE American and is therefore not new or novel.⁶⁰

⁶⁰ <u>See NYSE American Rule 980NY, Commentary .02(i)</u> (providing that, when executing an ECO, if each leg of the contra-side Derived BBO --calculated using the BBO from the Consolidated Book for each of the options series comprising a given complex order strategy per Rule 900.2NY(7)(a)(b)-- for the components of the ECO includes Customer interest, the price of at least one leg of the order must "trade at a price that is better than the corresponding price of all customer bids or offers in the Consolidated Book for the same series, by at least one standard trading increment as defined in Rule 960NY," which minimum trading increment is one cent (\$0.01). <u>See NYSE American Rule 960NY(b)</u>.

- Proposed Rule 6.91P-O(e)(1)(D) would provide that ECOs with any one of the following complex strategies would be ineligible to trade with the leg markets and would be processed as a Complex Only Order:
 - o a complex strategy with more than five legs;
 - a complex strategy with two legs and both legs are buying or both legs are selling, and both legs are calls or both legs are puts; or
 - a complex strategy with three or more legs and all legs are buying or all legs are selling.

The proposal to restrict ECOs with more than five legs from trading with the leg markets (and being treated as Complex Only Orders), per proposed Rule 6.91P-O(e)(1)(D)(i), would be new functionality under Pillar and is designed to help Market Makers manage risk. The Exchange currently requires Market Makers to utilize certain risk controls for quoting to help mitigate risk particularly during periods of market volatility, and would require Market Makers to continue to use risk controls on Pillar.⁶¹ Because the execution of a multi-legged ECO is a single transaction, comprising discrete legs that must all trade simultaneously, allowing ECOs with more than five legs to trade with the leg markets may allow a multi-legged transaction to occur before a Market Maker's risk settings would be triggered. This proposed limitation is designed to prevent such multi-legged

⁶¹ <u>See</u> Single-Leg Pillar Filing (describing the activity-based controls with updated functionality under Pillar that Market Makers would be required to use to manage risk in connection with their quotes, per Rule 6.40P-O(a)(3) and (b)(2)). The proposed Pillar risk controls are substantively identical to the existing risk controls set forth in Rules 6.40-O(b)(2), (c)(2) and (d)(2) and Commentary .04 to Rule 6.40-O.

transactions, which would help ensure that Market Makers continue to provide liquidity and do not trade above their established risk tolerance levels. The Exchange notes that this restriction is consistent with similar limits established on other options exchanges.⁶²

Proposed Rule 6.91P-O(e)(1)(D)(ii)-(iii), which treats ECOs with certain complex strategies as Complex Only Orders, is based in part on current Rule 6.91-O(b)(4)(i)-(ii), with a difference that currently, such so-called "directional strategies" are rejected. The proposed handling under Pillar would be less restrictive than the current rule because such strategies would not be rejected and is consistent with the treatment of such complex strategies on other options exchanges.⁶³ As with the proposal to restrict ECOs with more than five legs trading with the leg markets, this proposed restriction is also designed to ensure that Market Maker risk settings would not be bypassed. Because ECOs with directional strategies are typically geared towards an aggressive directional capture of volatility, such ECOs can represent significantly more risk than trading any one of the legs in isolation. As such, because Market Maker risk settings are only triggered after the entire ECO package has traded, the Exchange believes this proposed rule change would help ensure fair and orderly markets by preventing such orders from trading with the leg markets, which would minimize risk to

⁶² <u>See, e.g.</u>, Cboe Rule 5.33(g) (providing the ECOs may be restricted from trading with the leg markets if such ECO has more than a maximum number of legs, which maximum the Exchange determines on a class-by-class basis and may be two, three, or four).

⁶³ <u>See, e.g.</u>, Nasdaq ISE Options 3, Section 14 (d)(3)(A)-(B) (providing that ECOs with these complex strategies may trade only with other ECOs).

Market Makers.

Proposed Rule 6.91P-O(e)(2) would provide that the Exchange would evaluate trading opportunities for a resting ECO when the leg markets comprising a complex strategy update, provided that during periods of high message volumes, such evaluation may be done less frequently. The Exchange believes that this proposed rule promotes transparency of the frequency with which the Exchange would be evaluating the leg markets for updates.

The Exchange believes the proposed handling of ECOs during Core Trading is reasonably designed to facilitate increased interaction between orders on the leg markets and ECOs, and to do so in such a manner as to ensure a dynamic, realtime trading mechanism that maximizes the opportunity for trade executions for both ECOs and orders on single option series.

Execution of ECOs During a COA. Proposed Rule 6.91P-O(f) would describe how ECOs would trade during a COA. The COA Process is currently described in Rule 6.91-O(c). Under Pillar, the Exchange proposes to modify the COA process, including by relying on the DBBO (as described above) for pricing, allowing a COA Order to initiate a COA only on arrival, and streamlining the rule text describing the circumstances that would cause an early end to a COA.

As proposed, a COA Order received when a complex strategy is open for trading and that satisfies the requirements of paragraph (f)(1) of the proposed Rule would initiate a COA only on arrival after trading with eligible interest per proposed Rule 6.91P-O(f)(2)(A) (described below). As further proposed, a COA Order would be rejected if entered during a pre-open state or if entered during Core Trading Hours with a time-inforce of FOK or GTX. This proposed order handling is based in part on current Rule 6.91-O(c)(1)(ii), which requires that COA Orders be submitted during Core Trading Hours. The proposed rejection of such orders during a pre-open state would be new under Pillar and is consistent with the Exchange's proposed functionality that a COA Order would initiate a COA only on arrival. In addition, the proposal would clarify that COA Orders designated as FOK or GTX would be rejected, even if submitted during Core Trading Hours, is based on current functionality and this addition would add further detail and clarification to the rule text. Finally, as further proposed, only one COA may be conducted at a time in a complex strategy, which is identical to text in current Rule 6.91-O(c)(3).

Proposed Rule 6.91P-O(f)(1) would describe the conditions required for the "Initiation of a COA." As proposed, to initiate a COA, the limit price of the COA Order to buy (sell) must be higher (lower) than the best-priced, same-side ECOs resting on the Consolidated Book and equal to or higher (lower) than the midpoint of the DBBO, which is designed to encourage aggressively-priced COA Orders and, in turn, to attract a meaningful number of RFR Responses to potentially provide price improvement of the COA Order's limit price. This proposed text is based in part on current Rule 6.91-O(c)(3)(i), with a difference to add a new "midpoint of the DBBO" requirement to reflect this new concept under Pillar. As further proposed, a COA Order that does not satisfy these pricing parameters would not initiate a COA and, unless it is cancelled (i.e., if an IOC), such order would be ranked in Consolidated Book and processed as an ECO, per proposed Rule 6.91P-O(e) (described above). This would be new under Pillar, as current Rule 6.91-O(c)(3) allows an order designated for COA to reside on the Consolidated Book unless or until such order meets the requisite pricing conditions to initiate a COA. The Exchange believes this proposed change would simplify the COA process and promote the orderly initiation of COAs, which is essential to maintaining a fair and orderly market for ECOs.

Finally, as proposed, once a COA is initiated, the Exchange would disseminate a Request for Response message, the Response Time Interval would begin and, during such interval, the Exchange would accept RFR Responses, including ECO GTX Orders. This proposed text is based on current functionality set forth in Rule 6.91-O(c), with non-substantive differences to use Pillar terminology, including using the new Pillar term for ECO GTX Orders.

Proposed Rule 6.91P-O(f)(2) would describe the "Pricing of a COA." As proposed, a COA Order to buy (sell) would initiate a COA at its limit price, unless its limit price locks or crosses the DBO (DBB), in which case it would initiate a COA at a price equal to one penny (\$0.01) times the smallest leg ratio inside the DBO (DBB) (the "COA initiation price"). This proposed functionality utilizes the new concept of a DBBO, is consistent with current functionality (that relies on substantively similar concept of Complex BBO), and ensures (consistent with current functionality) that interest on the leg markets maintain priority.

Proposed Rule 6.91P-O(f)(2)(A) would provide that prior to initiating a COA, a COA Order to buy (sell) would trade with any ECO to sell (buy) resting in the Consolidated Book that is priced equal to or lower (higher) than the DBO (DBB), unless the DBO (DBB) is calculated using the Exchange BBO for all legs of the complex strategy and all such Exchange BBOs have displayed Customer interest,

in which case the COA Order will trade up (down) to one penny (\$0.01) times the smallest leg ratio inside the DBO (DBB) (i.e., priced better than the leg markets) and any unexecuted portion of such COA Order would initiate a COA. This proposed rule is based on current Rule 6.91-O(c)(2) with a difference to use the Pillar concept of DBBO rather than refer to the contra-side Complex BBO and to specify that the COA Order must price improve the DBBO when there is displayed Customer interest on the Exchange leg markets, as noted above.

- Proposed Rule 6.91P-O(f)(2)(B) would provide that a COA Order would not be eligible to trade with the leg markets until after the COA ends, which added detail, while not explicitly stated in the current rule, is consistent with current functionality described in Rules 6.91-O(c)(7)(A) and (B) that only RFR Responses (i.e., GTX orders) and ECOs will be allocated in a COA and that the COA Order would not trade with the leg markets until after the COA allocations.
- Proposed Rule 6.91P-O(f)(3) would set forth the conditions that would result in the "Early End to a COA" (i.e., a COA ending prior to the expiration of the Response Time Interval), which conditions are consistent with current Rule 6.91-O(c)(6) as described below. Currently, as described in Rule 6.91-O(c)(3), the Exchange takes a snapshot of the Complex BBO at the start of a COA and uses that snapshot as the basis for determining whether to end a COA early. Under Pillar, the Exchange would no longer use a snapshot of the Complex BBO as the basis for determining whether to end a COA early on the DBBO (calculated per proposed Rule 6.91P-O(a)(5)), which is updated as market

conditions change (including during the Response Time Interval).⁶⁴ The Exchange believes relying on the DBBO is appropriate and would benefit investors as it would provide real-time trading information that includes an additional layer of price protection for ECO trading as the DBBO is based on Exchange BBOs, when available, or the ABBO. The Exchange proposes a COA would end early under the following conditions:

- Proposed Rule 6.91P-O(f)(3)(A) would provide that a COA would end early if the Exchange receives an incoming ECO or COA Order to buy (sell) in the same complex strategy that is priced higher (lower) than the initiating COA Order to buy (sell), which proposed text is based on current Rule 6.91-O(c)(6)(B)(i) without any substantive differences.
- Proposed Rule 6.91P-O(f)(3)(B) would provide that a COA would end early if the Exchange receives an RFR Response that locks or crosses the DBBO on the same-side as the COA Order, which proposed text is based on current Rule 6.91-O(c)(6)(A)(i), except (as noted above) it refers to the DBBO rather than the "initial Complex BBO."
- Proposed Rule 6.91P-O(f)(3)(C) would provide that a COA would end early if the leg markets update causing the DBBO on the same-side as the COA Order to lock or cross (i) any RFR Response(s) or (ii) if no RFR Responses have been received, the best-priced, contra-side ECOs. This

⁶⁴ As discussed <u>infra</u> regarding proposed Rule 6.91P-O(a)(5) and the definition of the Derived BBO, "the DBBO will be updated as the Exchange BBO or ABBO, as applicable, is updated").

proposed rule is based in part on current Rule 6.91-O(c)(6)(C)(i), with differences to use Pillar terminology, including reference to the DBBO.

 Proposed Rule 6.91P-O(f)(3)(D) would provide that a COA would end early if the leg markets update causing the contra-side DBBO to lock or cross the COA initiation price. This proposed rule is based in part on current Rule 6.91-O(c)(6)(C)(ii), except that it would refer to the DBBO and the COA initiation price, which would be new concepts under Pillar.

Because the DBBO may be calculated using the ABBO for a given leg, the Exchange notes that it would be new under Pillar to have a COA end early based on (locking or crossing) market conditions outside of the Exchange. The Exchange believes this proposed functionality would benefit market participants by preventing COA Orders from executing at prices too far away from the prevailing market for that complex strategy. In addition, the Exchange believes this proposed functionality would promote internal consistency and benefit market participants because, as proposed, the execution of ECOs on the Exchange, including whether such ECO may initiate a COA as a COA Order, is based on the DBBO. As such, the Exchange believes it is appropriate and to the benefit of market participants that the early termination of a COA likewise be based on the DBBO -- regardless of whether the prices used to calculate such DBBO include (or consist entirely of) ABBO prices.

Proposed Rule 6.91P-O(f)(4) would set forth the "Allocation of COA Orders" after a COA either ends early or after the expiration of the Response Time Interval. Current Rule 6.91-O(c)(7)(A) sets forth that the COA-eligible orders are

allocated against the best-priced interest received in the COA at each price on a "Size Pro Rata Basis," as that concept is defined in Rule 6.75-O(f)(6). Under Pillar, the allocation of the COA Order would be based on price-time priority, rather than Size Pro Rata, which would align the allocation of ECOs in a COA with standard processing of ECOs on the Exchange, which adds transparency and consistency to ECO processing on the Exchange as well as internal consistency to Exchange rules, all to the benefit of market participants.

Proposed Rule 6.91P-O(f)(4)(A) would provide that RFR Responses to sell (buy) that are priced lower (higher) than a COA Order to buy (sell) would trade in price-time priority up (down) to the DBBO; provided, however, that if all legs of the DBB (DBO) are calculated using Exchange BBOs and all such Exchange BBOs have displayed Customer interest, RFR Responses to sell (buy) would not trade below (above) one penny (\$0.01) times the smallest leg ratio inside the DBB (DBO). This proposed rule would ensure that the COA Order would not trade at a worse price than the leg markets and would price improve the DBBO where there is displayed Customer interest on all legs of the complex strategy on the Exchange. The proposed text is based in part on current Rule 6.91-O(c)(7)(A)insofar as it ensures that the COA Order would trade with the best-priced RFR Responses received in the COA and differs substantively because the COA Order would not trade ahead of certain displayed Customer interest and, as discussed above, the COA Order would trade with RFR Responses in price-time priority (and not Size Pro Rata).

Proposed Rule 6.91P-O(f)(4)(B) would provide that after COA allocations pursuant to paragraph (f)(4)(A) of this proposed Rule, any unexecuted balance of a COA Order (including COA Orders designated as IOC) would be eligible to trade with any contra-side interest, including the leg markets unless the COA Order is designated or treated as a Complex Only Order. This proposed text is based on existing functionality and makes explicit that a COA Order would trade solely with complex interest (and not the leg markets) during a COA. This proposed rule is designed to provide clarity and transparency that the remaining balance of a COA Order would be eligible to trade with the leg markets after the COA ends.

Proposed Rule 6.91P-O(f)(4)(C) would provide that after a COA Order trades pursuant to proposed Rule 6.91P-O(f)(4)(B), any unexecuted balance of a COA Order that is not cancelled (i.e., if an IOC) would be ranked in the Consolidated Book and processed as an ECO pursuant to paragraph (e) of this Rule. The proposed text is based on current Rule 6.91-O(c)(7)(B) without any substantive differences.

Proposed Rule 6.91P-O(f)(5) would set forth "Prohibited Conduct related to COAs," and is based on the first sentence of current Commentary .04 to Rule 6.91-O with one substantive differences: to add reference to quotes, and would provide that a pattern or practice of submitting "unrelated *quotes or* orders that cause a COA to conclude early would be deemed conduct inconsistent with just and equitable principles of trade,"⁶⁵

⁶⁵ <u>See proposed Rule 6.91P-O(f)(5) (emphasis added)</u>. In addition, rather than copy into proposed Rule 6.91P-O the second sentence of current Rule 6.91-O, Commentary .04, which provides that dissemination of information related to

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which addition would broaden the scope of "Prohibited Conduct" to the benefit of market participants and would also add clarity and transparency to Exchange rules.

ECO Risk Checks. Proposed Rule 6.91P-O(g) would describe the "ECO Risk Checks," which are designed to help OTP Holders and OTP Firms to effectively manage risk when trading ECOs. Current Commentaries .03, .05, and .06 of Rule 6.91-O set forth the existing risk checks for ECOs. With the transition to Pillar, the Exchange proposes to modify and enhance its existing risk checks for ECOs, as follows:

• Proposed Rule 6.91P-O(g)(1) would set forth the "Complex Strategy Limit." As proposed, the Exchange would establish a limit on the maximum number of new complex strategies that may be requested to be created per MPID, which limit would be announced by Trader Update.⁶⁶ As further proposed, when an MPID reaches the limit on the maximum number of new complex strategies, the Exchange would reject all requests to create new complex strategies from that MPID for the rest of the trading day. In addition, and notwithstanding the established Complex Strategy Limit, the Exchange proposes that it may reject a request to create a new complex strategy from any MPID whenever the Exchange determines it is necessary in the interests of a fair and orderly market.

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COA Orders to third parties would also be deemed as conduct inconsistent with just and equitable principles of trade, the Exchange proposes to add more expansive language regarding this prohibited conduct to the order exposure rule. See infra for discussion of proposed change to Rule 6.47A-O.

The Exchange has proposed to add the definition of MPID to proposed Rule 1.1, which would refer to "the identification number(s) assigned to the orders and quotes of a single ETP Holder, OTP Holder, or OTP Firm for the execution and clearing of trades on the Exchange by that permit holder. An ETP Holder, OTP Holder, or OTP Firm may obtain multiple MPIDs and each such MPID may be associated with one or more sub-identifiers of that MPID." <u>See</u> Single-Leg Pillar Filing.

This is new functionality proposed under Pillar but is conceptually similar to the Complex Order Table Cap (the "Cap"), set forth in Commentary .03 to Rule 6.91-O, which Cap (like the Complex Strategy Limit), would help maintain a fair and orderly market because it would operate as a system protection tool that enables the Exchange to prevent any single MPID from creating more than a limited number of complex strategies during the trading day. The Exchange also notes that other options exchanges likewise impose a limit on new complex order strategies.⁶⁷

Proposed Rule 6.91P-O(g)(2) would set forth the ECO Price Protection. The existing ECO "Price Protection Filter" is set forth in Commentary .05 to current Rule 6.91-O (the "ECO Filter"). The proposed "ECO Price Protection" on Pillar would work similarly to how the current ECO price protection mechanism functions on the Exchange because an ECO would be rejected if it is priced a specified percentage away from the contra-side Complex NBB or NBO.⁶⁸ However, on Pillar, the Exchange proposes to use new thresholds and reference prices, which would not only simplify the existing price check, but it would also align the proposed functionality with the proposed "Limit Order Price Protection"

⁶⁷ <u>See, e.g.</u>, Cboe Rule 5.33(a) (providing, in its definition of "complex strategy" that Cboe "may limit the number of new complex strategies that may be in the [Cboe] System at a particular time") and MIAX Rule 518(a)(6) (providing, in its definition of "complex strategy" that MIAX "may limit the number of new complex strategies that may be in the System at a particular time and will communicate this limitation to Members via Regulatory Circular").

⁶⁸ As noted above, the Exchange proposes to define the Complex NBBO as the derived national best bid and derived national best offer for a complex strategy calculated using the NBB and NBO for each component leg of a complex strategy. <u>See</u> proposed Rule 6.91P-O(a)(2).

for single-leg interest, thus adding uniformity to Exchange rules.⁶⁹ Although the mechanics of the ECO Price Protection would vary slightly from the existing Price Protection Filter, the goal of this feature would remain the same: to prevent the execution of ECOs that are priced too far away from the prevailing market for the same strategy and therefore potentially erroneous. Whereas the Away Market Deviation (vis a vis a DBBO based on an Exchange BBO) is designed to make sure that ECOs do not trade too far away from the prevailing market, the ECO Order Protection as proposed (and as is the case today) is to prevent the execution of ECOs that were potentially (inadvertently) entered at prices too far away from the prevailing market and, as such, this mechanism protects the order sender from itself.

Proposed Rule 6.91P-O(g)(2)(A) would provide that each trading day, an ECO to buy (sell) would be rejected or cancelled (if resting) if it is priced a Specified Threshold amount or more above (below) the Reference Price (as described below), subject to proposed paragraphs (g)(2)(A)(i)-(v) of the Rule as described below. Because ECO Price Protection would be applied each trading day, an ECO designated GTC would be re-evaluated for ECO Price Protection on each day that it is eligible to trade and would be cancelled if the limit price is equal to or through the Specified Threshold.

• Proposed Rule 6.91P-O(g)(2)(A)(i) would provide that an ECO that arrives when a complex strategy is open for trading would be evaluated for

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⁵⁹ <u>See</u> Single-Leg Pillar Filing (Rule 6.62P-O(a)(3) sets forth the Limit Order Price Protection applicable to Limit Orders and quotes).

ECO Price Protection on arrival. The Exchange has proposed similar functionality for single-leg options.⁷⁰

- Proposed Rule 6.91P-O(g)(2)(A)(ii) would provide that an ECO received during a pre-open state would be evaluated for ECO Price Protection after the ECO Opening Auction Process concludes.⁷¹ The Exchange has proposed similar functionality for single-leg options.⁷²
- Proposed Rule 6.91P-O(g)(2)(A)(iii) would provide that an ECO resting on the Consolidated Book before a trading halt would be reevaluated for ECO Price Protection after the ECO Opening Auction Process concludes. The Exchange has proposed similar functionality for single-leg options.⁷³
- Proposed Rule 6.91P-O(g)(2)(A)(iv) would provide that QCC Orders (per Rule 6.62P-O(g)(1)) would not be subject to ECO Price Protection, as the Exchange subjects such paired orders to distinct price validations.⁷⁴ The Exchange has proposed similar functionality for single-leg options.⁷⁵

⁷⁰ See Single-Leg Pillar Filing (discussion regarding Rule 6.62P-O(a)(3)(A)(i)).

⁷¹ See discussion <u>infra</u> regarding proposed Rule 6.91P-O(d), which describes the ECO Opening Auction Process (or Reopening after a Trading Halt) as well as the concepts of ECO Auction Collars and ECO Auction Price.

⁷² See Single-Leg Pillar Filing (discussion regarding Rule 6.62P-O(a)(3)(A)(ii)).

⁷³ See Single-Leg Pillar Filing (discussion regarding Rule 6.62P-O(a)(3)(A)(iii)).

⁷⁴ <u>See</u> Single-Leg Pillar Filing (discussion regarding Rule 6.62P-O(g)(1)(C) and (D) regarding price requirements for execution of QCC Orders and Complex QCC Orders, respectively).

⁷⁵ <u>See Single-Leg Pillar Filing (discussion regarding Rule 6.62P-O(a)(3)(A)</u> excluding Cross Orders).

Proposed Rule 6.91P-O(g)(2)(A)(v) would provide that ECO Price
 Protection would not be applied if there is no Reference Price for an ECO.

The Exchange has proposed similar functionality for single-leg options.⁷⁶ Proposed Rule 6.91P-O(g)(2)(B) would specify the "Reference Price" used in connection with the ECO Price Protection. As proposed, the Reference Price for calculating ECO Price Protection for an ECO to buy (sell) would be the Complex NBO (NBB), provided that, immediately following an ECO Opening Auction Process, the Reference Price would be the ECO Auction Price or, if none, the Complex NBO (NBB). The Exchange believes that adjusting the Reference Price for ECO Price Protection immediately following an ECO Opening Auction would ensure that the most up-to-date price would be used to assess whether to cancel an ECO that was received during a pre-open state, including during a Trading Halt. The Exchange notes this functionality is consistent with the proposed operation of the Limit Order Price Protection for single-leg options.⁷⁷

As further proposed, there would be no Reference Price for an ECO if there is no NBBO for any leg of such ECO (i.e., the Exchange would not calculate a Complex NBB (NBO)), which text is based on current Rule 6.91-O, Commentary .05(c), except that the proposed rule would not reference OPRA because, as further proposed, for purposes of determining a Reference Price, the Exchange

⁷⁶ See Single-Leg Pillar Filing (discussion regarding Rule 6.62P-O(a)(3)(A)). ⁷⁷ See Single Leg Piller Filing (discussion regarding Rule 6.62P O(a)(3)(A)).

<u>See</u> Single-Leg Pillar Filing (discussion regarding Rule 6.62P-O(a)(3)(B) describing that the Reference Price for Limit Order Price Protection would be adjusted immediately following an Auction would ensure that the most up-to-date price would be used to assess whether to cancel a Limit Order that was received during a pre-open state or would be reevaluated after a Trading Halt Auction).
would not use an adjusted NBBO (i.e., such NBBO is implicitly reliant on information from OPRA).⁷⁸ The Exchange notes that using an unadjusted NBBO to calculate the Reference Price is based on how Limit Order Price Protection currently functions on the Exchange's cash equity market, as described in Rule 7.31-E(a)(2)(B) and is also consistent with the proposed operation of the Limit Order Price Protection for single-leg options.⁷⁹

Proposed Rule 6.91P-O(g)(2)(C) would set forth the "Specified Threshold" used in connection with the ECO Price Protection. As proposed, the Specified Threshold for calculating ECO Price Protection would be \$1.00, unless determined otherwise by the Exchange and announced to OTP Holders and OTP Firms by Trader Update.

The Exchange believes that the proposed Specified Threshold of \$1.00 simplifies how the Reference Price would be calculated as compared to the calculations currently specified in Commentary .05 to Rule 6.91-O. In addition, consistent with Commentary .05(d), the Exchange proposes that the Specified Threshold could change, subject to announcing the changes by Trader Update. Providing flexibility in Exchange rules regarding how the Specified Threshold would be set

⁷⁸ See Single-Leg Pillar Filing (discussion regarding the definition of "NBBO" in Rule 1.1 describing that the "NBBO" for purposes of options trading as referring to the national best bid or offer and that "[u]nless otherwise specified, the Exchange may adjust its calculation of the NBBO based on information about orders it sends to Away Markets, execution reports received from those Away Markets, and certain orders received by the Exchange").

⁷⁹ References to the NBBO, NBB, and NBO in Rule 7.31-E refer to using a determination of the national best bid and offer that has not been adjusted. <u>See</u> Single-Leg Pillar Filing (describing use of unadjusted NBBO for single-leg Limit Order Price Protection in Rule 6.62P-O(a)(3)(B)).

is consistent with the rules of other options exchanges as well as the proposed functionality for the single-leg Limit Order Price Protection feature.⁸⁰

Proposed Rule 6.91P-O(g)(3) would set forth the "Complex Strategy Protections." The proposed protections are based on current Rule 6.91-O, Commentary .06, which are referred to as the "Debit/Credit Reasonability Checks." The Exchange believes this name change is appropriate because it more accurately conveys that the check applies solely to certain complex strategies and because (as discussed above), the Exchange proposes to refer simply to a "net price" as opposed to the "total net debit or credit price." The proposed Pillar Complex Strategy Protections would function similarly to the current Debit/Credit Reasonability Checks because potentially erroneously priced incoming ECOs would be rejected. However, rather than to refer to specified debit or credit amounts as a way to determine whether a given strategy is erroneously priced, the proposed rule would instead focus on the expectation of the order sender and what would result if the ECO were not rejected. Consistent with current functionality, the proposed Complex Strategy Protections are designed to prevent the execution of ECOs at prices that are inconsistent with/not aligned with their strategies. As proposed, to protect an OTP Holder or OTP Firm that sends an ECO (each an "ECO sender") with the expectation that it would receive (or pay) a net premium but has priced the ECO such that the ECO sender would instead pay (or receive) a

See, e.g., Cboe Rule 5.34(b)(6) (describing the "Drill-Through Protection" and that Cboe "determines a default buffer amount on a class-by-class basis). See Single-Leg Pillar Filing (describing use of Trader Update to modify Specified Thresholds in Rule 6.62P-O (a)(3)(C)).

net premium, the Exchange would reject any ECO that is comprised of the erroneously-priced complex strategies as set forth in proposed Rule 6.91P-O(g)(3)(A)-(C) and described below.

Proposed Rule 6.91P-O(g)(3)(A) would provide that "All buy' or 'all sell' strategies" would be rejected as erroneously-priced if it is an ECO for a complex strategy where all legs are to buy (sell) and it is entered at a price less than one penny (\$0.01) times the sum of the number of options in the ratio of each leg of such strategy (e.g., a complex strategy to buy (sell) 2 calls and buy (sell) 1 put with a price less than \$0.03). The proposed text is based on Rule 6.91-O, Commentary .06(a)(1), with no substantive differences, except that the Exchange has streamlined the text and set forth the minimum price (i.e., \$0.03) for any "all buy" or "all sell" strategies.

Proposed Rule 6.91P-O(g)(3)(B) would provide for the rejection of erroneouslypriced "Vertical spreads," which are defined as complex strategies that consists of a leg to sell a call (put) option and a leg to buy a call (put) option in the same option class with the same expiration but at different strike prices. As proposed, the Exchange would reject as erroneously-priced: (i) an ECO for a vertical spread to buy a lower (higher) strike call and sell a higher (lower) strike call and the ECO sender would receive (pay) a net premium (proposed Rule 6.91P-O(g)(3)(B)(i)); and (ii) an ECO for a vertical spread to buy a higher (lower) strike put and sell a lower (higher) strike put and the ECO sender would receive (pay) a net premium (proposed Rule 6.91P-O(g)(3)(B)(ii)). The proposed strategy protections for vertical spreads are based on current Rule 6.91-O, Commentary .06(a)(2), except

that, as noted above, the proposed Rule is written from the standpoint of the expectation of the ECO sender as opposed to reviewing total net debit or credit price of the strategy.

Proposed Rule 6.91P-O(g)(3)(C) would provide for the rejection of erroneouslypriced "Calendar spreads," which are defined as consisting of a leg to sell a call (put) option and a leg to buy a call (put) option in the same option class at the same strike price but with different expirations. As proposed, the Exchange would reject as erroneously-priced: (i) an ECO for a calendar spread to buy a call leg with a shorter (longer) expiration while selling a call leg with a longer (shorter) expiration and the ECO sender would pay (receive) a net premium (proposed Rule 6.91P-O(g)(3)(C)(i); and (ii) an ECO for a calendar spread to buy a put leg with a shorter (longer) expiration while selling a put leg with a longer (shorter) expiration and the ECO sender would pay (receive) a net premium (proposed Rule 6.91P-O(g)(3)(C)(ii)). The proposed strategy protections for calendar spreads are based on current Rule 6.91-O, Commentary .06(a)(3), except that, as noted above, the proposed Rule is written from the standpoint of the expectation of the ECO sender as opposed to reviewing the total net debit or credit price of the strategy. The Exchange has also not retained discretion to disable the strategy protections for calendar spreads (as contained in Commentary .06(a)(3)(i) of the current Rule) because since adopting this provision in 2017, the Exchange has never exercised this discretion and therefore has determined that such discretion is no longer needed.

Proposed Rule 6.91P-O(g)(3)(D) would provide that any ECO that is not rejected by the complex strategy protections would still be subject to the ECO Price Protection, per paragraph (g)(2) of this Rule, which proposed text is based on Rule 6.91-O, Commentary .06(b) without any substantive difference.

<u>Rule 6.47A-O: Order Exposure Requirements — OX</u>

The Exchange also proposes conforming, non-substantive amendments to Rule 6.47A-O, regarding order exposure, to add a cross-reference to new Pillar Rule 6.91P-O. Current Rule 6.47A-O(iii) exempts orders submitted to the COA Process, (per current Rule 6.91-O) from its one-second order exposure requirements. This proposed amendment would extend the exemption from the order exposure requirements to orders submitted to a COA on Pillar.⁸¹ The Exchange also proposes to modify the reference to "Complex Order Auction Process ('COA')" to simply "Complex Order Auction ('COA')" (i.e., removing the word Process) consistent with how this concept is defined in proposed Rule 6.91P-O(a)(3). As previously stated, the Exchange believes that the proposed Response Time Interval for a COA (with a duration of no less than 100 milliseconds) is of sufficient length to allow OTP Holders and OTP Firms time to respond to a COA. As such, the proposal is designed to promote timely execution of the COA Order, while ensuring adequate exposure of such orders. Accordingly, the Exchange proposes to amend Rule 6.47A-O(iii) to extend the exemption from the onesecond exposure requirement to COA Orders under Pillar, which exemption is consistent

See proposed Rule 6.47A-O(iii). Consistent with the Single-Leg Pillar Filing, the Exchange also proposes to replace reference to "OX" with "the Exchange." See id. (preamble).

with the treatment of similar orders on other options exchanges.⁸² Consistent with Rule 6.47A-O, Commentary .01, OTP Holders and OTP Firms would only utilize the COA where there is a genuine intention to execute a bona fide transaction.⁸³

The Exchange also proposes to modify Commentary .03 to Rule 6.47A-O, which is currently Reserved, to provide that "[p]rior to or after submitting an order to the Exchange, an OTP Holder or OTP Firm cannot inform another OTP Holder or OTP Firm or any other third party of any of the terms of the order." The proposed provision is designed to prevent OTP Holders or OTP Firms from providing material, non-public information to third parties and is consistent with similar provisions on other options exchanges.⁸⁴

As discussed above, because of the technology changes associated with the migration to the Pillar trading platform, subject to approval of this proposed rule change, the Exchange will announce by Trader Update when rules with a "P" modifier will become operative and for which symbols. The Exchange believes that keeping existing rules on the rulebook pending the full migration of Pillar will reduce confusion because it

⁸² <u>See, e.g.</u>, NYSE American Rule 935NY(iii) (exempting from the one-second order exposure requirement orders submitted to the Customer Best Execution Auction (or CUBE) process per Rules 971.1NY (for single-leg CUBE) and 971.2NY(for Complex CUBE)).

⁸³ <u>See</u> Rule 6.47A-O, Commentary .01 ("Rule 6.47A-O prevents a User from executing agency orders to increase its economic gain from trading against the order without first giving other trading interest on the Exchange an opportunity to either trade with the agency order or to trade at the execution price when the User was already bidding or offering on the book").

⁸⁴ <u>See, e.g.</u>, NYSE American Rule 935NY, Commentary .04 (providing that "[p]rior to or after submitting an order to the System, an ATP Holder cannot inform another ATP Holder or any other third party of any of the terms of the order").

will ensure that the rules governing trading on the Exchange's current system will continue to be available pending the full migration to Pillar.

2. <u>Statutory Basis</u>

The proposed rule change is consistent with Section 6(b) of the Securities Exchange Act of 1934 (the "Act"),⁸⁵ in general, and furthers the objectives of Section 6(b)(5),⁸⁶ in particular, because it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in 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. The Exchange believes that proposed Rule 6.91P-O to support electronic complex trading on Pillar would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed rule would promote transparency in Exchange rules by using consistent terminology governing trading on both the Exchange's cash equity and options Pillar trading platforms, thereby ensuring that members, regulators, and the public can more easily navigate the Exchange's rulebook and better understand how options trading is conducted on the Exchange.

The Exchange believes that adding new Rule 6.91P-O with the modifier "P" to denote that this rule would be operative for the Pillar trading platform would remove impediments to and perfect the mechanism of a free and open market and a national market system by providing transparency of which rules would govern trading once a

⁸⁵ 15 U.S.C. 78f(b).

⁸⁶ 15 U.S.C. 78f(b)(5).

symbol has been migrated to the Pillar platform. The Exchange similarly believes that adding a preamble to current Rule 6.91-O stating that it would not be applicable to trading on Pillar would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote transparency regarding which rules would govern trading on the Exchange during and after the transition to Pillar.

The Exchange believes that incorporating Pillar functionality currently available on the Exchange's cash equity market (and recently proposed for single-leg options),⁸⁷ for trading of electronic complex orders on its options market in proposed Rule 6.91P-O would remove impediments to and perfect the mechanism of a free and open market and a national market system because the Exchange would be able to offer consistent functionality across both its options and cash equity trading platforms, adapted as applicable for trading of electronic complex orders. As discussed herein, and unless otherwise specified herein, the Exchange is not proposing fundamentally different functionality regarding how ECOs would trade on Pillar than is currently available on the Exchange. Accordingly, with the transition to Pillar, the Exchange would use Pillar terminology to describe functionality that is not changing and also introduce certain new or updated functionality for Electronic Complex Orders (i.e., enhancing the opening auction process, including introducing the "ECO Auction Collars") that will also be available for outright options trading on the Pillar platform. As such, the Exchange believes that using Pillar terminology and incorporating updated functionality for the proposed new rule would remove impediments to and perfect the mechanism of a free

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See generally the Single-Leg Pillar Filing.

and open market and a national market system because it would promote consistency in the Exchange's rules across both its options and cash equity platforms.

Definitions, Types of ECOs and Priority and Pricing of ECOs

The Exchange believes that the proposed definitions in Rule 6.91P-O(a) would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed changes are designed to promote clarity and transparency by consolidating existing defined terms related to electronic complex trading into one section of the proposed rule. The Exchange believes that the proposed non-substantive amendments to those terms currently defined in Rule 6.91-O would promote clarity and transparency by using Pillar terminology. The Exchange further believes consolidating defined terms in proposed Rule 6.91P-O(a) (including alphabetizing the proposed terms) would make the proposed rule more transparent and easier to navigate.

The Exchange believes that the proposed new definition of Away Market Deviation would further remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote clarity and transparency to market participants regarding how the Exchange would calculate this additional protection against ECOs being executed on the Exchange at prices too far away from the current market.

The Exchange believes that the proposed new definition of DBBO (and related terms of DBB and DBO) would further remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote clarity and transparency to market participants regarding how the DBBO would

be calculated under Pillar. The proposed definition is not novel and is based in part on similarly defined terms used on NYSE American and Cboe. The Exchange believes that providing an alternative means of calculating the DBBO (i.e., by looking to the contraside best bid (offer) in the absence of same-side interest) would remove impediments to and perfect the mechanism of a free and open market and a national market system thereby benefitting as it should increase opportunities for trading. This proposed definition of Away Market Derivation is new and would promote clarity and transparency In addition, the proposal to use the Away Market Deviation as a means of binding the Exchange's calculation of the DBBO as well as trading of ECOs with the leg markets would remove impediments to and perfect the mechanism of a free and open market and a national market system because such limitation would benefit market participants by providing an additional protection against ECOs being executed on the Exchange at prices too far away from the current market.

In addition, the Exchange believes that setting forth additional definitions in proposed Rule 6.91P-O(a), including those that are used on other options exchanges (e.g., "complex strategy" and "ratio") and clarifying terms (e.g., "leg" and "leg markets"), would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote clarity and transparency to market participants regarding electronic complex trading under Pillar. Finally, the proposed definition of "ECO Order Instruction" would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would incorporate for ECOs existing Pillar order handling functionality in an auction that is currently available on the Exchange's cash equity platform, as described in Rule 7.35-

E(g) and is proposed for options trading in Rule 6.64P-O(e) and its sub-paragraphs (1) and (2) (as described in the Single-Leg Pillar Filing). The Exchange similarly proposes this functionality for the ECO Opening Auction Process, with non-substantive differences only to use an ECO-specific defined term and to refer to the ECO Opening Auction Process.

The Exchange believes that the proposed types of ECOs available per Rule 6.91P-O(b) would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would describe the ECOs and time-in-force modifiers that would be available on Pillar, as well as specifying additional ECO types. The Exchange is not proposing any new ECO order types or time-in-force modifiers on Pillar and believes that the non-substantive differences to use Pillar terminology to describe the available ECO order types would promote transparency and clarity in Exchange rules. The Exchange believes that the proposed Complex Only Order is not novel because it is based in part on the existing PNP Plus order functionality as both order types only interact with other ECOs. In addition, the proposed ECO GTX Order uses Pillar terminology to describe what is referred to as an "RFR Response" in the current rules, and therefore is not novel.

The Exchange believes that proposed new Rule 6.91P-O(c), and subparagraphs (2), (3), and (4), would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed rules would set forth a price-time priority model for Pillar and pricing requirements for ECO trading that are substantively the same as the Exchange's current price-time priority model and pricing requirements as set forth in Rule 6.91-O(a)(1) and Commentaries .01 and .02(i) to Rule

6.91-O. The Exchange proposes certain modified functionality, including the Complex Only Order as noted above, and regarding ECO trading vis a vis the DBBO (and binding such DBBO by the maximum allowable Away Market Deviation when the Exchange BBO is used to calculate the DBBO for a leg), which would benefit market participants as the proposes features would provide additional price protection in ECO trading and would add clarity and transparency to the rules. The Exchange believes that proposed Rule 6.91P-O(c)(1) - (4) would remove impediments to and perfect the mechanism of a free and open market and a national market system because they would promote transparency and clarity in Exchange rules regarding how ECOs would trade with the leg markets and with other ECOs.

Execution of ECOs at the Open (or Reopening after a Trading Halt).

The Exchange believes that proposed Rule 6.91P-O(d) regarding the ECO Opening Auction Process would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed rule maintains the fundamentals of an auction process that the Exchange currently uses for ECOs, as described in Rule 6.91-O(a)(2)(i)(B), while at the same time enhancing the process by incorporating Pillar auction functionality that is currently available on the Exchange's cash equity platform, as described in Rule 7.35-E as well as proposed for single-leg options in Rule 6.64P-O. For example, the Exchange proposes to use Pillar functionality to determine how to price an ECO Opening Auction Process, as described in proposed Rule 6.91P-O(d)(3), including using proposed "ECO Auction Collars" and an "ECO Auction Price," which are consistent with the core functionality for opening ECOs, with additional detail that would promote clarity and transparency to market participants regarding this process. The Exchange believes it is appropriate to refrain from opening a series when there is a lack of reliable pricing indication(s) regarding the price at which a complex strategy should execute because doing so would protect market participants from potentially erroneous executions, thereby promoting a fair and orderly ECO Opening Auction Process.

Moreover, the Exchange believes that the proposal to use the DBBO (as opposed to the currently used Complex NBBO) for the ECO Opening Process would allow the Exchange to open a series based on the Exchange BBO, bound by the Away Market Deviation (or, the ABBO if the Exchange BBO is not available), which is consistent with ECO handling during Core Trading (per proposed Rule 6.91P-O(e)). The Exchange believes this proposed change would better align the permissible opening price for a series with the permissible execution price during Core Trading, which adds consistency to ECO order handling (as well as internal consistency to Exchange rules) to the benefit of investors. As such, this proposed change would remove impediments to and perfect the mechanism of a free and open market and a national market system.

In addition, the Exchange believes that requiring that the opening price for a complex strategy must improve the DBBO if there is displayed Customer interest on all legs of the strategy on the Exchange would protect displayed Customer interest, and protect investors in general, while ensuring a fair and orderly ECO Opening Process.

The Exchange also proposes to process ECOs received during an ECO Opening Auction Process, as described in proposed Rule 6.91P-O(d)(4), and transition to continuous trading following an ECO Opening Auction Process, as described in proposed Rule 6.91P-O(d)(5), in a manner similar to how the Exchange's cash equity market processes orders that are received during an Auction Processing Period and transitions to continuous trading following a cash equity Trading Halt Auction, which the Exchange also proposes for single-leg options in Rule 6.64P-O. The Exchange believes that using similar functionality for different types of auctions would promote consistency across the Exchange's options and cash equity trading platforms. Because the Exchange would be harnessing Pillar technology to support the ECO Opening Auction Process for electronic complex options trading, the Exchange believes that structuring proposed Rule 6.91P-O(d) based on Rule 7.35-E and Rule 6.64P-O would promote transparency in the Exchange's trading rules.

The Exchange further believes that the proposed Rules 6.91P-O(d)(1) and (2), which describe when the Exchange would initiate an ECO Opening Auction Process and which ECOs would be eligible to trade in that process, would remove impediments to and perfect the mechanism of a free and open market and a national market system because they would provide clarity and transparency of the conditions required before the Exchange would initiate an ECO Opening Auction Process. The Exchange further believes that those conditions are not novel and are based on existing conditions specified in Rule 6.91-O(a)(2)(i)(A) and (B), with additional specificity designed to promote clarity and transparency. Accordingly, the Exchange believes that the ECO Opening Auction Process for ECOs trading on Pillar would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed process is based on the current opening process, including that orders would be matched based on price-time priority at a price at which the maximum volume can be traded. *Execution of ECOs During Core Trading Hours*

The Exchange believes that proposed Rule 6.91P-O(e), setting forth the execution of ECOs during Core Trading Hours, would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed functionality would incorporate the Exchange's existing price-time priority model for trading ECOs, including providing that the leg markets would have priority at a price. The Exchange believes that the proposed rule change to add text to specify that an ECO may trade with another ECO at the leg market price if the interest in the leg markets is insufficient to trade at that price (i.e., the leg markets cannot trade at that price in full or in a permissible ratio), would continue to respect the priority of the leg markets at a price, but would also ensures that ECO trading opportunities are maximized after eligible interest in the leg markets is exhausted at that price resulting in more efficient executions. The Exchange note that this proposed functionality is consistent with the rule of at least one options exchange and is therefore not new or novel.⁸⁸ Once interest in the leg markets is exhausted at a price, such interest is no longer executable as "orders are executable against each other only when both the price and the quantity of the orders match."⁸⁹

In addition, the Exchange believes that allowing Complex Only Orders to trade up to the DBBO unless there is displayed Customer interest on each leg on the Exchange at the DBBO (as described above) would provide market participants additional trading opportunities while still protecting Customer interest on the Exchange, which would, in turn, remove impediments to and perfect the mechanism of a free and open market and national market system.

⁸⁸ See BOX Rule 7240(b)(2)(ii); see also BOX Notice, 78 FR at 15093 and BOX Approval, 78 FR, at 24449.

⁸⁹ See BOX Approval Order, 78 FR, at 24449.

The Exchange believes that it would remove impediments to and perfect the mechanism of a free and open market and national market system to specify that ECOs will not trade with orders in the leg markets designated AON, FOK or with an MTS modifier (as described in the Single-Leg Pillar Filing) because it would add clarity and transparency to the proposed Rule regarding the handling of ECO vis a vis these singleleg order types that are conditional based on order size. The Exchange further believes that it would remove impediments to and perfect the mechanism of a free and open market and a national market system for ECOs to trade as Complex Only Orders (rather than be rejected as they would under current rules) if they have a complex strategy that could result in a Market Maker breaching their established risk settings.⁹⁰ This proposed process is also consistent with the treatment of similar ECOs on other options markets.⁹¹ The Exchange further believes that it would remove impediments to and perfect the mechanism of a free and open market and a national market system to specify the frequency with which the Exchange would evaluate trading opportunities for an ECO with the leg markets update because it would promote clarity and transparency in Exchange rules.

Overall, the Exchange believes the proposal for ECO trading during Core Trading would help maintain a fair and orderly market and would benefit investors by facilitating increased interaction between ECOs (not designated as Complex Only) and leg markets interest. In particular, such ECOs would execute against interest in the leg markets for all

⁹⁰ <u>See discussion infra</u> regarding rationale for proposed Rule 6.91P-O(e) to restrict certain ECOs from executing as a package and bypassing Market Maker risk settings.

⁹¹ <u>See supra notes 62 and 63 (citing to Cboe Rule 5.33(g) and Nasdaq ISE Options</u> 3, Section 14 (d)(3)(A)-(B) regarding similar functionality).

of the quantity available at the best price in a permissible ratio until the quantities remaining on such leg markets are insufficient to execute against the ECO while respecting the spread ratio. The Exchange believes that requiring Complex Only Orders to improve at least a portion of the displayed Customer interest on the leg markets when all legs of a complex strategy contain displayed Customer interest would provide market participants with additional trading opportunities while still protecting displayed Customer interest on the Exchange. To the extent that this proposed handling of ECOs on the Exchange during Core Trading results in greater liquidity (because of increased opportunity for order execution) this increased liquidity should, in turn, enhance execution quality.

Execution of ECOs During a COA

The Exchange believes that proposed Rule 6.91P-O(f), setting forth the execution of ECOs during a COA, would remove impediments to and perfect the mechanism of a free and open market and a national market system and promote just and equitable principles of trade because the proposed functionality would both incorporate existing functionality to provide that COA Orders would trade solely with other ECOs (and not the leg markets) during the auction and that a COA Order would be allocated on pricetime priority, which is consistent with the Exchange's priority scheme. The Exchange believes that relying on the DBBO (and binding such DBBO by the maximum allowable Away Market Deviation when the Exchange BBO is used to calculate the DBBO for a leg) as opposed to an initial snapshot of the Complex BBO (as is currently the case), would benefit market participants as the proposed operation of the DBBO would provide additional price protection in ECO trading, including during a COA, and would add clarity and transparency to the rules. The Exchange also believes that the proposed change to add reference to quotes (in addition to orders) to Rule 6.91P-O(f)(5) (Prohibited Conduct) regarding the COA Process, would benefit market participants as it would broaden the scope of such the prohibition. Overall, the Exchange believes the proposed rule would add clarity and transparency to OTP Holders and OTP Firms utilizing the COA process.

In addition, the Exchange further believes that the proposed changes to the COA process on Pillar that either differ from current functionality or that would be new would remove impediments to and perfect the mechanism of a free and open market and national market system because:

- Requiring that a COA Order initiate a COA on arrival, else be treated as a standard ECO, is new under Pillar as, per the current Rule, a COA Order may sit on the Consolidated Book until market conditions change such that it may initiate a COA. The Exchange believes the proposed change would provide OTP Holders and OTP Firms with a higher level of transparency and determinism of when a COA Order could initiate a COA and would also encourage market participants to submit aggressively-priced orders in order to qualify for initiation of a COA, which better-priced interest benefits all investors and improves market quality.
- Making explicit that COA Orders may only execute with ECOs (and not the leg markets) until after the COA ends is consistent with current functionality, per Rule 6.91-O(c)(2), but is designed to make clear that ECOs have priority during a COA.
- Streamlining the rule text that would describe the market events that, under Pillar, would cause an early end to a COA would simplify the COA process and would

provide OTP Holders and OTP Firms with a higher level of transparency and determinism regarding the handling of COA Orders.

Allowing a COA to end early based on the DBBO, which may be calculated using ABBO leg prices, would benefit market participants and promote internal consistency because, as proposed, such early termination would prevent COA Orders from executing at prices too far away from the prevailing market for that complex strategy. In addition, the DBBO is used to determine the execution of ECOs on the Exchange, including whether such ECO may initiate a COA as a COA Order. As such, the Exchange believes it is appropriate and to the benefit of market participants that the early termination of a COA likewise be based on the DBBO -- regardless of whether the prices used to calculate such DBBO include (or consist entirely of) ABBO prices. *ECO Risk Checks*

The Exchange believes that proposed Rule 6.91P-O(g), setting forth ECO Risk Checks, would remove impediments to and perfect the mechanism of a free and open market and a national market system and promote just and equitable principles of trade because the proposed functionality would incorporate existing risk controls, without any substantive differences. The Exchange further believes that the proposed changes to ECO Risk Checks on Pillar that either differ from current functionality or would be new would remove impediments to and perfect the mechanism of a free and open market and national market system because:

• The Exchange believes that the new Complex Strategy Limit (which is conceptually similar to the Complex Order Table Cap under the current Rule) would help maintain a fair and orderly market because it would operate as a

system protection tool that enables the Exchange to prevent any single MPID from creating more than a limited number of complex strategies during the trading day,. The proposed limits are not novel and are based on limits imposed by other options exchanges on new complex order strategies.⁹²

- The proposed ECO Price Protection on Pillar would work similarly to how the current ECO price protection mechanism functions on the Exchange because an ECO would be rejected if it is priced a specified percentage away from the contraside Complex NBB or NBO.⁹³ The Exchange believes that the proposed differences on Pillar, to use new thresholds and reference prices, would not only simplify the existing price check, but it would also align the proposed functionality with the proposed "Limit Order Price Protection" for single-leg interest, thus adding uniformity to Exchange rules.⁹⁴ Although the mechanics of the ECO Price Protection would vary slightly from the existing Price Protection Filter, the goal of this feature would remain the same: prevent the execution of ECOs that are priced too far away from the prevailing market for the same strategy and therefore potentially erroneous to be benefit of market participants.
- The proposed Pillar Complex Strategy Protections would function similarly to the current Debit/Credit Reasonability Checks because erroneously priced incoming

⁹² <u>See supra note 67 (citing Cboe Rule 5.33(a) and MIAX Rule 518(a)(6) regarding</u> each exchange's ability to limit the number of new complex strategies in their systems at any particular time).

⁹³ As noted above, the Exchange proposes to define the Complex NBBO as the derived national best bid and derived national best offer for a complex strategy calculated using the NBB and NBO for each component leg of a complex strategy. <u>See</u> proposed Rule 6.91P-O(a)(2).

⁹⁴ <u>See Single-Leg Pillar Filing (Rule 6.62P-O(a)(3) sets forth the Limit Order Price</u> Protection Filter applicable to Limit Orders and quotes).

ECOs would be rejected. Consistent with current functionality, the proposed Complex Strategy Protections are designed to prevent the execution of ECOs at prices that are inconsistent with/not aligned with their strategies to the benefit of market participants. The Exchange believes that the non-substantive differences to focus on the expectation of the ECO sender and what would result if the ECO were not rejected rather than refer to specified debit or credit amounts as a way to determine whether a given strategy is erroneously priced would remove impediments to and perfect the mechanism of a free and open market system because it would promote clarity and transparency in Exchange rules.

Rule 6.47A-O

The Exchange believes that the proposed non-substantive change to Rule 6.47A-O to update references to "COA" (versus COA Process) and "the Exchange," to delete reference to "OX," and add the reference to Rule 6.91P-O would remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, protect investors and the public interest because the proposed conforming changes would add clarity, transparency and consistency to the Exchange's rules. The Exchange believes that market participants would benefit from the increased clarity, thereby reducing potential confusion. Similarly, the Exchange believes that adding a cross-reference to proposed Rule 6.91P-O(f) and extending the exemption from the onesecond order exposure requirement of Rule 6.47A-O would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote clarity and transparency of which Pillar rules would be eligible for the exception specified in that Rule.

As previously stated, the Exchange believes that the proposed Response Time Interval for a COA (i.e. no less than 100 milliseconds) is of sufficient length so as to permit OTP Holders and OTP Firms time to respond to a COA. As such, the Exchange believes the proposed rule change would provide the order sender with a timely execution of its COA Order, while ensuring that there is an adequate exposure of such order. Accordingly, the Exchange proposes to amend Rule 6.47A-O(iii) to extend the exemption from the one-second order exposure requirement to COA Orders under Pillar, which exemption is consistent with the treatment of similar orders on other options exchanges.⁹⁵ Consistent with Rule 6.47A-O, Commentary .01, OTP Holders and OTP Firms would only utilize the COA where there is a genuine intention to execute a bona fide transaction.⁹⁶

The Exchange believes that the proposed prohibition that OTP Holder and OTP Firms not inform another OTP Holder or OTP Firm or any other third party of any of the terms of the order, per proposed Commentary .03 to Rule 6.47A-O, would remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, protect investors and the public interest because the proposed change is designed to prevent OTP Holders or OTP Firms from providing material, non-public information to third parties and consistent with similar provisions on other options exchanges.⁹⁷

⁹⁵ <u>See supra note 82 (regarding NYSE American Rule 935NY(iii)).</u>

⁹⁶ See <u>supra</u> note 83 (regarding Rule 6.47A-O, Commentary .01).

⁹⁷ <u>See supra note 84 (regarding similarly provision contained in NYSE American</u> Rule 935NY, Commentary .04).

For the reasons set forth above, the Exchange believes proposed Rule 6.91P-O, regarding ECO trading, including the priority and execution of such ECOs vis a vis the leg markets, is consistent with the goals of the Act to remove impediments to and to perfect the mechanism of a free and open market and a national market system, and to protect investors and the public interest.

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

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 operates in a competitive market and regularly competes with other options exchanges for order flow. The Exchange believes that the transition to Pillar for trading of ECOs on its options trading platform would promote competition among options exchanges by offering a low-latency platform that offers more deterministic outcomes for trading interest, which, in turn, facilities ECO trading on a continuous and real-time basis on the Exchange.

The proposed rule changes would support that inter-market competition by allowing the Exchange to offer additional functionality to its OTP Holders and OTP Firms, thereby potentially attracting additional order flow to the Exchange. Otherwise, the proposed changes are not designed to address any competitive issues, but rather to amend the Exchange's rules relating to trading of ECOs to support the transition to Pillar. As discussed in detail above, with this rule filing, the Exchange is not proposing to change its core functionality regarding the treatment of ECOs. Rather, the Exchange believes that the proposed rule changes would promote consistent use of terminology to support options (both single-leg and complex) and cash equity trading on the Exchange, making the Exchange's rules easier to navigate. The Exchange does not believe that the proposed rule changes would raise any intra-market competition as the proposed rule changes would be applicable to all OTP Holders and OTP Firms, and reflects the Exchange's existing treatment of ECOs, without proposing any material substantive changes.

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

No written comments were solicited or received with respect to the proposed rule change.

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

Within 45 days of the date of publication of this notice in the <u>Federal Register</u> or up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

- (A) by order approve or disapprove the proposed rule change, or
- (B) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

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

Electronic comments:

• Use the Commission's Internet comment form

(http://www.sec.gov/rules/sro.shtml); or

 Send an e-mail to rule-comments@sec.gov. Please include File Number SR-NYSEARCA-2021-68 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-NYSEARCA-2021-68. 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, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-NYSEARCA-2021-68 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.⁹⁸

Eduardo A. Aleman Deputy Secretary

⁹⁸ 17 CFR 200.30-3(a)(12).

EXHIBIT 4

Additions: <u>Underlined</u> Deletions: [Bracketed] Amendment No. 1 added text in <u>bold italics double-underlined</u> Amendment No. 1 deleted text in strikethrough

RULES OF THE NYSE ARCA, INC.

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OPTIONS RULES

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RULE 6-O OPTIONS TRADING

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Rule 6.47A-O. Order Exposure Requirements [— OX]

With respect to orders routed to <u>the Exchange[OX]</u>, Users may not execute as principal orders they represent as agent unless (i) agency orders are first exposed on the Exchange for at least one (1) second; (ii) the User has been bidding or offering on the Exchange for at least one (1) second prior to receiving an agency order that is executable against such bid or offer; or (iii) the User utilizes the Complex Order Auction [Process] ("COA") pursuant to Rule 6.91-O(c) or 6.91P-O(f).

* * * * *

Commentary:

.03 [Reserved.]<u>Prior to or after submitting an order to the Exchange, an OTP Holder</u> or OTP Firm cannot inform another OTP Holder or OTP Firm or any other third party of any of the terms of the order.

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Rule 6.91-O. Electronic Complex Order Trading

This Rule is will not be applicable to trading on Pillar.

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Rule 6.91P-O. Electronic Complex Order Trading

(a) Definitions. The following are definitions for purposes of this Rule.

(1) "Away Market Deviation" means the difference between the Exchange BB (BO) for a series and the ABB (ABO) for that same series when the Exchange BB (BO) is lower (higher) than the ABB (ABO). The maximum allowable Away Market Deviation is the greater of \$0.05 or 5% below (above) the ABB (ABO) (rounded down to the nearest whole penny). No ECO on the Exchange will execute at a price that would exceed the maximum allowable Away Market Deviation on any component of the complex strategy.

(2) "Complex NBBO" means the derived national best net bid and derived national best net offer for a complex strategy calculated using the NBB and NBO for each component leg of a complex strategy.

(3) "Complex Order Auction" or "COA" means an auction of an ECO as set forth in paragraph (f) of this Rule. The following terms are used for purposes of a COA:

(A) "COA Order" means an ECO that is designated by the OTP Holder as eligible to initiate a COA.

(B) "Request for Response" or "RFR" means the message disseminated to the Exchange's proprietary complex data feed announcing that the Exchange has received a COA Order and has begun a COA. Each RFR message will identify the component series. the price, the size and side of the market of the COA Order.

(C) "RFR Response" means any ECO received during the Response Time Interval that is in the same complex strategy, on the opposite side of the market of the COA Order that initiated the COA and marketable against the COA Order.

(D) "Response Time Interval" means the period of time during which <u>RFR Responses for a COA may be entered. The Exchange will</u> <u>determine and announce by Trader Update the length of the Response</u> <u>Time Interval; provided, however, that the duration of the Response</u> <u>Time Interval will not be less than 100 milliseconds and will not</u> <u>exceed one (1) second.</u>

(4) "Complex strategy" means a particular combination of leg components and their ratios to one another. New complex strategies can be created when the Exchange receives either a request to create a new complex strategy or an ECO with a new complex strategy.

(5) "DBBO" means the derived best net bid ("DBB") and derived best net offer ("DBO") for a complex strategy. The bid (offer) price used to calculate the DBBO on each leg will be the Exchange BB (BO) (if available), bound by the maximum allowable Away Market Deviation. If a leg of a complex strategy does not have an Exchange BB (BO), the bid (offer) price used to

<u>calculate the DBBO will be the ABB (ABO) for that leg. The DBBO will be</u> <u>updated as the Exchange BBO or ABBO, as applicable, is updated.</u>

(A) If, for a leg, there is no Exchange BB (BO) and no ABB (ABO), the bid (offer) price used to calculate the DBBO will be the offer (bid) price for that leg (i.e., the Exchange BO (BB), bound by the maximum allowable Away Market Deviation (or the ABO (ABB) for that leg if no Exchange BO (BB) is available)), minus (plus) "one collar value," which is (i) \$0.25 where the offer (bid) is priced \$1.00 or lower, or the lesser of \$2.50 or 25% of the offer (bid) where the offer (bid) is priced above \$1.00 (rounded down to the nearest whole penny); or (ii) \$0.01 if the offer is equal to or less than one collar value.

(B) If, for a leg of a complex strategy, there is neither an Exchange BBO nor an ABBO, the Exchange will not allow the complex strategy to trade until, for that leg, there is either an Exchange BB or BO, or an ABB or ABO, on at least one side of the market.

(C) If the best bid and offer prices (when not based solely on the Exchange BBO) for a component leg of the complex strategy are locked or crossed, the Exchange will not allow an ECO for that strategy to execute against another ECO until this condition resolves. If an Away Market quote updates to lock or cross the current Exchange BB (BO) or ABB (ABO) for a component leg of a complex strategy, the Exchange will allow an ECO for that strategy to execute against leg market interest on the Exchange.

(6) "ECO Order Instruction" means a request to cancel, cancel and replace, or modify an ECO.

(7) "Electronic Complex Order" or "ECO" means a Complex Order as defined in Rule 6.62P-O(f) that is submitted electronically to the Exchange.

(8) "Leg" or "leg market" means each of the component option series that comprise an ECO.

(9) "Ratio" or "leg ratio" means the quantity of each leg of an ECO reduced to the least common denominator. The "smallest leg ratio" is the portion of the ratio represented by the leg with the fewest contracts.

<u>(1) "Electronic Complex Order" or "ECO" means a Complex Order as defined in</u> <u>Rule 6.62P O(f) or a Stock/Option Order or Stock/Complex Order as defined in</u> <u>Rule 6.62P O(h)(6)(A), (B), respectively, that is submitted electronically to the</u> <u>Exchange.</u>

(2) "ECO Order Instruction" means a request to cancel, cancel and replace, or modify an ECO.

(3) "Leg" or "leg market" means each of the component option series that comprise an ECO.

(4) "Complex NBBO" means the derived national best bid and derived national best offer for a complex strategy calculated using the NBB and NBO for each component leg of a complex strategy.

(5) "Complex strategy" means a particular combination of leg components and their ratios to one another. New complex strategies can be created when the Exchange receives either a request to create a new complex strategy or an ECO with a new complex strategy.

(6) "DBBO" means the derived best bid ("DBB") and derived best offer ("DBO") for a complex strategy calculated using the Exchange BBO for each leg (or the Away Market NBBO for a leg if there is no BBO), provided that the bid (offer) price used to calculate the DBBO will never be lower (higher) than the greater of \$0.05 or 5% below (above) the Away Market NBB (NBO). The DBBO will be updated as the Exchange's calculation of the Exchange BBO or Away Market NBBO, as applicable, is likewise updated.

(A) If there is no Exchange BB (BO) or Away Market NBB (NBO) for a leg, the bid (offer) price used to calculate the DBBO will be the offer (bid) price for that leg minus (plus) "one collar value," which is (i) \$0.25 where the best offer (bid) is priced \$1.00 or lower; or (ii) the lower of \$2.50 or 25% where the best offer (bid) is priced above \$1.00, provided that:

(i) If the best offer is equal to or less than one collar value, the best bid price used to calculate the DBBO for that leg will be \$0.01.

(7) "Complex Order Auction" or "COA" means an auction of an ECO as set forth in paragraph (f) of this Rule. The following terms are used for purposes of a <u>COA:</u>

(A) "COA Order" means an ECO that is designated by the OTP Holder as eligible to initiate a COA.

(B) "Request for Response" or "RFR" means the message disseminated to the Exchange's proprietary complex data feed announcing that the Exchange has received a COA Order and has begun a COA. Each RFR message will identify the component series, the price, and the size and side of the market of the COA Order.

(C) "RFR Response" means any ECO received during the Response Time Interval that is in the same complex strategy, on the opposite side of the market of the COA Order that initiated the COA and marketable against the COA Order.

(D) "Response Time Interval" means the period of time during which RFR Responses for a COA may be entered. The Exchange will determine and announce by Trader Update the length of the Response Time Interval; provided, however, that the duration of the Response Time Interval will not be less than 100 milliseconds and will not exceed one (1) second.

(b) Types of ECOs.

(1) ECOs may be entered as Limit Orders, or Limit Orders designated as Complex Only Orders, or as Complex QCCs.

(A) Complex Only Order. An ECO designated as a Complex Only Order will trade only with ECOs and will not trade with the leg markets. If there is displayed Customer interest on all legs of the Complex Only Order, it will not trade below (above) one penny (\$0.01) times the smallest leg ratio inside the DBB (DBO) containing Customer interest.

(2) ECOs may be designated with a time-in-force of Day, IOC, FOK, or GTC, as those terms are defined in Rule 6.62P-O(b), or GTX.

(A) An ECO designated as IOC or FOK will be rejected if entered during a pre-open state.

(B) <u>An ECO designated as FOK must also be designated as a Complex</u> <u>Only Order.</u>

(C) An ECO designated as GTX ("ECO GTX Order") will not be displayed, may be entered only during the Response Time Interval of a COA, must be on the opposite side of the COA Order, and must specify the price, size, and side of the market. ECO GTX Orders may be modified or cancelled during the Response Time Interval and any remaining size that does not trade with the COA Order will be cancelled at the end of the COA.

(c) *Priority and Pricing of ECOs.* An ECO received by the Exchange that is not immediately executed (or cancelled)<u>, including if it cannot trade under paragraphs</u> (a)(5)(B)-(C) and (c)(1)-(2) of this Rule, or does not initiate a COA per paragraph (f)(1), will be ranked in the Consolidated Book according to price-time priority based on the total net price and the time of entry of the order. Unless otherwise specified in this Rule, ECOs are processed as follows:

(1) When trading with the leg markets :-

(A) an ECO must trade at or within the greater of \$0.05 or 5% higher (lower) than the Away Market NBO (NBB); and

(B) an ECO will trade at the price(s) of the leg markets <u>unless the leg</u> <u>markets are priced more than the maximum allowable Away Market</u> <u>Deviation</u>.

(2) When trading with another ECO, an *each component leg of the* ECO must trade at a price at or within the DBBO *Exchange BBO for that series*, and no leg of an *the* ECO may trade at a price of zero.

* * * * *

(d) Execution of ECOs at the Open (or Reopening after a Trading Halt).

(1) The Exchange will initiate an ECO Opening Auction Process for a complex strategy only if all legs of the complex strategy have opened or reopened for trading, provided that a complex strategy will not be opened if:

(A) Any leg of the complex strategy has <u>*neither an Exchange*</u>BO <u>*n*</u>or <u>*an*</u> <u>*ABO*-NBO; <u>*or*</u></u>

(B) The bid and offer prices used to calculate the DBBO for the complex strategy <u>cannot trade per Ruler 6.91P-O(a)(5)(B)-(C).</u> are locking or <u>crossing; or</u>

(C) All legs of the complex strategy include displayed Customer interest and the width of the DBBO is less than or equal to one penny (\$0.01) times the smallest leg ratio.

* * * * *

(3) ECO Opening Auction Process.

(A) *ECO Auction Collars*. The upper (lower) price of an ECO Auction Collar for a complex strategy is the DBO (DBB). If <u>the DBO (DBB) is calculated</u> <u>using the Exchange BBO for</u> there is displayed Customer interest on all legs of <u>a-the</u> complex strategy <u>and all such Exchange BBOs have displayed</u> <u>Customer interest</u>, the upper (lower) price of an ECO Auction Collar will be one penny (\$0.01) times the smallest leg ratio inside the DBO (DBB) <u>containing Customer interest</u>.

* * * * *

(4) ECO Order Processing during ECO Opening Auction Process. New ECOs and ECO Order Instructions received when the Exchange is conducting the ECO Opening Auction Process for the complex strategy will be accepted but will not be processed until after the conclusion of this process. When the Exchange is conducting the ECO Opening Auction Process, ECO Order Instructions will be processed as follows:

(A) An ECO Order Instruction received during the ECO Opening Auction Process will not be processed until after this process concludes if it relates to

an ECO that was received before the process begins. Any subsequent ECO Order Instruction(s) relating to such ECO will be rejected *if received during the ECO Opening Auction Process when a prior ECO Order Instruction is pending*.

* * * * *

(5) *Transition to continuous trading*. After the ECO Opening Auction, ECOs will be subject to ECO Price Protection, per paragraph (g)(2) of this Rule and, if eligible to trade, will trade as follows:

(A) An ECOs received before the complex strategy was opened that did not trade in whole in the ECO Opening Auction Process and that is locking or crossing other ECOs or leg markets in the Consolidated Book will trade pursuant to paragraph (e) of this Rule: otherwise, such ECOs will be added to the Consolidated Book.

(B) Next, an ECO<u>s</u> received during the ECO Opening Auction Process will be processed in time sequence relative to one another based on original entry time.

(e) Execution of ECOs During Core Trading Hours.

(1) Once a complex strategy is open for trading, an ECO received by the Exchange will trade with the best-priced contra-side interest as follows:

(A) If, at a price, the incoming ECO is eligible to trade with the leg markets can trade with an eligible ECO, in full or in a permissible ratio, the leg markets will trade have first priority at that price, and will trade with the incoming ECO pursuant to Rule 6.76AP-O, until the quantities on the leg markets are insufficient to trade with the ECO, at which time before such incoming ECO will trade with contra-side ECOs resting in the Consolidated Book at that price.

(B) An ECO will not trade with orders in the leg markets designated as AON<u>.</u> *FOK*, or with an MTS modifier.

(C) <u>An ECO designated as Complex Only is eligible to trade solely with</u> <u>another ECO and will not trade with the leg markets. A Complex Only</u> <u>Order must trade at a price at or within the DBBO, provided that if the</u> <u>DBB (DBO) is calculated using the Exchange BBOs for all legs of the</u> <u>complex strategy and all such Exchange BBOs have displayed Customer</u> <u>interest, the Complex Only Order will not trade below (above) one penny</u> <u>(\$0.01) times the smallest leg ratio inside the DBB (DBO), regardless of</u> <u>whether there is sufficient quantity on such leg markets to satisfy the</u> <u>ECO.</u>

(D) An ECO (not designated as a Complex Only Order) will be eligible to trade with the leg markets (in full or in a permissible ratio), provided that an

ECO will be processed as a Complex Only Order if the ECO has a complex strategy with:

(i) more than five legs;

(ii) two legs and both legs are buying or both legs are selling, and both legs are calls or both legs are puts; or

(iii) three or more legs and all legs are buying or all legs are selling.

(2) Any ECO or portion thereof that does not trade immediately when it is received by the Exchange and that is designated either Day or GTC will be ranked in the Consolidated Book pursuant to paragraph (c) of this Rule. The Exchange will evaluate trading opportunities for a resting ECO when the leg markets comprising a complex strategy update, provided that during periods of high message volumes, such evaluation may be reduced to no *done* less *frequently* than ten times per one (1) second.

(3) ECOs that trade with the leg markets will be allocated pursuant to Rule 6.76AP O.

(f) *Execution of ECOs During a COA*. A COA Order received when a complex strategy is open for trading <u>and that satisfies the requirements of paragraph (1) below</u> will initiate a COA only on arrival <u>after trading with eligible interest per paragraph (2)(A)</u> <u>below</u>, subject to paragraph (f)(1) of this Rule. A COA Order will be rejected if entered during a pre-open state or if entered during Core Trading Hours with a time-in-force of FOK or GTX. Only one COA may be conducted at a time in a complex strategy.

(1) Initiation of a COA. To initiate a COA, the limit price of the COA Order to buy (sell) must be higher (lower) than the best-priced, same-side ECOs resting on the Consolidated Book and equal to or higher (lower) than the midpoint of the DBBO. A COA Order that does not satisfy these pricing parameters will not initiate a COA and, unless cancelled, will be processed as an ECO pursuant to paragraph (e) above. Once a COA is initiated, the Exchange disseminates a Request for Response message, the Response Time Interval begins and, during such interval, the Exchange will accept RFR Responses, including GTX ECO <u>GTX</u>Orders.

(2) *Pricing of a COA*. A COA Order to buy (sell) will initiate a COA at its limit price, unless its limit price locks or crosses the DBO (DBB), in which case it will initiate a COA at a price equal to one penny (\$0.01) times the smallest leg ratio inside the DBO (DBB) (the "COA initiation price").

(A) Prior to initiating a COA, a COA Order to buy (sell) will trade with any ECO to sell (buy) *resting in the Consolidated Book* that is priced below (above) equal to or lower (higher) than the DBO (DBB), unless the DBO (DBB) is calculated using the Exchange BBO for all legs of the complex

strategy and all such Exchange BBOs have displayed Customer interest, in which case the COA Order will trade up (down) to one penny (\$0.01) times the smallest leg ratio inside the DBO (DBB). Any unexecuted portion of such COA Order will initiate a COA.

* * * * *

(3) *Early End to a COA*. A COA will end before the expiration of the Response Time Interval if:

* * * * *

(B) The Exchange receives an RFR Response that *locks or* crosses the same side DBBO *on the same side as the COA Order.*

(C) The leg markets update causing the <u>DBBO on the same side as the COA</u> <u>Order same side DBBO</u> to lock or cross (i) any RFR Response(s) or (ii) if no RFR Responses have been received, the best-priced, contra-side ECOs.

* * * * *

(4) *Allocation of COA Orders*. When a COA ends early or at the end of the Response Time Interval, a COA Order will be executed as follows:

(A) RFR Responses to sell (buy) <u>that are priced lower (higher) than a COA</u> <u>Order to buy (sell)</u> will trade in price-time priority with a COA Order to buy (sell). If there is- <u>up (down) to the DBBO, but if all legs of the DBB (DBO)</u> <u>are calculated using Exchange BBOs and all such Exchange BBOs have</u> displayed Customer interest-on all legs of the DBB (DBO), RFR Responses to sell (buy) will not trade below (above) one penny (\$0.01) times the smallest leg ratio inside the DBB (DBO).

* * * * *

(C) After a COA Order trades pursuant to paragraph (f)(4)(B) of this Rule, any unexecuted balance of a COA Order <u>that is not cancelled</u> will be <u>ranked</u> <u>in the Consolidated Book and</u> processed as an ECO pursuant to paragraph (e) of this Rule.

(5) *Prohibited Conduct related to COAs.* A pattern or practice of submitting unrelated *guotes or* orders that cause a COA to conclude early will be deemed conduct inconsistent with just and equitable principles of trade. Dissemination of information related to COA Orders to third parties will also be deemed as conduct inconsistent with just and equitable principles of trade.

(g) ECO Risk Checks

* * * * *

(2) ECO Price Protection.

(A) Each trading day, an ECO to buy (sell) will be rejected or cancelled (if resting) if it is priced a Specified Threshold <u>amountequal to or more</u> above

(below) the Reference Price, rounded down to the nearest penny (\$0.01), as follows:

* * * * *

(iv) Cross <u>QCC</u> Orders and ECOs entered on the Trading Floor will not be subject to ECO Price Protection.

* * * * *

(3) *Complex Strategy Protections*. To protect an OTP Holder or OTP Firm that sends an ECO (each an "ECO sender") with the expectation that it will receive (or pay) a net premium but has priced the ECO such that the ECO sender will instead pay (or receive) a net premium, the Exchange will reject any ECO that is comprised of the following erroneously-priced complex strategies:

* * * * *

(D) Any ECO that is not rejected by the Complex Strategy Protections would still be subject to the <u>*ECO*</u> Price Protection-Filter, per paragraph (g)(2) of this <u>Rule.</u>

* * * * *
EXHIBIT 5

Additions <u>underlined</u> Deletions [bracketed]

RULES OF THE NYSE ARCA, INC.

* * * * *

OPTIONS RULES

* * * * *

RULE 6-O OPTIONS TRADING

* * * * *

Rule 6.47A-O. Order Exposure Requirements [--- OX]

With respect to orders routed to <u>the Exchange[OX]</u>, Users may not execute as principal orders they represent as agent unless (i) agency orders are first exposed on the Exchange for at least one (1) second; (ii) the User has been bidding or offering on the Exchange for at least one (1) second prior to receiving an agency order that is executable against such bid or offer; or (iii) the User utilizes the Complex Order Auction [Process] ("COA") pursuant to Rule 6.91-O(c) or 6.91P-O(f).

* * * * *

Commentary:

.03 [Reserved.]<u>Prior to or after submitting an order to the Exchange, an OTP Holder or OTP Firm cannot inform another OTP Holder or OTP Firm or any other third party of any of the terms of the order.</u>

* * * * *

Rule 6.91-O. Electronic Complex Order Trading

This Rule is not applicable to trading on Pillar.

* * * * *

Rule 6.91P-O. Electronic Complex Order Trading

(a) *Definitions*. The following are definitions for purposes of this Rule.

(1) "Away Market Deviation" means the difference between the Exchange BB (BO) for a series and the ABB (ABO) for that same series when the Exchange BB (BO) is lower (higher) than the ABB (ABO). The maximum allowable Away Market Deviation is the greater of \$0.05 or 5% below (above) the ABB (ABO) (rounded down to the nearest whole penny). No ECO on the Exchange will execute at a price that would exceed the maximum allowable Away Market Deviation on any component of the complex strategy.

(2) "Complex NBBO" means the derived national best net bid and derived national best net offer for a complex strategy calculated using the NBB and NBO for each component leg of a complex strategy.

(3) "Complex Order Auction" or "COA" means an auction of an ECO as set forth in paragraph (f) of this Rule. The following terms are used for purposes of a COA:

(A) "COA Order" means an ECO that is designated by the OTP Holder as eligible to initiate a COA.

(B) "Request for Response" or "RFR" means the message disseminated to the Exchange's proprietary complex data feed announcing that the Exchange has received a COA Order and has begun a COA. Each RFR message will identify the component series, the price, the size and side of the market of the COA Order.

(C) "RFR Response" means any ECO received during the Response Time Interval that is in the same complex strategy, on the opposite side of the market of the COA Order that initiated the COA and marketable against the COA Order.

(D) "Response Time Interval" means the period of time during which RFR Responses for a COA may be entered. The Exchange will determine and announce by Trader Update the length of the Response Time Interval; provided, however, that the duration of the Response Time Interval will not be less than 100 milliseconds and will not exceed one (1) second.

(4) "Complex strategy" means a particular combination of leg components and their ratios to one another. New complex strategies can be created when the Exchange receives either a request to create a new complex strategy or an ECO with a new complex strategy.

(5) "DBBO" means the derived best net bid ("DBB") and derived best net offer ("DBO") for a complex strategy. The bid (offer) price used to calculate the DBBO on each leg will be the Exchange BB (BO) (if available), bound by the maximum allowable Away Market Deviation. If a leg of a complex strategy does not have an Exchange BB (BO), the bid (offer) price used to calculate the DBBO will be the ABB (ABO) for that leg. The DBBO will be updated as the Exchange BBO or ABBO, as applicable, is updated. (A) If, for a leg, there is no Exchange BB (BO) and no ABB (ABO), the bid (offer) price used to calculate the DBBO will be the offer (bid) price for that leg (i.e., the Exchange BO (BB), bound by the maximum allowable Away Market Deviation (or the ABO (ABB) for that leg if no Exchange BO (BB) is available)), minus (plus) "one collar value," which is (i) \$0.25 where the offer (bid) is priced \$1.00 or lower, or the lesser of \$2.50 or 25% of the offer (bid) where the offer (bid) is priced above \$1.00 (rounded down to the nearest whole penny); or (ii) \$0.01 if the offer is equal to or less than one collar value.

(B) If, for a leg of a complex strategy, there is neither an Exchange BBO nor an ABBO, the Exchange will not allow the complex strategy to trade until, for that leg, there is either an Exchange BB or BO, or an ABB or ABO, on at least one side of the market.

(C) If the best bid and offer prices (when not based solely on the Exchange BBO) for a component leg of the complex strategy are locked or crossed, the Exchange will not allow an ECO for that strategy to execute against another ECO until this condition resolves. If an Away Market quote updates to lock or cross the current Exchange BB (BO) or ABB (ABO) for a component leg of a complex strategy, the Exchange will allow an ECO for that strategy to execute against leg market interest on the Exchange.

(6) "ECO Order Instruction" means a request to cancel, cancel and replace, or modify an ECO.

(7) "Electronic Complex Order" or "ECO" means a Complex Order as defined in Rule 6.62P-O(f) that is submitted electronically to the Exchange.

(8) "Leg" or "leg market" means each of the component option series that comprise an ECO.

(9) "Ratio" or "leg ratio" means the quantity of each leg of an ECO reduced to the least common denominator. The "smallest leg ratio" is the portion of the ratio represented by the leg with the fewest contracts.

(b) Types of ECOs.

(1) ECOs may be entered as Limit Orders, Limit Orders designated as Complex Only Orders, or as Complex QCCs.

(2) ECOs may be designated with a time-in-force of Day, IOC, FOK, or GTC, as those terms are defined in Rule 6.62P-O(b), or GTX.

(A) An ECO designated as IOC or FOK will be rejected if entered during a pre-open state.

(B) An ECO designated as FOK must also be designated as a Complex Only Order.

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(C) An ECO designated as GTX ("ECO GTX Order") will not be displayed, may be entered only during the Response Time Interval of a COA, must be on the opposite side of the COA Order, and must specify the price, size, and side of the market. ECO GTX Orders may be modified or cancelled during the Response Time Interval and any remaining size that does not trade with the COA Order will be cancelled at the end of the COA.

(c) *Priority and Pricing of ECOs.* An ECO received by the Exchange that is not immediately executed (or cancelled), including if it cannot trade under paragraphs (a)(5)(B)-(C) and (c)(1)-(2) of this Rule, or does not initiate a COA per paragraph (f)(1), will be ranked in the Consolidated Book according to price-time priority based on the total net price and the time of entry of the order. Unless otherwise specified in this Rule, ECOs are processed as follows:

(1) When trading with the leg markets, an ECO will trade at the price(s) of the leg markets unless the leg markets are priced more than the maximum allowable Away Market Deviation.

(2) When trading with another ECO, each component leg of the ECO must trade at a price at or within the Exchange BBO for that series, and no leg of the ECO may trade at a price of zero.

(3) An ECO may trade without consideration of prices of the same complex strategy available on other exchanges.

(4) An ECO may trade in one cent (\$0.01) increments regardless of the MPV otherwise applicable to any leg of the complex strategy.

(d) Execution of ECOs at the Open (or Reopening after a Trading Halt).

(1) The Exchange will initiate an ECO Opening Auction Process for a complex strategy only if all legs of the complex strategy have opened or reopened for trading, provided that a complex strategy will not be opened if:

(A) Any leg of the complex strategy has neither an Exchange BO nor an ABO; or

(B) The complex strategy cannot trade per Rule 6.91P-O(a)(5)(B)-(C).

(2) ECOs in a complex strategy with prices that lock or cross one another will be eligible to trade in the ECO Opening Auction Process.

(A) An ECO received during a pre-open state does not participate in the Auction Process for the leg markets pursuant to Rule 6.64P-O.

(B) A complex strategy created intra-day when all leg markets are open will not be subject to an ECO Opening Auction Process and will instead trade pursuant to paragraph (e) of this Rule. (C) The ECO Opening Auction Process will be used to reopen trading in ECOs after a trading halt.

(3) ECO Opening Auction Process.

(A) *ECO Auction Collars*. The upper (lower) price of an ECO Auction Collar for a complex strategy is the DBO (DBB). If the DBO (DBB) is calculated using the Exchange BBO for all legs of the complex strategy and all such Exchange BBOs have displayed Customer interest, the upper (lower) price of an ECO Auction Collar will be one penny (\$0.01) times the smallest leg ratio inside the DBO (DBB).

(B) *ECO Auction Price*. The ECO Auction Price will be the price at which the maximum volume of ECOs can be traded in an ECO Opening Auction, subject to the ECO Auction Collar. If there is more than one price at which the maximum volume of ECOs can be traded within the ECO Auction Collar, the ECO Auction Price will be the price closest to the midpoint of the ECO Auction Collar, or, if the midpoint falls within such prices, the ECO Auction Price will be the midpoint falls within such price will not be lower (higher) than the highest (lowest) price of an ECO to buy (sell) that is eligible to trade in the ECO Opening (or Reopening) Auction Process. If the ECO Auction Price is a sub-penny price, it will be rounded to the nearest whole penny.

(i) An ECO to buy (sell) with a limit price at or above (below) the upper (lower) ECO Auction Collar will be included in the ECO Auction Price calculation at the price of the upper (lower) ECO Auction Collar, but ranked for participation in the ECO Opening (or Reopening) Auction Process in price-time priority based on its limit price.

(ii) Locking and crossing ECOs in a complex strategy will trade at the ECO Auction Price. If there are no locking or crossing ECOs in a complex strategy at or within the ECO Auction Collars, the Exchange will open the complex strategy without a trade.

(4) ECO Order Processing during ECO Opening Auction Process. New ECOs and ECO Order Instructions received when the Exchange is conducting the ECO Opening Auction Process for the complex strategy will be accepted but will not be processed until after the conclusion of this process. When the Exchange is conducting the ECO Opening Auction Process, ECO Order Instructions will be processed as follows:

(A) An ECO Order Instruction received during the ECO Opening Auction Process will not be processed until after this process concludes if it relates to an ECO that was received before the process begins. Any subsequent ECO Order Instruction(s) relating to such ECO will be rejected if received during the ECO Opening Auction Process when a prior ECO Order Instruction is pending.

(B) An ECO Order Instruction received during the ECO Opening Auction Process will be processed on arrival if it relates to an order that was received during this process.

(5) *Transition to continuous trading*. After the ECO Opening Auction, ECOs will be subject to ECO Price Protection, per paragraph (g)(2) of this Rule and, if eligible to trade, will trade as follows:

(A) ECOs received before the complex strategy was opened that did not trade in whole in the ECO Opening Auction Process and that lock or cross other ECOs or leg markets in the Consolidated Book will trade pursuant to paragraph (e) of this Rule; otherwise, such ECOs will be added to the Consolidated Book.

(B) Next, ECOs received during the ECO Opening Auction Process will be processed in time sequence relative to one another based on original entry time.

(e) Execution of ECOs During Core Trading Hours.

(1) Once a complex strategy is open for trading, an ECO will trade with the bestpriced contra-side interest as follows:

(A) If, at a price, the leg markets can trade with an eligible ECO, in full or in a permissible ratio, the leg markets will trade first at that price, pursuant to Rule 6.76AP-O, until the quantities on the leg markets are insufficient to trade with the ECO, at which time such ECO will trade with contra-side ECOs resting in the Consolidated Book at that price.

(B) An ECO will not trade with orders in the leg markets designated as AON, FOK, or with an MTS modifier.

(C) An ECO designated as Complex Only is eligible to trade solely with another ECO and will not trade with the leg markets. A Complex Only Order must trade at a price at or within the DBBO, provided that if the DBB (DBO) is calculated using the Exchange BBOs for all legs of the complex strategy and all such Exchange BBOs have displayed Customer interest, the Complex Only Order will not trade below (above) one penny (\$0.01) times the smallest leg ratio inside the DBB (DBO), regardless of whether there is sufficient quantity on such leg markets to satisfy the ECO.

(D) An ECO will be processed as a Complex Only Order if the ECO has a complex strategy with:

(i) more than five legs;

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(ii) two legs and both legs are buying or both legs are selling, and both legs are calls or both legs are puts; or

(iii) three or more legs and all legs are buying or all legs are selling.

(2) The Exchange will evaluate trading opportunities for a resting ECO when the leg markets comprising a complex strategy update, provided that during periods of high message volumes, such evaluation may be done less frequently.

(f) *Execution of ECOs During a COA*. A COA Order received when a complex strategy is open for trading and that satisfies the requirements of paragraph (1) below will initiate a COA only on arrival after trading with eligible interest per paragraph (2)(A) below. A COA Order will be rejected if entered during a pre-open state or if entered during Core Trading Hours with a time-in-force of FOK or GTX. Only one COA may be conducted at a time in a complex strategy.

(1) Initiation of a COA. To initiate a COA, the limit price of the COA Order to buy (sell) must be higher (lower) than the best-priced, same-side ECOs resting on the Consolidated Book and equal to or higher (lower) than the midpoint of the DBBO. A COA Order that does not satisfy these pricing parameters will not initiate a COA and, unless cancelled, will be ranked in the Consolidated Book and processed as an ECO pursuant to paragraph (e) above. Once a COA is initiated, the Exchange disseminates a Request for Response message, the Response Time Interval begins and, during such interval, the Exchange will accept RFR Responses, including ECO GTX Orders.

(2) *Pricing of a COA*. A COA Order to buy (sell) will initiate a COA at its limit price, unless its limit price locks or crosses the DBO (DBB), in which case it will initiate a COA at a price equal to one penny (\$0.01) times the smallest leg ratio inside the DBO (DBB) (the "COA initiation price").

(A) Prior to initiating a COA, a COA Order to buy (sell) will trade with any ECO to sell (buy) resting in the Consolidated Book that is priced equal to or lower (higher) than the DBO (DBB), unless the DBO (DBB) is calculated using the Exchange BBO for all legs of the complex strategy and all such Exchange BBOs have displayed Customer interest, in which case the COA Order will trade up (down) to one penny (\$0.01) times the smallest leg ratio inside the DBO (DBB). Any unexecuted portion of such COA Order will initiate a COA.

(B) A COA Order will not be eligible to trade with the leg markets until after the COA ends.

(3) *Early End to a COA*. A COA will end before the expiration of the Response Time Interval if:

(A) The Exchange receives an incoming ECO or COA Order to buy (sell) in the same complex strategy that is priced higher (lower) than the initiating COA Order to buy (sell).

(B) The Exchange receives an RFR Response that locks or crosses the DBBO on the same side as the COA Order.

(C) The leg markets update causing the DBBO on the same side as the COA Order to lock or cross (i) any RFR Response(s) or (ii) if no RFR Responses have been received, the best-priced, contra-side ECOs.

(D) The leg markets update causing the contra-side DBBO to lock or cross the COA initiation price.

(4) Allocation of COA Orders. When a COA ends early or at the end of the Response Time Interval, a COA Order will be executed as follows:

(A) RFR Responses to sell (buy) that are priced lower (higher) than a COA Order to buy (sell) will trade in price-time priority up (down) to the DBBO, but if all legs of the DBB (DBO) are calculated using Exchange BBOs and all such Exchange BBOs have displayed Customer interest, RFR Responses to sell (buy) will not trade below (above) one penny (\$0.01) times the smallest leg ratio inside the DBB (DBO).

(B) After COA allocations pursuant to paragraph (f)(4)(A) of this Rule, any unexecuted balance of a COA Order (including those designated as IOC) will be eligible to trade with any contra-side interest, including the leg markets, unless the COA Order is designated or treated as a Complex Only Order.

(C) After a COA Order trades pursuant to paragraph (f)(4)(B) of this Rule, any unexecuted balance of a COA Order that is not cancelled will be ranked in the Consolidated Book and processed as an ECO pursuant to paragraph (e) of this Rule.

(5) *Prohibited Conduct related to COAs.* A pattern or practice of submitting unrelated quotes or orders that cause a COA to conclude early will be deemed conduct inconsistent with just and equitable principles of trade.

(g) ECO Risk Checks

(1) Complex Strategy Limit. The Exchange will establish a limit on the maximum number of new complex strategies that may be requested to be created per MPID, which limit will be announced by Trader Update. When an MPID reaches the limit on the maximum number of new complex strategies, the Exchange will reject all requests to create new complex strategies from that MPID for the rest of the trading day. Notwithstanding the established Complex Strategy Limit, the Exchange may reject a request to create a new complex strategy from any MPID

whenever the Exchange determines it is necessary in the interests of a fair and orderly market.

(2) ECO Price Protection.

(A) Each trading day, an ECO to buy (sell) will be rejected or cancelled (if resting) if it is priced a Specified Threshold amount or more above (below) the Reference Price, as follows:

(i) An ECO that arrives when a complex strategy is open for trading will be evaluated for ECO Price Protection on arrival.

(ii) An ECO received during a pre-open state will be evaluated for ECO Price Protection after the ECO Opening Auction Process concludes.

(iii) An ECO resting on the Consolidated Book before a trading halt will be reevaluated for ECO Price Protection after the ECO Opening Auction Process concludes.

(iv) QCC Orders will not be subject to ECO Price Protection.

(v) ECO Price Protection will not be applied if there is no Reference Price for an ECO.

(B) *Reference Price*. The Reference Price for calculating ECO Price Protection for an ECO to buy (sell) will be the Complex NBO (NBB), provided that, immediately following an ECO Opening Auction Process, the Reference Price will be the ECO Auction Price or, if none, the Complex NBO (NBB). There will be no Reference Price for an ECO if there is no NBBO for any leg of such ECO. For purposes of determining a Reference Price, the Exchange will not use an adjusted NBBO.

(C) Specified Threshold. The Specified Threshold for calculating ECO Price Protection will be \$1.00, unless determined otherwise by the Exchange and announced to OTP Holders and OTP Firms by Trader Update.

(3) Complex Strategy Protections. To protect an OTP Holder or OTP Firm that sends an ECO (each an "ECO sender") with the expectation that it will receive (or pay) a net premium but has priced the ECO such that the ECO sender will instead pay (or receive) a net premium, the Exchange will reject any ECO that is comprised of the following erroneously-priced complex strategies:

(A) "All buy" or "all sell" strategies. An ECO for a complex strategy where all legs are to buy (sell) and it is entered at a price less than one penny (\$0.01) times the sum of the number of options in the ratio of each leg of such strategy (e.g., a complex strategy to buy (sell) 2 calls and buy (sell) 1 put with a price less than \$0.03).

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(B) *Vertical spreads*. A vertical spread complex strategy consists of a leg to sell a call (put) option and a leg to buy a call (put) option in the same option class with the same expiration but at different strike prices, as follows:

(i) An ECO for a vertical spread to buy a lower (higher) strike call and sell a higher (lower) strike call and the ECO sender would receive (pay) a net premium.

(ii) An ECO for a vertical spread to buy a higher (lower) strike put and sell a lower (higher) strike put and the ECO sender would receive (pay) a net premium.

(C) *Calendar spreads*. A calendar spread consists of a leg to sell a call (put) option and a leg to buy a call (put) option in the same option class at the same strike price but with different expirations, as follows.

(i) An ECO for a calendar spread to buy a call leg with a shorter (longer) expiration while selling a call leg with a longer (shorter) expiration and the ECO sender would pay (receive) a net premium.

(ii) An ECO for a calendar spread to buy a put leg with a shorter (longer) expiration while selling a put leg with a longer (shorter) expiration and the ECO sender would pay (receive) a net premium.

(D) Any ECO that is not rejected by the Complex Strategy Protections would still be subject to the ECO Price Protection, per paragraph (g)(2) of this Rule.

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