

Additions underlined
 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 the Exchange[OX], 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).

* * * * *

Rule 6.91-O. Electronic Complex Order Trading

This Rule will not be 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) “Electronic Complex Order” or “ECO” means a Complex Order as defined in Rule 6.62P-O(f) or a Stock/Option Order or Stock/Complex Order as defined in Rule 6.62P-O(h)(6)(A), (B), respectively, that is submitted electronically to the Exchange.

(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 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, 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.

(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) 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) 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 prices of the leg markets.

(2) When trading with another ECO, an ECO must trade at a price at or within the DBBO and no leg of an 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 no BO or NBO;

(B) The bid and offer prices used to calculate the DBBO for the complex strategy are locking or crossing; or

(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.

(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 there is displayed Customer interest on all legs of a complex strategy, the upper (lower) price of an ECO Auction Collar will be one penny (\$0.01) times the smallest leg ratio inside the DBO (DBB) containing Customer interest.

(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, provided that the ECO Auction 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 Instructions relating to such ECO will be rejected.

(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) An ECO 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.

(B) Next, an ECO 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, the leg markets will have first priority at that price and will trade with the incoming ECO pursuant to Rule 6.76AP-O 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 or with an MTS modifier.

(C) 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 less 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 will initiate a COA only on arrival, 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 will be processed as an ECO. 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 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) that is priced below (above) 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 crosses the same-side DBBO.

(C) The leg markets update causing the same-side DBBO 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) will trade in price-time priority with a COA Order to buy (sell). If there is 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).

(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 will be processed as an ECO pursuant to paragraph (e) of this Rule.

(5) *Prohibited Conduct related to COAs.* A pattern or practice of submitting unrelated 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

(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 equal to or above (below) the Reference Price, rounded down to the nearest penny (\$0.01), 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) Cross Orders and ECOs entered on the Trading Floor 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).

(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 Price Protection Filter, per paragraph (g)(2) of this Rule.

* * * * *