

Additions: Underlined
Deletions: [Bracketed]

Rules of NYSE Arca, Inc.

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Rule 1.1. Definitions

Whenever and wherever used herein, unless the context requires otherwise, the following terms shall be deemed to have the meanings indicated:

Affiliate

[(a)]An “affiliate” of, or person “affiliated” with a specific person, is a person that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the person specified.

Aggregate Exercise Price

The term “aggregate exercise price” in respect of an option contract means, if the underlying security is a stock or an Exchange-Traded Fund Share, the exercise price of an option contract multiplied by the number of shares of the underlying security covered by such option contract.

[Reserved

(b) Reserved.]

Approved Person

[(c)]The term “Approved Person” shall refer to a person who is not an OTP Holder or ETP Holder, nor an employee of an OTP Firm, and who:

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Associated Person

[(d)]The term “Associated Person” shall refer to a person who is a partner, officer, director, member of a limited liability company, trustee of a business trust, employee of an OTP Firm, OTP Holder or ETP Holder or any person directly or indirectly controlling, controlled by or under common control with an OTP Firm, OTP Holder or ETP Holder.

Authorized Trader

[(e) With respect to equities traded on the Exchange, t]The term “Authorized Trader” or “AT” shall mean a person who may submit orders to the Exchange's Trading Facilities on behalf of his or her ETP Holder, OTP Holder or Sponsored Participant.

Away Market

[(f)]With respect to cash equity securities[equities] traded on the Exchange, the term “Away Market” means any exchange, alternative trading system (“ATS”) or other broker-dealer (1) with which the NYSE Arca Marketplace maintains an electronic linkage and (2) which provides instantaneous responses to orders routed from the NYSE Arca Marketplace. The Exchange will designate from time to time those ATS's or other broker-dealers that qualify as Away Markets.

With respect to options traded on the Exchange, the term “Away Market” means any Trading Center (1) with which the Exchange maintains an electronic linkage, and (2) that provides instantaneous responses to orders routed from the Exchange.

BBO

[(g)]With respect to cash equity securities[equities] traded on the Exchange, the term “BBO” means the best bid or offer that is a protected quotation on the NYSE Arca Marketplace. The term “BB” means the best bid on the NYSE Arca Marketplace and the term “BO” means the best offer on the NYSE Arca Marketplace.

With respect to options traded on the Exchange, the term “BBO” means the best displayed bid or best displayed offer on the Exchange.

Board and Board of Directors

[(h)]The terms “Board” and “Board of Directors” shall mean the Board of Directors of NYSE Arca, Inc.

Call

The term “call” means an option contract under which the holder of the option has the right, in accordance with the terms of the option, to purchase from the Options Clearing Corporation the number of shares of the underlying security covered by the option contract.

Class of Options

The term “class of options” or “class” means all series of options, both puts and calls, overlying the same underlying security.

Clearing Member

The term “Clearing Member” means an OTP Firm or OTP Holder that has been admitted to membership in the Options Clearing Corporation pursuant to the provisions of the Rules of the Options Clearing Corporation.

Closing Purchase Transaction

The term “closing purchase transaction” means a transaction in a series in which the purchaser intends to reduce or eliminate a short position in such series.

Closing Sale Transaction

The term “closing sale transaction” means a transaction in a series in which the seller intends to reduce or eliminate a long position in such series.

Consolidated Book

For options traded on the Exchange, the term “Consolidated Book” means the Exchange’s electronic book of orders and quotes. All orders and quotes that are entered into the Consolidated Book will be ranked and maintained in accordance with the rules of priority, as provided in Rule 6.76P-O.

Control

[(i)]The term “control” shall mean the power, directly or indirectly, to direct the management or policies of a person, whether through ownership of securities, by contract, or otherwise. A person shall be presumed to control another person if such person:

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Core Trading Hours

[(j) With respect to equities traded on the Exchange, t]The term “Core Trading Hours” [shall]means the hours of 9:30 am Eastern Time through 4:00 pm (Eastern Time) or such other hours as may be determined by the Exchange from time to time.

For options traded on the Exchange, transactions may be effected on the Exchange for an equity options class until close of trading of the primary market for the securities underlying an options class.

Covered

The term “covered” in respect of a short position in a call option contract means that the writer’s obligation is secured by a “specific deposit” or an “escrow deposit” meeting the condition of Rule 610(f) or 610(h), respectively, of the Rules of the Options Clearing Corporation, or the writer holds in the same account as the short position, on a share-for-share basis, a long position either in the underlying security or in an option contract of the same class of options where the exercise price of the option contract in such long position is equal to or less than the exercise price of the option contract in such short position. The

term "covered" in respect of a short position in a put option contract means that the writer holds in the same account as the short position, on a share-for-share basis, a long position in an option contract of the same class of options where the exercise price of the option contract in such long position is equal to or greater than the exercise price of the option contract in such short position.

Crowd Participants

The term "Crowd Participants" means the Market Makers appointed to an option issue under Rule 6.35-O, and any Floor Brokers actively representing orders at the best bid or offer on the Exchange.

Customer and Professional Customer

For options traded on the Exchange, the term "Customer" does not include a broker or dealer.

For options traded on the Exchange, the term "Professional Customer" means an individual or organization that (i) is not a broker or dealer, as defined Sections 3(a)(4) and 3(a)(5) of the Exchange Act and rules thereunder, and (ii) places more than 390 orders in listed options per day on average during a calendar month for its own beneficial account(s).

Except as noted below, each order of any order type counts as one order for Professional Customer order counting purposes.

(a) Complex Orders:

- (1) A complex order comprised of eight (8) option legs or fewer counts as a single order;
- (2) A complex order comprised of nine (9) option legs or more counts as multiple orders with each option leg counting as its own separate order;

(b) "Parent"/"Child" Orders:

- (1) Same Side and Same Series: A "parent" order that is placed for the beneficial account(s) of a person that is not a broker or dealer in securities that is broken into multiple "child" orders on the same side (buy/sell) and series as the "parent" order by a broker or dealer, or by an algorithm housed at a broker or dealer or by an algorithm licensed from a broker or dealer, but which is housed with the customer, counts as one order even if the "child" orders are routed across multiple exchanges.
- (2) Both Sides and/or Multiple Series: A "parent" order (including a strategy order) that is broken into multiple "child" orders on both sides (buy/sell) of a series and/or multiple series counts as multiple orders, with each "child" order counting as a new and separate order.

(c) Cancel/Replace:

- (1) Except as provided in paragraph (c)(2) below, any order that cancels and replaces an existing order counts as a separate order (or multiple new orders in the case of a complex order comprised of nine (9) option legs or more).
- (2) Same Side and Same Series: An order that cancels and replaces any “child” order of a “parent” order that is placed for the beneficial account(s) of a person or entity that is not a broker, or dealer in securities that is broken into multiple “child” orders on the same side (buy/sell) and series as the “parent” order by a broker or dealer, by an algorithm housed at a broker or dealer, or by an algorithm licensed from a broker or dealer, but which is housed with the customer, does not count as a new order.
- (3) Both Sides and/or Multiple Series: An order that cancels and replaces any “child” order of a “parent” order (including a strategy order) that generates “child” orders on both sides (buy/sell) of a series and/or in multiple series counts as a new order.
- (4) Pegged Orders: Notwithstanding the provisions of paragraph (c)(2) above, an order that cancels and replaces any “child” order resulting from a “parent” order being “pegged” to the BBO or NBBO or that cancels and replaces any “child” order pursuant to an algorithm that uses BBO or NBBO in the calculation of “child” orders and attempts to move with or follow the BBO or NBBO of a series counts as a new order each time the order cancels and replaces in order to attempt to move with or follow the BBO or NBBO.

Derivative Securities Product and UTP Derivative Securities Product

[(k)]With respect to cash equity securities[equities] traded on the Exchange, the term “Derivative Securities Product” means a security that meets the definition of “derivative securities product” in Rule 19b-4(e) under the Securities Exchange Act of 1934 and a “UTP Derivative Securities Product” means one of the following Derivative Securities Products that trades on the Exchange pursuant to unlisted trading privileges:

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Effective National Market System Plan, Regular Trading Hours

[(l)]With respect to cash equity securities[equities] traded on the Exchange, for purposes of Rule 7-E, the terms “effective national market system plan” and “regular trading hours,” shall have the meanings set forth in Rule 600(b) of Regulation NMS under the Securities Exchange Act of 1934.

Electronic Order Capture System (“EOC”)

For options traded on the Exchange, the term “Electronic Order Capture System” (“EOC”) means the Exchange’s electronic audit trail and order tracking system that provides an accurate time-sequenced record of all orders and transactions on the Exchange. EOC records the receipt of an order and documents the life of the order through the process of execution, partial execution, or cancellation. This system includes the electronic communications interface between EOC booth terminals and the Floor Broker Hand Held applications. Each OTP Holder or OTP Firm’s EOC booth terminal and each Floor Broker Hand Held Terminal contains an electronic order entry screen that displays the terms and conditions of each order received by that OTP Holder or OTP Firm.

Eligible Security

[(m)]The term “Eligible Security” shall mean any cash equity security (i) either listed on the Exchange or traded on the Exchange pursuant to a grant of unlisted trading privileges under Section 12(f) of the Exchange Act and (ii) specified by the Exchange to be traded on the NYSE Arca Marketplace, NYSE Arca Equities Application or other facility, as the case may be.

ETP

[(n)]The term “ETP” shall refer to an Equity Trading Permit issued by the Exchange for effecting approved securities transactions on the Exchange's Trading Facilities. An ETP may be issued to a sole proprietor, partnership, corporation, limited liability company or other organization which is a registered broker or dealer pursuant to Section 15 of the Securities Exchange Act of 1934, as amended, and which has been approved by the Exchange.

ETP Holder

[(o)]The term “ETP Holder” shall refer to a sole proprietorship, partnership, corporation, limited liability company or other organization in good standing that has been issued an ETP. An ETP Holder must be a registered broker or dealer pursuant to Section 15 of the Securities Exchange Act of 1934. An ETP Holder shall agree to be bound by the Certificate of Incorporation, Bylaws and Rules of the Exchange, and by all applicable rules and regulations of the Securities and Exchange Commission.

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Exchange

[(p)]The term “Exchange” shall mean the NYSE Arca, Inc., a Delaware corporation as described in the company’s Certificate of Incorporation and Bylaws. The NYSE Arca, Inc. is a national securities exchange as that term is defined by Section 6 of the Securities Exchange Act of 1934, as amended.

Exchange Act

[(q)] “Exchange Act” shall mean the Exchange Act of 1934, as amended.

Exchange Option Transaction and Exchange Transaction

The term “Exchange option transaction” and the term “Exchange transaction”, as used in Rules 6.6-O, 6.15-O, 6.22-O, 6.36-O, and 6.79-O means a transaction effected on a national securities exchange which has qualified for participation in the Options Clearing Corporation pursuant to the provisions of the Bylaws of Options Clearing Corporation, between members of such exchange or exchanges, for the purchase or sale of an option contract, or for the closing out of a long or short position in an option contract, and as used elsewhere in this Rule means a transaction effected on the Exchange between Exchange OTP Holders or OTP Firms for the purchase or sale of an options contract, or for the closing out of a long or short position in an option contract.

Exchange-Traded Fund Share

For options traded on the Exchange, the term “Exchange-Traded Fund Share” means Exchange-listed securities representing interests in open-end unit investment trusts or open-end management investment companies that hold securities (including fixed income securities) based on an index or a portfolio of securities.

Exercise Price

The term “exercise price” in respect of an option contract means the stated price per share at which the underlying security may be purchased (in the case of a call) or sold (in the case of a put) upon the exercise of such option contract.

Expiration Date

For options traded on the Exchange, unless separately defined elsewhere in these Rules with regard to a particular option contract, the term “expiration date” in respect of an option contract or Exchange-Traded Fund Share means the third Friday of the expiration month of such option contract, or if such Friday is a day on which the Exchange is not open for business, the preceding day on which the Exchange is open for business; unless, in either case, expiration is accelerated pursuant to Options Clearing Corporation Rule 807. For a One Week Option Series the term “expiration date” shall mean the close of business on the next Friday that is a business day. If a Friday is not a business day, the “expiration date” shall be the close of business on the first business day immediately prior to that Friday. For a Quarterly Options Series, the term “expiration date” shall mean the close of business on the last business day of a calendar quarter.

Expiration Month

The term “expiration month” in respect of an option contract means the month and year in which such option contract expires.

FINRA

[(r)]The term “FINRA” shall mean the Financial Industry Regulatory Authority, Inc.

Firm

For options traded on the Exchange, the term “Firm” means a broker-dealer that is not registered as a dealer-specialist or market maker on a registered national securities exchange or association.

Floor, Trading Floor and Options Trading Floor

[(s)]The terms “Floor,” “Trading Floor” and “Options Trading Floor”[shall] mean the options trading floor.

Freely Transferable Security

[(t)]The term “Freely transferable security” means any security which, on its face, may be transferred without it being necessary that the Board of Directors of the Exchange approved the transferee.

General Authorized Trader

[(u)]With respect to cash equity securities[equities] traded on the Exchange, the term “General Authorized Trader” or “GAT” shall mean an authorized trader who performs only non-market making activities on behalf of an ETP Holder.

Good Standing

[(v)]The term “good standing” shall refer to an ETP Holder, OTP Holder or OTP Firm who is not in violation of any of its agreements with the Exchange or any of the provisions of the Rules or Bylaws of the Exchange, and who has maintained all of the conditions for approval of the ETP or OTP.

Lead Market Maker

[(w)]With respect to cash equity securities[equities]traded on the Exchange, the term “Lead Market Maker” shall mean a registered Market Maker that is the exclusive Designated Market Maker in listings for which the Exchange is the primary market.

With respect to options traded on the Exchange, the term “Lead Market Maker” or “LMM” means a person that has been deemed qualified by the Exchange for the purpose of making transactions on the Exchange in accordance with Rule 6.82-O. Each LMM must be registered with the Exchange as a Market Maker. Any OTP Holder or OTP Firm registered as a Market Maker with the Exchange is eligible to be qualified as an LMM.

Listed

[(x)]The terms “Listed” or “Listed Securities” means securities admitted to dealings on the Exchange.

Long Position

The term “long position” means the number of outstanding option contracts of a given series of options held by a person (purchaser).

Marketable

[(y) With respect to equities traded on the Exchange, t]The term “Marketable” means, for a Limit Order, an order that can be immediately executed or routed. Market Orders are always considered marketable.

Market Maker

[(z)]With respect to cash equity securities[equities] traded on the Exchange, the term “Market Maker” shall refer to an ETP Holder that acts as a Market Maker pursuant to Rule 7-E.

With respect to options traded on the Exchange, the term “Market Maker” refers to an OTP Holder or OTP Firm that acts as a Market Maker pursuant to Rule 6.32-O.

For purposes of Exchange rules, the term Market Maker includes Lead Market Makers, unless the context otherwise indicates.

Market Maker Authorized Trader

[(aa)]With respect to cash equity securities[equities] traded on the Exchange, the term “Market Maker Authorized Trader” or “MMAT” shall mean an authorized trader who performs market making activities pursuant to Rule 7-E on behalf of a Market Maker.

With respect to options traded on the Exchange, the term “Market Maker Authorized Trader” or “MMAT” means an Authorized Trader who performs market making activities pursuant to Rule 6-O on behalf of an OTP Firm or OTP Holder registered as a Market Maker.

Market Participant

[(bb)]With respect to cash equity securities[equities] traded on the Exchange, for the purposes of Rule 7-E, the term “Market Participant” shall include electronic communications networks (“ECN”), dealer-specialists registered with a national securities exchange, and market makers registered with a national securities association.

Market Participant Identifier (“MPID”)

The term “Market Participant Identifier” or “MPID” refers to the identifier 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.

Minimum Price Variation or MPV

The term “Minimum Price Variation” or “MPV” means the price variations established by the Exchange. The MPV for quoting of cash equity securities traded on the Exchange are set forth in Rule 7.6-E. The MPV for quoting and trading options traded on the Exchange are set forth in Rule 6.72-O(a).

Nasdaq

[(cc)]The term "Nasdaq" means The NASDAQ Stock Market LLC.

NBBO, Best Protected Bid, Best Protected Offer, Protected Best Bid and Offer (PBBO)

[(dd)]With respect to cash equity securities[equities] traded on the Exchange, the term “NBBO” means the national best bid or offer. The terms “NBB” mean the national best bid and “NBO” means the national best offer. The terms “Best Protected Bid” or “PBB” means the highest Protected Bid, and “Best Protected Offer” or “PBO” means the lowest Protected Offer, and the term “Protected Best Bid and Offer” (“PBBO”) means the Best Protected Bid and the Best Protected Offer.

With respect to options traded on the Exchange, the term “NBBO” means the national best bid or offer. The terms “NBB” mean the national best bid and “NBO” means the national best offer. Unless 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. The term “Away Market NBBO” refers to a calculation of the NBBO that excludes the Exchange’s BBO.

NMS Stock

[(ee)]The term “NMS stock” shall mean any security, other than an option, for which transaction reports are collected, processed, and made available pursuant to an effective transaction reporting plan.

Nominee

[(ff)]The term “Nominee” means an individual who is authorized by an OTP Firm, in accordance with Rule 2.4, to conduct business on the Exchange’s Trading Facilities and to represent such OTP Firm in all matters relating to the Exchange. As long as a nominee remains effective, the nominee will have status as a “member” of the NYSE Arca, Inc. as that term is defined in Section 3 of the Securities Exchange Act of 1934, as amended. A nominee shall agree to be bound by the Bylaws and Rules of the Exchange, and by all applicable rules and regulations of the Securities and Exchange Commission.

Non-OTP Firm or Non-OTP Holder Market Maker

For options traded on the Exchange, the terms “Non-OTP Firm or Non-OTP Holder Market Maker” include specialists, designated primary market makers, lead market makers, market makers, registered options traders, primary market makers and competitive market makers registered on an exchange other than the NYSE Arca.

Non-Resident Organization

[(gg)]The term “non-resident organization” shall mean:

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Notice of Consent

[(hh)]With respect to cash equity securities[equities] traded on the Exchange, the term “Notice of Consent” shall mean a written statement provided to the Exchange by a Sponsoring ETP Holder by which the Sponsoring ETP Holder acknowledges responsibility for the orders, executions and actions of its Sponsored Participant(s).

NYSE Arca

[(ii)]The term “NYSE Arca” shall have the same meaning as “Exchange” as that term is defined in Rule 1.1.

NYSE Arca Book

[(jj)]For cash equity securities traded on the Exchange, [T]the term “NYSE Arca Book” refers to the NYSE Arca Marketplace's electronic file of orders, which contains all orders entered on the NYSE Arca Marketplace.

NYSE Arca Marketplace

[(kk)]For cash equity securities traded on the Exchange, the term “NYSE Arca Marketplace” shall mean the electronic securities communications and trading facility designated by the Board of Directors through which orders of Users are consolidated for execution and/or display.

Official Closing Price

[(ll)]With respect to cash equity securities [equities] traded on the Exchange, the term “Official Closing Price” means the reference price to determine the closing price in a security for purposes of Rule 7-E Equities Trading. The Official Closing Price is determined as follows:

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Opening Purchase Transaction

The term “opening purchase transaction” means a transaction in a series in which the purchaser intends to create or increase a long position in such series.

Opening Writing Transaction

The term “opening writing transaction” means a transaction in a series in which the seller (writer) intends to create or increase a short position in such series.

Options Clearing Corporation or OCC

The term “Options Clearing Corporation” means The Options Clearing Corporation, a subsidiary of the Participating Exchanges.

Option Contract

The term “option contract” means a put or a call issued, or subject to issuance, by the Options Clearing Corporation pursuant to the Rules of the Options Clearing Corporation. Option contracts are included within the definition of “security” or “securities” as such terms are used in the Bylaws and Rules of the Exchange.

Option Issue

The term “option issue” means the option contract overlying a particular underlying security.

Options Trading

The term “options trading,” when not preceded by the word “Exchange,” means trading in any option contract, whether or not approved for trading on the Exchange.

Order Flow Provider or OFP

With respect to options traded on the Exchange, the term “Order Flow Provider” (“OFP”) means any OTP Holder that submits, as agent, orders to the Exchange.

OTP

[(mm)]The term “OTP” shall refer to an Options Trading Permit issued by the Exchange for effecting approved securities transactions on the Exchange’s Trading Facilities. An OTP may be issued to a sole proprietor, partnership, corporation, limited liability company or other organization which is a registered broker or dealer pursuant to Section 15 of the Securities Exchange Act of 1934, as amended, and which has been approved by the Exchange.

OTP Holder

[(nn)]The term “OTP Holder” shall refer to a natural person, in good standing, who has been issued an OTP, or has been named as a Nominee. An OTP Holder must be a registered broker or dealer pursuant to Section 15 of the Securities Exchange Act of 1934, or a nominee or an associated person of a registered broker or dealer that has been approved by the Exchange to conduct business on the Exchange’s Trading Facilities. An

OTP Holder shall agree to be bound by the Bylaws and Rules of the Exchange, and by all applicable rules and regulations of the Securities and Exchange Commission.

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OTP Firm

[(oo)]The term “OTP Firm” shall refer to a sole proprietorship, partnership, corporation, limited liability company or other organization in good standing who holds an OTP or upon whom an individual OTP Holder has conferred trading privileges on the Exchange’s Trading Facilities pursuant to and in compliance with these Rules. An OTP Firm must be a registered broker or dealer pursuant to Section 15 of the Securities Exchange Act of 1934. An OTP Firm shall agree to be bound by the Certificate of Incorporation, Bylaws and Rules of the Exchange, and by all applicable rules and regulations of the Securities and Exchange Commission.

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Outstanding

The term “outstanding” in respect of an option contract means an option contract that has been issued by the Options Clearing Corporation and has not been the subject of a closing sale transaction, exercised, or expired.

Parent

[(pp)]A “parent” of a specified person or organization is an affiliate controlling such person or organization directly, or indirectly through one or more intermediaries.

Participant

[(qq)]The term “Participant” shall mean any ETP Holder or OTP Holder, partner, approved person, stockholder associate, registered employee or other full-time employee of an ETP Holder or OTP Firm.

Participating Exchange

With respect to options traded on the Exchange, the term “Participating Exchange” means a national securities exchange that has qualified for participation in the Options Clearing Corporation pursuant to the provisions of the Rules of the Options Clearing Corporation.

Person

[(rr)]The term “person” shall refer to a natural person, corporation, partnership, limited liability company, association, joint stock company, trustee of a trust fund, or any organized group of persons whether incorporated or not.

Primary Market

With respect to options traded on the Exchange, the term “primary market” means the principal market in which the underlying security is traded.

Protected Bid, Protected Offer, Protected Quotation

[(ss)]With respect to cash equity securities[equities] traded on the Exchange, the term “Protected Bid” or “Protected Offer” shall mean a quotation in an NMS stock that is (i) displayed by an Automated Trading Center; (ii) disseminated pursuant to an effective national market system plan; and (iii) an Automated Quotation that is the best bid or best offer of a national securities exchange, the best bid or best offer of The Nasdaq Stock Market, Inc. or the best bid or best offer of a national securities association that is not the best bid or best offer of The Nasdaq Stock Market, Inc. The term “Protected Quotation” shall mean a quotation that is a Protected Bid or Protected Offer. For purposes of the foregoing definitions, the terms “Automated Trading Center,” “Automated Quotation,” “Manual Quotation,” “Best Bid,” and “Best Offer,” shall have the meanings ascribed to them in Rule 600(b) of Regulation NMS under the Securities Exchange Act.

Put

The term “put” means an option contract under which the holder of the option has the right, in accordance with the terms of the option, to sell to the Options Clearing Corporation the number of shares of the underlying security covered by the option contract.

Quarterly Options Series

The term “Quarterly Options Series” means a series in an options class that is approved for listing and trading on the Exchange in which the series is opened for trading on any business day and that expires at the close of business on the last business day of a calendar quarter.

Registered Employee

[(tt)]The term “Registered Employee” shall mean any person soliciting or conducting business in securities on behalf of an ETP Holder, OTP Firm or OTP Holder.

Routing Agreement

[(uu)]With respect to cash equity securities[equities] traded on the Exchange, the term “Routing Agreement” shall mean the form of Agreement between an ETP Holder and the broker-dealer affiliate of NYSE Arca, L.L.C., under which the broker-dealer affiliate of NYSE Arca, L.L.C., agrees to act as agent for routing orders of the ETP Holder and the ETP Holder's Sponsored Participants entered into the NYSE Arca Marketplace to other market centers or broker-dealers for execution, other than excluded by the terms of the Routing Agreement, whenever such routing is required.

Rules of the Options Clearing Corporation

The term “Rules of the Options Clearing Corporation” means the By-laws and the Rules of the Options Clearing Corporation, and all written interpretations thereof, as the same may be in effect from time to time.

Security

[(vv)] The term “security” shall mean any security as defined in Rule 3(a)(10) under the Securities Exchange Act of 1934, provided, however, that for purposes of Rule 7-E such term means any NMS stock.

Self-Regulatory Organization (“SRO”)

[(ww)] The terms “self-regulatory organization” and “SRO” shall have the same meaning as set forth in the provisions of the Securities Exchange Act of 1934 relating to national securities exchanges.

Series of Options

The term “series of options,” “options series,” or “series” means all options contracts of the same class of options having the same expiration date and expiration price, and the same unit of trading.

Short Position

The term “short position” means the number of outstanding option contracts of a given series of options with respect to which a person is obligated as a writer (seller).

Sponsored Participant

[(xx)] With respect to cash equity securities[equities] traded on the Exchange, the term “Sponsored Participant” shall mean a person which has entered into a sponsorship arrangement with a Sponsoring ETP Holder pursuant to Rule 7.29-E.

Sponsoring ETP Holder

[(yy)] With respect to cash equity securities[equities] traded on the Exchange, the term “Sponsoring ETP Holder” shall mean a broker-dealer that has been issued an ETP by the Exchange who has been designated by a Sponsored Participant to execute, clear and settle transactions resulting from the NYSE Arca Marketplace. The Sponsoring ETP Holder shall be either (i) a clearing firm with membership in a clearing agency registered with the Commission that maintains facilities through which transactions may be cleared or (ii) a correspondent firm with a clearing arrangement with any such clearing firm.

Sponsorship Provisions

[(zz)]With respect to cash equity securities[equities] traded on the Exchange, the term “Sponsorship Provisions” shall mean the provisions set forth in Rule 7.29-E(b)(2). For a Sponsored Participant to obtain authorized access to the NYSE Arca Marketplace, the Sponsored Participant and its Sponsoring ETP Holder must enter into an agreement which incorporates the Sponsorship Provisions.

Stockholder Associate

[(aaa)]With respect to cash equity securities[equities] traded on the Exchange, the term “Stockholder Associate” means a person who is the employee of an ETP Holder, who is actively engaged in its business and devotes the major portion of his or her time thereto, who is not an ETP Holder, and who, as a holder of cash equity securities, has been approved by the Exchange as a stockholder associate.

Trade-Through

[(bbb)]With respect to cash equity securities[equities] traded on the Exchange, the term “trade-through” shall mean the purchase or sale of an NMS stock during regular trading hours, either as principal or agent, at a price that is lower than a Protected Bid or higher than a Protected Offer.

Trading Center

[(ccc)]With respect to cash equity securities[equities] traded on the Exchange, for purposes of Rule 7-E, the term “Trading Center” shall mean a national securities exchange or a national securities association that operates an SRO trading facility, an alternative trading system, an exchange market maker, an OTC market maker or any other broker or dealer that executes orders internally by trading as principal or crossing orders as agent. For purposes of this definition, the terms “SRO trading facility,” “alternative trading system,” “exchange market maker” and “OTC market maker” shall have the meanings ascribed to them in Rule 600(b) of Regulation NMS under the Securities Exchange Act.

With respect to options traded on the Exchange, for purposes of Rule 6-O, the term “Trading Center” means a national securities exchange that has qualified for participation in the Options Clearing Corporation pursuant to the provisions of the rules of the Options Clearing Corporation.

Trading Crowd

With respect to options traded on the Exchange, the term “trading crowd” means all Market Makers and Floor Brokers at the trading post where such trading crowd is located and all Market Makers who regularly effect transactions in person for their Market Maker accounts at that trading post, but generally will consist of the individuals present at the trading post.

Trading Facilities

[(ddd)]The term “Trading Facilities” shall refer to the Exchange's facilities for the trading of cash equity securities[equities], options, office space provided by the Exchange to ETP Holders, OTP Holders and OTP Firms in connection with their floor trading activities, and any and all electronic or automated order execution systems and reporting services provided by the Exchange to ETP Holders, OTP Holders and OTP Firms.

Trading Official

For options traded on the Exchange, a “Trading Official” will be an Exchange employee or officer, who is designated by the Chief Executive Officer, or its designee or by the Chief Regulatory Officer or its designee. Any Exchange employee or officer designated as a Trading Official will from time to time as provided in these rules have the ability to recommend and enforce rules and regulations relating to trading access, order, decorum, health, safety and welfare on the Exchange.

Type of Option

The term “type of option” means the classification of an option contract as either a put or a call.

Uncovered

The term “uncovered” in respect of a short position in an option contract means that the short position is not covered.

Underlying Stock or Underlying Security

The terms “underlying stock” or “underlying security” in respect of an option contract means the security that the Options Clearing Corporation shall be obligated to sell (in the case of a call) or purchase (in the case of a put) upon the valid exercise of such option contract.

User

[(eee)]With respect to cash equity securities[equities] traded on the Exchange, the term “User” shall mean any ETP Holder or Sponsored Participant who is authorized to obtain access to the NYSE Arca Marketplace pursuant to Rule 7.29-E.

With respect to options traded on the Exchange, the term “User” means any OTP Holder or OTP Firm who is authorized to obtain access to the Exchange pursuant to Rule 6.2A-O.

User Agreement

[(fff)]With respect to cash equity securities[equities] traded on the Exchange, the term “User Agreement” shall mean an appropriate subscription agreement entered into by the User with the Exchange[NYSE Arca, L.L.C].

UTP Listing Market

[(ggg)]With respect to cash equity securities[equities] traded on the Exchange, the term “UTP Listing Market” means the primary listing market for a UTP Security.

UTP Regulatory Halt

[(hhh)]With respect to cash equity securities[equities] traded on the Exchange, the term “UTP Regulatory Halt” means a trade suspension, halt, or pause called by the UTP Listing Market in a UTP Security that requires all market centers to halt trading in that security.

UTP Security

[(iii)]The term “UTP Security” means a cash equity security that is listed on a national securities exchange other than the Exchange and that trades on the NYSE Arca Marketplace pursuant to unlisted trading privileges.

Wholly Owned Subsidiary

[(jjj)]The term “wholly owned subsidiary” means a subsidiary substantially all of whose outstanding voting securities are owned by its parent and/or the parent's other wholly owned subsidiaries.

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Options Rules

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Rule 6-O OPTIONS TRADING

Rules with a “P” modifier are operative for symbols that are trading on the Pillar trading platform. If a symbol is trading on the Pillar trading platform, a rule with the same number as a rule with a “P” modifier will no longer be operative for that symbol. The Exchange will announce by Trader Update when symbols are trading on the Pillar trading platform.

Rules Principally Applicable to Trading of Option Contracts

Rule 6.1-O. Applicability, Definitions and References

This Rule is not applicable to trading on Pillar.

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Rule 6.1P-O. Applicability

(a) Rule 6-O is applicable to the trading on the Exchange of options contracts issued by the Options Clearing Corporation, the terms and conditions of such contracts, the exercise

and settlement thereof, the handling of orders, and the conduct of accounts and other matters relating to options trading. Except to the extent that specific provisions of Rule 6-O govern, or unless the context otherwise requires, the provisions of the Bylaws and of all other Rules and policies of the Board of Directors shall be applicable to the trading on the Exchange of option contracts.

(b) *Applicability of Other Exchange Rules.* Unless stated otherwise, Exchange rules are applicable to transactions on the Exchange in option contracts.

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Rule 6.1A-O. Definitions and References – OX

This Rule is not applicable to trading on Pillar.

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Rule 6.37-O. Obligations of Market Makers

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(c) *Unusual Conditions - [Opening] Auctions.* If the interest of maintaining a fair and orderly market so requires, a Trading Official may declare that unusual market conditions exist in a particular issue and allow Market Makers in that issue to make auction bids and offers with spread differentials of up to two times, or in exceptional circumstances, up to three times, the legal limits permitted under Rule 6.37-O or Rule 6.64P-O(a)10). In making such determinations to allow wider markets, the Trading Official should consider the following factors: (A) whether there is pending news, a news announcement or other special events; (B) whether the underlying security [or Exchange-Traded Fund Share] is trading outside of the bid or offer in such security then being disseminated; (C) whether OTP Holders and OTP Firms receive no response to orders placed to buy or sell the underlying security; and (D) whether a vendor quote feed is clearly stale or unreliable.

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Rule 6.37A-O. Market Maker Quotations.

This Rule is not applicable to trading on Pillar.

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Rule 6.37AP-O. Market Maker Quotations.

(a) A Market Maker may send quotations only in the issues included in its appointment.

(1) *Quote or Quotation.* The term “quote” or “quotation” means a bid or offer sent by a Market Maker that is not sent as an order. Once received by the Exchange, a subsequent quotation sent by a Market Maker replaces that Market Maker’s previously displayed same-side quotation.

(2) A Market Maker may designate either a Non-Routable Limit Order or an ALO Order as a quote and such quote will be processed as described in Rule 6.62P-O.

(b) *Lead Market Makers.* A Lead Market Maker (“LMM”) must provide continuous two-sided quotations throughout the trading day in its appointed issues for 90% of the time the Exchange is open for trading in each issue. Such quotations must meet the legal quote width requirements of Rule 6.37-O. These obligations will apply to all of the LMMs appointed issues collectively, rather than on an issue-by-issue basis. Compliance with this obligation will be determined on a monthly basis.

(1) If a technical failure or limitation of a system of the Exchange prevents a LMM from maintaining, or prevents a LMM from communicating to the Exchange, timely and accurate electronic quotes in an issue, the duration of such failure will not be considered in determining whether the LMM has satisfied the 90% quoting standard with respect to that option issue. The Exchange may consider other exceptions to this continuous electronic quote obligation based on demonstrated legal or regulatory requirements or other mitigating circumstances.

(c) *Market Makers.* A Market Maker must provide continuous two-sided quotations throughout the trading day in its appointed issues for 60% of the time the Exchange is open for trading in each issue. Such quotations must meet the legal quote width requirements of Rule 6.37-O. These obligations will apply to all of the Market Maker's appointed issues collectively, rather than on an issue-by-issue basis. Compliance with this obligation will be determined on a monthly basis.

(1) If a technical failure or limitation of a system of the Exchange prevents a Market Maker from maintaining, or prevents a Market Maker from communicating to the Exchange, timely and accurate electronic quotes in an issue, the duration of such failure shall not be considered in determining whether the Market Maker has satisfied the 60% quoting standard with respect to that option issue. The Exchange may consider other exceptions to this continuous electronic quote obligation based on demonstrated legal or regulatory requirements or other mitigating circumstances.

(d) *Required Submission of Quotations.* A Market Maker may be called upon by a Trading Official to submit a single quote or maintain continuous quotes in one or more series of an option issue within its appointment whenever, in the judgment of such Trading Official, it is necessary to do so in the interest of maintaining fair and orderly markets.

(e) *Firm Quotes.* A Market Maker will be compelled to buy/sell a specified quantity of option contracts at the disseminated bid/offer pursuant to his obligations under Rule 6.86-O.

Commentary:

.01 The obligations set forth in subsections (b) and (c) of this Rule do not apply to Market Makers with respect to adjusted option series, to series of options on cash equity

securities with a time to expiration of nine months or greater, or to series of options on Index Options with a time to expiration of twelve months or greater. For purposes of this Rule, an adjusted option series is a series of options wherein, as a result of a corporate action by the issuer of the underlying security, one option contract in the series represents the delivery of other than 100 shares of underlying stock or Exchange-Traded Fund Shares.

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Rule 6.40-O. Risk Limitation Mechanism

This Rule is not applicable to trading on Pillar.

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Rule 6.40P-O. Pre-Trade and Activity-Based Risk Controls

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

(1) “Entering Firm” means an OTP Holder or OTP Firm (including those acting as Market Makers).

(2) “Pre-Trade Risk Controls” refer to the following optional limits, each of which an Entering Firm may utilize with respect to its trading activity on the Exchange.

(A) “Single Order Maximum Notional Value Risk Limit” means a pre-established maximum dollar amount for a single order or quote to be applied one time. Orders designated GTC will be subject to this check only once.

(B) “Single Order Maximum Quantity Risk Limit” means a pre-established maximum number of contracts that may be included in a single order or quote before it can be traded. Orders designated GTC will be subject to this check only once.

(3) “Activity-Based Risk Controls” refer to activity-based risk limits that may be applied to orders and quotes in an options class based on specified thresholds measured over the course of an Interval. The Activity-Based Risk Controls available on the Exchange are:

(A) “Transaction-Based Risk Limit” refers to a pre-established limit on the number of an Entering Firm’s orders and quotes executed in a specified class of options per Interval;

(B) “Volume-Based Risk Limit” refers to a pre-established limit on the number of contracts of an Entering Firm’s orders and quotes that can be executed in a specified class of options per Interval; or

(C) “Percentage-Based Risk Limit” refers to a pre-established limit on the

percentage of contracts executed in a specified class of options as measured against the full size of an Entering Firm's orders and quotes executed per Interval. To determine whether an Entering Firm has breached the specified percentage limit, the Exchange calculates the percent of each order or quote in a specified class of option that is executed during an Interval (each, a "percentage"), and sums up those percentages. This risk limit will be breached if the sum of the percentages exceeds the pre-established limit.

(4) "Global Risk Control" refers to a pre-established limit on the number of times an Entering Firm may breach its Activity-Based Risk Controls per Interval.

(5) "Interval" refers to the configurable time period during which the Exchange will determine if an Activity-Based Risk Control or the Global Risk Control has been breached.

(b) *Setting and Adjusting Pre-Trade, Activity-Based, and Global Risk Controls.*

(1) Pre-Trade, Activity-Based and Global Risk Controls may be set before the beginning of a trading day and may be adjusted during the trading day.

(2) Pre-Trade, Activity-Based and Global Risk Controls can be set at the MPID level or at one or more sub-IDs associated with that MPID, or both.

(c) *Automated Breach Actions.* The Exchange will automatically take the following actions.

(1) *Pre-Trade Risk Controls.*

(A) *Breach Action for Pre-Trade Risk Controls.*

(i) A Limit Order or quote that breaches the designated limit of either a Single Order Maximum Notional Value Risk Limit or Single Order Maximum Quantity Risk Limit will be rejected.

(ii) A Market Order that breaches the designated limit of a Single Order Maximum Quantity Risk Limit will be rejected. A Market Order that breaches the designated limit of a Single Order Notional Value Risk Limit will be rejected if the order arrived during continuous trading or canceled if the order was received during a pre-open state and the quantity remaining to trade after an Auction concludes breaches the designated limit.

(2) *Activity-Based Risk Controls*

(A) An Entering Firm acting as a Market Maker is required to apply one of the Activity-Based Risk Controls to all of its orders and quotes. An Entering Firm that is not acting as a Market Maker may, but is not required to, apply one of the Activity-Based Risk Controls to its orders.

- (B) To determine when an Activity-Based Risk Control has been breached, the Exchange will maintain a Trade Counter that will be incremented every time an order or quote trades, including any leg of a Complex Order, and will aggregate the number of contracts traded during each such execution. An Entering Firm may opt to exclude any orders designated IOC or FOK from being considered by a Trade Counter.
- (C) When designating one of the three Activity-Based Risk Controls, the Entering Firm must indicate which of the following actions it wishes the Exchange to take if an Activity-Based Risk Limit is breached:
- (i) Notification Only: The Exchange will continue to accept new order and quote messages and related instructions and will not cancel any unexecuted orders or quotes in the Consolidated Book.
 - (ii). Block Only: The Exchange will reject new order and quote messages and related instructions, provided that the Exchange will continue to process instructions from the Entering Firm to cancel one or more orders or quotes (including Auction-Only Orders) in full or any of the instructions specified in paragraph (e) of this Rule.
 - (iii) Cancel and Block: In addition to the restrictions defined above for “Block Only,” the Exchange will cancel all unexecuted orders and quotes in the Consolidated Book other than Auction-Only Orders and orders designated GTC.
- (D) If an Entering Firm breaches an Activity-Based Risk Control, the Automated Breach Action will be applied to its orders and quotes in the affected class of options.
- (E) The Exchange will specify by Trader Update any applicable minimum, maximum and/or default settings for the Activity-Based Risk Controls, subject to the following:
- (i) For the Transaction-Based Risk Limit, the minimum setting will not be less than one and the maximum setting will not be more than 2,000.
 - (ii) For the Volume-Based Risk Limit, the minimum setting will not be less than one and the maximum setting will not be more than 500,000.
 - (iii) For the Percentage-Based Risk Limit, the minimum setting will not be less than 50 and the maximum setting will not be more than 200,000.
- (F) The Exchange will specify by Trader Update the Interval for the Activity-Based Risk Controls, subject to the following:

(i) The Interval will not be less than 100 milliseconds and will not be greater than 300,000 milliseconds, inclusive of the duration of any trading halt occurring within that time.

(ii) For transactions occurring in the Core Open Auction, per Rule 6.64P-O, the applicable time period is the lesser of (i) the time between the Core Open Auction of a series and the initial transaction or (ii) the Interval.

(3) Global Risk Controls

(A) If the Global Risk Control limit is breached, the Exchange will Cancel and Block, per paragraph (c)(2)(iii) above.

(B) If an Entering Firm breaches the Global Risk Control, the Automated Breach Action will be applied to all orders and quotes of the Entering Firm in all classes of options regardless of which class(es) of options caused the underlying breach of Activity-Based Risk Controls.

(C) The Exchange will specify by Trader Update any applicable minimum, maximum and/or default settings for the Global Risk Control, provided that the minimum setting will not be less than 25 and the maximum setting will not be more than 100.

(D) The Exchange will specify by Trader Update the Interval for the Global Risk Controls, subject to the following:

(i) The Interval will not be less than 100 milliseconds and will not be greater than 300,000 milliseconds, inclusive of the duration of any trading halt occurring within that time.

(ii) For transactions occurring in the Core Open Auction, per Rule 6.64P-O, the applicable time period is the lesser of (i) the time between the Core Open Auction of a series and the initial transaction or (ii) the Interval.

(d) Reinstatement of Entering Firm After Automated Breach Action. If either a “Block Only” or “Cancel and Block” Automated Breach Action has been triggered, the Exchange will not reinstate the Entering Firm’s ability to enter orders and quotes and related instructions on the Exchange (other than instructions to cancel one or more orders or quotes (including Auction-Only Orders and orders designated GTC) in full) without the consent of the Entering Firm, which may be provided via automated contact if it was a breach of an Activity-Based Risk Control. An Entering Firm that breaches the Global Risk Control will not be reinstated unless the Entering Firm provides consent via non-automated contact with the Exchange.

(e) Kill Switch Actions. An Entering Firm can direct the Exchange to take one or more of the following actions with respect to orders and quotes at either an MPID or sub-ID level:

(1) Cancel all Auction-Only Orders;

- (2) Cancel all orders designated GTC;
- (3) Cancel all unexecuted orders and quotes in the Consolidated Book other than Auction-Only Orders and orders designated GTC; or
- (4) Block the entry of any new order and quote messages and related instructions, provided that the Exchange will continue to accept instructions from the Entering Firm to cancel one or more orders or quotes (including Auction-Only Orders and orders designated GTC) in full, and later, reverse that block.

Commentary:

.01 The Pre-Trade, Activity-Based, and Global Risk Controls described in this Rule are meant to supplement, and not replace, the OTP Holder's or OTP Firm's own internal systems, monitoring, and procedures related to risk management and are not designed for compliance with Rule 15c3-5 under the Exchange Act. Responsibility for compliance with all Exchange and SEC rules remains with the OTP Holder or OTP Firm.

Rule 6.41P-O. [Reserved]Price Reasonability Checks - Orders and Quotes

- (a) The Exchange will apply Price Reasonability Checks defined in paragraphs (b) and (c) of this Rule to all Limit Orders and quotes during continuous trading on each trading day (excluding those represented in open outcry), subject to the following:
 - (1) A Limit Order or quote received during a pre-open state will be subject to the Price Reasonability Checks after an Auction concludes. A Limit Order or quote that was resting on the Consolidated Book before a trading halt will be subject to the Price Reasonability Checks again after the Trading Halt Auction. A put option message to buy will be subject to the Arbitrage Check regardless of when it arrives.
 - (2) If the calculation of the Price Reasonability Check is not consistent with the MPV for the series, it will be rounded down to the nearest price within the applicable MPV.
 - (3) The Price Reasonability Checks will not apply to:
 - (i) any options series for which the underlying security has a non-standard cash or stock deliverable as part of a corporate action;
 - (ii) any options series for which the underlying security is identified as over-the-counter ("OTC");
 - (iii) any option series on an index; and
 - (iv) any option series for which the Exchange determines it is necessary to exclude underlying securities in the interests of maintaining a fair and orderly market,

which the Exchange will announce by Trader Update.

(b) Arbitrage Checks for buy orders or quotes.

(1) Puts. Order or quote messages to buy for put options will be rejected if the price of the order or quote is equal to or greater than the strike price of the option.

(2) Calls. Order or quote messages to buy for call options will be rejected or canceled (if resting) if the price of the order or quote is equal to or greater than the last sale price of the underlying security on the Primary Market, plus a specified threshold to be determined by the Exchange and announced by Trader Update.

(c) Intrinsic Value Checks for sell orders or quotes.

(1) The Intrinsic Value for a put option is equal to the strike price minus the last sale price of the underlying security on the Primary Market.

(2) The Intrinsic Value for a call option is equal to the last sale price of the underlying security on the Primary Market minus the strike price.

(3) ISOs to sell are not subject to the Intrinsic Value Check described in this paragraph (c).

(4) Puts and calls.

(A) Orders or quotes to sell for both puts and calls will be rejected or canceled (if resting) if the price of the order or quote is equal to or lower than its Intrinsic Value, minus a specified threshold to be determined by the Exchange and announced by Trader Update.

(B) The threshold percentage is based on the NBB, provided that, immediately following an Auction, it is based on the Auction Price or, if none, the lower Auction Collar price, or, if none, the NBB. For purposes of determining the Intrinsic Value, the Exchange will not use an adjusted NBBO. The Intrinsic Value Check for sell orders and quotes will not be applied if the Intrinsic Value cannot be calculated.

(d) Automated Breach Action for Market Makers. If a Market Maker's order or quote message is rejected or cancelled (if resting) pursuant to paragraph (b) or (c) of this Rule, the Exchange will Cancel and Block orders and quotes in the affected class of options per Rule 6.40P-O(c)(2)(iii).

(1) Global Risk Control Trigger. This breach will be counted towards the Market Maker's Global Risk Control limit per Rule 6.40P-O(a)(4).

(2) Reinstatement of Market Maker After Automated Breach Action. The Exchange will not reinstate the Market Maker's ability to enter orders and quotes and related instructions on the Exchange in that class of options (other than instructions to

cancel one or more orders/quotes (including Auction-Only Orders and orders designated GTC) in full) without the consent of the Market Maker, which may be provided via automated contact.

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Rule 6.60-O. Price Protection - Orders

This Rule is not applicable to trading on Pillar.

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Rule 6.61-O. Price Protection - Quotes

This Rule is not applicable to trading on Pillar.

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Rule 6.62-O. Certain Types of Orders Defined

This Rule is not applicable to trading on Pillar.

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Rule 6.62P-O. Orders and Modifiers

(a) Primary Order Types

(1) Market Order. An unpriced order message to buy or sell a stated number of option contracts at the best price obtainable, subject to the Trading Collar assigned to the order. A Market Order may be designated Day or GTC. Unexecuted Market Orders are ranked Priority 1 - Market Orders. For purposes of processing Market Orders, the Exchange will not use an adjusted NBBO.

(A) A Market Order that arrives during continuous trading will be rejected, or that was routed, returns unexecuted, and has no resting quantity to join will be cancelled if:

(i) There is no NBO.

(ii) There is no NBB and the NBO is higher than \$0.50 (for sell Market Orders only). If there is no NBB and the NBO is \$0.50 or below, a Market Order to sell will not be rejected and will have a working price and display price one MPV above zero and will not be subject to a Trading Collar. A Market Order to sell will be cancelled if it was assigned a Trading Collar, routed, and when it returns unexecuted, it has no resting portion to join and there is no NBB, regardless of the price of the NBO;

(iii) There are no contra-side Market Maker quotes on the Exchange or contra-side Away Market NBBO, provided that a Market Order to sell will be accepted as provided for in paragraph (a)(1)(A)(ii) of this Rule; or

(iv) the NBBO is not locked or crossed and the spread is equal to or greater than the following:

<u>The midpoint of the NBBO</u>	<u>Spread Parameter</u>
<u>\$0.00 to \$2.00</u>	<u>\$0.75</u>
<u>Above \$2.00 to and including \$5.00</u>	<u>\$1.25</u>
<u>Above \$5.00 to and including \$10.00</u>	<u>\$1.50</u>
<u>Above \$10.00 to and including \$20.00</u>	<u>\$2.50</u>
<u>Above \$20.00 to and including \$50.00</u>	<u>\$3.00</u>
<u>Above \$50.00 to and including \$100.00</u>	<u>\$4.50</u>
<u>Above \$100.00</u>	<u>\$6.00</u>

(B) An Aggressing Market Order to buy (sell) will trade with all orders or quotes to sell (buy) on the Consolidated Book priced at or below (above) the Trading Collar before routing to Away Market(s) at each price. After trading or routing, or both, the Market Order will be displayed at the Trading Collar, subject to paragraph (a)(1)(C).

(C) A Market Order will be cancelled before being displayed if there are no remaining contra-side Market Maker quotes on the Exchange or contra-side Away Market NBBO.

(D) After being displayed at its Trading Collar, a Market Order will be cancelled if there ceases to be a contra-side NBBO.

(E) A resting, displayed Market Order that is locked or crossed by an Away Market will be routed to that Away Market.

(2) Limit Order. An order message to buy or sell a stated number of option contracts at a specified price or better, subject to Limit Order Price Protection and the Trading Collar assigned to the order. A Limit Order may be designated Day, IOC, or GTC. Unless otherwise specified, the working price and the display price of a Limit Order is equal to the limit price of the order, is eligible to be routed, and is ranked Priority 2 - Display Orders.

(A) A marketable Limit Order to buy (sell) received by the Exchange will trade with all orders and quotes to sell (buy) on the Consolidated Book priced at or below (above) the NBO (NBB) before routing to an Away Market NBO (NBB), and may route to prices higher (lower) than the NBO (NBB) only after trading with orders and quotes to sell (buy) on the Consolidated Book at each price point. Once no longer marketable, the Limit Order will be ranked and displayed on the Consolidated Book.

(3) Limit Order Price Protection.

(A) Each trading day, a Limit Order or quote 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 price within the MPV for the series (“Limit Order Price Protection”). Cross Orders, LOO Orders, and orders represented in open outcry, are not subject to Limit Order Price Protection. Limit Order Price Protection will not be applied to a Limit Order or quote if there is no Reference Price.

(i) A Limit Order or quote that arrives when a series is open will be evaluated for Limit Order Price Protection on arrival.

(ii) A Limit Order or quote received during a pre-open state will be evaluated for Limit Order Price Protection after an Auction concludes.

(iii) A Limit Order or quote resting on the Consolidated Book before a trading halt will be evaluated for Limit Order Price Protection again after the Trading Halt Auction concludes.

(B) Reference Price. The Reference Price for calculating Limit Order Price Protection for an order or quote to buy (sell) will be the NBO (NBB), provided that, immediately following an Auction, the Reference Price will be the Auction Price or, if none, the upper (lower) Auction Collar price, or, if none, the NBO (NBB). For purposes of calculating Limit Order Price Protection, the Exchange will not use an adjusted NBBO.

(C) Specified Threshold. Unless determined otherwise by the Exchange and announced to OTP Holders and OTP Firms by Trader Update, the Specified Threshold applicable to Limit Order Price Protection will be:

<u>Reference Price</u>	<u>Specified Threshold</u>
<u>\$0.00 to \$1.00</u>	<u>\$0.30</u>
<u>\$1.01 to \$10.00</u>	<u>50%</u>
<u>\$10.01 to \$20.00</u>	<u>40%</u>

<u>\$20.01 to \$50.00</u>	<u>30%</u>
<u>\$50.01 to \$100.00</u>	<u>20%</u>
<u>\$100.01 and higher</u>	<u>10%</u>

(4) Trading Collar. A Market Order or Limit Order to buy (sell) will not trade or route to an Away Market at a price above (below) the Trading Collar assigned to that order. Auction-Only Orders, Limit Orders designated IOC or FOK, Cross Orders, ISOs, and Market Maker quotes are not subject to Trading Collars. Trading Collars will not be applicable during Auctions.

(A) Assignment of Trading Collar. A Trading Collar assigned to an order will be calculated once per trading day and will be updated only if the series is halted.

(i) An order that is received during continuous trading will be assigned a Trading Collar before being processed for either trading, repricing, or routing. An order that is routed and returned unexecuted will use the Trading Collar that was previously assigned to it.

(ii) An order received during a pre-open state will be assigned a Trading Collar after an Auction concludes.

(iii) The Trading Collar for an order resting on the Consolidated Book before a trading halt will be calculated again after the Trading Halt Auction concludes.

(B) Reference Price. The Reference Price for calculating the Trading Collar for an order to buy (sell) will be the NBO (NBB). For Auction-eligible orders to buy (sell) that were received during a pre-open state or orders that are re-assigned a Trading Collar after a trading halt, the Reference Price will be the Auction Price or, if none, the upper (lower) Auction Collar price or, if none, the NBO (NBB). For purposes of calculating a Trading Collar, the Exchange will not use an adjusted NBBO.

(i) A Trading Collar will not be assigned to a Limit Order if there is no Reference Price at the time of calculation.

(C) Calculation of the Trading Collar. The Trading Collar 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%.

(i) If the calculation of a Trading Collar is not in the MPV for the series, it will be rounded down to the nearest price within the applicable MPV.

(ii) For orders to sell, if subtracting the Trading Collar from the Reference Price would result in a negative number, the Trading Collar for Limit Orders will be the limit price and the Trading Collar for Market Orders will be one MPV above zero.

(D) Application of the Trading Collar. If an order to buy (sell) would trade or route above (below) the Trading Collar or would have its working price repriced to a Trading Collar that is below (above) its limit price, the order will be added to the Consolidated Book at the Trading Collar for 500 milliseconds and if not traded within that period, will be cancelled. Once the 500-millisecond timer begins for an order, the order will be cancelled at the end of the timer even if it repriced or has been routed to an Away Market during that period, in which case any portion of the order returned unexecuted will be cancelled.

(b) Time in Force Modifiers

(1) Day Modifier. Any order or quote to buy or sell designated Day, if not traded, will expire at the end of the trading day on which it was entered. A Day Modifier cannot be combined with any other Time in Force Modifier.

(2) Immediate-or-Cancel ("IOC") Modifier. A Limit Order may be designated IOC or Routable IOC, as described in paragraphs (A) and (B) of this paragraph (b)(2). A Limit Order designated IOC is not eligible to participate in any Auctions.

(A) Limit IOC Order. A Limit Order designated IOC will be traded in whole or in part on the Exchange as soon as such order is received, and the unexecuted quantity cancelled. A Limit IOC Order does not route.

(B) Limit Routable IOC Order. A Limit Order designated Routable IOC will be traded in whole or in part on the Exchange as soon as such order is received, and the unexecuted quantity routed to Away Market(s). Any quantity not immediately traded either on the Exchange or an Away Market will be cancelled.

(3) Fill-or-Kill ("FOK") Modifier. A Limit Order designated FOK will be traded in whole on the Exchange as soon as such order is received and, if not so traded, cancelled. A Limit Order designated FOK does not route and does not participate in any Auctions.

(4) Good-'Til-Cancelled ("GTC") Modifier. A Limit or Market Order designated GTC remains in force until the order is filled, cancelled, the MPV in the series changes overnight, the option contract expires, or a corporate action results in an adjustment to the terms of the option contract.

(c) Auction-Only Orders. A Limit Order or Market Order that is to be traded only in an Auction pursuant to Rule 6.64P-O. An Auction-Only Order will not be accepted when a series is opened for trading and any portion of an Auction-Only Order that is not traded in a Core Open Auction or Trading Halt Auction will be cancelled.

(1) A Limit-on-Open Order (“LOO Order”). A LOO Order is a Limit Order that is to be traded only in an Auction.

(2) A Market-on-Open Order (“MOO Order”). A MOO Order is a Market Order that is to be traded only in an Auction.

(3) An Imbalance Offset Order (“IO Order”). An IO Order is a Limit Order that is to be traded only in an Auction.

(A) An IO Order will participate in an Auction only if: (1) there is an Imbalance in the series on the opposite side of the market from the IO Order after taking into account all other orders and quotes eligible to trade at the Indicative Match Price; and (2) the limit price of the IO Order to buy (sell) is at or above (below) the Indicative Match Price.

(B) The working price of an IO Order to buy (sell) will be adjusted to be equal to the Indicative Match Price, provided that the working price of an IO Order will not be higher (lower) than its limit price.

(d) Orders with a Conditional or Undisplayed Price and/or Size

(1) Reserve Order. A Limit Order with a quantity of the size displayed and with a reserve quantity of the size (“reserve interest”) that is not displayed. The displayed quantity of a Reserve Order is ranked Priority 2 - Display Orders and the reserve interest is ranked Priority 3 - Non-Display Orders. Both the display quantity and the reserve interest of an arriving marketable Reserve Order are eligible to trade with resting interest in the Consolidated Book or route to Away Markets, unless designated as a Non-Routable Limit Order. The working price of the reserve interest of a resting Reserve Order to buy (sell) will be adjusted in the same manner as a Non-Displayed Limit Order, as provided for in paragraph (d)(2)(A) of this Rule, provided that it will never be priced higher (lower) than the working price of the display quantity of the Reserve Order.

(A) The displayed portion of a Reserve Order will be replenished when the display quantity is decremented to zero. The replenish quantity will be the minimum display size of the order or the remaining quantity of the reserve interest if it is less than the minimum display quantity.

(B) Each time the display quantity of a Reserve Order is replenished from reserve interest, a new working time will be assigned to the replenished quantity.

(C) A Reserve Order may be designated as a Non-Routable Limit Order. If so designated, the reserve interest that replenishes the display quantity will be assigned a display price and working price consistent with the instructions for the order.

(D) A routable Reserve Order will be evaluated for routing both on arrival and each time the display quantity is replenished.

(i) If routing is required, the Exchange will route from reserve interest before publishing the display quantity.

(ii) Any quantity of a Reserve Order that is returned unexecuted will join the working time of the reserve interest. If there is no reserve interest to join, the returned quantity will be assigned a new working time.

(E) A request to reduce the size of a Reserve Order will cancel the reserve interest before cancelling the display quantity.

(F) A Reserve Order may be designated Day or GTC, but it may not be designated as an ALO Order.

(2) Non-Displayed Limit Order. A Limit Order that is not displayed, does not route, and is ranked Priority 3 - Non-Display Orders. A Non-Displayed Limit Order may be designated Day or GTC and does not participate in any Auctions.

(A) The working price of a Non-Displayed Limit Order will be assigned on arrival and adjusted when resting on the Consolidated Book. The working price of a Non-Displayed Limit Order to buy (sell) will be the lower (higher) of the limit price or the NBO (NBB).

(3) All-or-None (“AON”) Order. A Limit Order that is to be traded in whole on the Exchange at the same time or not at all. An AON Order that does not trade on arrival is ranked Priority 3 - Non-Display Orders. An AON Order may be designated Day or GTC, does not route, and will not participate in any Auctions.

(A) The working price of an AON Order will be assigned on arrival and adjusted when resting on the Consolidated Book. The working price of an AON Order to buy (sell) will be the lower (higher) of the limit price or NBO (NBB).

(B) An Aggressing AON Order to buy (sell) will trade with sell (buy) orders and quotes that in the aggregate can satisfy the AON Order in its entirety.

(C) A resting AON Order to buy (sell) will trade with an Aggressing Order or Aggressing Quote to sell (buy) that individually can satisfy the whole AON Order.

(i) If an Aggressing Order or Aggressing Quote to sell (buy) does not satisfy the resting AON Order to buy (sell), that Aggressing Order or Aggressing Quote will not trade with and may trade through such AON Order.

(ii) If a resting non-displayed order to sell (buy) does not satisfy the quantity of a same-priced resting AON Order to buy (sell), a subsequently arriving order or quote to sell (buy) that satisfies the AON Order will trade before such resting non-displayed order or quote to sell (buy) at that price.

(D) A resting AON Order to buy (sell) will not be eligible to trade against an Aggressing Order or Aggressing Quote to sell (buy):

(i) at a price equal to or above (below) any orders or quotes to sell (buy) that are displayed at a price equal to or below (above) the working price of such AON Order; or

(ii) at a price above (below) any orders or quotes to sell (buy) that are not displayed and that have a working price below (above) the working price of such AON Order.

(E) If a resting AON Order to buy (sell) becomes an Aggressing Order it will trade as provided in paragraph (d)(3)(B) of this Rule; however, other resting orders or quotes to buy (sell) ranked Priority 3 - Non-Display Orders that become Aggressing Orders or Aggressing Quotes at the same time as the resting AON Order will be processed before the AON Order.

(4) *Stop Order.* A Stop Order is an order to buy (sell) a particular option contract that becomes a Market Order (or is “elected”) when the Exchange BB (BO) or the most recent consolidated last sale price reported after the order was placed in the Consolidated Book (the “Consolidated Last Sale”) (either, the “trigger”) is equal to or higher (lower) than the specified “stop” price. When a Stop Order is elected, it will be cancelled if it does not meet the validations specified in paragraph (a)(1)(A) of this Rule and if not cancelled, it will be assigned a Trading Collar.

(A) *Ranking and Working Time.* A Stop Order will be assigned a working time when it is received but it will not be ranked or displayed in the Consolidated Book until it is elected. Once converted to a Market Order, the order will be assigned a new working time and be ranked Priority 1- Market Orders.

(B) *Election.*

(i) If not elected on arrival, a Stop Order that is resting will not be eligible to be elected based on a Consolidated Last Sale unless the Consolidated Last Sale is equal to or in between the NBBO.

(ii) A Stop Order will not be elected if the NBBO is crossed.

(iii) After a Limit State or Straddle State is lifted, the trigger to elect a Stop Order will be either the Consolidated Last Sale received after such state was lifted or the Exchange BB (BO).

(5) *Stop Limit Order.* A Stop Limit Order is an order to buy (sell) a particular option contract that becomes a Limit Order (or is “elected”) when the Exchange BB (BO) or the Consolidated Last Sale (either, the “trigger”) is equal to or higher (lower) than the specified “stop” price. A Stop Limit Order to buy (sell) will be rejected if the stop price is higher (lower) than its limit price. When a Stop Limit Order is elected, it will be cancelled if it fails Limit Order Price Protection or a Price Reasonability Check and if not cancelled, it will be assigned a Trading Collar.

(A) *Ranking and Working Time.* A Stop Limit Order will be assigned a working

time when it is received but it will not be ranked or displayed in the Consolidated Book until it is elected. Once converted to a Limit Order, the order will be assigned a new working time and be ranked Priority 2 - Display Orders.

(B) Election.

(i) If not elected on arrival, a Stop Limit Order that is resting will not be eligible to be elected based on a Consolidated Last Sale unless the Consolidated Last Sale is equal to or in between the NBBO.

(ii) A Stop Limit Order will not be elected if the NBBO is crossed.

(e) Orders with Instructions Not to Route

(1) Non-Routable Limit Order. A Limit Order or quote that does not route and may be designated Day or GTC. A Non-Routable Limit Order with a working price different from the display price is ranked Priority 3-Non-Display Orders and a Non-Routable Limit Order with a working price equal to the display price is ranked Priority 2-Display Orders.

(A) A Non-Routable Limit Order will not be displayed at a price that would lock or cross an Away Market NBBO. A Non-Routable Limit Order to buy (sell) will trade with orders or quotes to sell (buy) in the Consolidated Book priced at or below (above) the Away Market NBO (NBB).

(i) A Non-Routable Limit Order can be designated to be cancelled if it would be displayed at a price other than its limit price.

(ii) If not designated to cancel, if the limit price of a Non-Routable Limit Order to buy (sell) would lock or cross an Away Market NBO (NBB), it will be repriced to have a working price equal to the Away Market NBO (NBB) and a display price one MPV below (above) that NBO (NBB).

(B) The display price of a resting Non-Routable Limit Order to buy (sell) that has been repriced will be repriced higher (lower) only one additional time. If after that repricing, the display price could be repriced higher (lower) again, the order can be designated to either remain at its last working price and display price or be cancelled, provided that a resting Non-Routable Limit Order that is designated as a quote cannot be designated to be cancelled.

(i) If the limit price of the resting Non-Routable Limit Order to buy (sell) that has been repriced no longer locks or crosses the Away Market NBO (NBB), it will be assigned a working price and display price equal to its limit price.

(ii) The working price of a resting Non-Routable Limit Order to buy (sell) that has been repriced will be adjusted to be equal to its display price if the

Away Market NBO (NBB) is equal to or lower (higher) than its display price. Once the working price and display price of a Non-Routable Limit Order to buy (sell) are the same, the working price will be adjusted higher (lower) only if the display price of the order is adjusted.

(C) The designation to cancel a Non-Routable Limit Order will not be applicable in an Auction and such order will participate in an Auction at its limit price.

(2) ALO Order. An ALO Order is a Limit Order or quote that is a Non-Routable Limit Order that will not remove liquidity from the Consolidated Book.

(A) An ALO Order will not be displayed at a price that would lock or cross an Away Market NBBO, would lock or cross displayed interest in the Consolidated Book, or would cross non-displayed interest in the Consolidated Book.

(i) An ALO Order can be designated to be cancelled if it would be displayed at a price other than its limit price.

(ii) An ALO Order to buy (sell) will be displayed at its limit price if it locks non-displayed orders or quotes to sell (buy) on the Consolidated Book.

(iii) An ALO Order to buy (sell) will not consider an AON Order or an order with an MTS Modifier to sell (buy) for purposes of determining whether it needs to be repriced or cancelled.

(B) If not designated to cancel:

(i) If the limit price of an ALO Order to buy (sell) would lock or cross displayed orders or quotes to sell (buy) on the Consolidated Book, it will be repriced to have a working price and display price one MPV below (above) the lowest (highest) priced displayed order or quote to sell (buy) on the Consolidated Book;

(ii) If the limit price of an ALO Order to buy (sell) would lock or cross an Away Market NBO (NBB), it will be repriced to have a working price equal to the Away Market NBO (NBB) and a display price one MPV below (above) that NBO (NBB);

(iii) If the limit price of an ALO Order to buy (sell) would cross non-displayed orders or quotes on the Consolidated Book, it will be repriced to have a working price and display price equal to the lowest (highest) priced non-displayed order or quote to sell (buy) on the Consolidated Book.

(C) The display price of a resting ALO Order to buy (sell) that has been repriced will be repriced higher (lower) only one additional time. If, after that repricing, the display price could be repriced higher (lower) again, the order can be designated to either remain at its last working price and display price or

be cancelled, provided that a resting ALO Order that is a quote cannot be designated to be cancelled.

(i) If the limit price of an ALO Order to buy (sell) that has been repriced no longer locks or crosses displayed orders or quotes in the Consolidated Book, locks or crosses the Away Market NBBO, or crosses non-displayed orders or quotes in the Consolidated Book, it will be assigned a working price and display price equal to its limit price.

(D) The working price of a resting ALO Order to buy (sell) that has been repriced will be adjusted to be equal to its display price if:

(i) the Away Market NBO (NBB) re-prices to be equal to or lower (higher) than the display price of the resting ALO Order to buy (sell); or

(ii) an ALO Order or Day ISO ALO to sell (buy) is displayed on the Consolidated Book at a price equal to the working price of the resting ALO Order to buy (sell).

(E) When the working price and display price of an ALO Order to buy (sell) are the same, the working price will be adjusted higher (lower) only if the display price of the order is adjusted.

(F) The ALO designation will be ignored for ALO Orders that participate in an Auction.

(3) Intermarket Sweep Order (“ISO”). A Limit Order that does not route and meets the requirements of Rule 6.92-O(a)(8).

(A) An ISO designated IOC (“IOC ISO”) to buy (sell) will be immediately traded with orders and quotes to sell (buy) in the Consolidated Book up to its full size and limit price and may trade through Away Market Protected Quotations. Any untraded quantity of an IOC ISO will be immediately and automatically cancelled.

(B) An ISO designated Day (“Day ISO”) to buy (sell), if marketable on arrival, will be immediately traded with orders and quotes to sell (buy) in the Consolidated Book up to its full size and limit price and may trade through Away Market Protected Quotations. Any untraded quantity of a Day ISO will be displayed at its limit price and may lock or cross Away Market Protected Quotations at the time the Day ISO is received by the Exchange.

(C) A Day ISO may be designated with an ALO Modifier (“Day ISO ALO”). On arrival, a Day ISO ALO to buy (sell) may lock or cross Away Market Protected Quotations at the time of arrival of the Day ISO ALO but will not remove liquidity from the Consolidated Book. A Day ISO ALO can be designated to be cancelled if it would be displayed at a price other than its limit price.

(i) If not designated to cancel, a Day ISO ALO that would lock or cross orders and quotes on the Consolidated Book will be repriced as specified in paragraph (e)(2)(B) of this Rule.

(ii) Once resting, a Day ISO ALO will be processed as an ALO Order as specified in paragraphs (e)(2)(C) - (G) of this Rule.

(f) Complex Orders. A Complex Order is any order involving the simultaneous purchase and/or sale of two or more option series in the same underlying security (the “legs” or “components” of the Complex Order), for the same account, in a ratio that is equal to or greater than one-to-three (.333) and less than or equal to three-to-one (3.00) and for the purpose of executing a particular investment strategy.

(g) Cross Orders. Two-sided order messages with instructions to match the identified buy-side with the identified sell-side at a specified price, which can either be designated as a limit price or at the market (“cross price”). A Cross Order that is not rejected per paragraph (g)(1) or (2) below will immediately trade in full at its cross price, does not route, and may be entered with an MPV of \$0.01 regardless of the MPV of the options series. Cross Orders may be entered by Floor Brokers from the Trading Floor or routed to the Exchange from off-Floor. Rule 6.47A-O does not apply to Cross Orders.

(1) Execution of Single-Leg Cross Orders. A Cross Order with one option leg will be rejected if received when the NBBO is crossed or if it will trade at a price that (i) is at the same price as a displayed Customer order on the Consolidated Book and (ii) is not at or between the NBBO. A Cross Order with a cross price at the market will execute at the midpoint of the NBBO, provided that:

(A) if there is no NBB, a \$0.01 bid will be used;

(B) if there is displayed Customer interest priced equal to the NBB, NBO or both, the midpoint will be based on the BBO improved by \$0.01 for the side(s) containing displayed Customer interest;

(C) if there is no NBO, such order will be rejected; or

(D) if the midpoint of the NBBO is in sub-pennies, the order will trade at the midpoint of the NBBO rounded to the nearest MPV for the series.

(2) Execution of Complex Cross Orders. A Complex Cross Order must include a limit price and will be rejected if:

(A) it is not priced within the Complex NBBO for the complex strategy. If there is displayed Customer interest on a given leg, the Complex NBB (NBO) for that leg will be calculated by increasing (decreasing) the NBB (NBO) by one penny (\$0.01) and then multiplying by the leg ratio. If there is no NBB for a given leg, a \$0.01 bid will be used to calculate the Complex NBB for that leg;

(B) either the Complex NBBO or the best-priced Complex Orders in the Consolidated Book is crossed;

(C) there is displayed Customer interest priced equal to the best-priced Complex Order(s) on either side of the market or both (the “best-priced complex interest”) and the Complex Cross Order price does not improve the best-priced complex interest by \$0.01 for the side(s) containing displayed Customer interest; or

(D) there is no NBO for a given leg.

(3) Qualified Contingent Cross (“QCC”) Order. A QCC Order must be comprised of an originating order to buy or sell at least 1,000 contracts that is identified as being part of a qualified contingent trade coupled with a contra-side order or orders totaling an equal number of contracts. If a QCC has more than one option leg (a “Complex QCC Order”), each option leg must have at least 1,000 contracts.

(A) Qualified Contingent Trade. A “qualified contingent trade” is a transaction consisting of two or more component orders, executed as agent or principal, where:

(i) at least one component is an NMS Stock, as defined in Rule 600 of Regulation NMS under the Exchange Act;

(ii) all components are effected with a product or price contingency that either has been agreed to by all the respective counterparties or arranged for by a broker-dealer as principal or agent;

(iii) the execution of one component is contingent upon the execution of all other components at or near the same time;

(iv) the specific relationship between the component orders (e.g., the spread between the prices of the component orders) is determined by the time the contingent order is placed;

(v) the component orders bear a derivative relationship to one another, represent different classes of shares of the same issuer, or involve the securities of participants in mergers or with intentions to merge that have been announced or cancelled; and

(vi) the transaction is fully hedged (without regard to any prior existing position) as a result of other components of the contingent trade.

(B) QCC Orders entered from Trading Floor. While on the Trading Floor, only Floor Brokers can enter QCC Orders. Floor Brokers may not enter QCC Orders for their own account, the account of an associated person, or an account with respect to which it or an associated person thereof exercises investment discretion (each a “prohibited account”). When executing such orders, Floor Brokers will not be subject to Rule 6.47-O regarding “Crossing” orders. Floor Brokers must maintain books and records demonstrating that each QCC Order entered from the Floor was not entered for a prohibited account. Any QCC Order entered from the Floor that does not have a

corresponding record required by this paragraph will be deemed to have been entered for a prohibited account in violation of this Rule.

(C) QCC Orders entered off-Floor. With respect to QCC Orders routed to the Exchange from off-Floor, OTP Holders must maintain books and records demonstrating that each such order was so routed.

(h) Orders Available Only in Open Outcry.

(1) Clear-the-Book (“CTB”) Order. A CTB Order is a Limit IOC Order that may be entered only by a Floor Broker, contemporaneous with executing an order in open outcry, that is approved by a Trading Official (the “TO Approval”). The CTB Order is eligible to trade only with contra-side orders and quotes that were resting in the Consolidated Book prior to the TO Approval.

(A) A CTB Order to buy (sell) will trade with contra-side orders and quotes with a display price below (above) the limit price of the CTB Order.

(B) A CTB Order to buy (sell) will trade with contra-side orders and quotes that have a display price and working price equal to the limit price of the CTB Order only if there is displayed Customer sell (buy) interest at that price, in which case, the CTB Order to buy (sell) will trade with the displayed Customer interest to sell (buy) and any non-Customer interest to sell (buy) with a working time earlier than the latest-arriving displayed Customer interest to sell (buy).

(C) Any unexecuted portion of the CTB Order will cancel after trading with all better-priced interest and eligible same-priced interest on the Consolidated Book.

(D) Floor Brokers submitting CTB Orders must do so in a timely manner after receiving TO Approval. Because CTB Orders are non-routable, Floor Brokers are obligated to route orders to better-priced interest on Away Markets per Rule 6.94-O.

(2) Facilitation Order. A Facilitation Order is an order that is only to be executed in whole or in part in a cross transaction with an order for a Customer of an OTP Holder or OTP Firm and designated as a Facilitation Order.

(3) Mid-Point Crossing Order. An order to be crossed pursuant to Rule 6.47-O at the mid-point price or better of the electronically disseminated BBO in the relevant option series; provided, however, that the mid-point must fall on an MPV. If the mid-point does not fall on an MPV, the Mid-Point Crossing Order will be cancelled.

(4) Not Held Order. A Not Held Order is an order that provides a broker with discretion as to price or time in executing the order. A Not Held Order must be designated as such in the “Optional Data” field of the EOC. For orders excepted from EOC, pursuant to Rule 6.67-O(d)(1)(A), a Not Held Order is marked “not

held", "NH", "take time" or marked with some qualifying notation giving discretion as to the price or time at which such order is to be executed. The "not held" designation must appear in the "special instructions" portion of the order ticket. Orders that merely include a "not held" designation as part of the timestamp will not be deemed to be "not held" orders. An order entrusted to a Floor Broker will be considered a Not Held Order, unless otherwise specified by a Floor Broker's client.

(5) Single Stock Future ("SSF")/Option Order. An order to buy or sell a stated number of units of a single stock future or a security convertible into a single stock future ("convertible SSF") coupled with either (A) the purchase or sale of option contract(s) on the opposite side of the market representing either the same number of units of stock underlying the single stock future or convertible SSF, or the number of units of stock underlying the single stock future or convertible SSF necessary to create a delta neutral position; or (B) the purchase or sale of an equal number of put and call option contracts, each having the same exercise price, expiration date, and each representing the same number of units of underlying stock, as and on the opposite side of the market from, the stock underlying the single stock future or convertible SSF portion of the order. SSF/Options Orders are only eligible for open outcry trading.

(6)(A) Stock/Option Order is an order to buy or sell a stated number of units of an underlying stock or a security convertible into the underlying stock ("convertible security") coupled with the purchase or sale of option contract(s) on the opposite side of the market representing either (A) the same number of units of the underlying stock or convertible security, or (B) the number of units of the underlying stock necessary to create a delta neutral position, but in no case in a ratio greater than 8 option contracts per unit of trading of the underlying stock or convertible security established for that series by the Clearing Corporation.

(B) Stock/Complex Order. A "Stock/Complex Order" is the purchase or sale of a Complex Order (as defined in Rule 6.62-O(e)) coupled with an order to buy or sell a stated number of units of an underlying stock or a security convertible into the underlying stock ("convertible security") representing either:

(i) the same number of units of the underlying stock or convertible security as are represented by the options leg of the Complex Order with the least number of Options contracts, or

(ii) the number of units of the underlying stock necessary to create a delta neutral position, but in no case in a ratio greater than eight-to-one (8.00), where the ratio represents the total number of units of the underlying stock or convertible security in the option leg to the total number of units of the underlying stock or convertible security in the stock leg.

(i) Additional Order Instructions and Modifiers.

(1) Proactive if Locked/Crossed Modifier. A Limit Order that is displayed and

eligible to route and designated with a Proactive if Locked/Crossed Modifier will route to an Away Market if the Away Market locks or crosses the display price of the order. If any quantity of the routed order is returned unexecuted, the order will be displayed in the Consolidated Book.

(2) Self Trade Prevention Modifier (“STP”). An Aggressing Order or Aggressing Quote to buy (sell) designated with one of the STP modifiers in this paragraph will be prevented from trading with a resting order or quote to sell (buy) also designated with an STP modifier from the same MPID, and, if specified, any sub-identifier of that MPID. The STP modifier on the Aggressing Order or Aggressing Quote controls the interaction between two orders and/or quotes marked with STP modifiers. Self-Trade Prevention will not be applicable during an Auction or to Cross Orders or when a Complex Order legs out. If the condition for a Limit Order designated FOK, an AON Order, or an arriving order with an MTS modifier designated under paragraph (i)(3)(B)(i) of this Rule cannot be met because of STP modifiers, such order will be cancelled or placed on the Consolidated Book, as applicable. Aggressing Orders or Aggressing Quotes will be processed as follows.

(A) STP Cancel Newest (“STPN”). An Aggressing Order or Aggressing Quote to buy (sell) marked with the STPN modifier will not trade with resting interest to sell (buy) marked with any STP modifier from the same MPID. The Aggressing Order or Aggressing Quote marked with the STPN modifier will be cancelled. The resting order or quote marked with one of the STP modifiers will remain on the Consolidated Book.

(B) STP Cancel Oldest (“STPO”). An Aggressing Order or Aggressing Quote to buy (sell) marked with the STPO modifier will not trade with resting interest to sell (buy) marked with any STP modifier from the same MPID. The resting order or quote marked with the STP modifier will be cancelled. The Aggressing Order or Aggressing Quote marked with the STPO modifier will be placed on the Consolidated Book.

(C) STP Cancel Both (“STPC”). An Aggressing Order or Aggressing Quote to buy (sell) marked with the STPC modifier will not trade with resting interest to sell (buy) marked with any STP modifier from the same MPID. The entire size of both orders and/or quotes will be cancelled.

(3) Minimum Trade Size (“MTS”) Modifier. A Limit IOC Order or Non-Displayed Limit Order may be designated with an MTS Modifier.

(A) The quantity of the MTS Modifier may be less than the order quantity. An order will be rejected if it has an MTS Modifier quantity that is larger than the size of the order.

(B) One of the following instructions must be specified with respect to whether an order to buy (sell) with an MTS Modifier will trade on arrival with:

- (i) orders or quotes to sell (buy) in the Consolidated Book that in the aggregate meet such order's MTS; or
 - (ii) only individual order(s) or quote(s) to sell (buy) in the Consolidated Book that each meets such order's MTS.
- (C) An order with an MTS Modifier that is designated Day or GTC that cannot be executed immediately on arrival will be ranked in the Consolidated Book. In such case, the order with an MTS Modifier to buy (sell) that is ranked in the Consolidated Book will not be eligible to trade:
 - (i) at a price equal to or above (below) any orders or quotes to sell (buy) that are displayed at a price equal to or below (above) the working price of such order with an MTS Modifier; or
 - (ii) at a price above (below) any orders or quotes to sell (buy) that are not displayed and that have a working price below (above) the working price of such order with an MTS Modifier.
- (D) An order with an MTS Modifier that is designated IOC and cannot be immediately executed will be cancelled.
- (E) A resting order to buy (sell) with an MTS Modifier will trade with individual orders and quotes to sell (buy) that each meet the MTS.
 - (i) If an Aggressing Order or Aggressing Quote to sell (buy) does not meet the MTS of the resting order to buy (sell) with an MTS Modifier, that Aggressing Order or Aggressing Quote will not trade with, and may trade through, such resting order with an MTS Modifier.
 - (ii) If a resting non-displayed order or quote to sell (buy) did not meet the MTS of a same-priced resting order or quote to buy (sell) with an MTS Modifier, a subsequently arriving order or quote to sell (buy) that meets the MTS will trade before such resting non-displayed order or quote to sell (buy) at that price.
- (F) A resting order with an MTS Modifier will be cancelled if it is traded in part or reduced in size and the remaining quantity is less than such order's MTS.

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Rule 6.64-O. OX Opening Process

This Rule is not applicable to trading on Pillar.

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Rule 6.64P-O. Auction Process

(a) This Rule is applicable to all series that trade on the Exchange other than Flex Options. The following are definitions for purposes of Rule 6-O Options Trading that are applicable to trading on Pillar:

(1) "Auction" means the opening or reopening of a series for trading either with or without a trade.

(A) "Core Open Auction" means the Auction that opens trading after the beginning of Core Trading Hours.

(B) "Trading Halt Auction" means the Auction that reopens trading following a trading halt.

(2) "Auction Collar" means the price collar thresholds for the Indicative Match Price for an Auction.

(A) The upper Auction Collar will be the offer of the Legal Width Quote and the lower Auction Collar will be the bid of the Legal Width Quote, provided that if the bid of the Legal Width Quote is zero, the lower Auction Collar will be one MPV above zero for the series.

(B) If there is no Legal Width Quote, the Auction Collars will be published in the Auction Imbalance Information as zero.

(3) "Auction Imbalance Information" means the information that the Exchange disseminates about an Auction via its proprietary data feeds and includes the Auction Collars, Auction Indicator, Book Clearing Price, Far Clearing Price, Indicative Match Price, Matched Volume, Market Imbalance, and Total Imbalance. Auction Imbalance Information will be based on all quotes and orders (including the non-displayed quantity of Reserve Orders) eligible to participate in an Auction, excluding IO Orders.

(A) "Auction Indicator" means the indicator that provides a status update of whether an Auction cannot be conducted because either (i) there is no Legal Width Quote, or (ii) a Market Maker quote has not been received during the Opening MMQ Time Parameter.

(B) "Book Clearing Price" is the price at which all contracts could be traded in an Auction if not subject to the Auction Collar. The Book Clearing Price will be zero if a sell (buy) Imbalance cannot be filled by any buy (sell) interest.

(C) "Far Clearing Price" is the price at which Auction-Only Orders could be traded in an Auction within the Auction Collar.

(D) "Imbalance" means the number of buy (sell) contracts that cannot be matched with sell (buy) contracts at the Indicative Match Price at any given time.

- (i) “Total Imbalance” is the Imbalance of all buy (sell) contracts at the Indicative Match Price for all orders and quotes eligible to trade in an Auction.
- (ii) “Market Imbalance” is the Imbalance of any remaining buy (sell) Market Orders and MOO Orders that are not matched for trading in the Auction.
- (4) “Auction Price” means the price at which an Auction that results in a trade is conducted.
- (5) “Auction Process” means the process that begins when the Exchange receives an Auction Trigger for a series and ends when the Auction is conducted.
- (6) “Auction Processing Period” means the period during which the Auction is being processed.
- (7) “Auction Trigger” means the information disseminated by the Primary Market in the underlying security that triggers the Auction Process for a series to begin.

 - (A) For a Core Open Auction, the Auction Trigger is when the Primary Market first disseminates at or after 9:30 a.m. Eastern Time both a two-sided quote and a trade of any size that is at or within the quote.
 - (B) For a Trading Halt Auction, the Auction Trigger is when the Primary Market disseminates at the end of a trading halt or pause a resume message, a two-sided quote, and a trade of any size that is at or within the quote.
- (8) “Calculated NBBO” means the highest bid and lowest offer among all Market Maker quotes and the Away Market NBBO during the Auction Process.
- (9) “Indicative Match Price” means the price at which the maximum number of contracts can be traded in an Auction, including the non-displayed quantity of Reserve Orders and excluding IO Orders, subject to the Auction Collars. If there is no Legal Width Quote, the Indicative Match Price included in the Auction Imbalance Information will be calculated without Auction Collars.

 - (A) If there is more than one price level at which the maximum number of contracts can be traded within the Auction Collars, the Indicative Match Price will be the price closest to the midpoint of the Legal Width Quote, rounded to the nearest MPV for the series, provided that the Indicative Match Price will not be lower (higher) than the highest (lowest) price of a Limit Order to buy (sell) ranked Priority 2 - Display Orders that is eligible to participate in the Auction.
 - (B) An Indicative Match Price that is higher (lower) than the upper (lower) Auction Collar will be adjusted to the upper (lower) Auction Collar and orders eligible to participate in the Auction will trade at the collared Indicative Match Price.

(i) Limit Orders to buy (sell) with a limit price above (below) the upper (lower) Auction Collar will be included in the Auction Imbalance Information at the collared Indicative Match Price and will be eligible to trade at the Indicative Match Price.

(ii) Limit Orders and quotes to buy (sell) with a limit price below (above) the lower (upper) Auction Collar will not be included in the Auction Imbalance Information and will not participate in an Auction.

(C) If the Matched Volume for an Auction consists of only buy and sell Market Orders, the Indicative Match Price will be the midpoint of the Legal Width Quote, rounded to the MPV for the series, or, if the Legal Width Quote is locked, the locked price.

(D) If there is no Matched Volume, including if there are Market Orders on only one side of the Market, the Indicative Match Price and Total Imbalance for the Auction Imbalance Information will be zero.

(10) A “Legal Width Quote” is a Calculated NBBO that:

(A) may be locked, but not crossed;

(B) does not contain a zero offer; and

(C) has a spread between the Calculated NBBO for each option contract that does not exceed the following differentials, which can be widened as provided for in Rule 6.37-O(c):

(i) no more than .25 where the bid does not exceed \$2,

(ii) no more than .40 where the bid is more than \$2 but does not exceed \$5,

(iii) no more than .50 where the bid is more than \$5 but does not exceed \$10,

(iv) no more than .80 where the bid is more than \$10 but does not exceed \$20, and

(v) no more than \$1 where the bid is more than \$20, provided that a Trading Official may establish differences other than the above for one or more series or classes of options.

(11) “Matched Volume” means the number of buy and sell contracts that can be matched at the Indicative Match Price, excluding IO Orders.

(12) “Pre-open state” means the period before a series is opened or reopened for trading. During the pre-open state, the Exchange will accept Auction-Only Orders, quotes, and orders designated Day or GTC, including orders ranked Priority 3 - Non-Display Orders that are not eligible to participate in an Auction.

(A) The pre-open state for the Core Open Auction begins at 6:00 a.m. Eastern Time and ends when the Auction Processing Period begins. At the beginning of the pre-open state before the Core Open Auction, orders designated GTC that remain from the prior trading day will be included in the Consolidated Book.

(B) The pre-open state for a Trading Halt Auction begins at the beginning of the trading halt and ends when the Auction Processing Period begins.

(13) “Rotational Quote” means the highest Market Maker bid and lowest Market Maker offer on the Exchange when the Auction Process begins. During the Auction Process, the Exchange will update the price and size of the Rotational Quote. A Rotational Quote can be locked or crossed. If there are no Market Maker quotes, the Rotational Quote will be published with a zero price and size.

(b) Auction Ranking. Orders and quotes on the side of the Imbalance are not guaranteed to participate in an Auction and will be ranked in price-time priority under Rule 6.76P-O consistent with the priority ranking associated with each order or quote, provided that:

(1) Limit Orders, quotes, and LOO Orders will be ranked based on their limit price and not the price at which they would participate in the Auction.

(2) MOO Orders will be ranked Priority 1 - Market Orders.

(3) LOO Orders will be ranked Priority 2 - Display Orders.

(4) IO Orders will be ranked based on time among IO Orders, subject to eligibility to participate at the Indicative Match Price based on their limit price.

(c) Auction Imbalance Information. Auction Imbalance Information is updated at least every second until the Auction is conducted, unless there is no change to the information. The Exchange will begin disseminating Auction Imbalance Information at the following times:

(1) Core Open Auction Imbalance Information will begin at 8:00 a.m. Eastern Time.

(2) Trading Halt Auction Imbalance Information will begin at the beginning of the trading halt.

(d) Auction Process.

(1) Rotational Quote. When the Exchange receives the Auction Trigger for a series, the Exchange will send a Rotational Quote to both OPRA and proprietary data feeds indicating that the Exchange is in the process of transitioning from a pre-open state to continuous trading for that series.

(2) Once a Rotational Quote has been sent, the Exchange will conduct an Auction when there is both a Legal Width Quote and, if applicable, Market Maker quote with a non-zero offer in the series (subject to the Opening MMQ Time Parameter

requirements in paragraph (d)(3) of this Rule). The Exchange will wait a minimum of two milliseconds after disseminating the Rotational Quote before an Auction can be conducted. Subject to the above:

(A) If there is Matched Volume that can trade at or within the Auction Collars, the Auction will result in a trade at the Indicative Match Price.

(B) If there is no Matched Volume that can trade at or within the Auction Collars, the Auction will not result in a trade and the Exchange will transition to continuous trading as described in paragraph (f) of this Rule and the Auction will result in a quote.

(3) Opening MMQ Time Parameter. Once the Auction Process begins, the Exchange will begin a one-minute timer for the Market Maker(s) assigned to a series to submit a quote with a non-zero offer, subject to the following:

(A) If there are no Market Makers assigned to a series, the Exchange will conduct an Auction in that series based on only a Legal Width Quote, without waiting for the Opening MMQ Time Parameter to end.

(B) If there is only one Market Maker assigned to a series:

(i) The Exchange will conduct the Auction, without waiting for the Opening MMQ Time Parameter to end, as soon as there is both a Legal Width Quote and the assigned Market Maker has submitted a quote with a non-zero offer.

(ii) If the Market Maker assigned to a series has not submitted a quote with a non-zero offer by the end of the Opening MMQ Time Parameter and there is a Legal Width Quote, the Exchange will conduct the Auction.

(C) If there are two or more Market Makers assigned to a series:

(i) The Exchange will conduct the Auction, without waiting for the Opening MMQ Time Parameter to end, as soon as there is both a Legal Width Quote and at least two assigned Market Makers have submitted a quote with a non-zero offer.

(ii) If at least two Market Makers assigned to a series have not submitted a quote with a non-zero offer by the end of the Opening MMQ Time Parameter, the Exchange will begin a second Opening MMQ Time Parameter. During the second Opening MMQ Time Parameter, the Exchange will conduct the Auction, without waiting for the second Opening MMQ Time Parameter to end, if there is both a Legal Width Quote and at least one Market Maker has submitted a quote with a non-zero offer.

(iii) If no Market Maker assigned to a series has submitted a quote with a non-zero offer by the end of the second Opening MMQ Time Parameter and there is a Legal Width Quote, the Exchange will conduct the Auction.

(4) For the first five minutes of the Auction Process, if there is no Legal Width Quote, the Exchange will not conduct an Auction, even if there is Matched Volume. Five minutes after the Auction Process begins:

(A) If there is no Matched Volume and the Calculated NBBO is wider than the Legal Width Quote, is not crossed, and does not contain a zero offer, the Exchange will transition to continuous trading as described in paragraph (f) of this Rule. In such case, the Auction is not intended to end with a trade, but it may result in a trade even if there is no Legal Width Quote if orders or quotes arrive during the period when the Exchange is evaluating the status of orders and quotes.

(i) Any time a series is opened or reopened when there is no Legal Width Quote, Market Orders and MOO Orders will not participate in the Auction and will be cancelled before the Exchange transitions to continuous trading.

(B) If the Exchange still cannot conduct an Auction, the Exchange will continue to evaluate both the Calculated NBBO and interest on the Consolidated Book until the earlier of:

(i) a Legal Width Quote is established and an Auction can be conducted;

(ii) the series can be opened as provided for in paragraph (d)(4)(A);

(iii) the series is halted; or

(iv) the end of Core Trading Hours.

(5) The Exchange may deviate from the standard manner of the Auction Process, including adjusting the timing of the Auction Process in any option series or opening or reopening a series when there is no Legal Width Quote, when it believes it is necessary in the interests of a fair and orderly market.

(e) Order Processing during an Auction Processing Period. New order and quote messages received during the Auction Processing Period will be accepted but will not be processed until after the Auction Processing Period. For purposes of paragraphs (e) and (f) of this rule, an "order instruction" refers to a request to cancel, cancel and replace, or modify an order or quote. During the Auction Processing Period, order instructions will be processed as follows:

(1) An order instruction that arrives during the Auction Processing Period will not be processed until after the Auction Processing Period if it relates to an order or quote that was received before the Auction Processing Period. Any subsequent order instructions relating to such order will be rejected.

(2) An order instruction that arrives during the Auction Processing Period will be processed on arrival if it relates to an order that was received during the Auction Processing Period.

(f) Transition to Continuous Trading. After the Auction Processing Period concludes, the Exchange will transition to continuous trading as follows:

(1) Orders that are no longer eligible to trade will be cancelled.

(2) During the transition to continuous trading, order instructions will be processed as follows:

(A) An order instruction that relates to an order or quote that was received before the Auction Processing Period or that has already transitioned to continuous trading and that arrives during either the transition to continuous trading or the Auction Processing Period under paragraph (e)(1) of this Rule will be processed in time sequence with the processing of orders and quotes as specified in paragraphs (f)(3)(A) or (B) of this Rule. Any subsequent order instructions relating to such order or quote will be rejected.

(B) An order instruction that arrives during the transition to continuous trading will be processed on arrival if it relates to an order or quote that was entered during either the Auction Processing Period or the transition to continuous trading and such order or quote has not yet transitioned to continuous trading.

(3) When transitioning to continuous trading following an Auction, orders and quotes will be processed as follows:

(A) The Exchange will process Auction-eligible orders and quotes that were received before the Auction Processing Period and orders ranked Priority 3 - Non-Display Orders received before a trading halt as follows:

(i) Limit Orders and quotes will be subject to the Limit Order Price Check, Arbitrage Check, and Intrinsic Value Check, as applicable.

(ii) Limit Orders and Market Orders will be assigned a Trading Collar.

(iii) Orders eligible to route that are marketable against Away Market Protected Quotations will route based on the ranking of such orders as set forth in Rule 6.76P-O(c).

(iv) After routing eligible orders, orders and quotes not eligible to route that are marketable against Away Market Protected Quotations will cancel.

(v) Once there are no more unexecuted orders marketable against Away Market Protected Quotations, orders and quotes that are marketable against other orders and quotes in the Consolidated Book will trade or be repriced.

(vi) Market Orders received during a pre-open state will be subject to the validation specified in Rule 6.62P-O(a)(1)(C).

(vii) The display quantity of Reserve Orders will be replenished.

(viii) The Exchange will send a quote to OPRA and proprietary data feeds representing the highest-priced bid and lowest-priced offer of any remaining unexecuted Auction-eligible orders and quotes that were received before the Auction Processing Period.

(B) Next, orders ranked Priority 3 - Non-Display Orders that were received during a pre-open state will be assigned a new working time in time sequence relative to one another based on original entry time and will be subject to the Limit Order Price Check, Arbitrage Check, and Intrinsic Value Check, as applicable, and if not cancelled, will be traded or repriced.

(C) Next, orders and quotes that were received during the Auction Processing Period will be assigned a new working time in time sequence relative to one another based on original entry time and will be subject to the Limit Order Price Check, Pre-Trade Risk Controls, Arbitrage Check, Intrinsic Value Check, and validations specified in Rule 6.62P-O(a)(1)(A), as applicable, and if not cancelled, will be processed consistent with the terms of the order or quote.

(D) When transitioning to continuous trading:

(i) The display price and working price of orders and quotes will be adjusted based on the contra-side interest in the Consolidated Book or Away Market NBBO, as provided for in Rule 6.62P-O.

(ii) The display price and working price of a Day ISO will be adjusted in the same manner as a Non-Routable Limit Order until the Day ISO is either traded in full or displayed at its limit price. The display price and working price of a Day ISO ALO will be adjusted in the same manner as an ALO Order until the Day ISO ALO is either traded in full or displayed at its limit price.

(g) Order Processing During a Trading Halt. The Exchange will process new and existing orders and quotes in a series during a trading halt as follows:

(1) cancel any unexecuted quantity of orders for which the 500-millisecond Trading Collar timer has started and all resting Market Maker quotes;

(2) re-price all other resting orders on the Consolidated Book to their limit price. The repricing of a Non-Routable Limit Order, ALO Order, or Day ISO ALO to its limit price during a trading halt will not be counted toward the number of times such order may be repriced. Any subsequent repricing of such order during the transition to continuous trading is permitted as the additional repricing event as provided for in Rule 6.62P-O(e)(1)(B) and (e)(2)(C);

(3) accept and process all cancellations;

(4) reject incoming Limit Orders designated IOC or FOK;

(5) accept all other incoming order and quote messages and instructions until the Auction Processing Period for the Trading Halt Auction, at which point, paragraph (e) of this Rule will govern the entry of incoming orders, quotes, and order instructions; and

(6) disseminate a zero bid and zero offer quote to OPRA and proprietary data feeds.

(h) Whenever in the judgment of the Exchange the interests of a fair and orderly market so require, the Exchange may adjust the timing of or suspend the Auctions set forth in this Rule with prior notice to OTP Holders and OTP Firms.

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Rule 6.65A-O. Limit-Up and Limit-Down During Extraordinary Market Volatility

Capitalized terms used in this Rule will have the same meaning as provided for in the Plan to Address Extraordinary Market Volatility Pursuant to Rule 608 of Regulation NMS (“LULD Plan”).

(a) Treatment of Orders during a Limit State and Straddle State in the Underlying NMS stock.

(1) The Exchange will reject Market Orders, as defined in Rule 6.62-O(a) or Rule 6.62P-O(a)(1), entered when the underlying NMS stock is either in a Limit State or a Straddle State and will notify OTP Holders of the reason for such rejection. The Exchange will cancel any resting Market Order [that is a collared order pursuant to Rule 6.60-O(a)] if the underlying NMS stock enters a Limit State or a Straddle State and will notify OTP Holders of the reason for such cancellation.

(2) The Exchange will not elect Stop Orders, as defined in Rule 6.62-O(d)(1) or Rule 6.62P-O(d)(4), when the underlying NMS stock is either in a Limit State or a Straddle State.

(b) Market Maker Quotations. When evaluating whether a Lead Market Maker has met its market-making quoting requirement pursuant to Rule 6.37AP[B]-O(b) or a Market Maker has met its market-making quoting requirement pursuant to Rule 6.37AP[B]-O(c) in options overlying NMS stocks, the Exchange shall consider as a mitigating circumstance the frequency and duration an underlying NMS stock is in a Limit State or a Straddle State.

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Rule 6.76-O. Order Ranking and Display - OX

This Rule is not applicable to trading on Pillar.

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Rule 6.76P-O. Order Ranking and Display**(a) Definitions for purposes of Rule 6-O Options Trading:**

- (1) “Display price” means the price at which an order or quote ranked Priority 2 - Display Orders or Market Order is displayed, which may be different from the limit price or working price of the order.
- (2) “Limit price” means the highest (lowest) specified price at which a Limit Order or quote to buy (sell) is eligible to trade.
- (3) “Working price” means the price at which an order or quote is eligible to trade at any given time, which may be different from the limit price or display price of the order.
- (4) “Working time” means the effective time sequence assigned to an order or quote for purposes of determining its priority ranking.
- (5) “Aggressing Order” or “Aggressing Quote” means a buy (sell) order or quote that is or becomes marketable against sell (buy) interest on the Consolidated Book. A resting order or quote may become an Aggressing Order or Aggressing Quote if its working price changes, the NBBO is updated, there are changes to other orders or quotes on the Consolidated Book, or when processing inbound messages.

(b) Display. The Exchange displays all non-marketable Limit Orders and quotes ranked Priority 2 - Display Orders, unless the order or modifier instruction specifies that all or a portion of the order is not to be displayed.

- (1) Except as otherwise permitted by Rule 6.76AP-O, all non-marketable displayed interest will be displayed on an anonymous basis.
- (2) The Exchange will disseminate current consolidated quotations/last sale information, and such other market information as may be made available from time to time pursuant to agreement between the Exchange and other Trading Centers, consistent with the Plan for Reporting of Consolidated Options Last Sale Reports and Quotation Information.
- (3) If 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.

(c) Ranking. All non-marketable orders and quotes are ranked and maintained in the Consolidated Book according to price-time priority in the following manner: (1) price; (2) priority category; (3) time; and (4) ranking restrictions applicable to an order/quote or modifier condition.

(d) Price. All orders and quotes are ranked based on the working price of an order or quote. Orders and quotes to buy are ranked from highest working price to lowest working price. Orders and quotes to sell are ranked from lowest working price to highest working price. If the working price of an order or quote changes, the price priority of the order or quote changes.

(e) Priority Categories. At each price, all orders and quotes are assigned a priority category. If, at a price, there are no orders or quotes in a priority category, the next priority category has first priority.

(1) Priority 1 - Market Orders. Unexecuted Market Orders have priority over all other same-side orders with the same working price.

(2) Priority 2 - Display Orders. Non-marketable Limit Orders or quotes with a displayed working price have second priority.

(3) Priority 3 - Non-Display Orders. Non-marketable Limit Orders or quotes for which the working price is not displayed, including reserve interest of Reserve Orders, have third priority.

(f) Time. At each price level within each priority category, orders and quotes are ranked based on time priority.

(1) An order or quote is assigned a working time when it is first added to the Consolidated Book based on the time such order or quote is received by the Exchange.

(A) An order that is fully routed to an Away Market on arrival, per Rule 6.76AP-O(b)(1), is not assigned a working time unless and until any unexecuted portion of the order returns to the Consolidated Book.

(B) For an order that, on arrival, is partially routed to an Away Market, the portion that is not routed is assigned a working time. If any unexecuted portion of the order returns to the Consolidated Book and joins any remaining resting portion of the original order, the returned portion of the order is assigned the same working time as the resting portion of the order. If the resting portion of the original order has already executed and any unexecuted portion of the order returns to the Consolidated Book, the returned portion of the order is assigned a new working time.

(2) An order or quote is assigned a new working time if:

(A) the display price of an order or quote changes, even if the working price does not change; or

(B) the working price of an order or quote changes, unless the working price is adjusted to be the same as the display price of an order or quote.

(3) An order or quote is assigned a new working time if the size of an order or quote increases. An order or quote retains its working time if the size of the order or quote is decreased.

(g) Ranking Restrictions. The Exchange will apply ranking restrictions applicable to specific order or modifier instructions as provided for in Rule 6.62P-O.

(h) Orders Executed Manually.

(1) Floor Brokers representing orders in the Trading Crowd must comply with the order execution and priority principles set forth in Rule 6.75-O, and with the following provisions establishing priority for bids and offers by account type:

(A) Customer orders on the Consolidated Book, along with any bids and offers of non-Customers ranked ahead of such Customer orders on the Consolidated Book, have first priority. Multiple Customer and non-Customer orders at the same price are ranked based on time priority.

(B) Bids and offers of OTP Holders or OTP Firms in the Trading Crowd have second priority. These bids and offers include those made by Market Makers and Floor Brokers (on behalf of orders they are representing). Priority shall be afforded to Crowd Participants in accordance with Rule 6.75-O(f).

(C) Bids and offers of non-Customers on the Consolidated Book ranked behind any Customer orders at the same price have third priority. Such bids and offers of non-Customers will be executed based on time priority pursuant to Rule 6.76AP-O.

(D) Notwithstanding the priority provisions otherwise applicable under subparagraph (B) above, OTP Holders relying on Section 11(a)(1)(G) of the Exchange Act and Rule 11a1-1(T) thereunder (“G exemption rule”) as an exemption must also yield priority to any equal-priced non-Customer bids or offers on the Consolidated Book.

Rule 6.76A-O. Order Execution - OX

This Rule is not applicable to trading on Pillar.

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Rule 6.76AP-O. Order Execution and Routing

(a) Order Execution. An Aggressing Order or Aggressing Quote in an option series that is open for trading will be matched for execution against contra-side orders or quotes in the Consolidated Book according to the price-time priority ranking of the resting interest, per Rule 6.76P-O, subject to the following.

(1) When the execution price is equal to the NBB (NBO), and there is no displayed Customer interest in time priority at the NBBO in the Consolidated Book, the

Aggressing Order or Aggressing Quote will be matched against the quote of the LMM for an amount equal to 40% of the Aggressing Order or Aggressing Quote, up to the size of the LMM's quote (the "LMM Guarantee").

(A) If an LMM has more than one quote at a price, the LMM Guarantee will be applied only to the first LMM quote in time priority.

(B) If an LMM is entitled to an allocation pursuant to this paragraph (a)(1) and the Aggressing Order or Aggressing Quote had an original size of five (5) contracts or fewer, then such order or quote, will be matched against the quote of the LMM for an amount equal to 100%, up to the size of the LMM's quote.

(C) If the result of applying the LMM Guarantee is a fractional allocation of contracts, the LMM Guarantee is rounded down to the nearest contract. If the result of applying the LMM Guarantee results in less than one contract, the LMM Guarantee will be equal to one contract.

(D) After applying the LMM Guarantee, if any, the Aggressing Order or Aggressing Quote will be allocated pursuant to paragraph (a) of this Rule.

(b) Routing. Unless an order has an instruction not to route, after being matched for execution with any contra-side orders or quotes in the Consolidated Book pursuant to paragraph (a) of this Rule, marketable orders will be routed to Away Market(s).

(1) An order that cannot meet the pricing parameters of paragraph (a) of this Rule may be routed to Away Market(s) before being matched for execution against contra-side orders or quotes in the Consolidated Book.

(2) An order with an instruction not to route will be processed as provided for in Rule 6.62P-O.

(3) Any order or portion thereof that has been routed is not eligible to trade on the Consolidated Book, unless all or a portion of the order returns unexecuted.

(4) Requests to cancel an order that has been routed in whole or in part will not be processed unless and until all or a portion of the order returns unexecuted.

(c) After trading with eligible contra-side interest on the Consolidated Book and/or returning unexecuted after routing to an Away Market(s), any unexecuted non-marketable portion of an order will be ranked consistent with Rule 6.76P-O.

Commentary:

.01 The Exchange will evaluate on a quarterly basis what percentage of the volume executed on the Exchange comprised of orders for five (5) contracts or fewer that was allocated to LMMs and will reduce the size of the orders included in this provision if such percentage is over 40%.

Rule 6.88-O. Directed Orders

This Rule is not applicable to trading on Pillar.

Rule 6.90-O. Qualified Contingent Crosses

This Rule is not applicable to trading on Pillar.

Rule 6.96-O. Operation of Routing Broker

(a) The term “Routing Broker” means the broker-dealer affiliate of NYSE Arca, Inc. and/or any other non-affiliate that acts as a facility of the Exchange for routing orders submitted to the Exchange to other Trading Centers for execution whenever such routing is required by NYSE Arca Rules and federal securities laws.

[(a)](b) Outbound Routing Function

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[(b)](c) Inbound Routing Function

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[(c)](d) Cancellation of Orders and Error Account

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