All text is new

Rule 7.10-E. Clearly Erroneous Executions

The provisions of paragraphs (c), (e)(2), (f), and (g) of this Rule, as amended on September 10, 2010, and the provisions of paragraphs (i) through (k), will be in effect during a pilot period to coincide with the pilot period for the Limit Up-Limit Down Plan, including any extensions to the pilot period for the Plan. If the Plan is not either extended or approved as permanent, the prior versions of sections (c), (e)(2), (f), and (g) will be in effect, and the provisions of paragraphs (i) through (k) will be null and void.

(a) *Definition*. For purposes of this Rule, the terms of a transaction executed on the Exchange are "clearly erroneous" when there is an obvious error in any term, such as price, number of shares or other unit of trading, or identification of the security. A transaction made in clearly erroneous error and cancelled by both parties or determined by the Exchange to be clearly erroneous will be removed from the Consolidated Tape. Executions as a result of a Trading Halt Auction are not eligible for a request to review as clearly erroneous under paragraph (b) of this Rule.

(b) *Request and Timing of Review*. An ETP Holder that receives an execution on an order that was submitted erroneously to the Exchange for its own or customer account may request that the Exchange review the transaction under this Rule. An Officer of the Exchange or such other employee designee of the Exchange ("Officer") will review the transaction under dispute and determine whether it is clearly erroneous, with a view toward maintaining a fair and orderly market and the protection of investors and the public interest. Such request for review will be made in writing via e-mail or other electronic means specified from time to time by the Exchange in a circular distributed to ETP Holders.

   (i) *Requests for Review*. Requests for review must be received within thirty (30) minutes of execution time and will include information concerning the time of the transaction(s), security symbol(s), number of shares, price(s), side (bought or sold), and factual basis for believing that the trade is clearly erroneous. Upon receipt of a timely filed request that satisfies the numerical guidelines set forth in Section (c)(1) of this Rule, the counterparty to the trade will be notified by the Exchange as soon as practicable, but generally within 30 minutes. An Officer may request additional supporting written information to aid in the resolution of the matter. If requested, each party to the transaction will provide, within thirty (30) minutes of the request, any supporting written information. Either party to the disputed trade may request the supporting written information provided by the other party on the matter.

   (ii) *Routed Executions*. Other market centers will generally have an additional 30 minutes from receipt of their participant's timely filing, but no longer than 60 minutes from the time of the execution at issue, to file with the Exchange for review

of transactions routed to the Exchange from that market center and executed on the Exchange.

(c) *Thresholds*. Determinations of a clearly erroneous execution will be made as follows:

(1) *Numerical Guidelines*. Subject to the provisions of paragraph (c)(3) below, a transaction executed during the Core Trading Session or the Early and Late Trading Session will be found to be clearly erroneous if the price of the transaction to buy (sell) that is the subject of the complaint is greater than (less than) the Reference Price by an amount that equals or exceeds the Numerical Guidelines set forth below. The Reference Price will be equal to the consolidated last sale immediately prior to the execution(s) under review except for: (A) Multi-Stock Events involving twenty or more securities, as described in (c)(2) below; and (B) in other circumstances, such as, for example, relevant news impacting a security or securities, periods of extreme market volatility, sustained illiquidity, or widespread system issues, where use of a different Reference Price is necessary for the maintenance of a fair and orderly market and the protection of investors and the public interest.

Reference Price, Circumstance or Product:	Core Trading Session Numerical Guidelines (Subject transaction's % difference from the Reference Price:	Early and Late Trading Session Numerical Guidelines (Subject transaction's % difference from the Reference Price:
Between $0.00 and $25.00	10%	20%
Between $25.01 and $50.00	5%	10%
Greater than $50.00	3%	6%
Multi-Stock Event - Filings involving five or more, but less than twenty, securities whose executions occurred within a period of five minutes or less	10%	10%
Multi-Stock Event - Filings involving twenty or more securities whose executions occurred within a period of five	30%, subject to the terms of paragraph (c)(2) below	30%, subject to the terms of paragraph (c)(2) below

minutes or less		
Leveraged ETF/ETN securities	Core Trading Session Numerical Guidelines multiplied by the leverage multiplier (e.g., 2x)	Core Trading Session Numerical Guidelines multiplied by the leverage multiplier (e.g. 2x)

(2) Multi-Stock Events Involving Twenty or More Securities. During Multi-Stock Events involving twenty or more securities the number of affected transactions may be such that immediate finality is necessary to maintain a fair and orderly market and to protect investors and the public interest. In such circumstances, the Exchange may use a Reference Price other than consolidated last sale. To ensure consistent application across market centers when this paragraph is invoked, the Exchange will promptly coordinate with the other market centers to determine the appropriate review period, which may be greater than the period of five minutes or less that triggered application of this paragraph, as well as select one or more specific points in time prior to the transactions in question and use transaction prices at or immediately prior to the one or more specific points in time selected as the Reference Price. The Exchange will nullify as clearly erroneous all transactions that are at prices equal to or greater than 30% away from the Reference Price in each affected security during the review period selected by the Exchange and other markets consistent with this paragraph.

(3) *Additional Factors*. Except in the context of a Multi-Stock Event involving five or more securities, an Officer may also consider additional factors to determine whether an execution is clearly erroneous, including but not limited to, system malfunctions or disruptions, volume and volatility for the security, derivative securities products that correspond to greater than 100% in the direction of a tracking index, news released for the security, whether trading in the security was recently halted/resumed, whether the security is an IPO, whether the security was subject to a stock-split, reorganization, or other corporate action, overall market conditions, Early and Late Trading Session executions, validity of the consolidated tapes trades and quotes, consideration of primary market indications, and executions inconsistent with the trading pattern in the stock. Each additional factor will be considered with a view toward maintaining a fair and orderly market and the protection of investors and the public interest.

(d) *Outlier Transactions*. In the case of an Outlier Transaction, an Officer may at its sole discretion, and on a case-by-case basis, consider requests received pursuant to subsection (b) of this Rule after 30 minutes, but not longer than sixty minutes after the transaction in question, depending on the facts and circumstances surrounding such request.

(1) "Outlier Transaction" means a transaction where:

(A) the execution price of the security is greater than three times the current Numerical Guidelines set forth in Paragraph (c)(1) of this Section, or

(B) the execution price of the security in question is not within the Outlier Transaction parameters set forth in Paragraph (d)(1)(A) of the Section but breaches the 52-week high or 52-week low, the Exchange may consider Additional Factors as outlined in 7.10-E(c)(3), in determining if the transaction qualifies for further review or if the Exchange shall decline to act.

(e) *Review Procedures.*

(1) *Determination by Officer.* Unless both parties (or party, in the case of a Cross Order) to the disputed transaction agree to withdraw the initial request for review, the transaction under dispute will be reviewed, and a determination will be rendered by the Officer. If the Officer determines that the transaction is not clearly erroneous, the Officer will decline to take any action in connection with the completed trade. In the event that the Officer determines that the transaction in dispute is clearly erroneous, the Officer will declare the transaction null and void. A determination will be made generally within 30 minutes of receipt of the complaint, but in no case later than the start of Core Trading on the following trading day. The parties will be promptly notified of the determination.

(2) *Appeals.* If an ETP Holder affected by a determination made under this Rule so requests within the time permitted below, the Clearly Erroneous Execution Panel ("CEE Panel") will review decisions made by the Officer under this Rule, including whether a clearly erroneous execution occurred and whether the correct determination was made; provided however that the CEE Panel will not review decisions made by an officer under subsection (f) of this Rule if such Officer also determines under subsection (f) of this Rule that the number of the affected transactions is such that immediate finality is necessary to maintain a fair and orderly market and to protect investors and the public interest, and further provided that with respect to rulings made in conjunction with one or more additional market centers, the number of the affected transactions is similarly such that immediate finality is necessary to maintain a fair and orderly market and to protect investors and the public interest and, hence, are also non-appealable.

(A) The CEE Panel will consist of the Exchange Chief Regulatory Officer ("CRO"), or a designee of the CRO, and representatives from two (2) ETP Holders.

(B) The Exchange will designate at least ten (10) ETP Holder representatives to be called upon to serve on the CEE Panel as needed. In no case will a CEE Panel include a person related to a party to the trade in question. To the extent reasonably possible, the Exchange will call upon the designated representatives to participate on a CEE Panel on an equally frequent basis.

(3) A request for review on appeal must be made via e-mail within thirty (30) minutes after the party making the appeal is given notification of the initial determination being appealed. The CEE Panel will review the facts and render a decision as soon as

practicable, but generally on the same trading day as the execution(s) under review. On requests for appeal received between 3:00 p.m. Eastern Time and the close of trading in the Late Trading Session, a decision will be rendered as soon as practicable, but in no case later than the trading day following the date of the execution under review.

(4) The CEE Panel may overturn or modify an action taken by the Officer under this Rule. All determinations by the CEE Panel will constitute final action by the Exchange on the matter at issue.

(5) If the CEE Panel votes to uphold the decision made pursuant to Rule 7.10-E(e)(1), the Exchange will assess a $500.00 fee against the ETP Holder(s) who initiated the request for appeal.

(6) Any determination by an Officer or by the CEE Panel will be rendered without prejudice as to the rights of the parties to the transaction to submit their dispute to arbitration.

(f) *System Disruption or Malfunctions.* In the event of any disruption or a malfunction in the operation of any electronic communications and trading facilities of the Exchange in which the nullification of transactions may be necessary for the maintenance of a fair and orderly market or the protection of investors and the public interest exist, the Officer, on his or her own motion, may review such transactions and declare such transactions arising out of the operation of such facilities during such period null and void. In such events, the Officer of the Exchange or such other senior level employee designee will rely on the provisions of Section (c)(1)-(3) of this Rule, but in extraordinary circumstances may also use a lower Numerical Guideline if necessary to maintain a fair and orderly market, protect investors and the public interest. Absent extraordinary circumstances, any such action of the Officer pursuant to this subsection (f) will be taken within thirty (30) minutes of detection of the erroneous transaction. When extraordinary circumstances exist, any such action of the Officer must be taken by no later than the start of Core Trading on the day following the date of execution(s) under review. Each ETP Holder involved in the transaction will be notified as soon as practicable, and the ETP Holder aggrieved by the action may appeal such action in accordance with the provisions of subsection (e)(2)-(4).

(g) *Officer Acting On Own Motion.* An Officer, acting on its own motion, may review potentially erroneous executions and declare trades null and void or will decline to take any action in connection with the completed trade(s). In such events, the Officer of the Exchange or such other senior level employee designee will rely on the provisions of Section (c)(1)-(3) of this Rule. Absent extraordinary circumstances, any such action of the Officer will be taken in a timely fashion, generally within thirty (30) minutes of the detection of the erroneous transaction. When extraordinary circumstances exist, any such action of the Officer must be taken by no later than the start of Core Trading on trading day following the date of execution(s) under review. When such action is taken independently, each party involved in the transaction will be notified as soon as

practicable by the Exchange, and the party aggrieved by the action may appeal such action in accordance with the provisions of subsection (e)(2)-(4) above.

(h) *Trade Nullification for UTP Securities that are Subject of Initial Public Offerings ("IPOs").* Pursuant to SEC Rule 12f-2, as amended, the Exchange may extend unlisted trading privileges to a security that is the subject of an initial public offering when at least one transaction in the subject security has been effected on the national securities exchange or association upon which the security is listed and the transaction has been reported pursuant to an effective transaction reporting plan. A clearly erroneous error may be deemed to have occurred in the opening transaction of the subject security if the execution price of the opening transaction on the Exchange is the lesser of $1.00 or 10% away from the opening price on the listing exchange or association. In such circumstances, the Officer will declare the opening transaction null and void or will decline to take action in connection with the completed trade(s). Clearly erroneous executions of subsequent transactions of the subject security will be reviewed in the same manner as the procedure set forth in (e)(1). Absent extraordinary circumstances, any such action of the Officer pursuant to this subsection (h) will be taken in a timely fashion, generally within thirty (30) minutes of the detection of the erroneous transaction. When extraordinary circumstances exist, any such action of the Officer must be taken by no later than the start of Core Trading on the day following the date of execution(s) under review. Each party involved in the transaction will be notified as soon as practicable by the Exchange, and the party aggrieved by the action may appeal such action in accordance with the provisions of subsection (e)(2)-(4) above.

(i) Securities Subject to Limit Up-Limit Down Plan. For purposes of this paragraph, the phrase "Limit Up-Limit Down Plan" or "Plan" means the Plan to Address Extraordinary Market Volatility Pursuant to Rule 608 of Regulation NMS under the Act. The provisions of paragraphs (a) through (h) above and (j) through (k) below will govern all Exchange transactions, including transactions in securities subject to the Plan, other than as set forth in this paragraph (i). If as a result of an Exchange technology or systems issue any transaction occurs outside of the applicable price bands disseminated pursuant to the Plan, an Officer of the Exchange or senior level employee designee, acting on his or her own motion or at the request of a third party, will review and declare any such trades null and void. Absent extraordinary circumstances, any such action of the Officer of the Exchange or other senior level employee designee will be taken in a timely fashion, generally within thirty (30) minutes of the detection of the erroneous transaction. When extraordinary circumstances exist, any such action of the Officer of the Exchange or other senior level employee designee must be taken by no later than the start of the Core Trading Hours on the trading day following the date on which the execution(s) under review occurred. Each ETP Holder involved in the transaction will be notified as soon as practicable by the Exchange, and the party aggrieved by the action may appeal such action in accordance with the provisions of paragraph (e)(2) above. In the event that a single plan processor experiences a technology or systems issue that prevents the dissemination of price bands, the Exchange will make the determination of whether to nullify transactions based on paragraphs (a) through (h) above and (j) through (k) below.

(j) *Multi-Day Event.* A series of transactions in a particular security on one or more trading days may be viewed as one event if all such transactions were effected based on the same fundamentally incorrect or grossly misinterpreted issuance information resulting in a severe valuation error for all such transactions (the "Event"). An Officer, acting on his or her own motion, will take action to declare all transactions that occurred during the Event null and void not later than the start of trading on the day following the last transaction in the Event. If trading in the security is halted before the valuation error is corrected, an Officer will take action to declare all transactions that occurred during the Event null and void prior to the resumption of trading. Notwithstanding the foregoing, no action can be taken pursuant to this paragraph with respect to any transactions that have reached settlement date or that result from an initial public offering of a security. To the extent transactions related to an Event occur on one or more other market centers, the Exchange will promptly coordinate with such other market center(s) to ensure consistent treatment of the transactions related to the Event, if practicable. Any action taken in connection with this paragraph will be taken without regard to the Numerical Guidelines set forth in this Rule. Each ETP Holder involved in a transaction subject to this paragraph will be notified as soon as practicable by the Exchange, and the party aggrieved by the action may appeal such action in accordance with the provisions of paragraph (e)(2) above.

(k) *Trading Halts.* In the event of any disruption or malfunction in the operation of the electronic communications and trading facilities of the Exchange, another market center or responsible single plan processor in connection with the transmittal or receipt of a regulatory trading halt, suspension or pause, an Officer, acting on his or her own motion, will nullify any transaction in a security that occurs after the primary listing market for such security declares a regulatory trading halt, suspension or pause with respect to such security and before such regulatory trading halt, suspension or pause with respect to such security has officially ended according to the primary listing market. In addition, in the event a regulatory trading halt, suspension or pause is declared, then prematurely lifted in error and is then re-instituted, an Officer will nullify transactions that occur before the official, final end of the halt, suspension or pause according to the primary listing market. Any action taken in connection with this paragraph will be taken in a timely fashion, generally within thirty (30) minutes of the detection of the erroneous transaction and in no circumstances later than the start of Core Trading Hours on the trading day following the date of execution(s) under review. Any action taken in connection with this paragraph will be taken without regard to the Numerical Guidelines set forth in this Rule. Each ETP Holder involved in a transaction subject to this paragraph will be notified as soon as practicable by the Exchange, and the party aggrieved by the action may appeal such action in accordance with the provisions of paragraph (e)(2) above.

*****

Rule 7.11-E. Limit Up—Limit Down Plan and Trading Pauses in Individual Securities Due to Extraordinary Market Volatility

The provisions of this Rule shall be in effect during a pilot to coincide with the pilot period for the Regulation NMS Plan to Address Extraordinary Market Volatility.

Rules 7.11-E(a)(5) and (a)(6) govern order processing when ETP Holders communicate with the NYSE Arca Marketplace using Pillar phase I protocols. Rule 7.11-E(a)(5P) governs order processing when ETP Holders communicate with the NYSE Arca Marketplace using Pillar phase II protocols. The Exchange will file a separate proposed rule change to delete Rules 7.11-E(a)(5) and (a)(6) when the Pillar phase I protocols are no longer available.

(a) **Limit Up-Limit Down Mechanism.**

   (1) **Definitions**

      (A) "Plan" means the Plan to Address Extraordinary Market Volatility Submitted to the Securities and Exchange Commission Pursuant to Rule 608 of Regulation NMS under the Securities Exchange Act of 1934, Exhibit A to Securities Exchange Act Release No. 67091 (May 31, 2012), 77 FR 33498 (June 6, 2012), as it may be amended from time to time.

      (B) All capitalized terms not otherwise defined in this Rule shall have the meanings set forth in the Plan or Exchange rules, as applicable.

   (2) **Exchange Participation in the Plan.** The Exchange is a Participant in, and subject to the applicable requirements of, the Plan, which establishes procedures to address extraordinary volatility in NMS Stocks.

   (3) **ETP Holder Compliance**. ETP Holders will comply with the applicable provisions of the Plan.

   (4) **Exchange Compliance with the Plan**. Exchange systems will not display or trade buy (sell) interest above (below) the Upper (Lower) Price Bands, unless such interest is specifically exempted under the Plan.

   (5) **Cancellation of Orders**. Exchange systems will cancel buy (sell) interest that is priced or could be traded above (below) the Upper (Lower) Price Band, except as specified in (a)(6) below.

      (A) Incoming marketable interest, including Market Orders, Limit Orders, and Limit Orders designated IOC will be traded, or if applicable, routed to an Away market, to the fullest extent possible, subject to Rules 7.31-E(a)(1)(B) (Trading Collars for Market Orders) and 7.31-E(a)(2)(B) (price check for Limit Orders), at prices at or within the Price Bands. Any untraded quantity of such incoming marketable interest that cannot be traded at prices at or within the Price Bands will be cancelled and the ETP Holder will be notified of the reason for the cancellation.

(B) Cross Orders with a cross price above the Upper Price Band or below the Lower Price Band will be rejected.

(5P) **Repricing and Cancellation of Orders**. Exchange systems will reprice or cancel buy (sell) orders that are priced or could be traded above (below) the Upper (Lower) Price Band.

(A) Incoming Market Orders, Limit Orders designated IOC, and Day ISOs will be traded, or if applicable, routed to an Away Market, to the fullest extent possible, subject to Rule 7.31-E(a)(1)(B) (Trading Collars for Market Orders) and 7.31-E(a)(2)(B) (price check for Limit Orders) at prices at or within the Price Bands.

   (i) Any quantity of such orders that cannot be traded or routed at prices at or within the Price Bands will be cancelled and the ETP Holder will be notified of the reason for the cancellation.

   (ii) If Price Bands move and the working price of a resting Market Order or Day ISO to buy (sell) is above (below) the updated Upper (Lower) Price Band, such orders will be cancelled.

(B) Incoming Limit Orders will be traded, or if applicable, routed to an Away Market, to the fullest extent possible, subject to Rule 7.31-E(a)(2)(B) (price check for Limit Orders) at prices at or within the Price Bands.

   (i) Unless the ETP Holder has entered an instruction to cancel any quantity of a Limit Order that cannot be traded or routed at prices at or within the Price Bands, such order will be assigned a working price, and if applicable, display price, at the Upper (Lower) Price Band, consistent with the terms of the order.

   (ii) The repricing of Limit Orders will be applicable to both incoming and resting orders. If the Price Bands move and the limit price of a repriced order is at or within the Price Band, such Limit Order will be adjusted to its limit price.

   (iii) Primary Until 9:45 Orders and Primary After 3:55 Orders will be priced under paragraph (a)(5P)(B) of this Rule only when such orders are entered on or resting on the NYSE Arca Book.

(C) **Sell Short Orders**. If a Limit Order does not include a cancel instruction and is also a sell short order, during a Short Sale Price Test, as set forth in Rule 7.16-E(f), such short sale order priced below the Lower Price Band will be repriced to the higher of the Lower Price Band or the Permitted Price, as defined in Rule 7.16-E(f)(5)(A). Sell short orders that are not eligible to be repriced will be treated as the order types specified in (a)(5P)(A) above.

(D) Incoming Q Orders to buy (sell) with a limit price above (below) the Upper (Lower) Price Band will be rejected. If Price Bands move and the limit price of a resting Q Order to buy (sell) is above (below) the updated Upper (Lower) Price Band, the Q Order will be cancelled.

(E) Limit IOC Cross Orders with a cross price above (below) the Upper (Lower) Price Band will be rejected.

(F) If the midpoint of the PBBO is above (below) the Upper (Lower) Price Band, an MPL Order to buy (sell) will not be repriced or rejected and will not be eligible to trade. An MPL Order will be cancelled or rejected if the ETP Holder enters an instruction to cancel or reject such MPL Order.

(6) **Discretionary Instruction to Reprice Eligible Limit Orders.** ETP Holders may enter an instruction for the working price of a Limit Order to buy (sell) with a limit price above (below) the Upper (Lower) Price Band to be adjusted a price that is equal to the Upper (Lower) Price Band rather than cancel the order.

(A) Repricing instructions are not available for Market Orders, Auction-Only Orders, Primary Only Orders, Day ISO, Q Orders, or any Limit Order that includes an IOC modifier, including Cross Orders. Instructions to reprice included with a Primary Until 9:45 Order or Primary After 3:55 Order will only be enforced when such orders are entered on or resting on the NYSE Arca Book.

(B) Instructions to reprice eligible Limit Orders will be applicable to both incoming and resting orders. If the Price Bands move and the original limit price of a repriced order is at or within the Price Bands, such Limit Order would be adjusted to its original limit price.

(C) An MPL Order that has an instruction to reprice will not cancel, but will not be repriced or be eligible to trade if the midpoint of the PBBO is below the Lower Price Band or above the Upper Price Band.

(D) **Sell Short Orders**. If an eligible order includes a repricing instruction and is also a sell short order, during a Short Sale Price Test, as set forth in Rule 7.16-E(f), a short sale order priced below the Lower Price Band will be repriced to the higher of the Lower Price Band or the Permitted Price, as defined in Rule 7.16-E (f)(5)(A). Sell short orders that are not eligible for repricing instructions will be treated as any other order pursuant to (a)(5) above.

(7) **Routing to Away Markets**. Exchange systems will not route buy (sell) orders to an Away Market displaying a sell (buy) quote that is above (below) the Upper (Lower) Price Band, provided that the Exchange will route Primary Only Orders, Primary Until 9:45, and Primary After 3:55 Orders to the primary listing market regardless of price.

(8) **Trading Pause during a Straddle State**. The Exchange may declare a Trading Pause for a NMS Stock listed on the Exchange when (i) the National Best Bid (Offer) is below (above) the Lower (Upper) Price Band and the NMS Stock is not in a Limit State; and (ii) trading in that NMS Stock deviates from normal trading characteristics.

(9) After the Exchange opens or reopens an Exchange-listed security but before receiving Price Bands from the SIP under the Regulation NMS Plan to Address Extraordinary Market Volatility, the Exchange will calculate Price Bands based on the first Reference Price provided to the SIP and if such Price Bands are not in the MPV for the security, such Price Bands will be rounded to the nearest price at the applicable MPV.

(b) **Re-opening of Trading following a Trading Pause**. At the end of the Trading Pause, the Exchange will re-open the security in accordance with the procedures set forth in Rule 7.35-E for a Trading Halt Auction. Any interest repriced pursuant to paragraph (a)(6) of this Rule will return to its original order instructions for purposes of the re-opening transaction following a Trading Pause.

(1) Notification of Trading Pauses. If a Trading Pause is triggered under this Rule or if the Exchange is unable to reopen trading at the end of the Trading Pause due to a systems or technology issue, the Exchange will immediately notify the single plan processor responsible for consolidation of information for the security pursuant to Rule 603 of Regulation NMS under the Securities Exchange Act of 1934.

(2) If a primary listing market issues a Trading Pause, the Exchange will resume trading as provided for in Rule 7.18-E(a).

*****

Rule 7.31-E. Orders and Modifiers

(a) Primary Order Types

(1) Market Order. An unpriced order to buy or sell a stated amount of a security that is to be traded at the best price obtainable without trading through the NBBO. A Market Order must be designated Day and will be rejected on arrival or cancelled if resting if there is no contra-side NBBO. Unexecuted Market Orders are ranked Priority 1 - Market Orders.

(A) On arrival, a Market Order to buy (sell) is assigned a working price of the NBO (NBB) and will trade with all sell (buy) orders on the NYSE Arca Book priced at or below (above) the NBO (NBB) before routing to the NBO (NBB) on an Away Market. The quantity of a Market Order to buy (sell) not traded or routed will remain undisplayed on the NYSE Arca Book at a working price of the NBO

(NBB) and be eligible to trade with incoming sell (buy) orders at that price. When the updated NBO (NBB) is displayed, the Market Order to buy (sell) will be assigned a new working price of the updated NBO (NBB) and will trade with all sell (buy) orders on the NYSE Arca Book priced at or below (above) the updated NBO (NBB) before routing to the updated NBO (NBB) on an Away Market. Such assessment will continue at each new contra-side NBBO until the order is filled or a Trading Collar is reached. If the NBBO becomes locked or crossed while the order is held undisplayed, the Market Order to buy (sell) will be assigned a working price of the NBB (NBO).

(B) Trading Collar. During Core Trading Hours, a Market Order to buy (sell) will not trade or route to an Away Market at a price at or above (below) the Trading Collar. Trading Collars will not apply to Limit Orders.

(i) Calculation of the Trading Collar. The Trading Collar will be based on a price that is a specified percentage away from the consolidated last sale price and it will be continuously updated based on market activity. The specified percentage is equal to the corresponding "numerical guideline" percentage set forth in Rule 7.10-E(c)(1) (Clearly Erroneous Executions) for the Core Trading Session. The upper boundary of the Trading Collar is the consolidated last sale price increased by the specified percentage truncated to the MPV for the security, and the lower boundary is the consolidated last sale price decreased by the specified percentage truncated to the MPV for the security. A halt, suspension, or pause in trading will zero out the Trading Collar values, and the Trading Collar will be recalculated with the first consolidated last sale after trading resumes. If there is no consolidated last sale price on the same trading day, the Exchange will use the last Official Closing Price for the security.

(ii) If a Trading Collar is triggered, the unexecuted quantity of a Market Order to buy (sell) will be held undisplayed and assigned a working price one MPV below (above) the Trading Collar. The Market Order to buy (sell) will be available to trade with incoming orders to sell (buy) at that working price but will not trade with interest on the NYSE Arca Book or route until (i) additional opportunities to trade consistent with the Trading Collar restriction become available, either on the Exchange or an Away Market, or (ii) a new Trading Collar is calculated and the remaining quantity of the order(s) is then able to trade or route at prices consistent with the new Trading Collar and NBBO.

(2) Limit Order. An order to buy or sell a stated amount of a security at a specified price or better. Unless otherwise specified, the working price and the display price of a Limit Order equal the limit price of the order, it is eligible to be routed, and it is ranked Priority 2 - Display Orders.

(A) A marketable Limit Order to buy (sell) will trade with all sell (buy) orders on the NYSE Arca Book priced at or below (above) the PBO (PBB) before routing to the PBO (PBB) and may route to prices higher (lower) than the PBO (PBB) only

after trading with orders to sell (buy) on the NYSE Arca Book at each price point. Once no longer marketable, the Limit Order will be ranked and displayed on the NYSE Arca Book.

(B) Limit Order Price Protection. A Limit Order to buy (sell) will be rejected if it is priced at or above (below) a specified percentage away from the NBO (NBB). The specified percentage is equal to the corresponding "numerical guideline" percentage set forth in paragraph (c)(1) of Rule 7.10-E (Clearly Erroneous Executions) for the Core Trading Session. The Limit Order Price Protection will not be applied to an incoming Limit Order to buy (sell) if there is no NBO (NBB). Limit Order Price Protection will be applied when an order is eligible to trade. A Limit Order entered before the Core Trading Session that is designated for the Core Trading Session only will become subject to Limit Order Price Protection after the Core Open Auction. Limit Order Price Protection for both buy and sell orders that are not in the minimum price variation ("MPV") for the security, as defined in Rule 7.6-E, will be rounded down to the nearest price at the applicable MPV.

(C) If a BB (BO) that is locked or crossed by an Away Market PBO (PBB) is cancelled, executed or routed and the next best-priced resting Limit Order(s) on the NYSE Arca Book that would become the new BB (BO) would have a display price that would lock or cross the PBO (PBB), such Limit Order(s) to buy (sell) will be assigned a display price one MPV below (above) the PBO (PBB) and a working price equal to the PBO (PBB). When the PBO (PBB) is updated, the Limit Order(s) to buy (sell) will be repriced consistent with the original terms of the order. If a Day ISO to buy (sell) arrives before the PBO (PBB) is updated and would result in at least a round lot being displayed as a new BB (BO), such re-priced Limit Order(s) to buy (sell) will be repriced to the lower (higher) of the display price of the Day ISO or the original price of the Limit Order(s). If the arriving Day ISO to buy (sell) would not result in at least a round lot being displayed, the Day ISO will be assigned a display price one MPV below (above) the PBO (PBB) and a working price equal to the PBO (PBB).

(3) Inside Limit Order. A Limit Order that is to be traded at the best price obtainable without trading through the NBBO.

(A) On arrival, a marketable Inside Limit Order to buy (sell) is assigned a working price of the NBO (NBB) and will trade with all sell (buy) orders on the NYSE Arca Book priced at or below (above) the NBO (NBB) before routing to the NBO (NBB) on an Away Market. Once the NBO (NBB) is exhausted, the Inside Limit Order to buy (sell) will be displayed at its working price and be eligible to trade with incoming sell (buy) orders at that price. When the updated NBO (NBB) is displayed, the Inside Limit Order to buy (sell) will be assigned a new working price of the updated NBO (NBB) and will trade with all sell (buy) orders on the NYSE Arca Book priced at or below the updated NBO (NBB) before routing to the updated NBO (NBB) on an Away Market. Such assessment will continue at

each new NBO (NBB) until the order is filled, no longer marketable, or the limit price is reached. Once the order is no longer marketable, it will be ranked and displayed in the NYSE Arca Book.

(B) An Inside Limit Order designated as a Primary Until 9:45 Order or a Primary After 3:55 Order will follow the order processing of an Inside Limit Order only when the order is on the NYSE Arca Book.

(C) An Inside Limit Order may not be designated as a Limit IOC Order but may be designated as a Limit Routable IOC Order. An Inside Limit Order to buy (sell) designated as a Limit Routable IOC Order will trade with sell (buy) orders on the NYSE Arca Book priced at or below (above) the NBO (NBB) and the quantity not traded will be routed to the NBO (NBB). Any unfilled quantity not traded on the NYSE Arca Marketplace or an Away Market will be cancelled.

(b) Time in Force Modifiers

(1) Day Modifier. Any order to buy or sell designated Day, if not traded, will expire at the end of the designated session on the 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). The IOC Modifier will override any posting or routing instructions of orders that include the IOC Modifier. A Limit Order designated IOC is not eligible to participate in any auctions.

(A) Limit IOC Order. A Limit Order designated IOC is to be traded in whole or in part on the NYSE Arca Marketplace as soon as such order is received, and the quantity not so traded is cancelled. A Limit IOC Order does not route. A Limit IOC Order to buy (sell) may be designated with a minimum trade size ("MTS"), which will trade against sell (buy) orders in the NYSE Arca Book that in the aggregate, meets its MTS. On entry, a Limit IOC Order with an MTS must have a minimum of one round lot and will be rejected on arrival if the MTS is larger than the size of the Limit IOC Order. A Limit IOC Order with an MTS that cannot be immediately traded at its minimum size will be cancelled in its entirety.

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

(c) Auction-Only Order. A Limit or Market Order that is to be traded only within an auction pursuant to Rule 7.35-E or routed pursuant to Rule 7.34-E. Any quantity of an Auction-Only Order that is not traded in the designated 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 during the Core Open Auction or a Trading Halt Auction. LOO Orders intended for a Trading Halt Auction will be accepted only during trading halts, which may occur in any trading session.

(2) A Market-on-Open Order ("MOO Order"). A MOO Order is a Market Order that is to be traded only during the Core Open Auction or a Trading Halt Auction. MOO Orders intended for a Trading Halt Auction will be accepted only during trading halts that occur during the Core Trading Session.

(3) Limit-on-Close Order ("LOC Order"). A LOC Order is a Limit Order that is to be traded only during the Closing Auction.

(4) Market-on-Close Order ("MOC Order"). A MOC Order is a Market Order that is to be traded only during the Closing Auction.

(5) Imbalance Offset Order ("IO Order"). An IO Order is a Limit Order to buy (sell) that is to be traded only in a Trading Halt Auction.

(A) An IO Order will be accepted only during a halt or pause, including any extensions.

(B) An IO Order will participate in a Trading Halt Auction only if: (i) there is an imbalance in the security on the opposite side of the market from the IO Order after taking into account all other orders eligible to trade at the Indicative Match Price; and (ii) the limit price of the IO Order to buy (sell) is at or above (below) the Indicative Match Price.

(C) 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 the IO Order will not higher (lower) that its limit price.

(D) An IO Order that participates in a Trading Halt Auction will be ranked in time priority among IO Orders after all other orders eligible to participate in the auction have been allocated.

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

(1) Reserve Order. A Limit or Inside 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 NYSE Arca Book or route to Away Markets.

(A) On entry, the display quantity of a Reserve Order must be entered in round lots. The displayed portion of a Reserve Order will be replenished following any execution. The Exchange will display the full size of the Reserve Order when the unfilled quantity is less than the minimum display size for the order.

(B) Each time a Reserve Order is replenished from reserve interest, a new working time is assigned to the replenished quantity of the Reserve Order, while the reserve interest retains the working time of original order entry.

(C) A Reserve Order must be designated Day and may be combined with the following orders only: Arca Only Order or Primary Pegged Order.

(2) Limit Non-Displayed Order. A Limit Order that is not displayed and does not route. A Limit Non-Displayed Order is ranked Priority 3 - Non-Display Orders. A Limit Non-Displayed Order must be designated Day, is valid for any trading session, and does not participate in any auctions.

(A) The working price of a Limit Non-Displayed Order will be adjusted both on arrival and when resting on the NYSE Arca Book based on the limit price of the order. If the limit price of a Limit Non-Display Order to buy (sell) is at or below (above) the PBO (PBB), it will have a working price equal to the limit price. If the limit price of a Limit Non-Displayed Order to buy (sell) is above (below) the PBO (PBB), it will have a working price equal to the PBO (PBB).

(B) A Limit Non-Displayed Order may be designated with a Non-Display Remove Modifier. If so designated, a Limit Non-Displayed Order to buy (sell) will trade as the liquidity-taking order with an incoming ALO Order to sell (buy) that has a working price equal to the working price of the Limit Non-Displayed Order.

(3) Mid-Point Liquidity Order ("MPL Order"). A Limit Order that is not displayed and does not route, with a working price at the midpoint of the PBBO. An MPL Order is ranked Priority 3- Non-Display Orders. MPL Orders are valid for any session and do not participate in any auctions.

(A) An MPL Order to buy (sell) must be designated with a limit price in the MPV for the security and is eligible to trade only if the midpoint of the PBBO is at or below (above) the limit price of the order.

(B) If there is no PBB, PBO, or the PBBO is locked or crossed, both an arriving and resting MPL Order will wait for a PBBO that is not locked or crossed before being eligible to trade. If a resting MPL Order(s) to buy (sell) trades with MPL Order(s) to sell (buy) after there is an unlocked or uncrossed PBBO, the MPL Order with the later working time will be the liquidity-removing order.

(C) On arrival, an MPL Order to buy (sell) that is eligible to trade will trade with resting orders to sell (buy) with a working price at or below (above) the midpoint of the PBBO. Resting MPL Orders to buy (sell) will trade at the midpoint of the PBBO against all incoming orders to sell (buy) priced at or below (above) the midpoint of the PBBO. An incoming Limit Order may be designated with a "No Midpoint Execution" modifier, in which case the incoming Limit Order will not trade with resting MPL Orders and may trade through MPL Orders.

(D) An MPL Order may be designated with an MTS of a minimum of one round lot and will be rejected on arrival if the MTS is larger than the size of the MPL Order. On arrival, an MPL Order to buy (sell) with an MTS will trade with sell (buy) orders in the NYSE Arca Book that in the aggregate, meets its MTS. If the sell (buy) orders do not meet the MTS, the MPL Order to buy (sell) will not trade on arrival and will be ranked in the NYSE Arca Book. Once resting, an MPL Order to buy (sell) with an MTS will trade with an order to sell (buy) that meets the MTS and is priced at or below (above) the midpoint of the PBBO. If an order does not meet an MPL Order's MTS, the order will not trade with and may trade through such MPL Order. If an MPL Order with an MTS is traded in part or reduced in size and the remaining quantity of the order is less than the MTS, the MPL Order will be cancelled.

(E) An MPL Order may be designated IOC ("MPL-IOC Order"). Subject to such IOC instructions, an MPL-IOC Order will follow the same trading and priority rules as an MPL Order, except that an MPL-IOC Order will be rejected if (i) the order entry size is less than one round lot, or (ii) there is no PBBO or the PBBO is locked or crossed. An MPL-IOC Order cannot be designated ALO or with a Non-Display Remove Modifier.

(F) An MPL Order may be designated with an ALO Modifier ("MPL-ALO Order"). On arrival, an MPL-ALO Order to buy (sell) will trade with resting orders to sell (buy) with a working price below (above) the midpoint of the PBBO, but will not trade with resting orders to sell (buy) priced at the midpoint of the PBBO. A resting MPL-ALO Order to buy (sell) will trade with an arriving order to sell (buy) that is eligible to trade at the midpoint of the PBBO.

(G) MPL Orders designated Day and MPL-ALO Orders may be designated with a Non-Display Remove Modifier. On arrival, an MPL Order or MPL-ALO Order to buy (sell) with a Non-Display Remove Modifier will trade with resting MPL Orders to sell (buy) priced at the midpoint of the PBBO and be the liquidity taker, regardless of whether the resting order to sell (buy) also has a Non-Display Remove Modifier. A resting MPL Order or MPL-ALO Order with a Non- Display Remove Modifier will be the liquidity taker when trading with arriving MPL Orders, including MPL-ALO Orders, that do not include a Non-Display Remove Modifier.

(4) Tracking Order. An order to buy (sell) with a limit price that is not displayed, does not route, must be entered in round lots and designated Day, and will trade only with an order to sell (buy) that is eligible to route. The working price of a Tracking Order to buy (sell) is the PBB (PBO), provided that such price is at or below (above) the limit price of the Tracking Order, it is ranked Priority 4- Tracking Orders, and it may trade in odd lot or mixed lot quantities. A Tracking Order is not eligible to trade if the PBBO is locked or crossed.

(A) A Tracking Order to buy (sell) does not trade on arrival and is triggered to trade by an order to sell (buy) that (i) has exhausted all other interest eligible to trade at the Exchange, (ii) has a remaining quantity equal to or less than the size of a resting Tracking Order, and (iii) would otherwise route to an Away Market. A Tracking Order will trade with the entire unexecuted quantity of the contra-side order, not just the quantity being routed.

(B) Each time a Tracking Order is traded in part, any remaining quantity of the Tracking Order will be assigned a new working time. A Tracking Order with a later working time will trade ahead of a Tracking Order with an earlier working time that does not meet the size requirement of an incoming order.

(C) A Tracking Order may be designated with an MTS of one round lot or more. If an incoming order cannot meet the MTS, a Tracking Order with a later working time will trade ahead of the Tracking Order designated with an MTS with an earlier working time. If a Tracking Order with an MTS is traded in part or reduced in size and the remaining quantity is less than the MTS, the Tracking Order will be cancelled.

(e) Orders with Instructions Not to Route

(1) Arca Only Order. A Limit Order that does not route.

(A) An Arca Only Order to buy (sell) that, at the time of entry and after trading with any sell (buy) orders in the NYSE Arca Book priced at or below (above) the PBO (PBB), would create a violation of Rule 610(d) of Regulation NMS by locking or crossing the protected quotation of an Away Market or would cause a violation of Rule 611 of Regulation NMS, will be priced as follows:

(i) It will have a working price of the PBO (PBB) of an Away Market and a display price one MPV below (above) that PBO (PBB).

(ii) If the PBO (PBB) of an Away Market re-prices higher (lower), it will be assigned a new working price of the updated PBO (PBB) and a new display price of one MPV below (above) that updated PBO (PBB).

     (iii) If the PBO (PBB) of an Away Market re-prices to be equal to or lower (higher) than its last display price, its display price will not change, but the working price will be adjusted to be equal to its display price.

     (iv) If its limit price no longer locks or crosses the PBO (PBB) of an Away Market, it will be assigned a working price and display price equal to its limit price and will not be assigned a new working price or display price based on changes to the PBO (PBB).

  (B) An Arca Only Order with a working price different from the display price is ranked Priority 3-Non-Display Orders and an Arca Only Order with a working price equal to the display price is ranked Priority 2-Display Orders.

  (C) An Arca Only Order may be designated with a Non-Display Remove Modifier. If so designated, an Arca Only Order to buy (sell) with a working price, but not display price, equal to the working price of an ALO Order to sell (buy) will trade as the liquidity taker against such ALO Order.

(2) ALO Order. An Arca Only Order that, except as specified below, will not remove liquidity from the NYSE Arca Book. Upon entry, an ALO Order must have a minimum of one displayed round lot.

  (A) ALO Orders may participate in auctions, but the ALO designation will be ignored. An ALO Order that has not traded in an auction will be assigned a working price and display price pursuant to paragraph (e)(2)(B) of this Rule.

  (B) An ALO Order to buy (sell) that, at the time of entry, is marketable against an order of any size to sell (buy) on the NYSE Arca Book or would lock or cross a protected quotation in violation of Rule 610(d) of Regulation NMS, will be priced or trade, or both as follows:

     (i) If there are no displayed or non-displayed orders to sell (buy) on the NYSE Arca Book priced equal to or below (above) the PBO (PBB), the ALO Order to buy (sell) will have a working price equal to the PBO (PBB) and a display price one MPV below (above) the PBO (PBB).

     (ii) If the limit price of the ALO Order to buy (sell) crosses the working price of any displayed or non-displayed order on the NYSE Arca Book priced equal to or below (above) the PBO (PBB), it will trade as the liquidity taker with such order(s). Any untraded quantity of the ALO Order will have a working price equal to the PBO (PBB) and a display price one MPV below (above) the PBO (PBB).

     (iii) If the limit price of the ALO Order to buy (sell) locks the display price of any order ranked Priority 2 - Display Orders on the NYSE Arca Book priced equal to or below (above) the PBO (PBB), it will be assigned a working price and

display price one MPV below (above) the price of the displayed order on the NYSE Arca Book.

(iv) If the limit price of the ALO Order to buy (sell) locks the working price of any order ranked Priority 3 - Non-Display Orders on the NYSE Arca Book priced equal to or below (above) the PBO (PBB), it will be assigned a working price equal to the PBO (PBB) and a display price one MPV below (above) the PBO (PBB), provided that,

(a) if there are any displayed orders at the working price of an order to sell (buy) ranked Priority 3 - Non-Display Orders, the ALO Order to buy (sell) will be priced under paragraph (e)(2)(B)(iii) of this Rule; and

(b) if the resting order(s) is a Limit Non-Displayed Order or Arca Only Order to sell (buy) that has been designated with a Non-Display Remove Modifier, the ALO Order will trade with such order(s) as the liquidity provider. Unless a resting order is designated with a Non-Display Remove Modifier, an ALO Order will trade only with arriving interest.

(v) An ALO Order to buy (sell) will not be assigned a working price or display price above (below) the limit price of such order.

(C) Once resting on the NYSE Arca Book, ALO Orders will be re-priced or trade, or both, as follows:

(i) If the order(s) to sell (buy) ranked Priority 2 - Display Orders or PBO (PBB) re-prices higher (lower), an ALO Order to buy (sell) will trade or be priced, or both, consistent with paragraphs (e)(2)(B)(i) - (iv) of this Rule.

(ii) If the PBO (PBB) re-prices lower (higher) to be equal to or lower (higher) than its last display price or if its limit price no longer locks or crosses the PBO (PBB), an ALO Order to buy (sell) will be priced pursuant to paragraphs (e)(1)(A)(iii) and (iv) of this Rule.

(D) An ALO Order will not trigger a contra-side MPL Order to trade.

(3) Intermarket Sweep Order ("ISO"). A Limit Order that does not route and meets the requirements of Rule 600(b)(30) of Regulation NMS.

(A) An ISO may trade through a protected bid or offer, and will not be rejected or cancelled if it would lock, cross, or be marketable against an Away Market provided that it meets the following requirements:

(i) It is identified as an ISO in the manner prescribed by the Exchange; and

(ii) Simultaneously with the routing of an ISO to the Exchange, the ETP Holder routes one or more additional Limit Orders, as necessary, to trade against the full displayed size of any protected bids (for sell orders) or protected offers (for buy orders) on Away Markets. These additional routed orders must be identified as ISO.

(B) An ISO designated IOC ("IOC ISO") will be immediately traded with contraside interest in the NYSE Arca Book up to its full size and limit price and the quantity not so traded will be immediately and automatically cancelled. An IOC ISO may not be designated with an MTS.

(C) An ISO designated Day ("Day ISO"), if marketable on arrival, will be immediately traded with contra-side interest in the NYSE Arca Book up to its full size and limit price. Any untraded quantity of a Day ISO will be displayed at its limit price and may lock or cross a protected quotation that was displayed at the time of arrival of the Day ISO.

(D) A Day ISO may be designated with an ALO Modifier ("Day ISO ALO") and must be entered with a minimum of one displayed round lot. An arriving Day ISO ALO to buy (sell) may trade through or lock or cross a protected quotation that was displayed at the time of arrival of the Day ISO ALO, and will be priced or trade, or both, as follows:

(i) If the limit price of the Day ISO ALO to buy (sell) crosses the working price of any displayed or non-displayed order on the NYSE Arca Book, it will trade as the liquidity taker with such order(s). Any untraded quantity of the Day ISO ALO will have a working price and display price equal to its limit price.

(ii) If the limit price of the Day ISO ALO to buy (sell) locks the display price of any order ranked Priority 2 - Display Orders on the NYSE Arca Book, it will be assigned a working price and display price one MPV below (above) the price of the displayed order on the NYSE Arca Book.

(iii) If the limit price of the Day ISO ALO Order to buy (sell) locks the working price of any order ranked Priority 3 - Non-Display Orders on the NYSE Arca Book, it will be assigned a working price and display price equal to the limit price of the order, provided that,

(a) if there are any displayed orders at the working price of an order to sell (buy) ranked Priority 3 - Non-Display Orders, the Day ISO ALO to buy (sell) will be priced under paragraph (e)(3)(D)(ii) of this Rule; and

(b) if the resting order(s) is a Limit Non-Displayed Order or Arca Only Order to sell (buy) that has been designated with a Non-Display Remove Modifier, the Day ISO ALO will trade with such order(s) as the liquidity provider.

(iv) After being displayed, a Day ISO ALO will be re-priced and re-displayed or trade, or both, based on changes to orders ranked Priority 2 - Display Orders or the PBO (PBB) consistent with paragraphs (e)(2)(C)(i) and (ii) of this Rule.

(f) Orders with Specific Routing Instructions

(1) Primary Only Order. A Market or Limit Order that on arrival is routed directly to the primary listing market without being assigned a working time or interacting with interest on the NYSE Arca Book. A Primary Only Order must be designated for the Core Trading Session. The primary listing market will validate whether the order is eligible to be accepted by that market and if the primary listing market rejects the order, the order will be cancelled. A Primary Only Order instruction on a security listed on the Exchange will be ignored.

(A) Primary Only MOO/LOO Order. A Primary Only Order designated for participation in the primary listing market's opening or re-opening process as a MOO or LOO Order.

(B) Primary Only Day/IOC Order. A Primary Only Order designated Day or IOC, but not ISO. A Primary Only Day Order may be designated as a Reserve Order. A Primary Only Day/IOC Order will be routed to an Away Market as a nonroutable order, and will remain at the Away Market until executed or cancelled. A Primary Only Day/IOC Order in NYSE- and NYSE MKT-listed securities may include an instruction to be routed to NYSE or NYSE MKT as a routable order, in which case such order would remain at the NYSE or NYSE MKT until executed, routed away, or cancelled.

(C) Primary Only MOC/LOC Order. A Primary Only Order designated for participation in the primary listing market's closing process as a MOC or LOC Order.

(2) Primary Until 9:45 Order. A Limit or Inside Limit Order that, on arrival and until 9:45 a.m. Eastern Time, routes to the primary listing market. After 9:45 a.m. Eastern Time, the order is cancelled on the primary listing market and entered on the NYSE Arca Book. The Primary Until 9:45 Order must be designated Day. Orders that return to the NYSE Arca Book after routing to the primary listing market will retain their original order attributes and be assigned a working time based on when the order is returned from the primary listing market and entered on the NYSE Arca Book. A Primary Until 9:45 Order can be combined with a Primary After 3:55 Order.

(3) Primary After 3:55 Order. A Limit or Inside Limit Order entered on the Exchange until 3:55 p.m. Eastern Time after which time the order is cancelled on the Exchange and routed to the primary listing market. The Primary After 3:55 Order must be designated Day. Orders that route to the primary listing market at 3:55 pm Eastern Time will retain their original order attributes.

(g) Cross Orders. Two-sided orders with instructions to match the identified buy-side with the identified sell-side at a specified price (the "cross price"). A Cross Order is not eligible to participate in any auctions.

   (1) Limit IOC Cross Order. A Cross Order that must trade in full at its cross price, will not route, and will cancel at the time of order entry if the cross price is not between the BBO or would trade through the PBBO.

(h) Pegged Orders. A Limit Order that does not route with a working price that is pegged to a dynamic reference price. If the designated reference price is higher (lower) than the limit price of a Pegged Order to buy (sell), the working price will be the limit price of the order.

   (1) Market Pegged Order. A Pegged Order to buy (sell) with a working price that is pegged to the PBO (PBB). A Market Pegged Order to buy (sell) will be rejected on arrival, or cancelled when resting, if there is no PBO (PBB) against which to peg. Market Pegged Orders will not participate in any auctions.

      (A) Market Pegged Orders are not displayed and are ranked Priority 3 - Non-Display Orders.

      (B) If the PBBO is locked or crossed, both an arriving and resting Market Pegged Order will wait for a PBBO that is not locked or crossed before the working price is adjusted and the order becomes eligible to trade.

      (C) A Market Pegged Order to buy (sell) may include an offset value that will set the working price below (above) the PBO (PBB) by the specified offset, which may be specified up to two decimals.

   (2) Primary Pegged Order. A Pegged Order to buy (sell) with a working price that is pegged to the PBB (PBO), with no offset allowed. A Primary Pegged Order to buy (sell) will be rejected on arrival, or cancelled when resting, if there is no PBB (PBO) against which to peg. A Primary Pegged Order is eligible to participate in auctions at the limit price of the order.

      (A) A Primary Pegged Order must include a minimum of one round lot displayed. The working price of a Primary Pegged Order equals the display price and the display quantity is ranked Priority 2 - Display Orders and the reserve interest is ranked Priority 3 - Non-Display Orders.

      (B) A Primary Pegged Order will be rejected if the PBBO is locked or crossed. If after arrival, the PBBO becomes locked or crossed, the Primary Pegged Order will wait for a PBBO that is not locked or crossed before the working price is adjusted, but remains eligible to trade at its current working price.

(3) Discretionary Pegged Order. A Pegged Order to buy (sell) that upon entry to the NYSE Arca Marketplace is assigned a working price equal to the lower (higher) of the midpoint of the PBBO ("Midpoint Price") or the limit price of the order. Any untraded shares of such order are assigned a working price equal to the lower (higher) of PBB (PBO) or the order's limit price and is automatically adjusted in response to changes to the PBB (PBO) for buy (sell) orders up (down) to the order's limit price. In order to trade with contra-side orders on the NYSE Arca Book, a Discretionary Pegged Order to buy (sell) will exercise the least amount of price discretion necessary from its working price to its discretionary price (defined as the lower (higher) of the Midpoint Price or the Discretionary Pegged Order's limit price), except during periods of quote instability, as defined in paragraph (h)(3)(D) below.

(A) Discretionary Pegged Orders are not displayed, must be designated Day, and are eligible to be designated for the Core Trading Session only. Discretionary Pegged Orders that include a designation for the Early Trading Session or Late Trading Session will be rejected.

(B) When exercising discretion, Discretionary Pegged Orders maintain their time priority at their working price as Priority 3 - Non-Display Orders and are prioritized behind Priority 3 - Non-Display Orders with a working price equal to the discretionary price of a Discretionary Pegged Order at the time of execution. If multiple Discretionary Pegged Orders are exercising price discretion during the same book processing action, they maintain their relative time priority at the discretionary price.

(C) A Discretionary Pegged Order is eligible to exercise price discretion to its discretionary price, except during periods of quote instability, as specified in paragraph (h)(3)(D) below.

(i) If the Exchange determines the PBB for a particular security to be an unstable quote in accordance with paragraph (h)(3)(D), it will restrict buy Discretionary Pegged Orders in that security from exercising price discretion to trade against interest above the PBB.

(ii) If the Exchange determines the PBO for a particular security to be an unstable quote in accordance with paragraph (h)(3)(D), it will restrict sell Discretionary Pegged Orders in that security from exercising price discretion to trade against interest below the PBO.

(D) Quote Stability. The Exchange utilizes real-time relative quoting activity of protected quotations and a mathematical calculation (the "quote instability calculation") to assess the probability of an imminent change to the current PBB to a lower price or PBO to a higher price for a particular security ("quote instability factor"). When the quoting activity meets predefined criteria and the quote instability factor calculated is greater than the Exchange's defined threshold

("quote instability threshold"), the Exchange treats the quote as not stable ("quote instability" or a "crumbling quote"). During all other times, the quote is considered stable ("quote stability"). The Exchange independently assesses the stability of the PBB and PBO for each security.

(i) Crumbling Quote. When the Exchange determines a quote, either the PBB or the PBO, is unstable, the determination remains in effect at that price level for ten (10) milliseconds. The Exchange will only treat one side of the PBBO as unstable in a particular security at any given time. Quote instability or a crumbling quote is determined by the Exchange when following factors occur:

(A) the PBB and PBO are the same as the PBB and PBO one (1) millisecond ago; and

(B) the PBBO spread is less than or equal to the thirty (30) day median PBBO spread during the Core Trading Session; and

(C) there are more protected quotations on the far side, i.e. more protected quotations on the PBO than the PBB for buy orders, or more protected quotations on the PBB than the PBO for sell orders; an

(D) the quote instability factor result from the quote stability calculation is greater than the defined quote instability threshold.

(1) Quote Instability Factor. The quote stability calculation used to determine the current quote instability factor is defined by the following formula that utilizes the quote stability coefficients and quote stability variables defined below: $1/(1 + e \char94 -(C0 + C1 * N + C2 * F + C3 * N\text{-}1 + C4 * F\text{-}1))$

(a) Quote Stability Coefficients. The Exchange utilizes the values below for the quote stability coefficients.

(i) C0 = -2.39515

(ii) C1 = -0.76504

(iii) C2 = 0.07599

(iv) C3 = 0.38374

(v) C4 = 0.14466

(b) Quote Stability Variables. The Exchange utilizes the quote stability variables defined below to calculate the current quote instability factor.

(i) N = the number of protected quotations on the near side of the market, i.e. PBB for buy orders and PBO for sell orders.

(ii) F = the number of protected quotations on the far side of the market, i.e. PBO for buy orders and PBB for sell orders.

(iii) N-1 = the number of protected quotations on the near side of the market one (1) millisecond ago.

(iv) F-1 = the number of protected quotations on the far side of the market one (1) millisecond ago.

(2) Quote Instability Threshold. The Exchange utilizes a quote instability threshold of 0.32.

(3) The Exchange reserves the right to modify the quote instability coefficients or quote instability threshold at any time, subject to a filing of a proposed rule change with the SEC.

(E) If the PBBO is locked or crossed, both an arriving and resting Discretionary Pegged Order will wait for a PBBO that is not locked or crossed before the working price is adjusted and the order becomes eligible to trade.

(i) Additional Order Instructions and Modifiers:

(1) Proactive if Locked/Crossed Modifier. A Limit Order or Inside 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 NYSE Arca Book.

(2) Self Trade Prevention Modifier ("STP"). Any incoming order to buy (sell) designated with an STP modifier will be prevented from trading with a resting order to sell (buy) also designated with an STP modifier and from the same ETP ID. The STP modifier on the incoming order controls the interaction between two orders marked with STP modifiers. Orders marked with an STP modifier will not be prevented from interacting during any auction.

(A) STP Cancel Newest ("STPN"). An incoming order to buy (sell) marked with the STPN modifier will not trade with resting interest to sell (buy) marked with any of the STP modifiers from the same ETP ID. The incoming order marked with the STPN modifier will be cancelled back to the originating ETP Holder. The resting order marked with one of the STP modifiers will remain on the NYSE Arca Book.

(B) STP Cancel Oldest ("STPO"). An incoming order to buy (sell) marked with the STPO modifier will not trade with resting interest to sell (buy) marked with any

of the STP modifiers from the same ETP ID. The resting order marked with the STP modifier will be cancelled back to the originating ETP Holder. The incoming order marked with the STPO modifier will remain on the NYSE Arca Book.

(C) STP Decrement and Cancel ("STPD"). An incoming order to buy (sell) marked with the STPD modifier will not trade with resting interest to sell (buy) marked with any of the STP modifiers from the same ETP ID. If both orders are equivalent in size, both orders will be cancelled back to the originating ETP Holder. If the orders are not equivalent in size, the equivalent size will be cancelled back to the originating ETP Holder and the larger order will be decremented by the size of the smaller order with the balance remaining on the NYSE Arca Book.

(D) STP Cancel Both ("STPC"). An incoming order to buy (sell) marked with the STPC modifier will not trade with resting interest to sell (buy) marked with any of the STP modifiers from the same ETP ID. The entire size of both orders will be cancelled back to originating ETP Holder.

(E) For purposes of STP, references to ETP ID mean an ETP ID when using Pillar phase I protocols to communicate with the NYSE Arca Marketplace or an MPID when using Pillar phase II protocols to communicate with the NYSE Arca Marketplace.

(j) Q Order. A Limit Order submitted to the NYSE Arca Marketplace by a Market Maker, and designated by a Market Maker as a "Q Order" through such means as the Exchange will specify. Q Orders entered by ETP Holders that are not registered in that security as a market maker will be rejected.

(1) A Q Order must have a minimum of one round lot displayed on entry, must be designated Day, and does not route. A Q Order to buy (sell) will be rejected if: (i) it has limit price at or above (below) the PBO (PBB); or (ii) it is designated as an Arca Only Order, ALO Order, or ISO.

(2) Market Makers must enter Q Orders in securities in which they are registered in accordance with Rule 7.23-E, beginning at the start of the Core Trading Session and continuing until the end of the Core Trading Session. Market Makers are not obligated to but may enter Q Orders in securities in which they are registered during the Early and Late Trading Sessions. Nothing in this Rule will be construed to relieve a Market Maker of any of its obligations pursuant to Rule 7.23-E.

Commentary:

> **.01** Order Type and Modifier Combinations. Users may combine order types and modifiers, unless the terms of the proposed combination are inconsistent.

.02 If two order types are combined that include instructions both for operation on arrival and for how the order operates while resting on the NYSE Arca Book, the instructions governing functionality while incoming will be operative upon arrival. Functionality governing how the order operates while resting on the NYSE Arca Book will govern any remaining balance of the order that is not executed upon arrival.

*****

Rule 7.35-E. Auctions

(a) For purposes of this Rule, unless otherwise specified, the term "Market Orders" includes MOO Orders (for the Core Open Auction and Trading Halt Auction) and MOC Orders (for the Closing Auction). The following are definitions for purposes of this Rule:

(1) "Auction-Eligible Security" means:

(A) For the Early Open Auction, Core Open Auction, and Closing Auction, all securities for which NYSE Arca is the primary listing market and UTP Securities designated by the Exchange.

(B) For a Trading Halt Auction, securities for which NYSE Arca is the primary listing market.

(2) "Auction Processing Period" means the period during which the applicable auction is being processed.

(3) "Auction Imbalance Freeze" means the period that begins before the scheduled time for the Early Open Auction, Core Open Auction, Closing Auction, or Trading Halt Auction, as specified in paragraphs (b), (c), (d), and (e) of this Rule, and that ends once the Auction Processing Period begins.

(4) "Auction Imbalance Information" means the information that is disseminated by the Exchange for an auction and includes, if applicable, the Total Imbalance, Market Imbalance, Indicative Match Price, Matched Volume, Auction Reference Price, Auction Collar, Book Clearing Price, Far Clearing Price, Imbalance Freeze Indicator, and Auction Indicator.

(A) Auction Imbalance Information is updated at least every second, unless there is no change to the information.

(B) Order entry eligibility during an Auction Imbalance Freeze is based on the most recently-updated Auction Imbalance Information.

(C) The Exchange disseminates Auction Imbalance Information via a proprietary data feed during the times specified in this Rule.

(5) "Auction NBBO" means an NBBO that is used for purposes of pricing an auction. An NBBO is an Auction NBBO when (i) there is an NBB above zero and NBO for the security and (ii) the NBBO is not crossed. In addition, for the Core Open Auction, an NBBO is an Auction NBBO when the midpoint of the NBBO when multiplied by a designated percentage, is greater than or equal to the spread of that NBBO. The designated percentage will be determined by the Exchange from time to time upon prior notice to ETP Holders.

(6) "Auction Ranking" means how orders on the side of an Imbalance are ranked for allocation in an auction. Such orders will be ranked in price-time priority under Rule 7.36-E(c) - (g) consistent with the priority ranking associated with each order, provided that:

(A) Limit Orders, LOO Orders, and LOC Orders will be ranked based on their limit price and not the price at which they would participate in the auction;

(B) MOO Orders and MOC Orders will be ranked Priority 1 - Market Orders;

(C) LOO Orders and LOC Orders will be ranked Priority 2 - Display Orders; and

(D) Orders on the side of the Imbalance are not guaranteed to participate in an auction.

(7) "Imbalance" means the number of buy (sell) shares that cannot be matched with sell (buy) shares at the Indicative Match Price at any given time and unless otherwise specified, includes the non-displayed quantity of Reserve Orders eligible to participate in the applicable auction.

(A) "Total Imbalance" means the net Imbalance of all buy (sell) shares at the Indicative Match Price for all orders that are eligible to trade in the applicable auction.

(B) "Market Imbalance" means the imbalance of any remaining buy (sell) Market Orders that are not matched for trading in the applicable auction.

(8) "Indicative Match Price" means the best price at which the maximum volume of shares, including the non-displayed quantity of Reserve Orders, is tradable in the applicable auction, subject to the Auction Collars.

(A) If there are two or more prices at which the maximum volume of shares is tradable, the Indicative Match Price will be the price closest to the Auction Reference Price, specified below, provided that the Indicative Match Price will not be lower (higher) than the price of an order to buy (sell) ranked Priority 2 - Display Orders that was eligible to participate in the applicable auction.

Auction	Auction Reference Price

Early Open Auction	Prior trading day's Official Closing Price
Core Open Auction	The midpoint of the Auction NBBO or, if the Auction NBBO is locked, the locked price. If there is no Auction NBBO, the prior trading day's Official Closing Price
Closing Auction	Last consolidated round-lot price of that trading day and, if none, the prior trading day's Official Closing Price
Trading Halt Auction	Last consolidated round-lot price of that trading day and, if none, the prior trading day's Official Closing Price (except as provided for in Rule 7.35-E(e)(7)(A))
IPO Auction	Zero, unless the Exchange is provided with a price for the security

(B) If there are two prices at which the maximum volume of shares is tradable and both prices are equidistant to the Auction Reference Price, the Indicative Match Price will be the Auction Reference Price.

(C) If the Matched Volume for an auction consists of buy and sell Market Orders only, the Indicative Match Price will be:

(i) For the Core Open Auction, the Auction Reference Price;

(ii) For the Closing Auction, the midpoint of the Auction NBBO as of the time the auction is conducted, provided that if the Auction NBBO is locked, it will be the locked price, and if there is no Auction NBBO, it will be the Auction Reference Price.

(iii) For the Trading Halt Auction, the Auction Reference Price.

(D) If there is a BBO, but no Matched Volume, the Indicative Match Price and Total Imbalance for the Auction Imbalance Information will be:

(i) The side of the BBO that has the higher volume; or

(ii) If the volume of the BB equals the volume of the BO, the BB.

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

(9) "Matched Volume" means the number of buy and sell shares that can be matched at the Indicative Match Price at any given time.

(10) "Auction Collar" means the price collar thresholds for the Indicative Match Price for the Core Open Auction, Trading Halt Auction, or Closing Auction.

(A) The Auction Collar will be based on a price that is a specified percentage away from the Auction Reference Price for the applicable auction. The upper (lower) boundary of the Auction Collar is the Auction Reference Price increased (decreased) by the specified percentage, truncated to the MPV. The specified percentages for price collar thresholds are:

Auction Reference Price	Core Open Auction**	Closing Auction (except as provided for in Rule 7.35-E(e)(10)(B))
$25.00 or less	10%	5%
Greater than $25.00 but less than or equal to $50.00	5%	2%
Greater than $50.00	3%	1%

**If as of 9:00 a.m. Eastern Time, the E-mini S&P 500 Futures are +/- 2% from the prior day's closing price of the E-mini S&P 500 Futures, or if the Exchange determines that it is necessary or appropriate for the maintenance of a fair and orderly market, the Auction Collar for the Core Open Auction will be 10%, regardless of the Auction Reference Price.

(B) An Indicative Match Price that is equal to or higher (lower) than the upper (lower) boundary of the Auction Collar will be adjusted to one MPV below (above) the upper (lower) boundary of the Auction Collar and orders eligible to participate in the applicable auction will trade at the collared Indicative Match Price.

(C) Limit Orders to buy (sell) with a limit price at or 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.

(D) Limit Orders 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 the applicable auction.

(11) "Book Clearing Price" means the price at which all interest eligible to participate in an auction could be traded 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) orders.

(12) "Far Clearing Price" means the price at which Auction-Only Orders could be traded within the Auction Collar.

(13) "Auction Indicator" is an indicator of whether an auction could be conducted, based on the applicable Auction Collar and Imbalance.

(14) "Imbalance Freeze Indicator" is an indicator of whether a security is currently in an Auction Imbalance Freeze.

(b) Early Open Auction. The Early Open Auction will be conducted at the beginning of the Early Trading Session. Only Limit Orders in Auction-Eligible Securities designated for the Early Trading Session will be eligible to participate in the Early Open Auction. If there is no Matched Volume for the Early Open Auction, the NYSE Arca Marketplace will open the Early Trading Session with a quote.

(1) Thirty minutes before the Early Trading Session begins, the NYSE Arca Marketplace will begin disseminating the Early Open Auction Imbalance Information. The non-displayed quantity of Reserve Orders eligible to participate in the Early Open Auction will not be included in the Matched Volume or Total Imbalance until the Early Open Auction Imbalance Freeze begins.

(2) The Early Open Auction Imbalance Freeze will begin one minute before the scheduled time for the Early Open Auction.

(3) Limit Orders eligible to trade in the Early Open Auction will be matched and traded at the Indicative Match Price following Auction Ranking as of the time of the Early Open Auction.

(4) The Early Open Auction trade will be designated with a modifier to identify it as an extended hour .T trade.

(c) Core Open Auction. The Core Open Auction will be conducted at the beginning of the Core Trading Session. Orders in Auction-Eligible Securities that include a designation for the Core Trading Session and that are eligible to participate in an auction will be eligible to participate in the Core Open Auction.

(1) The NYSE Arca Marketplace will begin publishing Core Open Auction Imbalance Information at 8:00 a.m. Eastern Time. The non-displayed quantity of Reserve Orders that are eligible to participate in the Core Open Auction will not be included in the Matched Volume, Total Imbalance, or Market Imbalance until the Core Open Auction Imbalance Freeze begins.

(2) Beginning one minute before the schedule time for the Core Open Auction, requests to cancel and requests to cancel and replace MOO Orders and LOO Orders will be rejected.

(3) The Core Open Auction Imbalance Freeze will begin five seconds before the scheduled time for the Core Open Auction. Order entry and cancellation will be processed during the Core Open Auction Imbalance Freeze as follows:

(A) MOO Orders and LOO Orders will be rejected.

(B) Market Orders (other than MOO Orders) and Limit Orders designated for the Core Trading Session only will be accepted but will not be included in the calculation of the Indicative Match Price or the Core Open Auction Imbalance Information. Such orders will participate in the Core Open Auction only to offset the Imbalance that is remaining after all orders entered before the Core Open Auction Imbalance Freeze, including the non-display quantity of Reserve Orders, are allocated in the Core Open Auction, and will be allocated in price-time priority under Rule 7.36-E(c) - (g) consistent with the priority ranking associated with each order.

(C) Requests to cancel and requests to cancel and replace Market Orders (other than MOO Orders) and Limit Orders designated for the Core Trading Session only will be accepted but not processed until after the Core Open Auction concludes.

(D) All other order instructions will be accepted.

(4) All orders eligible to trade in the Core Open Auction will be matched and traded at the Indicative Match Price following Auction Ranking as of the time of the Core Open Auction.

(5) The Core Open Auction trade will be designated with a modifier to identify it as a Core Open Auction trade.

(d) Closing Auction. The Closing Auction will be conducted at the end of the Core Trading Session. Orders in Auction-Eligible Securities that include a designation for the Core Trading Session and that are eligible to participate in an auction will be eligible to participate in the Closing Auction.

(1) The NYSE Arca Marketplace will begin publishing Closing Auction Imbalance Information one hour before the scheduled time for the Closing Auction. The non-displayed quantity of Reserve Orders that are eligible to participate in the Closing Auction will not be included in the Matched Volume, Total Imbalance, or Market Imbalance until the Closing Auction Imbalance Freeze begins.

(2) The Closing Auction Imbalance Freeze will begin one minute before the scheduled time for the Closing Auction. Order entry and cancellation will be processed during the Closing Auction Imbalance Freeze as follows:

    (A) LOC Orders and MOC Orders that are on the same side of the Imbalance, would flip the Imbalance, or would create a new Imbalance will be rejected.

    (B) Requests to cancel and requests to cancel and replace MOC Orders and LOC Orders will be rejected.

    (C) All other order instructions will be accepted.

(3) All orders eligible to trade in the Closing Auction will be matched and traded at the Indicative Match Price following Auction Ranking as of the time of the Closing Auction.

(4) The Closing Auction trade will be designated with a modifier to identify it as a Closing Auction trade. The Exchange will report an Official Closing Price, as defined in Rule 1.1(kk)(1), for all securities that trade on the NYSE Arca Marketplace, provided that an Official Closing Price will not be reported for a security if there were no consolidated last-sale eligible trades in such security on a trading day. Official Closing Prices determined under Rule 1.1(kk)(2) - (4) will be disseminated as provided for in that rule.

(e) Trading Halt Auction. A Trading Halt Auction will be conducted to re-open trading in an Auction-Eligible Security following a halt or pause of trading in that security in either the Early Trading Session, Core Trading Session, or Late Trading Session, as applicable. Orders that include a designation for the applicable trading session and are eligible to participate in an auction will be eligible to participate in a Trading Halt Auction.

(1) Immediately after trading in an Auction-Eligible Security is halted or paused, the NYSE Arca Marketplace will begin publishing Trading Halt Auction Imbalance Information.

(2) After trading in a security has been halted or paused, the NYSE Arca Marketplace will disseminate the estimated time at which trading in that security will re-open (the "Re-Opening Time"). The initial Re-Opening Time for a Trading Halt Auction following a trading pause under Rule 7.11-E ("Trading Pause") or trading halt due to extraordinary market volatility under Rule 7.12-E ("MWCB Halt") will be at the scheduled end of the Trading Pause or MWCB Halt.

(3) During a trading halt or pause in an Auction-Eligible Security, entry and cancellations of orders eligible to participate in the Trading Halt Auction will be processed as provided for in Rule 7.18-E(c).

(4) All orders eligible to trade in a Trading Halt Auction will be matched and traded at the Indicative Match Price following Auction Ranking as of the Re-Opening Time.

(5) A Trading Halt Auction will not be conducted if the Indicative Match Price, before being adjusted based on Auction Collars, is below (above) the Lower (Upper) Auction Collar or if there is a sell (buy) Market Imbalance (either, an "Impermissible Price").

(6) Extensions. The Re-Opening Time for a Trading Halt Auction will be extended as follows:

(A) If there is an Impermissible Price at the initial Re-Opening Time, the pause or halt will be extended an additional five minutes and a new Re-Opening Time will be disseminated ("First Extension"). The Exchange will not conduct a Trading Halt Auction before the Re-Opening Time for the First Extension.

(B) If there is an Impermissible Price at the end of the First Extension, the pause or halt will be extended an additional five minutes and a new Re-Opening Time will be disseminated ("Subsequent Extension"). The Exchange will conduct a Trading Halt Auction before the Re-Opening Time for a Subsequent Extension if the Indicative Match Price, before being adjusted based on Auction Collars, is within the applicable Auction Collars and there is no Market Imbalance.

(C) The trading pause or halt will continue to be extended if there is an Impermissible Price at the Re-Opening Time for a Subsequent Extension.

(7) Auction Collars. For securities with an Auction Reference Price above $3.00, the Price Collar Threshold for Auction Collars will be the Auction Reference Price multiplied by 5 percent. For securities with an Auction Reference Price $3.00 and below, the Price Collar Threshold for Auction Collars will be $0.15.

(A) Trading Halt Auction Reference Price. For a Trading Halt Auction following a Trading Pause, if the Limit State that preceded the Trading Pause was at the Lower (Upper) Price Band, the Auction Reference Price will be the Lower (Upper) Price Band. For all other Trading Halt Auctions, the Auction Reference Price will be as specified in paragraph (a)(8) of this Rule.

(B) Initial Auction Collars. The Auction Collar for the Trading Halt Auction at the initial Re-Opening Time will be:

(i) For a Trading Halt Auction following a Trading Pause, if the Auction Reference Price is the Lower (Upper) Price Band, the Lower (Upper) Auction Collar will be the Auction Reference Price decreased (increased) by the Price Collar Threshold, rounded down to the nearest MPV, and the Upper (Lower) Auction Collar will be the Upper (Lower) Price Band.

(ii) For a Trading Halt Auction following a MWCB Halt or regulatory halt, the Lower (Upper) Auction Collar will be the Auction Reference Price decreased (increased) by the Price Collar Threshold, rounded down to the nearest MPV.

(C) Auction Collar for Extensions. The Auction Collar on the side of the Impermissible Price will be widened for each Extension. The Auction Collar on the opposite side of the Impermissible Price will remain the same as the last-calculated Auction Collar on that side.

(i) If the Impermissible Price is on the side of the Lower (Upper) Auction Collar, the last-calculated Lower (Upper) Auction Collar will be decreased (increased) by a Price Collar Threshold and the Upper (Lower) Auction Collar will stay the same.

(ii) If the side of the Impermissible Price changes from the Lower (Upper) Auction Collar to the Upper (Lower) Auction Collar, the last-calculated Upper (Lower) Auction Collar will be widened for that Extension and the last-calculated Lower (Upper) Auction Collar will remain the same.

(8) Trading Halt Auction Imbalance Freeze: The Trading Halt Auction Imbalance Freeze will begin five seconds before the Re-Opening Time, including Re-Opening Times for each Extension. If a pause or halt is extended, the Trading Halt Auction Imbalance Freeze for the prior period will end, new orders and order instructions received during the prior period's Trading Halt Auction Imbalance Freeze will be processed, and the Exchange will accept order entry and cancellation as provided for in Rule 7.18-E(c) until the next Trading Halt Auction Imbalance Freeze. During the Trading Halt Auction Imbalance Freeze, order entry and cancellation will be processed as follows:

(A) MOO Orders and LOO Orders that are on the same side of the Imbalance, would flip the Imbalance, or would create a new Imbalance will be rejected.

(B) Market Orders (other than MOO Orders) and Limit Orders will be accepted but will not be included in the calculation of the Indicative Match Price or the Trading Halt Auction Imbalance Information. Such orders will participate in the Trading Halt Auction only to offset the Imbalance that is remaining after all orders entered before the Trading Halt Auction Imbalance Freeze, including the non-display quantity of Reserve Orders, are allocated in the Trading Halt Auction, and will be allocated in price-time priority under Rule 7.36-E(c) - (g) consistent with the priority ranking associated with each order and ahead of any IO Orders.

(C) Requests to cancel and requests to cancel and replace Market Orders, LOO Orders, Limit Orders, and IO Orders will be accepted but not processed until after the Trading Halt Auction concludes, as provided for in paragraph (h) of this Rule.

(D) All other order instructions will be accepted.

(9) Unexecuted Limit Orders: Any Limit Orders that were eligible to participate in the Trading Halt Auction but did not participate will transition to continuous trading as provided for in paragraph (h) of this Rule.

(10) If the Re-Opening Time for a Trading Halt Auction would be in the last ten minutes of trading before the end of Core Trading Hours, the Exchange will not conduct a Trading Halt Auction in that security and will not transition to continuous trading. Instead, the Exchange will remain paused and will conduct a Closing Auction in such security as provided for in paragraph (d) of this Rule. In such circumstances:

   (A) MOO Orders, LOO Orders, and IO Orders entered during the pause or halt will not participate in the Closing Auction and will expire at the end of the Core Trading Session; and

   (B) the Auction Collars for the Closing Auction for such security will be the most recently widened Auction Collars for the Trading Halt Auction that did not occur.

(11) A Trading Halt Auction that occurs during the Early Trading Session or Late Trading Session will be designated with a modifier to identify it as an extended hour .T trade. A Trading Halt Auction that occurs during the Core Trading Session will be designated with a modifier to identify it as a halt auction.

(f) IPO Auction. An IPO Auction will be conducted during the Core Trading Session on the first day of trading for any security, including a Derivative Securities Product, for which NYSE Arca is the primary listing market, excluding transfers. An IPO Auction will follow the processing rules of a Core Open Auction, provided that:

   (1) NYSE Arca Marketplace will specify the time that an IPO Auction will be conducted.

   (2) There will be no Auction Imbalance Freeze, Auction Collars, or restrictions on the entry or cancellation of orders for an IPO Auction.

   (3) An IPO Auction will not be conducted if there are only Market Orders on both sides of the market.

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

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

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

(h) Transition to Continuous Trading. After auction processing concludes, including if there is no Matched Volume and an auction is not conducted or when transitioning from one trading session to another, the Exchange will transition to continuous trading following an auction or when transitioning from one trading session to another as follows:

(1) Orders that are no longer eligible to trade, either because they are Auction-Only Orders or not eligible for the next trading session, will expire.

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

(A) An order instruction received during the Auction Imbalance Freeze, the transition to continuous trading, or the Auction Processing Period under paragraph (g)(1) of this Rule will be processed in time sequence with the processing of orders as specified in paragraphs (h)(3)(A) or (B) of this Rule if it relates to an order that was received before the Auction Processing Period. Any subsequent order instructions relating to such order will be rejected.

(B) An order instruction received during the transition to continuous trading will be processed on arrival if it relates to an order that was entered during the Auction Processing Period or the transition to continuous trading.

(3) When transitioning to continuous trading from a prior trading session or following an auction, orders will be processed as follows:

(A) A quote will be published based on unexecuted orders that were eligible to trade in the trading sessions both before and after the transition or auction, i.e., previously-live orders.

(i) Before publishing a quote when transitioning from a prior trading session or following the Early Open Auction, Core Open Auction, or Closing Auction: (1) previously-live orders that are marketable will be traded, routed, or cancelled in time sequence; (2) a new quote will be published only if different from the last-published quote; and (3) if the new published quote is worse than the previously-published quote and would lock or cross the PBBO, the display price of Limit Orders will be adjusted consistent with Rule 7.31-E(a)(2)(C).

(ii) Before publishing a quote following a Trading Halt Auction: (1) previously-live Limit Orders that are designated with a Proactive if Locked/Crossed Modifier or that would be the result of reserve interest replenishing the fully-executed display quantity of a routable Reserve Order will route, if marketable

against protected quotations on Away Markets; (2) previously-live orders that are marketable against other orders in the NYSE Arca Book and that would not trade-through a protected quotation will trade; and (3) the display price of all other orders that are marketable against a protected quotation on an Away Market will be adjusted consistent with Rule 7.31-E(a)(2)(C).

(B) Next, unexecuted orders that were not eligible to trade in the prior trading session (or were received during a halt or pause) or that were received during the Auction Processing Period, will be assigned a new working time at the end of the Auction Processing Period in time sequence relative to one another based on original entry time.

(C) When processing orders, the display price and working price of an order will be adjusted based on the PBBO or NBBO, as provided for in Rule 7.31-E.

When transitioning to continuous trading, the display price and working price of Day ISOs will be adjusted in the same manner as Arca Only Orders until the Day ISO is either traded in full or displayed at its limit price.

(i) 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 ETP Holders.

(j) For purposes of Rule 611(b)(3) of Regulation NMS, the Early Open Auction, Core Open Auction, Closing Auction, Trading Halt Auction, and IPO Auction are single-priced opening, reopening, or closing transactions and may trade through any other Away Market's Manual or Protected Quotations.

Commentary:

.01 During a Short Sale Period (as defined in Rule 7.16-E(f)):

(a) For purposes of pricing an auction and ranking orders for allocation in an auction, sell short Market Orders that are adjusted to a Permitted Price (as defined in Rule 7.16-E(f)) will be processed as Limit Orders ranked Priority 2 - Display Orders and will not be included in the Market Imbalance.

(b) Sell short orders that are included in Auction Imbalance Information, but are not eligible for continuous trading before the applicable auction, will be adjusted to a Permitted Price as the NBB moves both up and down.