Additions: <u>Underlined</u> Deletions: [Bracketed]

Rules of NYSE Arca Equities, Inc.

RULE 7 EQUITIES TRADING

Section 1: General Provisions

Rule 7.10. Clearly Erroneous Executions

- (a) *Definition*. For purposes of this Rule, the terms of a transaction executed on the Corporation 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 Corporation 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 Corporation for its own or customer account may request that the Corporation review the transaction under this Rule. An Officer of the Corporation or such other employee designee of the Corporation ("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.

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

(b) **Re-opening of Trading following a Trading Pause**. [During Phase 1 of the Plan, a Trading Pause in Tier 1 NMS Stocks subject to the requirements of the Plan, will be

subject to Plan requirements and paragraph (b)(2) of this Rule; a Trading Pause in Tier 1 NMS Stocks not yet subject to the requirements of the Plan will be subject to the requirements in paragraphs (b)(1) - (5) of this Rule; and a Trading Pause in Tier 2 NMS Stocks will be subject to the requirements set forth in paragraphs (b)(1)(B) - (5) of this Rule. Once the Plan has been fully implemented and all NMS Stocks are subject to the Plan, a Trading Pause under the Plan will be subject to only paragraphs (b)(2) of this Rule.

- (1) Between 9:45 a.m. and 3:35 p.m. Eastern Time, or in the case of an early scheduled close, 25 minutes before the close of trading, if the price of a security listed on the Corporation, other than rights and warrants, moves by a percentage specified below within a five-minute period ("Threshold Move"), as calculated pursuant to paragraph (c) below, trading in that security will immediately pause on the Corporation for a period of five minutes (a "Trading Pause").
 - (A) The Threshold Move will be 10% or more with respect to securities included in the S&P 500® Index, Russell 1000® Index, and a pilot list of Exchange Traded Products;
 - (B) The Threshold Move will be 30% or more with respect to all Tier 2 NMS Stocks with a price equal to or greater than \$1; and
 - (C) The Threshold Move will be 50% or more with respect to all Tier 2 NMS Stocks with a price less than \$1.
 - The determination that the price of a stock is equal to or greater than \$1 under paragraph (b)(i)(B) above or less than \$1 under paragraph (b)(i)(C) above will be based on the closing price on the previous trading day, or, if no closing price exists, the last sale reported to the Consolidated Tape on the previous trading day.
- (2) Re-opening of Trading following a Trading Pause.] At the end of the Trading Pause, the Corporation will re-open the security in accordance with the procedures set forth in Rule 7.35 for a Trading Halt Auction. [In the event of a significant imbalance at the end of a Trading Pause, the Corporation may delay the re-opening of a security. The Exchange will issue a notification if it cannot resume trading for a reason other than a significant imbalance.] 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.
- [(3) Calculation of Threshold Move. Every second the Corporation will calculate the Threshold Move by comparing each last consolidated sale price of a security ("Trigger Trade") during the preceding second to a reference price (the "Calculation Time"). The reference price will be any transaction in that security printed to the Consolidated Tape during the five-minute period before the Calculation Time, except for Trigger Trades in the first five minutes following

6:45 a.m., for which reference prices will begin at 6:45 a.m. Only regular way, insequence transactions qualify as either a Trigger Trade or a reference price. The Corporation can exclude a transaction price from use as a reference price or Trigger Trade if it concludes that the transaction price resulted from an erroneous execution.]

- [(4)](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 Corporation 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.
- [(5)](2) If a primary listing market issues a[n individual stock t]Trading [p]Pause, the Corporation will resume trading as provided for in Rule 7.18(a) [will pause trading in that security until trading has resumed on the primary listing market or notice has been received from the primary listing market that trading may resume. If the primary listing market does not reopen the security within 10 minutes of notification of a Trading Pause, the Corporation may resume trading the security].

Section 3: NYSE Arca Marketplace

Rule 7.31. Orders and Modifiers

- (c) Auction-Only Order. A Limit or Market Order that is to be traded only within an auction pursuant to Rule 7.35 or routed pursuant to Rule 7.34. 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.

Rule 7.35. 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:

- (3) "Auction Imbalance Freeze" means the period that begins before the scheduled time for the Early Open Auction, Core Open Auction, [or] Closing Auction, or <u>Trading Halt Auction</u>, as specified in paragraphs (b), (c), [and] (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 Corporation for an auction and includes, if applicable, the Total Imbalance, Market Imbalance, Indicative Match Price, [and] Matched Volume, Auction Reference Price, Auction Collar, Book Clearing Price, Far Clearing Price, Imbalance Freeze Indicator, and Auction Indicator.

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- (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)(7)(A))
IPO Auction	Zero, unless the Corporation is provided with a price for the security

- (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 [and Trading Halt Auction]	Closing Auction (except as provided for in Rule 7.35(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%

[* The price collar thresholds specified in this paragraph applicable to Trading Halt Auctions are in effect until January 31, 2017.]

- (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.

(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.

(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 ("Trading Pause") or trading halt due to extraordinary market volatility under Rule 7.12 ("MWCB Halt") will be at the scheduled end of the Trading Pause or MWCB Halt.

- (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(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(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.
- [(5)] (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.