

Additions: Underlined
 Deletions: [Bracketed]

Rules of NYSE Arca Equities, Inc.

Rule 7 Equities Trading

Section 3. NYSE Arca Marketplace

Rule 7.31. Orders and Modifiers

(a) Primary Order Types

(1) Market Order. An order to buy or sell a stated amount of a security that is to be executed at the NBBO when the order reaches the Corporation. Market Orders shall not trade through the NBBO or Protected Quotations. Market Orders shall be rejected if there is no contra-side bid or offer.

[(1)] (A) Trading Collar. During Core Trading Hours, including the Market Order Auction, a [m]Market [o]Order to buy (sell) will not execute or route to another market center at a price above (below) the Trading Collar. Trading [c]Collars will not apply to [l]Limit [o]Orders.

[(2)] (B) 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 paragraph (c)(1) of Rule 7.10 (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, and the lower boundary is the consolidated last sale price decreased by the specified percentage. 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.

[(3)] (C) Handling of Market Orders when a Trading Collar is triggered:

[(A)] (i) Exchange systems will hold a buy (sell) [m]Market [o]Order(s) or portions thereof that would execute above (below) the Trading Collar [(unless marked IOC)] until (i) additional opportunities for execution consistent with the Trading Collar restriction become available, either on the Corporation or on other automated trading centers, or (ii) a new Trading Collar is calculated and the remaining portion of the order(s) is then able to execute or route at prices consistent with the new Trading Collar.

[(B)] (ii) Multiple [m]Market [o]Orders that become restricted by the Trading Collar will be ranked in time priority. Any [m]Market [o]Order that becomes restricted by the Trading Collar will not be displayed.

[(b)] (2) Limit Order. An order to buy or sell a stated amount of a security at a specified price or better. A "marketable" [l]Limit [o]Order is a [l]Limit [o]Order to buy (sell) at or above (below) the contra-side PBBO for the security.

[(1)] (A) A [l]Limit [o]Order will not trade-through, lock or cross Protected Quotations except as provided in Rule 7.37(g)(1).

[(2)] (B) Limit Order Price Protection. A [l]Limit [o]Order will be rejected if it is priced a specified percentage away from the contra-side national best bid ("NBB") or national best offer ("NBO"). The specified percentage is equal to the corresponding "numerical guideline" percentage set forth in paragraph (c)(1) of Rule 7.10 (Clearly Erroneous Executions) for the Core Trading Session. Limit Order Price Protection will not be applied to [l]Limit [o]Orders entered before Core Trading Hours that are designated for the Core Trading Session or the Market Order Auction.

(3) Inside Limit Order. A Limit Order, which, if routed away pursuant to Rule 7.37(d), will be routed to the contra-side NBBO. Any unfilled portion of the order will not be routed to the next best price level until all quotes at the current contra-side NBBO are exhausted. Once each contra-side NBBO is exhausted, Exchange systems will display the order at that contra-side NBBO price and wait until the updated contra-side NBBO is displayed. If the updated contra-side NBBO is within the limit price of the Inside Limit Order, the Exchange will route to that single price point and continue such assessment at each new contra-side NBBO until the order is filled or no longer marketable. If the order is no longer marketable it will be ranked in the NYSE Arca Book pursuant to Rule 7.36.

(A) An Inside Limit Order is "marketable" when it is priced to buy (sell) at or above (below) the NBBO for the security.

(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 will not trade through the NBBO or Protected Quotations.

(D) An Inside Limit Order may not be designated as a Discretionary Order or as IOC, but may be designated as NOW.

[(c)] (b) Time in Force Modifiers

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

(2) Open Modifiers

(A) *Good Till Cancelled ("GTC") Modifier.* Any order to buy or sell (or unexecuted portion thereof) designated with a GTC Modifier if not executed, will remain in effect until executed, cancelled by the entering party, or expiration, whichever comes first. All unexecuted portions of orders designated with a GTC Modifier will be cancelled by the Corporation one year after initial entry.

(B) *Good Till Date ("GTD") Modifier.* Any order to buy or sell (or unexecuted portion thereof) designated with a GTD Modifier will be set to expire following the close of the core session of the pre-determined date specified by the entering party and, if not executed, will remain in effect until executed, cancelled by the entering party, or expiration, whichever comes first. All unexecuted portions of orders designated with a GTD Modifier will be cancelled by the Corporation one year after initial entry.

(3) Immediate-or-Cancel ("IOC") Modifier. A []Limit []Order designated with an IOC Modifier is to be executed in whole or in part as soon as such order is received, and the portion not so executed is to be treated as cancelled. An order designated with an IOC Modifier does not route. The IOC Modifier will override any posting or routing instructions of orders that include the IOC Modifier.

(4) Fill-or-Kill ("FOK") Modifier. A []Limit []Order designated FOK is to be executed in full as soon as such order is received. If execution is not possible, the entire order will be immediately cancelled. Orders designated FOK will not route out of NYSE Arca to other market centers.

(A) Users may specify a minimum executable size for an order designated FOK, no less than 100 shares. If Users do not specify a minimum executable size, then the order designated FOK will be executed in its entirety or immediately cancelled. An order designated FOK with a specified minimum executable size will execute only against orders that (in aggregate) meet its minimum executable size. Any remaining unexecuted portion of an order designated FOK will be immediately cancelled. An order designated FOK and a minimum executable size that cannot be immediately executed at its minimum size will be immediately cancelled in its

entirety.

(5) NOW Modifier. A Limit Order designated with a NOW Modifier is to be executed in whole or in part on the Corporation, and the portion not so executed shall be routed pursuant to Rule 7.37(d). Any portion not immediately executed by the NOW Recipient shall be cancelled. If an order designated NOW is not marketable when it is submitted to the Corporation, it shall be cancelled. An order designated NOW, if routed away pursuant to Rule 7.37(d), will be routed to all available quotations in the routing determination, including Protected Quotations. The NOW Modifier will override any posting or routing instructions of orders that include the NOW Modifier.

(c) Auction-Only Order. A Limit or Market Order that is to be executed within an Auction and, if not executed in the auction that it participates in, the balance of the order is cancelled. This order is only available for auctions that take place on the Exchange and the Exchange shall reject any Auction-Only Orders in securities that are not eligible for an auction on the Exchange or if an auction is suspended pursuant to NYSE Arca Equities Rule 7.35(g). Auction-Only Orders are not routed to other exchanges.

(1) A Limit-on-Open Order ("LOO Order"). A LOO Order is a Limit Order that is to be executed only during the Market Order Auction.

(2) A Market-on-Open Order ("MOO Order"). A MOO Order is a Market Order that is to be executed only during the Market Order Auction.

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

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

[(d) Inside Limit Order. A Limit Order, which, if routed away pursuant to Rule 7.37(d), will be routed to the market participant with the best displayed price. Any unfilled portion of the order will not be routed to the next best price level until all quotes at the current best bid or offer are exhausted. Once each current best bid or offer is exhausted, Exchange systems will reevaluate the next best displayed price and route to that single price point and continue such assessment at each new best displayed price level until the order is filled or no longer marketable. If the order is no longer marketable it will be ranked in the NYSE Arca Book pursuant to Rule 7.36. An Inside Limit Order is "marketable" when it is priced to buy (sell) at or above (below) the NBBO for the security. 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. An Inside Limit Order will not trade through the NBBO or Protected Quotations. An Inside Limit Order may not be designated as a Discretionary Order.

(e) Reserved.

(f) Tracking Order.

An undisplayed, priced round lot order that is eligible for execution in the Tracking Order Process against orders equal to or less than the aggregate size of Tracking Order interest available at that price. An ETP Holder may specify a minimum executable size for a Tracking Order. If a Tracking Order with a minimum size requirement is executed but not exhausted and the remaining portion of the order is less than the minimum size requirement, the Tracking Order shall be cancelled. If a Tracking Order is executed but not exhausted, the remaining portion of the order shall continue to repost in the Tracking Order Process, and shall be assigned a new time priority upon each reposting, until either the total posted size is exhausted or the Tracking Order is cancelled by the submitting ETP Holder. A Tracking Order shall not trade-through a Protected Quotation. STP Modifiers are ignored for Tracking Orders.

(g) Reserved.]

[(h)] (d) Working Order. Any order with a conditional or undisplayed price and/or size designated as a "Working Order" by the Corporation, including, without limitation:

[(1)] All-or-None Order ("AON"). A limit order which is to be executed in its entirety or not at all. A limit order marked as AON will not trade through a Protected Quotation.]

[(2)] (1) Discretionary Order. A[n] Limit [o]Order to buy or sell a stated amount of a security at a specified, undisplayed price (the "discretionary price"), in addition to at a specified, displayed price ("displayed price."). Discretionary Orders to sell short or designated IOC shall be rejected.

[(3)] (2) Reserve Order. A [l]Limit [o]Order with a portion of the size displayed and with a reserve portion of the size ("reserve size") that is not displayed on the Corporation. [A]The display quantity of a Reserve Order must be in round lots. A Reserve Order [and] cannot be combined with an order type that could never be displayed on the Corporation and may not be designated IOC. A Reserve Order [Order] shall not lock, cross or trade-through a Protected Quotation.

[(4)] (3) Passive Liquidity Order. An Inside Limit [o]Order to buy or sell a stated amount of a security at a specified, undisplayed price. Passive Liquidity Orders will not route and will be executed in the Working Order Process after all other Working Orders except undisplayed discretionary order interest. Passive Liquidity Orders with a price superior to that of displayed orders will have price priority and will execute ahead of inferior priced displayed orders in the Display Order Process. [A Passive Liquidity Order must be designated as an Inside Limit Order.] A Passive Liquidity Order designated IOC shall be rejected.

[(5)] (4) Mid-Point Passive Liquidity Order ("MPL Order"). A [Passive Liquidity] Limit Order priced at the midpoint of the PBBO and not displayed. An order designated as an MPL Order will not route or trade-through a Protected Quotation. The MPL order shall have a minimum order entry size of one share. MPL Orders entered without a limit price or with a FOK modifier shall be rejected.

(A) Users may specify a minimum executable size for an MPL Order, no less than one share. An MPL Order with a specified minimum executable size will execute against an incoming order that meets the minimum executable size and is priced at or better than the midpoint of the PBBO. Should the leaves quantity become less than the minimum size, the minimum size restriction will no longer be enforced on executions. If an incoming marketable order does not meet an MPL Order's minimum executable size condition, the incoming order will not execute against and may trade through such MPL Order.

(B) If the market is locked or crossed, the MPL Order will wait for the market to unlock or uncross before becoming eligible to trade again.

(C) MPL Orders will be ranked in time priority for the purposes of execution as long as the midpoint is within the limit range of the order. MPL Orders always execute at the midpoint and do not receive price improvement. MPL Orders are valid for any session, but do not participate in any auctions. [MPL Orders will not be exclusive to LMMs where NYSE Arca is the primary listings market.]

(D) Users may mark incoming []Limit []Orders with a "No Midpoint Execution" modifier; so marked, those []Limit []Orders will ignore MPL Orders and trade against the rest of the book in the ordinary course. [MPL Orders will not route out of NYSE Arca to other market centers.]

(E) A User may designate an MPL Order as an ALO Order ("MPL-ALO Order"). [MPL Orders entered without a limit price or with a FOK modifier shall be rejected.]

(5) MPL Order immediate-or-cancel ("MPL-IOC Order"). An MPL Order priced at the midpoint of the PBBO when entered that is designated IOC. Subject to such IOC instructions, MPL-IOC Orders shall follow the same execution and priority rules as an MPL Order, provided, however, (i) an MPL-IOC Order shall have a minimum order entry size of one round lot and (ii) if the market is locked or crossed, the MPL-IOC Order will cancel. An MPL-IOC Order with a minimum executable size that cannot be met upon arrival shall be rejected.

[(i)] Reserved.

[(j)] Reserved.

[(k)] Q Order.

(1) A "Q Order" is 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 Corporation shall specify.

(A) A Market Maker may instruct the NYSE Arca Marketplace before 6:28 am (Pacific Time) to enter a Q Order on their behalf as follows:

(1) At the last price and size entered by the Market Maker during the previous trading day, either including or excluding reserve size;

(2) At a specified percentage from the best bid or offer;

(3) Reserved.

(B)(1) Reserved.

(2) Upon execution of a Q Order, the Market Maker will then be responsible for immediately posting a new Q order.

(2) Auto Q Order. A Q Order may be designated as an Auto Q Order that would automatically repost a Q Order after an execution in the NYSE Arca Marketplace book at a designated increment and for the same amount of shares. After an execution, the Auto Q Order would continue to repost in the NYSE Arca Marketplace book pursuant to Rule 7.36 and would be assigned a new price time priority as of the time of each reposting at the determined increment and size until the total tradable size threshold is reached. When entering an Auto Q Order, a Market Maker would establish the following parameters: (i) price; (ii) size; (iii) buy or sell; (iv) increment update; and (v) total tradable size.

(3) Q Orders, Auto Q Orders and Reserve Q Orders shall not lock, cross or trade-through Protected Quotations.

(4) Q Orders designated as Intermarket Sweep Orders, that are marketable, or are an odd-lot size shall be rejected.

Nothing in this Rule shall be construed to relieve a Market Maker of any of its obligations pursuant to Rule 7.23.

(l) Reserved.

(m) Reserved.

(n) Do Not Reduce Modifier. Any limit order to buy designated with the Do Not Reduce Modifier will not be reduced by the amount of an ordinary cash dividend on the ex-dividend date. The Do Not Reduce Modifier applies only to ordinary cash dividends; it should be reduced for other distributions such as when a stock goes "ex" a stock dividend

or ex rights.

(o) Do Not Increase Modifier. Any limit order to buy designated with the Do Not Increase Modifier will not be increased in shares on the ex-date as a result of a stock dividend or stock distribution.

(p) Reserved.

(q) Reserved.

(r) Reserved.

(s) Cross Order. A two-sided order designated IOC with instructions to match the identified buy-side with the identified sell-side at a specified price (the "cross price"). The Corporation will cancel a Cross Order at the time of order entry if:

- (1) the cross price is marketable against the BBO; or
- (2) the cross price would cause an execution at a price that trades through the PBBO, except as provided in Rule 7.37; or
- (3) the cross price is between the BBO and does not improve the BBO by the minimum price increment pursuant to Rule 7.6(a).

(t) Auction-Only Order. A limit or market order that is to be executed within an Auction and, if not executed in the auction that it participates in, the balance of the order is cancelled. This order is only available for auctions that take place on the Exchange. Auction-Only orders are not routed to other exchanges. The Corporation accepts the following Auction-Only Orders:

- (1) A Limit-on-Open Order ("LOO Order") is an Auction-Only Limit Order that is to be executed only during the Market Order Auction. Any portion of a LOO Order that remains unfilled after completion of the Market Order Auction shall be cancelled.
- (2) A Market-on-Open Order ("MOO Order") is an Auction-Only Market Order that is to be executed only during the Market Order Auction. Any portion of a MOO Order that remains unfilled after completion of the Market Order Auction shall be cancelled.
- (3) Limit-on-Close Order ("LOC") is an Auction-Only Limit Order that is to be executed only during the Closing Auction. The Corporation will reject LOC Orders in the following circumstances: (i) in securities for which the Corporation is not the primary market; or (ii) when the auction is suspended pursuant to NYSE Arca Equities Rule 7.35(g).

(4) Market-on-Close Order ("MOC") is an Auction-Only Market Order that is to be executed only during the Closing Auction. The Corporation will reject MOC Orders in the following circumstances: (i) in securities for which the Corporation is not the primary market; or (ii) when the auction is suspended pursuant to NYSE Arca Equities Rule 7.35(g).

(u) Reserved.

(v) NOW Order. A Limit Order that is to be executed in whole or in part on the Corporation, and the portion not so executed shall be routed pursuant to Rule 7.37(d) only to one or more NOW Recipients for immediate execution as soon as the order is received by the NOW Recipient. Any portion not immediately executed by the NOW Recipient shall be cancelled. If a NOW Order is not marketable when it is submitted to the Corporation, it shall be cancelled. A NOW Order if routed away pursuant to Rule 7.37(d), will be routed to Protected Quotations. Combining a NOW Order with another order type will override any posting or routing instructions of such an order, and the combination will operate as a NOW Order. NOW Orders entered with a Reserve or Market modifier will be rejected.

(w) PNP Order (Post No Preference). A limit order to buy or sell that is to be executed in whole or in part on the Corporation, and the portion not so executed is to be ranked in the NYSE Arca Book, without routing any portion of the order to another market center; provided, however, the Corporation shall cancel a PNP Order that would trade-through, lock or cross the Protected Quotation. A PNP Order marked as an Intermarket Sweep Order may lock and cross and trade-through Manual and Protected Quotations, but only if the User has complied with Rule 7.37(e)(3)(C). A PNP Inside Limit Order shall not lock or cross Manual Quotations.

(x) Primary Only Order (PO Order). A market or limit order that is to be routed to the primary market. PO Orders may be entered at any time or until a cut-off time as determined from time to time by the Corporation. The PO Order shall be Day or IOC only, and may not be designated as GTC, a Reserve Order, or as an ISO. If the PO Order is not IOC, the order is not returned to the entering party and remains at the venue routed to, until executed or cancelled. For PO Orders routed to the NYSE or NYSE MKT, the Exchange designates the orders as Do Not Ship ("DNS"), a designation specific to the NYSE and NYSE MKT, which restricts the NYSE or NYSE MKT from routing the order to away market centers. Users may choose to override the DNS designation. If Users choose to override the DNS designation, PO Orders routed to the NYSE or NYSE MKT will remain at the NYSE or NYSE MKT until executed, routed away, or cancelled.

PO Orders routed to the NYSE or NYSE MKT that are designated as Market on Close ("MOC") or Limit on Close ("LOC") may not be electronically cancelled or reduced in size after 3:45 PM ET, or in the case of an early scheduled close, 15 minutes before the close. Electronic submissions after 3:45 PM ET (or in the case of an early scheduled close, 15 minutes before the close) to cancel or reduce in size a PO Order that has been routed to the NYSE or NYSE MKT and designated as MOC or LOC will be

automatically rejected and must be entered manually.

- (1) A PO Order entered for participation in the primary market opening must be entered before 6:28 am (Pacific Time).
- (2) A PO Order entered for participation in the primary market re-opening after a trading halt must be entered after trading was halted on the Corporation and before the Re-Opening Time. The PO Order will not be included in the Trading Halt Auction.
- (3) A PO Order entered for participation in the primary market, other than for participation in the primary market opening or primary market re-opening, must be marked with the modifier PO+.

(y) Reserved.

(z) Reserved.

(aa) Reserved.

(bb) Reserved.

(cc) Pegged Order. A limit order to buy or sell a stated amount of a security at a display price set to track the current bid or ask of the NBBO in an amount specified by the User. The tracking of the relevant Consolidated Quote information for Pegged Orders will occur on a real-time basis. The associated price of each Pegged Order that is updated will be assigned a new entry time with priority in accordance with Rule 7.36(a). A Pegged Order may be designated as a Reserve Order or Discretionary Order. The displayed price of a Pegged Order designated as a Discretionary Order will be used to reflect changes in the NBBO (the discretionary price of a Pegged Order will re-price based on the corresponding change in the displayed price). Pegged Orders may only be entered during the Core Trading Session. If an NBBO does not exist at the time of entry, a Pegged Order shall be rejected. A Pegged Order to sell short entered during a Short Sale Period, as defined in Rule 7.16(f)(iv), shall be rejected. Pegged Orders are priced according to which type of Pegged Order the User designates, as follows:

- (1) Market Pegged Order. A buy order that is pegged to the National Best Offer or a sell order that is pegged to the National Best Bid. To avoid locking the market, an offset value is required.
- (2) Primary Pegged Order. A buy order that is pegged to the National Best Bid or a sell order that is pegged to the National Best Offer. An offset value is permitted on a Primary Pegged Order, but is not required.

The offset value for Pegged Orders may be specified up to two decimals.

(dd) Reserved.

(ee) Reserved.

(ff) Reserved.

(gg) Reserved.

(hh) Proactive if Locked Modifier. A limit order designated with a Proactive if Locked Modifier will route to another market center pursuant to NYSE Arca Equities Rule 7.37(d) for the away market's displayed size in the instance in which the other market center has locked the order and the locking market has not resolved the locked market situation in a timely manner based upon average response times from other market centers. In the event that the order routed from the NYSE Arca Marketplace to the other market center is not executed in its entirety, the NYSE Arca Marketplace shall post the order or portion thereof in the NYSE Arca Marketplace Book. Proactive if Locked Modifier will apply only to exchange-listed securities.

(ii) Reserved.

(jj) Intermarket Sweep Order ("ISO"). An ISO means a limit order for an NMS stock that meets the requirements of Rule 600(b)(30) of Regulation NMS under the Securities Exchange Act. An ISO is never routed to an away market and may trade through Protected Quotations. Any inbound order received over NMS Linkage will constitute an Intermarket Sweep Order. Users shall be responsible for compliance with SEC Rule 611 of Regulation NMS and NYSE Arca Rule 7.37(e) with respect to Intermarket Sweep Orders. Any order marked ISO will not be rejected or cancelled if it would lock, cross, or be marketable against an away market.

(kk) Primary Sweep Orders ("PSO"). A PO Order that first sweeps the Arca book. A PSO may be entered at any time. The PSO shall be Day or IOC only, and may not be designated as GTC or as an ISO.

- (1) After sweeping the Arca book, the PSO (or any unexecuted portion thereof) shall be routed directly to the primary market. If the order is not IOC, the order is not returned to the book and remains at the venue routed to, until executed or cancelled. For PSO Orders routed to the NYSE or NYSE MKT, the Exchange designates the orders as Do Not Ship ("DNS"), a designation specific to the NYSE and NYSE MKT, which restricts the NYSE or NYSE MKT from routing the order to away market centers. Users may choose to override the DNS designation. If Users choose to override the DNS designation, PSO Orders routed to the NYSE or NYSE MKT will remain at the NYSE or NYSE MKT until executed, routed away, or cancelled.

(ll) Reserved.

(mm) PNP (Post No Preference) Blind. A PNP order that, if, at the time of entry, would create a violation of Rule 610(d) of Regulation NMS by locking or crossing the protected quotation of an external market or would cause a violation of Rule 611 of Regulation NMS shall be priced to the current best protected offer (“PBO”) (for bids) or to the current best protected bid (“PBB”) (for offers) and displayed at one minimum price variation (“MPV”) below the current PBO (for bids) or above the current PBB (for offers). A PNP Blind order will retain its original limit price irrespective of the prices at which such order is priced and displayed. A PNP Blind order combined with an ALO order will not be cancelled if it is marketable against the PBBO.

- (1) If the PBO (PBB) re-prices higher (lower), a PNP Blind order to buy (sell) shall be re-priced to the updated PBO (PBB) and re-displayed one MPV below (above) the updated PBO (PBB) until it reaches its limit price. If the PBO (PBB) re-prices to be equal to or lower (higher) than the last displayed price of a PNP Blind order to buy (sell), the PNP Blind order shall remain priced and displayed at its last displayed price. If the PBBO changes such that a PNP Blind order would not lock or cross the PBBO of an external market, the order will be displayed as a PNP limit order.
- (2) PNP Blind orders are governed by the Exchange's Display Order Process set forth in Rule 7.36. Marketable contra orders will execute first against PNP Blind orders, only at superior prices, then the rest of the book. All PNP Blind orders that are re-priced and re-displayed will retain their priority as compared to other PNP Blind orders based upon the time such orders were initially received by the Exchange, regardless of the price of the order.

(nn) Adding Liquidity Only Order (“ALO” Order). A limit order that is accepted and placed in the NYSE Arca book only where the order adds liquidity to the NYSE Arca book, except as provided for in section (nn)(3). Once accepted and placed in the NYSE Arca book, ALO Orders will not route to an away market center. The ALO Order shall be designated as Day only, and must be designated as either a PNP or MPL order. ALO Orders will be rejected where, at the time of entry:

- (1) the ALO Order is marketable, except as provided for in section (nn)(3);
- (2) the ALO Order will lock or cross the market; or
- (3) the ALO Order would interact with un-displayed orders on NYSE Arca, except that ALO Orders will ignore MPL Orders and proceed to be placed in the NYSE Arca Book and could lock another MPL or MPL-ALO Order unless the User specifies that an MPL Order or MPL-ALO Order may execute against an arriving marketable MPL-ALO Order.]

(e) Orders with Instructions Not to Route

- (1) Adding Liquidity Only Order (“ALO”). A Limit Order that is accepted and placed in the NYSE Arca book only where the order adds liquidity to the NYSE Arca book,

except as provided for in section (e)(1)(C). Once accepted and placed in the NYSE Arca book, ALO Orders will not route to an away market center. The ALO Order shall be designated as Day only, must be designated as either a PNP (including PNP Blind) or MPL Order. ALO Orders will be rejected where, at the time of entry:

(A) the ALO Order is marketable, except as provided for in section (e)(1)(c);

(B) the ALO Order will lock or cross the market; or

(C) the ALO Order would interact with un-displayed orders on NYSE Arca, except that ALO Orders will ignore MPL Orders and proceed to be placed in the NYSE Arca Book and could lock another MPL or MPL-ALO Order unless the User specifies that an MPL Order or MPL-ALO Order may execute against an arriving marketable MPL-ALO Order.

(2) Intermarket Sweep Order ("ISO"). An ISO means a Limit Order for an NMS stock that meets the requirements of Rule 600(b)(30) of Regulation NMS under the Securities Exchange Act. An ISO is never routed to an away market and may trade through Protected Quotations. Any inbound order received over NMS Linkage will constitute an Intermarket Sweep Order. Users shall be responsible for compliance with SEC Rule 611 of Regulation NMS and NYSE Arca Rule 7.37(e) with respect to Intermarket Sweep Orders. Any order marked ISO will not be rejected or cancelled if it would lock, cross, or be marketable against an away market.

(3) PNP Order (Post No Preference). A Limit Order to buy or sell that is to be executed in whole or in part on the Corporation, and the portion not so executed is to be ranked in the NYSE Arca Book, without routing any portion of the order to another market center; provided, however, the Corporation shall cancel a PNP Order that would trade-through, lock or cross the Protected Quotation. A PNP Order marked as an ISO may lock and cross and trade-through Manual and Protected Quotations, but only if the User has complied with Rule 7.37(e)(3)(C).

(4) PNP (Post No Preference) Blind. A PNP Order that, if, at the time of entry, would create a violation of Rule 610(d) of Regulation NMS by locking or crossing the protected quotation of an external market or would cause a violation of Rule 611 of Regulation NMS shall be priced to the current best protected offer ("PBO") (for bids) or to the current best protected bid ("PBB") (for offers) and displayed at one minimum price variation ("MPV") below the current PBO (for bids) or above the current PBB (for offers). A PNP Blind order will retain its original limit price irrespective of the prices at which such order is priced and displayed. A PNP Blind order combined with an ALO order will not be cancelled if it is marketable against the PBBO and may not be designated as a Reserve Order.

(A) If the PBO (PBB) re-prices higher (lower), a PNP Blind order to buy (sell) shall be re-priced to the updated PBO (PBB) and re-displayed one MPV below (above) the updated PBO (PBB) until it reaches its limit price. If the PBO (PBB) re-prices

to be equal to or lower (higher) than the last displayed price of a PNP Blind order to buy (sell), the PNP Blind order shall remain priced and displayed at its last displayed price. If the PBBO changes such that a PNP Blind order would not lock or cross the PBBO of an external market, the order will be displayed as a PNP limit order.

(B) PNP Blind orders are governed by the Exchange's Display Order Process set forth in Rule 7.36. Marketable contra orders will execute first against PNP Blind orders, only at superior prices, then the rest of the book. All PNP Blind orders that are re-priced and re-displayed will retain their priority as compared to other PNP Blind orders based upon the time such orders were initially received by the Exchange, regardless of the price of the order.

(5) Cross Order. A two-sided order designated IOC with instructions to match the identified buy-side with the identified sell-side at a specified price (the "cross price"). The Corporation will cancel a Cross Order at the time of order entry if:

(A) the cross price is marketable against the BBO; or

(B) the cross price would cause an execution at a price that trades through the PBBO, except as provided in Rule 7.37; or

(C) the cross price is between the BBO and does not improve the BBO by the minimum price increment pursuant to Rule 7.6(a).

(6) Tracking Order. An undisplayed, priced round lot order that is eligible for execution in the Tracking Order Process against a contra-side order that is eligible to route pursuant to Rule 7.37(d) and is equal to or less than the size of a resting Tracking Order. An ETP Holder may specify a minimum executable size for a Tracking Order. If a Tracking Order with a minimum size requirement is executed but not exhausted and the remaining portion of the order is less than the minimum size requirement, the Tracking Order shall be cancelled. If a Tracking Order is executed but not exhausted, the remaining portion of the order shall continue to repost in the Tracking Order Process, and shall be assigned a new time priority upon each reposting, until either the total posted size is exhausted or the Tracking Order is cancelled by the submitting ETP Holder. A Tracking Order will execute at the price of the same-side NBBO provided that such price shall not trade-through a Protected Quotation or the price of the Tracking Order. STP Modifiers are ignored for Tracking Orders.

(f) Orders with Specific Routing Instructions

(1) Primary Only Order (PO Order). A Market or Limit Order that is to be routed to the primary market. PO Orders may be entered at any time or until a cut-off time as determined from time to time by the Corporation. The PO Order shall be Day or IOC only, and may not be designated as GTC, a Reserve Order, or as an ISO. If the PO

Order is not IOC, the order is not returned to the entering party and remains at the venue routed to, until executed or cancelled. For PO Orders routed to the NYSE or NYSE MKT, the Exchange designates the orders as Do Not Ship ("DNS"), a designation specific to the NYSE and NYSE MKT, which restricts the NYSE or NYSE MKT from routing the order to away market centers. Users may choose to override the DNS designation. If Users choose to override the DNS designation, PO Orders routed to the NYSE or NYSE MKT will remain at the NYSE or NYSE MKT until executed, routed away, or cancelled.

PO Orders routed to the NYSE or NYSE MKT that are designated as Market on Close ("MOC") or Limit on Close ("LOC") may not be electronically cancelled or reduced in size after 3:45 PM ET, or in the case of an early scheduled close, 15 minutes before the close. Electronic submissions after 3:45 PM ET (or in the case of an early scheduled close, 15 minutes before the close) to cancel or reduce in size a PO Order that has been routed to the NYSE or NYSE MKT and designated as MOC or LOC will be automatically rejected and must be entered manually.

(A) A PO Order entered for participation in the primary market opening must be entered before 6:28 am (Pacific Time).

(B) A PO Order entered for participation in the primary market re-opening after a trading halt must be entered after trading was halted on the Corporation and before the Re-Opening Time. The PO Order will not be included in the Trading Halt Auction.

(C) A PO Order entered for participation in the primary market, other than for participation in the primary market opening or primary market re-opening, must be marked with the modifier PO+.

[(oo)] (2) Primary Until 9:45 Order. A[n] Limit Order entered for participation on the primary market until 9:45 am Eastern Time (6:45 am Pacific Time) after which time the order is cancelled on the primary market and entered on the NYSE Arca Book. The Primary Until 9:45 Order may be Day only and may not be designated as GTC or GTD. Orders that return to the NYSE Arca Book after routing to the primary market will retain their original order attributes.

[(pp)] (3) Primary After 3:55 Order. A[n] Limit Order entered for participation on the Exchange until 3:55 pm Eastern Time (12:55 pm Pacific Time) after which time the order is cancelled on the Exchange and an order is entered for participation on the primary market. The Primary After 3:55 Order may be Day only and may not be designated as GTC or GTD. Orders that route to the primary market at 3:55 pm Eastern Time will retain their original order attributes.

(g) Additional Order Instructions and Modifiers:

(1) Pegged Order. A Limit Order to buy or sell a stated amount of a security at a display price set to track the current bid or ask of the NBBO in an amount specified by the User. The tracking of the relevant Consolidated Quote information for Pegged Orders will occur on a real-time basis. The associated price of each Pegged Order that is updated will be assigned a new entry time with priority in accordance with Rule 7.36(a). A Pegged Order may be designated as a Reserve Order or Discretionary Order. The displayed price of a Pegged Order designated as a Discretionary Order will be used to reflect changes in the NBBO (the discretionary price of a Pegged Order will re-price based on the corresponding change in the displayed price). Pegged Orders may only be entered during the Core Trading Session. If an NBBO does not exist at the time of entry, a Pegged Order shall be rejected. A Pegged Order to sell short entered during a Short Sale Period, as defined in Rule 7.16(f)(iv), shall be rejected. Pegged Orders are priced according to which type of Pegged Order the User designates, as follows:

(A) Market Pegged Order. A buy order that is pegged to the National Best Offer or a sell order that is pegged to the National Best Bid. To avoid locking the market, an offset value is required.

(B) Primary Pegged Order. A buy order that is pegged to the National Best Bid or a sell order that is pegged to the National Best Offer. An offset value is permitted on a Primary Pegged Order, but is not required.

The offset value for Pegged Orders may be specified up to two decimals.

(2) Proactive if Locked Modifier. A Limit Order designated with a Proactive if Locked Modifier will route to another market center pursuant to NYSE Arca Equities Rule 7.37(d) for the away market's displayed size in the instance in which the other market center has locked the order and the locking market has not resolved the locked market situation in a timely manner based upon average response times from other market centers. In the event that the order routed from the NYSE Arca Marketplace to the other market center is not executed in its entirety, the NYSE Arca Marketplace shall post the order or portion thereof in the NYSE Arca Marketplace Book. Proactive if Locked Modifier will apply only to exchange-listed securities.

(3) Do Not Reduce Modifier. Any Limit Order to buy designated with the Do Not Reduce Modifier will not be reduced by the amount of an ordinary cash dividend on the ex-dividend date. The Do Not Reduce Modifier applies only to ordinary cash dividends; it should be reduced for other distributions such as when a stock goes "ex" a stock dividend or ex rights.

(4) Do Not Increase Modifier. Any Limit Order to buy designated with the Do Not Increase Modifier will not be increased in shares on the ex-date as a result of a stock dividend or stock distribution.

[(qq)] (5) Self Trade Prevention Modifier ("STP"). Any incoming order designated with an STP modifier will be prevented from executing against a resting opposite side order 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 as defined by Rule 7.35.

- [1)] (A) STP Cancel Newest ("STPN"). An incoming order marked with the STPN modifier will not execute against opposite side resting interest 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.
- [2)] (B) STP Cancel Oldest ("STPO"). An incoming order marked with the STPO modifier will not execute against opposite side resting interest 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.
- [3)] (C) STP Decrement and Cancel ("STPD"). An incoming order marked with the STPD modifier will not execute against opposite side resting interest 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 Holders. If the orders are not equivalent in size, the equivalent size will be cancelled back to the originating ETP Holders and the larger order will be decremented by the size of the smaller order with the balance remaining on the NYSE Arca Book.
- [4)] (D) STP Cancel Both ("STPC"). An incoming order marked with the STPC modifier will not execute against opposite side resting interest 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.

(h) 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 Corporation shall specify.

(1) A Market Maker may instruct the NYSE Arca Marketplace before 6:28 am (Pacific Time) to enter a Q Order on their behalf as follows:

(A) At the last price and size entered by the Market Maker during the previous trading day, either including or excluding reserve size; or

(B) At a specified percentage from the best bid or offer.

(C) Upon execution of a Q Order, the Market Maker will then be responsible for immediately posting a new Q order.

(2) Auto Q Order. A Q Order may be designated as an Auto Q Order that would automatically repost a Q Order after an execution in the NYSE Arca Marketplace book at a designated increment and for the same amount of shares. After an execution, the Auto Q Order would continue to repost in the NYSE Arca Marketplace book pursuant to Rule 7.36 and would be assigned a new price time priority as of the time of each reposting at the determined increment and size until the total tradable size threshold is reached. When entering an Auto Q Order, a Market Maker would establish the following parameters: (i) price; (ii) size; (iii) buy or sell; (iv) increment update; and (v) total tradable size.

(3) Q Orders, Auto Q Orders and Reserve Q Orders shall not route, lock, cross or trade-through Protected Quotations.

(4) Q Orders designated as Intermarket Sweep Orders, that are marketable, or are an odd-lot size shall be rejected.

(5) Nothing in this Rule shall be construed to relieve a Market Maker of any of its obligations pursuant to Rule 7.23.

[(rr) Reserved.]

Supplementary Material:

.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 Exchange's book, the instructions governing functionality while incoming will be operative upon arrival. Functionality governing how the order operates while resting on the Exchange's book will govern any remaining balance of the order that is not executed upon arrival.

Rule 7.35. Auctions

(a) Order Entry and Cancellation Before Opening Auction

(1) Users may submit any orders to the NYSE Arca Marketplace beginning 30 minutes prior to the Opening Session. Any such [Limited Price] Limit Orders designated for the Opening Session will be queued until 1:00 am (Pacific Time) at which time they will be eligible to be executed pursuant to paragraph (b) of this Rule. Any such

[m]Market [o]Orders will be queued until the Market Order Auction at which time they will be executed pursuant to paragraph (c) of this Rule.

- (2) Only [Limited Priced] Limit Orders designated for the Opening Session will be eligible for the Opening Auction. Market [o]Orders entered before the Opening Auction or during the Opening Session will participate in the Market Order Auction. [Limited Price] Limit Orders designated for the Core Trading Session and not designated for the Opening Session will become eligible for execution at the commencement of the Market Order Auction pursuant to Rule 7.35(c).
- (3) Beginning 30 minutes prior to the Opening Session, and various times thereafter as determined from time to time by the Corporation, the Indicative Match Price of the Opening Auction, and any Imbalance associated therewith, shall be published via electronic means as determined from time to time by the Corporation.
- (4) Orders that are eligible for the Opening Auction may not be cancelled 1 minute prior to the Opening Session until the conclusion of the Opening Auction.

(b) *Opening Auction.*

- (1) At 1:00 am (Pacific Time), [Limited Price] Limit Orders designated for the Opening Session are matched and executed in the Opening Auction.
- (2) The orders in the Opening Auction shall be executed at the Indicative Match Price as of the time of the Opening Auction.
- (3) Orders that are eligible for, but not executed in, the Opening Auction shall become eligible for the Opening Session immediately upon conclusion of the Opening Auction.

(c) *Market Order Auction.*

For exchange-listed securities, including: (i) exchange-listed securities for which the Corporation is the primary market and (ii) all exchange-listed Derivative Securities Products as defined in Rule 7.34(a)(4)(A), the Corporation will conduct a Market Order Auction. For all other exchange-listed securities, the Corporation will route all Market Orders to the primary market until the first opening print on the primary market. After the first opening print on the primary market, all Market Orders and Limit Orders will be processed pursuant to NYSE Arca Equities Rule 7.37. For purposes of this Rule 7.35(c), and unless stated otherwise, references to Market Orders shall include MOO Orders.

(1) Publication of Indicative Match Price and Imbalances

- (A) For exchange-listed securities for which the Corporation is the primary market and all exchange-listed Derivative Securities Products as defined in Rule 7.34(a)(4)(A)

- (1) Beginning at 5:00 am (Pacific Time), and updated real-time thereafter, the Indicative Match Price of the Market Order Auction and the volume of Market Orders and Limit Orders available to trade at such price, and the Market Imbalance and Total Imbalance, if any, shall be published via electronic means. Market Orders shall be included for purposes of calculating the Total Imbalance and Market Imbalance.

Example 1: (1) Market Order to buy 5000 shares;

- (2) LOO Order to sell 1000 at 50;
- (3) Limit Order to sell 1000 at 50.50; and
- (4) Limit Order to sell 500 at 50.75.

The NYSE Arca Marketplace will publish an Indicative Match Price of 50.75, a volume of 5000 shares, a buy Market Imbalance of 2500 shares, and a Total Imbalance of 2500 shares

Example 2: (1) Market Order to buy 3000 shares;

- (2) Market Order to sell 1000;
- (3) Limit Order to sell 1000 at 41.00; and
- (4) Limit Order to sell 1000 at 41.25.

The NYSE Arca Marketplace will publish an Indicative Match Price of 41.25 and a match volume of 3000 shares and will not publish an Imbalance.

[(B) For Nasdaq-Listed securities

Beginning at 5:00 am (Pacific Time), and updated real-time thereafter, the Market Imbalance associated with the Nasdaq-Listed Market Order Auction, if any, shall be published via electronic means. The Corporation will not publish an Indicative Match Price.]

(2) Reduction of Imbalances

(A) For exchange-listed securities for which the Corporation is the primary market and all exchange-listed Derivative Securities Products as defined in Rule 7.34(a)(4)(A).

- (1) Any Imbalance in the Market Order Auction may be reduced by new orders, entered on the side of the market opposite the Imbalance. Orders on the side of the Imbalance shall be executed pursuant to the following priority:

- (i) Market Orders;

- (ii) [Limited Price] Limit Orders eligible for the Opening Session;

(iii) [Limited Price] Limit Orders designated for the Core Trading Session and entered before 6:29 am (Pacific Time);

(iv) LOO Orders.

(2) Between 6:29 am (Pacific Time) and the conclusion of the Market Order Auction, [Limited Price] Limit Orders eligible for the Opening Session may be cancelled, but [Limited Price] Limit Orders not eligible for the Opening Session, Market Orders, and LOO Orders may not be cancelled.

(3) Between 6:29 am (Pacific Time) and the conclusion of the Market Order Auction, Market Orders and LOO Orders may not be entered on the same side as the Imbalance. Market Orders and LOO Orders may be entered on the opposite side of the Imbalance, however, any time before the conclusion of the Market Order Auction.

[(B) For Nasdaq-Listed securities

Any Market Imbalance in the Nasdaq-listed Market Order Auction may be reduced by new Market Orders entered on the side of the market opposite the Market Imbalance.]

(3) Determination of Market Order Auction Price

(A) For exchange-listed securities for which the Corporation is the primary market and all exchange-listed Derivative Securities Products as defined in Rule 7.34(a)(4)(A), the Market Order Auction Price shall be determined as follows:

(1) If there are Limit Orders in the Market Order Auction eligible for execution, all orders eligible for execution in the Market Order Auction pursuant to NYSE Arca Equities Rule 7.34(d) will be executed at the Indicative Match Price as of 6:30 am (Pacific Time).

(2) If there are no Limit Orders eligible for execution in the Market Order Auction:

(i) in the case of exchange-listed Derivative Securities Products as defined in Rule 7.34(a)(4)(A) for which the Corporation is not the primary market, as many buy Market Orders and sell Market Orders as possible shall be matched and executed once an NBBO is available, at the midpoint of the first uncrossed NBBO after 6:30 am (Pacific Time); or

(ii) in the case of exchange-listed securities, including exchange-listed Derivative Securities Products as defined in Rule 7.34(a)(4)(A), for which the Corporation is the primary market, Market Orders shall be rejected and shall not be eligible for paragraph 7.35(c)(3)(A)(3) below.

(3) The Market Orders that are eligible for both the Market Order Auction and the Core Trading Session, but are not executed in the Market Order Auction, shall become eligible for execution in the Core Trading Session immediately upon conclusion of the Market Order Auction.

(4) Market Order Auction executions shall be designated with a modifier to identify them as Market Order Auction trades.

[(B) For Nasdaq-Listed securities

(1) As many buy Market Orders and sell Market Orders as possible shall be matched and executed at the midpoint of the first uncrossed NBBO after 6:30 am (Pacific Time);

(2) Limit Orders and any remaining Market Imbalance Market Order interest shall be ranked in price/time priority as described in NYSE Arca Equities Rule 7.36 and processed pursuant to NYSE Arca Equities Rule 7.37.]

(d) *Transition to Core Trading Session.*

(1) [Limited Price] Limit Orders entered before 6:29 am (Pacific Time) shall participate in the Market Order Auction. [Limited Price] Limit Orders designated for the Core Trading Session entered after 6:29 am (Pacific Time) shall become eligible for execution at 6:30 am (Pacific Time) or at the conclusion of the Market Order Auction, whichever is later.

(2) Market Orders entered after 6:29 am (Pacific Time) and before 6:30 am (Pacific Time), which are eligible for either the Market Order Auction or the Core Trading Session, shall become eligible for execution at 6:30 am (Pacific Time) or at the conclusion of the Market Order Auction, whichever is later, unless otherwise provided in Rule 7.35(c)(2)(C).

(e) *Closing Auction*

The Corporation will conduct a Closing Auction for (i) exchange-listed securities for which the Corporation is the primary market[;] and (ii) all exchange-listed Derivative Securities Products as defined in Rule 7.34(a)(4)(A)[;] and (iii) NYSE listed securities subject to a sub-penny trading condition as defined by NYSE Rule 123D]. The Corporation may suspend the Closing Auction in these securities pursuant to NYSE Arca Equities Rule 7.35(g).

(1) Publication of Indicative Match Price and Imbalances

(A) Beginning at 12:00 pm (Pacific Time), and updated real-time thereafter, the Indicative Match Price of the Closing Auction and the volume available to trade

at such price, and the Total Imbalance and Market Imbalance associated with the Closing Auction, if any, will be, published via electronic means.

Example 1:

- (1) [Limit-on-Close] LOC Order to buy 1000 shares at 50;
- (2) [Limit-on-Close] LOC Order to sell 5000 shares at 40; and
- (3) [Market-on-Close] MOC Order to sell 2000 shares.

The NYSE Arca Marketplace will publish an Indicative Match Price of 40, a match volume of 1000 shares, a Market Imbalance of 1,000 shares and a Total Imbalance of 6,000 shares. The last sale during normal market hours as determined by the consolidated tape was 40.

Example 2:

- (1) [Market-on-Close] MOC Order to buy 3000 shares;
- (2) [Market-on-Close] MOC Order to sell 1000 shares;
- (3) Limit Order to sell 1000 shares at 41; and
- (4) Limit Order to sell 1000 shares at 41.25.

The last sale during normal market hours as determined by the consolidated tape was 41.25. The NYSE Arca Marketplace will publish an Indicative Match Price of 41.25 and a match volume of 3000 shares and will not publish an Imbalance.

(2) Reduction of Imbalances

- (A) Any Imbalance in the Closing Auction may be reduced by new orders, entered on the side of the market opposite the Imbalance. Orders on the side of the Imbalance shall be executed pursuant to the following priority:
 - (i) [Market-on-Close] MOC Orders;
 - (ii) Limit Orders entered prior to the Closing Auction; and
 - (iii) [Limit-on-Close] LOC Orders.
- (B) Between 12:59 pm (Pacific Time) and the conclusion of the Closing Auction, [Limited Price] Limit Orders (except [Limit-on-Close] LOC Orders) may be cancelled. [Market-on-Close] MOC Orders and [Limit-on-Close] LOC Orders may not be cancelled.

(C) Between 12:59 pm (Pacific Time) and the conclusion of the Closing Auction, [Market-on-Close] MOC Orders and [Limit-on-Close] LOC Orders may not be entered on the same side as the Imbalance. [Market-on-Close] MOC Orders and [Limit-on-Close] LOC Orders that reduce the Imbalance may be entered on the opposite side of the Imbalance, however, any time before the conclusion of the Closing Auction. [Market-on-Close] MOC Orders and [Limit-on-Close] LOC Orders that create equilibrium and thereafter convert the Imbalance from a buy to a sell (or convert the Imbalance from a sell to a buy) Imbalance will be rejected.

Example:

- (1) [Limit-on-Close] LOC Order to buy 1000 shares;
- (2) [Limit-on-Close] LOC Order to sell 1500 shares, creating an Imbalance of 500 shares on the sell side. A [Market-on-Close] MOC Order or [Limit-on-Close] LOC Order to buy 500 shares would be permitted because it achieves equilibrium. However, a [Market-on-Close] MOC Order or [Limit-on-Close] LOC Order to buy 1000 shares would not be permitted as it would inverse the Imbalance of 500 shares on the sell side to an Imbalance of 500 shares on the buy side.

(3) Determination of Closing Auction Price

- (A) If there are [Limited Price] Limit Orders in the Closing Auction eligible for execution, all orders eligible for execution in the Closing Auction pursuant to NYSE Arca Equities Rule 7.34(d) will be executed at the Indicative Match Price as of 1:00 p.m. (Pacific Time).
- (B) If there are no [Limited Price] Limit Orders eligible for execution in the Closing Auction, [Market-on-Close] MOC Orders shall be rejected.
- (C) The [Market-on-Close] MOC Orders that are eligible for, but not executed in, the Closing Auction shall be cancelled immediately upon conclusion of the Closing Auction.
- (D) All Closing Auction executions shall be designated with a modifier to identify them as Closing Auction trades.

(f) *Re-Opening After Trading Halts.* To re-open trading in a security following a trading halt in that security, the NYSE Arca Marketplace shall conduct a Trading Halt Auction, as described below:

- (1) *Re-Opening Time.* After trading in a security has been halted, the NYSE Arca Marketplace shall disseminate the estimated time at which trading in that security will re-open (the "Re-Opening Time").

[(A) For Nasdaq securities and securities that are dually listed on both Nasdaq and listed on the Corporation whereby trading in a security is halted and thereafter scheduled to re-open prior to 12:55 pm (Pacific Time), the NYSE Arca Marketplace will conduct a Halt Auction pursuant to the applicable procedures set forth in subsection (f)(2) through (6) of this Rule.

(B) For Nasdaq securities and securities that are dually listed on both Nasdaq and listed on the Corporation whereby trading in a security is halted and thereafter scheduled to re-open at 12:55 pm (Pacific Time) or later, no Closing Auction will occur for that security. Instead, the NYSE Arca Marketplace will conduct a Halt Auction pursuant to the applicable procedures set forth in subsection (f)(2) through (6) of this Rule.]

(2) Publication of Indicative Match Price and Imbalances

(A) Immediately after trading is halted in a security, and updated real-time thereafter, the Indicative Match Price of the Trading Halt Auction and the volume available to trade at such price, shall be published via electronic means. If such a price does not exist, the NYSE Arca Marketplace shall indicate via electronic means that an Indicative Match Price does not exist.

(B) Immediately after trading is halted in a security, and updated real-time thereafter, the Market and Total Imbalance associated with the Trading Halt Auction, if any, shall be published via electronic means. Market [o]Orders shall be included for purposes of calculating the Total Imbalance and Market Imbalance. Limit [o]Orders shall only be included in the Total Imbalance calculations.

(C) If the difference between the Indicative Match Price and the last price prior to the trading halt, as determined by the Consolidated Tape, is equal to or greater than a pre-determined amount, as determined from time to time by the Corporation, the NYSE Arca Marketplace will assign a "SIG" designator to such Indicative Match Price and publish such designator via electronic means.

(3) Reduction of Imbalances

(A) Any Imbalance in the Trading Halt Auction may be reduced by new orders, entered on the side of the market opposite the Imbalance, pursuant to the following priority:

(i) Market Orders; and

(ii) [Limited Price] Limit Orders.

(B) Primary Only Orders may be submitted to the NYSE Arca Marketplace during a trading halt.

(C) The Corporation, if it deems such action necessary, will disseminate the time, prior to the time that orders are matched pursuant to the Trading Halt Auction, at which orders may no longer be cancelled.

(4) Determination of Trading Halt Auction Price

(A) [For exchange-listed securities:

(i) If there is no Imbalance and no other market center has re-opened trading in the security, orders will be executed in the Trading Halt Auction at the Indicative Match Price as of the Re-Opening Time.

(ii) If an Imbalance exists, or if an equilibrium exists between buy market orders and sell market orders and an Indicative Match Price does not exist, or if another market center has re-opened trading in the security, as many buy market orders and sell market orders as possible shall be matched, on a time priority basis, at the midpoint of the first uncrossed, unlocked NBBO, once an NBBO is available.

(B) For Nasdaq securities:

(i) If there is no Imbalance, orders will be executed in the Trading Halt Auction at the Indicative Match Price as of the Re-Opening Time.

(ii) If an Imbalance exists, or if equilibrium exists between buy market orders and sell market orders, as many buy market orders and sell market orders as possible shall be matched, on a time priority basis, once an NBBO is available,

(a) at the midpoint of the NBBO at the Re-Opening Time, provided that the NBBO is not crossed; or

(b) at the midpoint of the first uncrossed NBBO after the Re-Opening Time, in the case in which the NBBO is crossed, but one side of the BBO is not crossed by the NBBO; or

(c) at the midpoint of the first uncrossed NBBO after the Re-Opening Time, in the case in which the NBBO is crossed and where both sides of the BBO are crossed by the NBBO; or

(d) at the bid (offer) of the BBO that was crossed prior to the Re-Opening Time, in the case in which the BBO is crossed by a market participant; or

(C)] For those issues for which the Corporation is the primary market: Orders will be executed at the Indicative Match Price at the Re-Opening Time. If equilibrium exists between buy and sell [m]Market [o]Orders, the match price shall be at the last Corporation sale price in the security regardless of the trading session;

however, if the last Corporation sale price is lower than the BBO, the match price shall be the displayed bid in the security, or if the last Corporation sale price is higher than the BBO, the match price will be the displayed offer in the security.

(5) If any orders are not executed in their entirety during the Trading Halt Auction, then such orders shall be executed in accordance with Rule 7.37 after the completion of the Trading Halt Auction.

(6) After the completion of the Trading Halt Auction, the NYSE Arca Marketplace will re-open for trading the previously halted security in accordance with Rule 7.

(g) Whenever in the judgment of the Corporation the interests of a fair and orderly market so require, the Corporation may adjust the timing of or suspend the auctions set forth in this Rule with prior notice to ETP Holders.

(h) For purposes of Rule 611(b)(3) of Regulation NMS, orders executed pursuant to the Opening Auction, Closing Auction, Market Open Auction and Halt Auction may trade-through any other Trading Center Manual or Protected Quotations if the transaction that constituted the trade-through was a single-priced opening, reopening, or closing transaction by the trading center.

Rule 7.36. Order Ranking and Display

The NYSE Arca Marketplace shall display to Users and other market participants all non-marketable [l]Limit [o]Orders in the Display Order Process. The NYSE Arca Marketplace will also disseminate current consolidated quotations/last sale information, and such other market information as may be made available from time to time pursuant to agreement between the Corporation and other market centers.

(a) *Ranking*. Orders of Users shall be ranked and maintained in the Display Order Process and/or Working Order Process of the NYSE Arca Book according to price-time priority, such that within each price level, all orders shall be organized by the time of entry in the following manner.

(1) *Display Order Process*. Within the Display Order Process:

(A) Limit [o]Orders, with no other conditions, shall be ranked based on the specified limit price and the time of original order entry.

(B) The displayed portion of Reserve Orders (not the reserve size) shall be ranked at the specified limit price and the time of order entry. If the displayed portion of the Reserve Order is decremented such that 99 shares or fewer are displayed, the displayed portion of the Reserve Order shall be refreshed for

(i) the displayed amount; or

- (ii) the entire reserve amount, if the remaining reserve amount is smaller than the displayed amount,

from the reserve portion and shall be submitted and ranked at the specified limit price and the new time that the displayed portion of the order was refreshed.

- (C) Discretionary Orders shall be ranked based on the displayed price (not the discretionary price) and the time of order entry. If a Discretionary Order is decremented, it remains ranked based on the displayed price and the time of original order entry.

(2) *Working Order Process.* Within the Working Order Process:

- (A) The reserve portion of Reserve Orders shall be ranked based on the specified limit price and the time of original order entry. After the displayed portion of a Reserve Order is refreshed from the reserve portion, the reserve portion remains ranked based on the original time of order entry, while the displayed portion is sent to the Display Order Process with a new time-stamp.

- (B) Discretionary Orders shall be ranked based on the displayed price and the time of original order entry. After a Discretionary Order is decremented, it remains ranked as described above.

- [(C) All-or-None Orders shall be ranked based on the specified limit price and the time of order entry.]

(3) *Size Modification.* In the event that the size of an order has been modified, such order retains priority if such modification involves a decrease in the size of the order. In the event that the size of the order has been increased and/or the price has been changed, the order will be treated as a new order and will receive a new time priority.

(b) *Display.* Except as otherwise permitted by Rule 7.7, all orders at all price levels in the Display Order Process of the NYSE Arca Book shall be displayed to all Users and other market participants on an anonymous basis.

(c) *Dissemination.* The best-ranked displayed order(s) to buy and the best ranked displayed order(s) to sell in the NYSE Arca Book and the aggregate displayed size of such orders associated with such prices shall be collected and made available to quotation vendors for dissemination pursuant to the requirements of Rule 11Ac1-1 under the Exchange Act. If non-marketable odd-lot sized orders can be aggregated to equal at least a round lot, such odd-lot sized orders will be displayed as the best ranked displayed orders to sell (buy) at the least aggressive price at which such odd-lot sized orders can be aggregated to equal at least a round lot.

Rule 7.37. Order Execution

Order Execution

Like-priced orders, bids and offers shall be matched for execution by following Steps 1 through 4 in this Rule; provided, however, for an execution to occur in any Order Process, the price must be equal to or better than (1) the PBBO, in the case of a Limit Order or a Q Order or (2) the NBBO, in the case of an Inside Limit Order, a Pegged Limit Order or a Market Order. If such an order is not executable within those parameters, it may be routed to away markets as provided in paragraph (d) of this rule (however, a User may submit a Primary Only Order that may be routed to an away market without consideration of the NBBO).

(a) [Reserved]

(b) Reserved

(1) Step 1: Display Order Process.

(1)[(A)] An incoming marketable order shall first attempt to be matched for execution against orders in the Display Order Process at the display price of the resident order for the total amount of stock available at that price or for the size of the incoming order, whichever is smaller. Passive Liquidity Orders as defined in NYSE Arca Equities Rule 7.31[(h)](d)(3) with a price superior to that of displayed orders will have price priority and will execute ahead of inferior priced displayed orders in the Display Order Process. For the purposes of this subsection, the size of an incoming Reserve Order includes the displayed and reserve size and the size of the portion of the Reserve Order resident in the Display Order Process is equal to its displayed size. If the incoming marketable order has not been executed in its entirety, the remaining part of the order shall be routed to the Working Order Process.

(2)[(B)] An incoming order that is not marketable shall enter the Working Order Process to be executed against any Discretionary Orders at or better than the NBBO.

(b) (2) Step 2: Working Order Process.

(1)[(A)] An incoming marketable order shall be matched for execution against orders in the Working Order Process in the following manner:

(A)[(i)] An incoming marketable order shall be matched against orders within the Working Order Process in the order of their ranking, at the price of the displayed portion ([or in the case of an All-or-None Order, at the limit price] or in the case of a Passive Liquidity Order, at its price), for the total amount of stock available at that price or for the size of the incoming order, whichever is smaller.

(B)[(ii)] If the BBO is outside the PBBO and any Discretionary Orders within the Working Order Process have a discretionary price equal to or better than the PBBO, the incoming order shall execute against such Discretionary Order(s) at the PBBO up to the size of the smaller of the two orders.

(C)[(iii)] If an incoming marketable order is a Discretionary Order or a Reserve Order and its prices overlap with the prices of a Discretionary Order(s) in the Working Order Process, then the orders will be executed at the display price of the order that was entered first up to the size of the smaller of the two orders. For the purposes of this subsection, the size of the incoming Reserve Order includes the displayed and reserve size.

(D)[(iv)] If the incoming marketable order has not been executed in its entirety, the remaining part of the order shall be routed to the Tracking Order Process.

(2)[(B)] An incoming order that is not marketable shall be matched for execution against orders in the Working Order Process in the following manner:

(A)[(i)] The incoming order shall be matched against any Discretionary Orders in the Working Order Process that have discretionary prices that would satisfy an otherwise displayable incoming [Limited Price] Limit Order. The execution shall occur at the limited price of the incoming order.

(B)[(ii)] If the incoming order is a Discretionary Order and its prices overlap with the prices of a Discretionary Order in the Working Order Process, then the orders will be executed at the discretionary price of the incoming order that would be the best price available for the order entered first.

(C)[(iii)] If the incoming order is an ISO, then the order will be executed against Discretionary Orders in the Working Order Process that have discretionary prices that would satisfy the ISO's limit price without regard to whether the transaction would occur at a price outside the Protected Quotation.

(3)[(C)] If any change in any Protected Quotation or NBBO (as applicable) or other available away trading interest would cause a potential match between the away order and an order in the Working Order Process, an order shall be routed to that market center or market participant pursuant to Step 4 below after having proceeded through Step 3.

(c) *Step 3: Tracking Order Process.* During Core Trading Hours only, orders may be matched and executed in the Tracking Order Process as follows: If an order that is eligible to route to an away market has not been executed in its entirety pursuant to paragraphs (a) and (b) of this Rule, the NYSE Arca Marketplace shall match and execute any remaining part of such order in the Tracking Order Process in price/time priority.

(d) *Step 4: Routing Away.*

(1) If an order has not been executed in its entirety pursuant to paragraphs (a) through (c) of this Rule and it has been designated as a PNP Order, IOC, MPL Order, or [Intermarket Sweep Order]ISO, the order shall be cancelled, without routing the order to another market center or market participant.

(2) If an order has not been executed in its entirety pursuant to paragraphs (a) through (c) of this Rule and it has not been designated as a PNP Order, IOC, MPL Order, or [Intermarket Sweep Order]ISO, the order shall be routed for execution as follows:

(A) if the order is designated as a Market Order, Inside Limit Order, or Pegged Order, the Exchange shall utilize all available quotes in the routing determination, or;

(B) if the order designation is as a Limit Order, the Exchange shall utilize available Protected Quotations in the routing determination, or;

(i) any order eligible for routing away shall be routed, either in its entirety or as component orders, to another market center or market participant as a an [Intermarket Sweep Order]ISO:

(a) for OTC securities—equal to the price of the quote published by the market center or market participant.

The remaining portion of the order, if any, shall be ranked and displayed in the NYSE Arca Book in accordance with the terms of such order under Rule 7.36 and such order shall be eligible for execution under Rule 7.37.

(ii) Based upon a User's instruction, a marketable [r]Reserve [o]Order may be routed (1) serially as component orders, such that each component corresponds to the displayed size, or (2) only once in its entirety, including both the displayed and reserve portions.

(C) The order that is routed away shall remain outside the NYSE Arca Marketplace for a prescribed period of time and may be executed in whole or in part subject to the applicable trading rules of the relevant market center or market participant.

(D) While an order remains outside the NYSE Arca Marketplace, it shall have no time standing, relative to other orders received from Users at the same price which may be executed against the NYSE Arca Book.

(E) Requests from Users to cancel their orders while the order is routed away to another market center or market participant and remains outside the NYSE Arca Marketplace shall be processed, subject to the applicable trading rules of the relevant market center or market participant.

- (3) Where an order or portion of an order is routed away and is not executed either in whole or in part at the other market center or market participant (*i.e.*, all attempts at the fill are declined or timed-out), the order shall be ranked and displayed in the NYSE Arca Book in accordance with the terms of such order under Rule 7.36 and such order shall be eligible for execution under Rule 7.37.
- (4) For an order that has not been executed in its entirety pursuant to paragraphs (a) through (c) of this Rule, and which is otherwise eligible to route away, Users may instruct NYSE Arca to bypass any market centers that are not posting Protected Quotations within the meaning of Regulation NMS.

Rule 7.38. Odd and Mixed Lots

(a) *Order Types.*

- (1) *Odd Lots.* All odd lot orders submitted by Users to the NYSE Arca Marketplace must be [m]Market [o]Orders or [l]Limit [o]Orders. [, where such orders are subject to no additional conditions (e.g., odd lot orders may not be Working Orders, Tracking Orders, etc.)] The following orders may not be entered in odd lots: Reserve Orders, MPL-IOC Orders, Tracking Orders, or Q Orders.
- (2) *Mixed Lots.* Mixed lot orders submitted by Users to the NYSE Arca Marketplace may be any order type supported by the NYSE Arca Marketplace, unless inconsistent with the order type descriptions found in Rule 7.31.[.]

(b) *Ranking and Execution.* Round lot, mixed lot and odd lot orders are treated in the same manner in the NYSE Arca Marketplace.
