

Part III: Manner of Operations

Item 7: Order Types and Attributes

- a. Identify and explain each order type offered by the NMS Stock ATS. In your explanation, include the following:
 - i. priority, including the order type's priority upon order entry and any subsequent change to priority (if applicable); whether and when the order type can receive a new time stamp; the order type's priority vis-à-vis other orders on the book due to changes in the NBBO or other reference price; and any instance in which the order type could lose execution priority to a later arriving order at the same price;
 - ii. conditions, including any price conditions (e.g., how price conditions affect the rank and price at which it can be executed; conditions on the display or non-display of an order; or conditions on executability and routability);
 - iii. order types designed not to remove liquidity (e.g., post-only orders), including what occurs when such order is marketable against trading interest on the NMS Stock ATS when received;
 - iv. order types that adjust their price as changes to the order book occur (e.g., price sliding orders or pegged orders) or have a discretionary range, including an order's rank and price upon order entry and whether such prices or rank may change based on the NBBO or other market conditions when using such order type; when the order type is executable and at what price the execution would occur; whether the price at which the order type can be executed ever changes; and if the order type can operate in different ways, the default operation of the order type;
 - v. whether an order type is eligible for routing to other Trading Centers;
 - vi. the time-in-force instructions that can be used or not used with each order type;
 - vii. the circumstances under which order types may be combined with another order type, modified, replaced, canceled, rejected, or removed from the NMS Stock ATS; and
 - viii. the availability of order types across all forms of connectivity to the NMS Stock ATS and differences, if any, in the availability of an order type across those forms of connectivity.

Conditional and Firm Orders. The algorithms/SOR and Subscribers that access JPB-X directly can route to JPB-X (i) conditional orders and (ii) if any of the conditional orders match with other conditional orders in JPB-X, firm orders routed in response to firm-up invitations received directly from JPB-X (in the case of the SOR with respect to orders designated for Close Price

Match and in the case of Subscribers that access JPB-X directly) or from JPB-X via the SOR (in the case of JPMS algorithmic trading strategies).

Matching Types. JPB-X accepts Firm/Conditional Orders designated for the following two matching types:

- Volume-Weighted Average Price Match ("VWAP Price Match"), which matches orders, using the conditional order process described in Part III, Item 9, and crosses them at a VWAP price determined by JPB-X over the course of a pre-determined match period; and
- Close Price Match, which matches orders, using the conditional order process described in Part III, Item 9, and crosses them at the security's official closing price as determined by the closing auction at the primary exchange for the security.

Firm/Conditional Orders designated for each matching type are maintained in separate order books within JPB-X and do not interact with each other.

Firm/Conditional Order Types. JPB-X accepts (1) limit and market Firm/Conditional Orders for the VWAP Price Match matching type and (2) market-on-close Firm/Conditional Orders for the Close Price Match matching type. A limit Firm/Conditional Order is a Firm/Conditional Order to buy or sell stock at a specific price or better. A market Firm/Conditional Order is a Firm/Conditional Order to buy or sell stock at the best available price. A market-on-close Firm/Conditional Order is a Firm/Conditional Order to buy or sell stock at its closing price as determined by the primary exchange for the stock. JPB-X does not offer post-only Firm/Conditional Order types, and none of the above Firm/Conditional Order types is eligible for routing to other Trading Centers. The above Firm/Conditional Order types cannot be combined (i.e., a Firm/Conditional Order cannot be more than one Firm/Conditional Order type).

Time-In-Force Instructions. For both VWAP Price Match and Close Price Match matching types, JPB-X only accepts a "day" time-in-force instruction. A day Firm/Conditional Order is a Firm/Conditional Order intended to rest in an order book maintained by JPB-X until the Firm/Conditional Order is executed or cancelled at the end of the trading day or earlier. **A blank time-in-force field is treated as a "day" time-in-force instruction.**

Modifications, Replacements, and Cancellations. The algorithms/SOR and Subscribers that access JPB-X directly can modify, replace, or cancel day Firm/Conditional Orders routed to JPB-X, whether designated for VWAP Price Match or Close Price Match, as described below. The modification or replacement of a day conditional order results in the entry of a replacement conditional order with a new time stamp and lower priority in time than the original conditional order, unless the modification is a reduction in the quantity of the conditional order, in which case the replacement conditional order has a new time stamp but the same priority in time that the original conditional order had prior to its replacement. Note, however, that conditional orders designated for Close Price Match cannot be modified, replaced, or cancelled once the Close Price Match matching time is reached. The algorithms/SOR and Subscribers that access JPB-X directly can cancel or reduce the quantity of a firm-up order prior to its execution.

Rejections. JPB-X rejects (i) short sale exempt Firm/Conditional Orders, (2) short sale Firm/Conditional Orders designated for Close Price Match, (3) Firm/Conditional Orders priced at or above \$1.00 per share if priced in a sub-penny increment, (4) Firm/Conditional Orders priced below \$1.00 per share if priced in an increment of less than \$.0001, (5) odd lot

Firm/Conditional Orders designated for the VWAP Price Match, and (6) Firm/Conditional Orders that exceed limits imposed by JPMS pursuant to its obligations under SEC Rule 15c3-5.

Eligibility for Matching and Execution. A Firm/Conditional Order is ineligible for matching in JPB-X unless the price, minimum quantity, and counterparty preference instructions associated with the Firm/Conditional Order, if any, are satisfied. Conditional orders, but not firm orders, can have minimum match size requirements. As described in response to Part III, Item 9, when JPB-X sends a firm-up invitation, JPB-X cancels the corresponding conditional order, irrespective of the conditional order's minimum quantity instruction. As also described in response to Part III, Item 9, a firm-up order is ineligible for execution in JPB-X during the order's applicable firm-up period.

Matching of VWAP Price Match Orders. As described in response to Part III, Item 11, once JPB-X matches firm-up orders designated for VWAP Price Match and the match period has elapsed, the firm-up orders are crossed, at the VWAP determined by JPB-X. In the event of (1) the cancellation of a firm-up order by the algorithms/SOR or a Subscriber that accesses JPB-X directly, (2) a response to a production issue, (3) the National Best Bid moving lower than or becoming equal to the limit of a matched sell order or the National Best Offer moving higher than or becoming equal to the limit of a matched buy order, (4) the triggering of a Rule 201 price test, or (5) the stock closing at the primary exchange, JPB-X will terminate the match period and issue partial fills before cancelling all matched firm-up orders. The quantity of a matched order's fill will be proportional to the duration of the match period and the price of the fill will be the VWAP over the duration of the match period (or, if a Rule 201 price test is in effect, at a price that is allowed by the rule). In addition, JPB-X does not execute a cross in any NMS stock that is subject to a regulatory or trading halt (a "Halt"), although, as described in response to Part III, Item 20, JPB-X will continue to accept Firm/Conditional Orders in such an NMS stock and instructions to modify, cancel, or replace Firm/Conditional Orders in that NMS stock using the priority logic described in response to Part III, Item 11(c). Firm-up orders that were matched but for which the match period has not elapsed will be cancelled by JPB-X immediately after the Halt goes into effect. If a Halt in an NMS stock occurs during regular trading hours while a firm-up period for one or more conditional orders in that security is underway, JPB-X rejects any firm-up order received during the firm-up period while the halt is in place.

Matching of Close Price Match Orders. As described in response to Part III, Item 11, once JPB-X matches firm-up orders designated for Close Price Match in a NMS stock, they are crossed, based on time priority, at the closing price as determined by the closing auction and published by the primary exchange for the NMS stock after the exchange closes. As described in response to Part III, Item 20, when a Halt is in effect for an NMS stock, JPB-X will continue to accept and match conditional orders designated for Close Price Match and to accept instructions to modify, cancel, or replace conditional orders in that NMS stock using the priority logic described in response to Part III, Item 11(c) but will not execute orders if the primary exchange does not publish a close price as determined by the closing auction for the stock, in which case JPB-X will cancel the unexecuted orders immediately after JPMS determines that the primary exchange has not published a close price as determined by the closing auction for the stock and has been delayed in doing so as a result of the Halt. Firm-up orders that were matched but have not yet been executed will be cancelled by JPB-X immediately after the Halt goes into effect.

Changes in NBBO. Although a change in the NBBO would not affect the relative priority of matched firm-up orders that remain eligible for execution after the change, the change could affect whether a firm-up order designated for VWAP Price Match with a price instruction associated with it is eligible for execution and the execution price at which orders that remain eligible for execution are crossed