

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. 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;
 - iii. 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;
 - iv. whether an order type is eligible for routing to other Trading Centers;
 - v. the time-in-force instructions that can be used or not used with each order type;
 - vi. 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
 - vii. 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.

For the Main Session, MatchIt accepts Peg orders, Day orders and Immediate or Cancel ("IOC") orders. Peg and Day orders may cross with contra-side Peg orders, contra-side Day orders or with IOC orders. IOC orders may only cross with contra-side Peg orders or contra-side Day orders. These order types may be entered with other instructions that will be used by the matching algorithm to determine whether and how they will interact with other orders.

For the Conditional Session, MatchIt accepts Peg orders and IOC orders. Peg orders may cross with contra-side Peg orders or with IOC orders. IOC orders may only cross with contra-side Peg orders. These order types may be entered with other instructions that will be used by the matching algorithm to determine whether and how they will interact with other orders.

Priority in the MatchIt Main Session for all order types is price, then time. If a Subscriber modifies the terms of a previously transmitted order, the order will receive a new order time stamp for matching purposes (i.e. the order will lose queue spot). The only exception is a reduction in order quantity which, absent any other changes to the terms of the order, will not update the order time stamp for matching purposes.

Priority in the MatchIt Conditional Session for all order types is price, then size, then time. If the

algorithm modifies the terms of a previously transmitted order, the order will receive a new order time stamp for matching purposes (i.e., the order will lose queue spot). The only exception is a reduction in order quantity which, absent any other changes to the terms of the order, will not update the order time stamp for matching purposes.

The following instructions are available for orders entered in both the Main Session and the Conditional Session. The instructions placed on orders will affect whether an order is eligible to be executed against contra-side orders.

(1) Peg Orders: Peg orders remain open until executed, canceled by the Subscriber or until the end of the daily matching session. Peg orders can be designated with the following execution instruction:

(i) Market: A Market instruction designates that the order can pay the full spread. For example, a buy order can be executed up to the national best offer and a sell order can be executed down to the national best bid.

(ii) Mid-Point: A Mid-Point instruction designates that an order can pay up to the mid-point between the national best bid and national best offer (“NBBO”).

(iii) Primary: A Primary instruction designates that the order can only be executed at the national best bid in the case of a buy order and the national best offer in the case of a sell order.

A Limit Price instruction can be specified for Peg orders in conjunction with the above referenced execution instruction.

~~Day orders will default to Mid Point peg if a peg instruction is not specified.~~

(2) Day Orders: Day orders remain open until executed, canceled by the Subscriber or until the end of the daily matching session. Day orders can also include a Market, Mid-Point, Primary or Limit Price instruction.

(3) IOC Orders: IOC orders will either execute if an eligible contra side order exists against which the order can be executed or if not the order is canceled. IOC orders can also include a Market, Mid-Point, Primary, or Limit Price instruction. IOC orders will default to Primary Peg if a peg instruction is not specified.

Other available Instructions and Designations for the Main and Conditional Sessions: The following instructions may be applied to the above order types unless otherwise indicated. These instructions may be implemented by transmitting specified values on the order or by requesting configurations that will apply particular instructions after receipt of the order:

- (i) **Minimum Execution Quantity (“MEQ”)**: An MEQ instruction specifies the minimum number of shares that must be available for a contra side order to be eligible for execution.
- (ii) **Locked Market**: A Locked Market instruction specifies that an order is not eligible for execution during locked markets. IOC orders entered with a Locked Market instruction will be rejected if the NBBO is locked. Peg orders will be accepted but ineligible for execution until the NBBO unlocks.
- (iii) **Peg Order Add-Only Liquidity Instruction (“Add Only”)**: An Add-Only instruction specifies that the order is only eligible for execution when it adds liquidity

to MatchIt upon entry. Peg orders that would remove liquidity from MatchIt will be accepted by MatchIt and remain open but ineligible for execution until such a time as the order adds liquidity to MatchIt. Contra-side Peg orders on the book at the time a Peg order with an Add Only instruction is entered will not interact with the Peg Add Only order.

- (iv) **Soft Dollar Instruction:** A Soft Dollar instruction will only allow riskless principal or agency crossing. To the extent that an order with a Soft Dollar instruction interacts with an order submitted by VCOMM, MatchIt will pass information on the execution message so that the market maker's systems transact with its underlying client according to FINRA's definition of "riskless principal," i.e., at the same price, as the execution received in MatchIt.
- (v) **Virtu Principal Opt Out:** VAL and VAL Affiliates may submit instructions on orders that prevent interactions with Virtu principal orders, as described in Part II, item 3(a). This instruction is not available to Direct Subscribers.
- (vi) **MatchIt Subscriber Profiles and Limits on Interaction:** This instruction specifies the types of counterparties that an order may interact with based on the counterparty's Liquidity Profile. MatchIt uses quantitative metrics to create one or more Liquidity Profiles for each MatchIt Subscriber. The metrics include execution performance relative to the market over different time horizons when removing liquidity from MatchIt. MatchIt makes discretionary decisions in assigning a Liquidity Profile to a new or previously uncategorized Subscribers. MatchIt will inform Subscribers about their own profile information upon request.
- (vii) **Self-Match Prevention:** Subscribers may provide instructions that will prevent orders from crossing if the resulting cross may result in a transaction with no change in beneficial ownership.

Available Instructions and Designations for the Conditional Session Only: In addition to the instructions above, the following instructions may be placed on orders entered into the Conditional Session:

- (i) **Conditional Indicator:** Peg orders entered into the Conditional Session are by default designated as Conditional Orders. Conditional Orders are not firm and must respond affirmatively to an electronic message ("an invitation to Firm-Up") from the MatchIt Conditional Session by transmitting a Firm-Up Response Order to be eligible to be executed against contra-side orders.
- (ii) **Firm-Up Response Order:** These orders are entered as IOC orders in response to invitations from the MatchIt Conditional Session and will carry instructions, including an Invitation ID and response size, that cannot be greater than the size specified in the invitation, which will allow for the order to be executed if eligible contra-side interest remains on the book upon receipt.
- (iii) **Response Time:** This instruction limits the time period that any contra side Conditional Orders have to respond to an invitation to Firm-Up with a Firm-Up Response Order. When this instruction is present on an IOC order, the time period begins when MatchIt receives the IOC order. When this instruction is present on a Conditional Order, the time period begins when MatchIt receives a contra side IOC order or the last Conditional Order in a potential match. Firm-Up Response Orders

received after the expiration of the Response Time will not be eligible for execution and will be cancelled by MatchIt.

- (iii) **Price Offset:** This instruction may be placed on Peg-Market and Peg Primary Conditional Orders and IOC Orders. The Price Offset must be expressed in positive or negative increments of \$0.01 for symbols priced above \$1.00 and positive or negative increments of \$0.0001 for symbols under \$1.00. The offset increases or decreases the price an order can pay in relation to the NBBO.
 - (iv) **In-Bound Retail Designation:** VAL receives orders from other broker-dealers for execution by its market making business ("Retail Orders"). VAL may transmit an order to the Conditional Session that represents a Retail Order and will designate the order with an In-Bound Retail designation ("In- Bound Retail Orders") if the order is generated prior to exposing the retail interest to VAL's market making algorithms. Contra-side orders must be designated as eligible to interact with In-Bound Retail Orders. VAL exercises discretion with regard to whether to route In-Bound Retail orders to the Conditional Session and which contra-side orders are eligible to interact with In-Bound Retail Orders.
 - (v) **In-Bound Retail Eligible:** VET may transmit algorithmic orders to the Conditional Session. VAL or a VAL Affiliate may transmit orders with a designation that specifies that the algorithmic order is eligible to interact with orders designated as In-Bound Retail Orders. VAL's decision to allow an order to be designated as In-Bound Retail Eligible will be entirely discretionary and determined by subjective criteria such as the breadth of the client relationship, commission rates, or other factors
 - (vi) **In-Bound Retail Only:** This designation specifies that the algorithmic order is eligible to only interact with orders designated as In-Bound Retail Orders.
- b. Are the terms and conditions for each order type and attribute the same for all Subscribers and the Broker-Dealer Operator?

☐ ☐ Yes

☒ ☐ No

If no, identify and explain any differences.

The Virtu Principal Opt Out and Soft Dollar Instruction are only available on orders transmitted by VAL and VAL Affiliate algorithms. The Conditional Crossing Session and Conditional Session Order Types are only available to VAL and VAL Affiliates.