

## Part II: Activities of the Broker-Dealer Operator and its Affiliates

### Item 2: Affiliates Trading Activities on the ATS

- a. Are Affiliates of the Broker-Dealer Operator permitted to enter or direct the entry of orders and trading interest into the NMS Stock ATS?

Yes ☐ No ☐

If yes, name and describe each type of Affiliate that enters or directs the entry of orders and trading interest into the ATS (e.g., broker-dealer, NMS Stock ATS, investment company, hedge fund, market maker, principal trading firm), and, for each Affiliate, provide the applicable MPID and list the capacity of its orders and trading interest (e.g., principal, agency, riskless principal).

- Virtu AlterNet Securities LLC (“AlterNet”): AlterNet is a U.S. broker-dealer that can enter or direct the entry of orders to POSIT to facilitate trades for its broker-dealer clients as agent, riskless principal, and/or principal under the MPID ALTX.
- Virtu Financial Capital Markets LLC (“VFCM”) is a U.S. broker-dealer that provides algorithms that enter or direct the entry of orders under the MPID EWTT. VFCM’s only client is its Affiliate Virtu Americas LLC (“VAL”) (described below) and all orders VFCM routes to POSIT originate from VAL. Virtu ITG can route orders to VAL that forwards to VFCM’s algorithms when Virtu ITG clients wish to use these algorithms.
  - VFCM receives agency orders from VAL that VAL receives from clients for handling by the algorithms.
  - VFCM receives principal orders from VAL for handling using the same algorithms that are used for VAL’s clients.
- VAL is a U.S. broker-dealer that engages in a variety of activities, including providing algorithms to clients, providing institutional sales and trading services in stocks and exchange traded products, and making markets. VAL can enter or direct the entry of orders to POSIT as agent or riskless principal under the MPIDs DTTX, GFLO, and VALR and as principal under the MPIDs VALX, VIRT and NITE.
- ~~Virtu Financial BD LLC (“VFBD”) is a U.S. broker-dealer engaged in making markets that can enter or direct the entry of principal orders to POSIT under the MPID VIRT.~~

Virtu ITG’s Canadian, EU and Asia Pacific Affiliates are broker-dealers that offer products and services that are similar to Virtu ITG Electronic Systems and have hi-touch desks, all of which can enter or direct the entry of orders to POSIT through Virtu ITG, and VAL indirectly through VFCM. Virtu ITG, VAL and VFCM enter or direct orders to the ATS for these Affiliates as agent or riskless principal using the Virtu ITG MPID ITGI in the case of Virtu ITG entering the order, the VAL MPIDs GFLO, VALR or VALX in the case of VAL entering the order, or the VFCM MPID EWTT in the case of VFCM entering the order.

- b. If yes, to Item 2(a), are the services that the NMS Stock ATS offers and provides to the Affiliates required to be identified in Item 2(a) the same for all Subscribers?

Yes ☐ No ☒

If no, explain any differences in response to the applicable Item number in Part III of this form, as required, and list the applicable Item number here. If there are differences that are not applicable to Part III, explain those differences.

Virtu ITG provides Subscribers in the U.S. with a FIX gateway to enter orders into POSIT using FIX protocols 4, 4.2 and 4.4. The FIX gateway communicates with POSIT in a binary format. Virtu ITG provides its Canadian Affiliate with a binary gateway to enter orders into POSIT. Subscribers in Canada direct orders to the Canadian Affiliate via FIX. See, Part III, Item 5(a).

- c. Are there any formal or informal arrangements with an Affiliate required to be identified in Item 2(a) to provide orders or trading interest to the NMS Stock ATS (e.g., undertaking to buy or sell continuously, or to meet specified thresholds of trading or quoting activity)?

Yes ☐ No ☒

If yes, identify the Affiliate and respond to the request in Part III, Item 12 of this form.

- d. Can orders and trading interest in the NMS Stock ATS be routed to a Trading Center operated or controlled by an Affiliate of the Broker-Dealer Operator?

Yes ☐ No ☒

If yes, respond to the request in Part III, Item 16 of this form.

Item 3: Order Interaction with Broker-Dealer Operator; Affiliates

- a. Can any Subscriber opt out from interacting with orders and trading interest of the Broker-Dealer Operator in the NMS Stock ATS?

Yes ☐ No ☒

If yes, explain the opt-out process.

- b. Can any Subscriber opt out from interacting with the orders and trading interest of an Affiliate of the Broker-Dealer Operator in the NMS Stock ATS?

Yes ☒ No ☐

If yes, explain the opt-out process.

Virtu ITG offers Subscribers the ability to opt out of interacting with principal orders entered into POSIT by its Affiliate ~~VFBD under the MPID VIRT and by its Affiliate~~ VAL under the MPIDs NITE, VIRT and VALX (“the Principal Opt-Out”). Orders entered into POSIT by its Affiliate AlterNet under the MPID ALTX, by its Affiliate VFCM under the MPID EWTT, by its Affiliate VAL under the MPIDs DTTX, GFLO and VALR are not subject to the Principal Opt-Out. See, Part II, Item 2(a) for descriptions of these Affiliates.

Subscribers can request the Principal Opt-Out through their sales persons. Following receipt of a request, the sales person will enter a ticket to make the request. Thereafter, an entry is made in a configuration file which will take effect in most cases on the next business day, but could take effect either the same day or greater than the next business day, depending upon the time of day the request is submitted. When the POSIT matching logic is applied, the configuration file is checked to determine whether orders are eligible for crossing with the Affiliate’s principal orders entered under the above referenced MPIDs. Virtu ITG does not allow POSIT Subscribers to opt out of interacting with any orders submitted to POSIT by its Affiliates when they are submitted under any of the other MPIDs referenced in Part II, Item 2(a). The Principal Opt-Out configuration is applied for all crossing sessions.

- c. If yes to Item 3(a) or 3(b), are the terms and conditions of the opt-out processes required to be identified in Item 3(a), 3(b), or both, the same for all Subscribers?

Yes ☐ No ☐

If no, identify and explain any differences.

### **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.

### Continuous Crossing Session

POSIT accepts Peg orders and Immediate or Cancel ("IOC") orders. Peg orders may execute against contra-side Peg orders or against IOC orders. IOC orders may only execute against contra-side Peg orders. These order types may be entered with other instructions, as described below, that will be used by the matching algorithm to determine whether and how they will interact with other 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 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 be executed 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.

(iv.) **Limit Price:** A Limit Price instruction specifies a price above which a buy order and below which a sell order that the order will not be eligible for execution.

(2) **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. Subscribers may enter IOC orders with Market, Mid-Point and Limit Price instructions.

Subscribers can include Minimum Execution Quantity (“MEQ”) instructions on their orders via FIX, which specifies the minimum number of shares that must be available for a contra side order to be eligible for execution.

Subscribers can also request to apply the following instructions on their orders at the session level:

- (i) **Locked Market:** Direct and Indirect Subscribers may request a Locked Market instruction, which 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.
- (ii) **Virtu Principal Opt-Out:** Direct and Indirect Subscribers may request to have their orders not interact with Virtu principal. This instruction will only prevent interaction against orders entered by ~~Affiliates~~Affiliate VAL under the MPID’s NITE, VIRT and VALX ~~and orders entered by VFBD under the MPID VIRT~~. Principal orders entered by the Affiliates using other MPIDs will not be subject to this opt out. See Part 2, Item 3b for more detail.
- (iii) **MEQ Instruction Non-Aggregation:** Direct and Indirect Subscribers may request that multiple orders are not aggregated to meet a MEQ instruction. By default, POSIT will aggregate orders to meet a Subscriber’s MEQ instruction.
- (iv) **Cancel Residual if Below MEQ Instruction:** Direct and Indirect Subscribers may request that a residual quantity be canceled back to the Subscriber if the residual quantity is less than the Subscriber’s MEQ instruction. By default, POSIT will not cancel back an order if the residual is less than the MEQ instruction.
- (v) **Default Peg Instructions:** Direct and Indirect Subscribers may request that their IOC and/or Day orders have a Default Peg instruction.

An order that contains a value in a utilized FIX field other than a value recognized by Virtu ITG (as described in its FIX specifications) will be rejected. An order containing a value in a non-utilized FIX field will be accepted, but that instruction will not be processed.

Subscribers can route orders to the Agency Close Crossing Session, which are subject to specific time-in-force and order type attributes, as described in Part III, Item 17.

For resting Peg orders, priority in POSIT is based on the price instruction, i.e. market, mid, or primary. Resting Peg orders that can be executed at the same price receive a pro rata share allocation. However, POSIT will always attempt to execute at the midpoint of the NBBO, prior to executing at the NBB or NBO. Resting Peg orders with market instructions on the same side of the market will execute at the midpoint in a pro rata share allocation along with resting Peg orders with midpoint instructions also on the same side of the market. Peg orders with primary instructions, cannot execute at the midpoint, and would not participate and receive shares in a pro rata allocation when there are resting Peg orders with market and or midpoint price instructions on the same side.

For IOC orders and Peg orders that remove liquidity, these orders are processed one at a time in time sequence. The following examples illustrate the matching process, assuming there are no instructions that would prevent an execution such as MEQ or a Limit Price that would be an order ineligible based upon the current NBBO.

***Example 1:***

Market bid/offer: \$10.00 x \$10.10

In POSIT, Order 1 is a Midpoint Peg order to buy 1,000 shares and Order 2 is a Market Peg order to buy 1,000 shares. An in-bound Peg order or IOC order with market or midpoint instructions to sell 1,000 shares is entered into POSIT. An execution of 1000 shares will occur at midpoint, with Order 1 receiving 500 shares, and Order 2 receiving 500 shares.

***Example 2:***

Market bid/offer: \$10.00 x \$10.10

In POSIT, Order 1 is a Midpoint Peg order to buy 1,000 shares and Order 2 is a Primary Peg order to buy 1,000 shares. An in-bound Peg order or IOC order with market or midpoint instructions to sell 1,000 shares is entered into POSIT. An execution of 1000 shares will occur at midpoint of the NBBO, with Order 1 receiving 1000 shares and Order 2 receiving no shares.

**Alert Crossing Session**

The Alert Crossing Session supports all of the order types and instructions described in the Continuous Crossing Session section in Part III, Item 7(a), with the exception that the Alert Crossing Session does not accept IOC orders. Additionally, the below order type instructions are only available in the Alert Crossing Session.

- (i) **Conditional Indicator:** Peg orders entered into the Alert Crossing Session are by default designated as Conditional Orders. Conditional Orders are not firm and must respond affirmatively to an Invitation to Firm-Up from the Alert Crossing 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 in response to invitations from the Alert Crossing Session.

See Part III, Item 9a for more detail on the Alert Crossing Session.

Agency Close Crossing Session

For the Agency Close Crossing session, Subscribers can only submit Peg orders with a Market Peg instruction and a time in force of close. See Part III, Item 11(c) for more detail on the Agency Close Crossing Session.

- 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.