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).

VAL's Canadian, EU and Asia Pacific Affiliates Virtu Canada Corporation, Virtu Europe Trading Limited, and Virtu ITG Hong Kong Limited are broker-dealers that offer products and services similar to VET and have hi-touch desks, all of which can enter or direct the entry of orders to POSIT through VAL. VAL enters or directs orders to the ATS for these Affiliates as agent or riskless principal using the VAL MPIDs VALR, or VALX.

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.

VAL offers Subscribers the ability to opt out of interacting with principal orders entered into POSIT under the MPIDs NITE, VIRT and VALX ("the Principal Opt-Out"). Orders entered into POSIT by VAL under the MPID VALR are not subject to the Principal Opt-Out.

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 VAL or its Affiliate's (see Part II, item 2a) principal orders entered under the above referenced MPIDs. VAL does not allow POSIT Subscribers to opt out of interacting with any orders submitted to POSIT by VAL or 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.

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.

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 (<u>e.g.</u>, 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 (<u>e.g.</u> 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, Day orders and Immediate or Cancel ("IOC") orders. Peg and Day orders may execute against contra-side Peg orders, contra-side Day orders or against IOC orders. IOC orders may only cross against 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.

Priority in the POSIT Continuous Crossing Session for all order types is price, then size, then time. For orders without a peg instruction, the limit price submitted is used to determine the price portion of the queue priority. For orders with a peg instruction, the less aggressive price between the current peg price and limit price submitted is used to determine the price portion of the queue priority. 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 the POSIT Continuous Crossing 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 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.

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

- (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 Peg 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. Subscribers may enter IOC orders with Market, Mid-Point, Primary Peg or Limit Price instructions.

Other available Instructions and Designations for the Continuous Crossing Session: The following instructions may be applied to the above order types unless otherwise indicated. These instructions may be implemented by either transmitting a specified value over a FIX tag on an order by order basis, or requesting a session level configuration that will apply the requested instruction across all orders sent to the session specified by the Direct Subscriber, unless otherwise indicated:

- (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. POSIT does not aggregate multiple contra side orders to satisfy a MEQ instruction on a single order. POSIT will cancel back an order to the Direct Subscriber if the residual quantity of an order falls below the MEQ instruction.
- (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 accepted if the NBBO is locked, but will receive a 'Nothing Done' message. 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 POSIT upon entry. Peg orders that would remove liquidity from POSIT will be accepted by POSIT and remain open but ineligible for execution until such a time as the order adds liquidity to POSIT. 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. The Add Only instruction will be ignored if specified for an IOC order.
- (iv) Virtu Principal Opt Out: Direct and Indirect Subscribers may request to have their orders not interact with Virtu principal orders. This instruction will only prevent interaction against orders entered by VAL under the MPID's NITE, VIRT and VALX. Principal orders entered by VAL or the Affiliates, as defined in Part II, Item 2a, using other MPIDs will not be subject to this opt out. See Part II, Item 3a for more detail. This order instruction can only be specified at the session level, and cannot be specified on an order by order basis via a FIX tag.
- (v) POSIT Liquidity 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. POSIT uses quantitative metrics to create one or more Liquidity Profiles for each POSIT Subscriber. The metrics include execution performance relative to the market over different time horizons for all fills in POSIT. POSIT makes discretionary decisions in assigning a Liquidity Profile to a new or previously uncategorized Subscriber. POSIT will inform Subscribers about their own profile information upon request. See Part III, Item 13a for more detail on POSIT Liquidity

Profiles.

(vi) 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. This order instruction can only be specified at the session level, and cannot be specified on an order by order basis via a FIX tag.

An order that contains a value in a utilized FIX field other than a value recognized by VAL (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.

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). 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.
- (iii) Auto-Ex: Human Participants, as described in Part III, Item 9(a), can designate a Conditional Order as Auto-Ex. If the Auto-Ex instruction is enabled for a Conditional Order, the Human Participant will not receive a pop up window requesting to Firm-Up, as described in Part III, Item 9(a), but instead the Conditional Order from the Human Participant will automatically Firm-Up against a contra side order.

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

Item 19: Fees

a. Identify and describe any fees or charges for use of the NMS Stock ATS services, including the type of fees (e.g., subscription, connectivity), the structure of the fees (e.g., fixed, volume-based, transaction-based), variables that impact the fees (e.g., types of securities traded, block orders, form of connectivity to the ATS),

differentiation among types of Subscribers (e.g., broker-dealers, institutional investors, retail) and range of fees (e.g., high and low).

POSIT does not charge any subscription or connectivity fees. Historically, execution charges, if any, were individually negotiated with each Direct Subscriber. Currently, Direct Subscribers pay fees between \$0.0001 and \$.05 per share. VAL and VAL Affiliates are not assessed a fee for POSIT trades. Indirect Subscribers pay bundled fees, See Section III, Item 19(b). VAL will consider a number of factors in determining the fee an individual Subscriber will be assessed, including, but not limited to, the client's overall relationship with VAL, the type of trading flow, the amount of trading flow, and the markets that will be traded.

VAL is assessed certain Consolidated Audit Trail (CAT) regulatory fees relating to trading on POSIT as an execution venue. In each transaction that does not include VAL mpids VIRT and VALX, VAL is identified on transaction reports as the CAT executing broker for the buyer and the selling POSIT direct broker dealer subscriber is reported as the CAT executing broker for the seller. When both sides of the transaction are broker dealers, FINRA assesses CAT fees on both VAL, on behalf of the buying POSIT subscriber, and on the selling POSIT subscriber. VAL passes through to the buying POSIT broker dealer direct subscriber these CAT-related fees that VAL is assessed on behalf of those buying POSIT broker dealer direct subscribers. For transactions that include VAL mpids VIRT or VALX and an external broker dealer direct subscriber as the contra, the external subscriber's mpid is reported as the CAT executing broker regardless of the side of the external subscriber's trade. For transactions where the direct subscriber is a non-broker dealer, VAL is identified on transaction reports as the CAT executing broker on the side of the transaction of the non-broker dealer. VAL only passes through CAT-related fees to broker dealer direct subscribers to POSIT. VAL does not pass through CAT-related fees if the POSIT subscriber's CAT-related fees are less than \$50 for a given month.

Item 20: Suspension of Trading

a. Explain any procedures for suspending or stopping trading on the NMS Stock ATS, including the suspension of trading in individual NMS stocks.

VAL may in its sole discretion, stop trading certain symbols from time to time for, among other reasons, the purpose of remaining below the volume thresholds for (i) classification as an "SCI Entity" under Regulation SCI and (ii) certain regulatory requirements as set forth in Rules 301(b)(3) Regulation (5) ATS. VAL uses a proprietary market data system to consolidate the best bids and offers to determine the NBBO at which executions occur on POSIT. See Part III, Item 23 for a description of this system. VAL has programmed its market data system to disseminate an alert when it detects a certain level of disparity from normative messages received by the systems. The POSIT system is programmed to shift to utilizing only the SIP BBOs when there is a certain level of disparity between the exchange book feeds and the SIP. If the Firm's Core Operations staff determines that there appears to be a significant delay or issue with the Firm's market data, they will cause POSIT to suspend trading in the impacted symbol or in all symbols in the case that they determine there is a more severe systems issue. In either event, the Core Operations staff will cause POSIT to cancel impacted orders. Cancellation reports will be sent to clients as soon as possible and POSIT's client services personnel will attempt to contact Subscribers. Where there is a severe

systems interruption that prevents POSIT from recovering for the remainder of the day, POSIT Subscribers orders will instruct to route their to other market POSIT will not execute orders if the NBBO is crossed, if the NBB is below the LULD Lower Limit Price Band, if the NBO is above the LULD Upper Limit Price Band, or if the security is LULD Trading Pause. POSIT will reject orders in certain NMS Stocks, including any symbols on VAL's restricted list or symbols for which VAL seeks to remain below certain volume thresholds. In those circumstances POSIT will provide clients with notice of the symbol(s) that will be unavailable by posting information on the POSIT page on the Virtu Financial, Inc. website (http://www.virtu.com).

For details on suspension of trading as a result of trade reporting outages, see Part III Item 21a.

Item 21: <u>Trade Reporting</u>

a. Explain any procedures and material arrangements for reporting transactions on the NMS Stock ATS, including where an ATS reports transactions and under what circumstances.

VAL reports all POSIT transactions to the FINRA NASDAQ CARTERET TRF. POSIT does not have a connection to other FINRA TRFsmay also report transactions to the FINRA NASDAQ Chicago TRF in the event of an outage of the FINRA NASDAQ Carteret TRF. In the event that POSIT is unable to report transactions to the NASDAQ CARTERET TRF or NASDAQ Chicago TRF, POSIT will cease trading, cancel existing orders, and reject new orders.

b. Are the procedures and material arrangements for reporting transactions on the NMS Stock ATS the same for all Subscribers and the Broker-Dealer Operator?



If no, identify and explain any differences.