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-a-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.

Order Types

The ATS accepts limit and pegged orders. The ATS does not accept market orders. Pegged orders may include the following reference prices: (i) primary (*i.e.*, NBB for buy orders, NBO for sell orders); (ii) market (*i.e.*, NBO for buy orders, NBB for sell orders); and (iii) midpoint of the NBBO. The ATS also accepts "PegBest" orders, which, as further discussed below, are pegged to the Combined NBBO (defined below) with +$0.01 offset. Only PegBest orders may be pegged to the Combined NBBO. Pegged orders may include an ultimate limit price, although PegBest orders

and orders pegged to the midpoint of the NBBO must include an ultimate limit price. Primary pegged orders may include dollar offset instructions expressed in penny increments (*e.g.*, pegged primary plus $0.01). Market pegged orders may include dollar offset instructions expressed in penny increments (*e.g.*, pegged market minus $0.01). Orders pegged to the midpoint of the NBBO may include dollar offset instructions ("Midpoint Offsets"), further discussed below. When used herein, a "positive" (+) offset refers to a more aggressive price, while a "negative" (-) offset refers to a less aggressive price. For instance, where the NBBO is $20.00 x $20.05, a primary pegged buy order with a positive (+) $0.01 offset will have an effective limit price of $20.01, while a primary pegged *sell* order with a positive (+) $0.01 offset will have an effective limit price of $20.04). Pegged orders are ranked based on their effective limit price. At no time will a peg instruction, including any offset instruction, violate an order's ultimate limit price.

Midpoint Offset instructions must include two values, one value that will be applied when the NBBO spread is an even value (e.g., where the NBBO is $20.00 x $20.10) (the "Even Spread Offset") and a second value that will be applied when the NBBO spread is an odd value (e.g., where the NBBO is $20.00 x $20.05) (the "Odd Spread Offset"). Even Spread Offsets must be expressed in full penny increments. Odd Spread Offsets must be expressed in a half penny increment, not a whole penny increment (that is, $0.005, $0.015, $0.025, etc.). Midpoint Offset instructions may be expressed as positive or negative offsets. An order's Even and Odd Spread Offset instructions must be sequential (that is, an order with an Even Spread Offset of +$0.01 must include Odd Spread Offset instructions of either +$0.005 or +$0.015; no other Odd Spread Offset instructions will be accepted). Midpoint Offset instructions will not cause an order's effective limit price to be marketable relative to the prevailing NBBO. Where a Midpoint Offset instruction would cause an order to be marketable relative to the prevailing NBBO (e.g., for buy orders, equal to or greater than the NBO), the ATS will treat the order's effective limit price as one penny below the NBO (for buy orders) or one penny above the NBB (for sell orders). The ATS will disregard any positive Midpoint Offset instruction when the NBBO is one penny wide. The above adjustments operate on a dynamic basis. For instance, assume a buy order pegged to the midpoint is submitted with an Even Spread Offset instruction of +$0.01 and an Odd Spread Offset instruction of +$0.015. If, upon order receipt, the prevailing NBBO is $20.00 x $20.10, the order's effective limit price would be $20.06 (that is, $20.05, the midpoint of the NBBO, plus a $0.01 Even Spread Offset). If, prior to the order being executed or cancelled, the NBBO updates to $20.00 x $20.03, the order's effective limit price would then be $20.02. If the NBBO further narrows to $20.00 x $20.01, the order's effective limit price would then be $20.005 (that is, the ATS will disregard the order's Midpoint Offset instruction). If the NBBO subsequently widens to $20.00 x $20.05, the order's effective limit price would then be $20.04 (that is, $20.025 plus the $0.015 Odd Spread Offset).

As noted above, "PegBest orders" are orders that are pegged to the Combined NBBO with a +$0.01 offset. The "Combined NBBO" is the more aggressive (higher for buys, lower for sells) of (i) the prevailing NBB (for buy orders) or NBO (for sell orders) and (ii) the highest price (for buy orders) or lowest price (for sell orders) at which aggregate same-side interest, including better-price interest, equals

or exceeds the PegBest order's Minimum Compete Size instruction (as defined below). For instance, where the prevailing NBBO is $20.00 x $20.09, and there is a resting non-PegBest buy order for 100-shares in the ATS with a limit price of $20.01, a buy PegBest order with a Minimum Compete Size instruction of 100-shares will have an effective limit price of $20.02 (Combined NBBO of $20.01 + $0.01 offset). Where the prevailing NBBO is $20.00 x $20.09, and the competing non-PegBest buy orders resting in the ATS are (i) an order for 50-shares with a limit price of $20.03, (ii) an order for 75-shares with a limit price of $20.02 and (iii) an order for 100-shares with a limit price of $20.01, a buy PegBest order with a Minimum Compete Size instruction of 100-shares will have an effective limit price of $20.03 (that is, the Combined NBBO would equal $20.02 as $20.02 is the highest price at which aggregate same-side interest, including better-price interest, equals or exceeds the PegBest order's Minimum Compete Size instruction, and the PegBest order's effective limit price would therefore equal $20.02 + $0.01 offset). The effective price of a PegBest order will never exceed the midpoint of the prevailing NBBO. For instance, where the prevailing NBBO is $20.00 x $20.09, and there is a resting 100-share non-PegBest buy order in the ATS with a limit price of $20.06, a buy PegBest order with a Minimum Compete Size instruction of 100 shares would be treated as pegged to the midpoint of the NBBO (effective limit price of $20.045).

PegBest orders must include a "Minimum Compete Size" instruction, expressed as a share quantity. The ATS appends a default Minimum Compete Size of 100 shares, although subscribers may select Minimum Compete Sizes that are smaller or larger than the default quantity (including a Minimum Compete Size of zero (0) shares). Minimum Compete Size instructions, which are used in determining the Combined NBBO for any given order, designate the minimum competing order size required before the PegBest order will attempt to better the price. As noted above, in determining whether an order's Minimum Compete Size instruction has been met the ATS will effectively walk down the order book (including, for clarity, both resting Brokerage Customer orders and resting Liquidity Provider orders), aggregating competing interest at each price level. Accordingly, where a PegBest buy order has a Minimum Compete Size instruction of 200-shares, the NBBO is $20.00 x $20.09 and the best-priced non-PegBest competing orders resting in the ATS are (i) a 100-share order with a limit price of $20.05, (ii) a 75-share order with a limit price of $20.04, (iii) a 100-share order with a limit price of $20.02 and (iv) a 100-share order with a limit price of $20.00, the PegBest order's Minimum Compete Size instruction would be satisfied at $20.02 (its Combined NBBO) and its effective limit price would be $20.03 (Combined NBBO + $0.01).

PegBest orders must also include a "Competing Tick Offset" instruction. By default, PegBest orders include a Competing Tick Offset instruction of +$0.02. Competing Tick Offset instructions are activated where there are competing PegBest orders in the ATS, and designate the amount by which a PegBest order's effective limit may exceed its Combined NBBO. A PegBest order will compete against another PegBest order even where the competing PegBest order doesn't satisfy its Minimum Compete Size instruction. Except as noted below, Competing Tick Offset instructions will not allow a PegBest order's effective limit price to exceed the midpoint of the prevailing NBBO. Subscribers

may designate their orders as free to "compete" to the midpoint of the NBBO, regardless of the amount by which the midpoint of the prevailing NBBO exceeds the Combined NBBO (e.g., providing for "unconstrained" Competing Tick Offset instructions). Alternatively, subscribers may express Competing Tick Offset instructions as an offset from the midpoint of the prevailing NBBO, specified in the form of Midpoint Offsets as discussed above. Subscribers may otherwise express Competing Tick Offset instructions in penny increments, whereby the instruction identifies the amount by which the order's effective limit price may exceed its Combined NBBO when competing with another PegBest order. Competing Tick Offset instructions must be for +$0.01 or higher when expressed as an offset from the Combined NBBO. Competing Tick Offset instructions expressed as an offset from the midpoint of the prevailing NBBO may be expressed as negative or positive (or zero) Midpoint Offsets. For clarity, subscribers may not include both Midpoint Offset restrictions and Competing Tick Offset instructions expressed in penny increments on the same order. Notwithstanding any order's Competing Tick Offset instruction, the effective limit price of a PegBest order will never exceed the order's ultimate limit price. For PegBest orders with Competing Tick Offset instructions expressed in penny increments, the order's effective limit price will never exceed the midpoint of the prevailing NBBO. For PegBest orders with Competing Tick Offset instructions expressed as a Midpoint Offset, the order's effective limit price may exceed the midpoint of the prevailing NBBO (in the event of a positive Midpoint Offset), subject to the terms of such Midpoint Offset instruction and any ultimate limit price associated with the order.

Assume that the prevailing NBBO is $20.00 x $20.15, and the Combined NBBO for each of PegBest Orders A and B (defined below) is $20.01. Further assume a PegBest buy order ("PegBest Order A") has been submitted to the ATS with a Competing Tick Offset of $0.02 and there are no competing PegBest buy orders in the ATS. PegBest Order A will have an effective limit price of $20.02 (one tick above its Combined NBBO) and its Competing Tick Offset will not be activated. Assume a competing PegBest buy order is subsequently submitted ("PegBest Order B"), with a Competing Tick Offset instruction of $0.04. PegBest Order A's effective limit price would increase to $20.03 (Combined NBBO + $0.02), while PegBest Order B's effective limit price would be $20.04 (Combined NBBO + $0.03). For clarity, PegBest Order B's effective limit price would *not* be $20.05 (Combined NBBO + $0.04) as Competing Tick Offset instructions are only activated to the extent necessary to contend with a competing PegBest order.

Assume instead that the prevailing NBBO is $20.00 x $20.15, and the Combined NBBO for PegBest Order A is $20.01 and the Combined NBBO for PegBest Order B is $20.04. Assume that PegBest Order A again has a Competing Tick Offset of $0.02 and that PegBest Order B again has a Competing Tick Offset instruction of $0.04. PegBest Order A's effective limit price would still be $20.03 (its Combined NBBO + $0.02), while PegBest Order B's effective limit price would be $20.05 (its Combined NBBO of $20.04 plus a + $0.01 offset; its Competing Tick Offset would effectively not be triggered).

Assume again that the prevailing NBBO is $20.00 x $20.15, the Combined NBBO for PegBest Order A is $20.01 and the Combined NBBO for PegBest Order B is

$20.04. Assume that PegBest Order A now has a Competing Tick Offset expressed as Midpoint Offsets of $-.0005 (Odd Spread Offset) and $-.01 (Even Spread Offset), while PegBest Order B again has a Competing Tick Offset instruction of $0.04. Here, PegBest Order A's effective limit price would be $20.07 (midpoint of the NBBO ($20.075) minus $.0005 (Odd Spread Offset)), while PegBest Order B's effective limit price would be $20.075 (that is, PegBest Order B would be treated as pegged to the midpoint of the NBBO as its Combined NBBO of $20.04 plus a + $0.04 offset would exceed the midpoint of the NBBO).

Directed orders submitted to the ATS by Brokerage Customers may include minimum quantity instructions. A minimum quantity instruction specifies the minimum execution size a subscriber will accept and does not allow for the aggregation of contra-side orders (*i.e.*, the minimum quantity instruction must be satisfied by a single contra-side order). When an order that includes a minimum quantity instruction receives an execution it will continues to rest in the ATS until its leaves quantity falls below its minimum quantity instruction, at which points the ATS will cancel back the order. Liquidity Providers may not include minimum quantity instructions with their orders.

Only Brokerage Customers (including Liquidity Providers in their capacities as Brokerage Customers) may (i) submit PegBest orders and (ii) utilize minimum quantity instructions. All other order instructions are available to both Liquidity Providers and Brokerage Customers. However, except for directed orders submitted to the ATS by Brokerage Customers, as a matter of policy IBKR does not rest non-marketable orders in the ATS, utilize peg instructions or utilize minimum quantity instructions.

Directed orders submitted to the ATS by a Brokerage Customer or Liquidity Provider will never remove liquidity from the ATS. Where, upon receipt, a directed order submitted to the ATS by a Brokerage Customer or Liquidity Provider is marketable against trading interest on the ATS, the ATS will accept the order for further processing as a post-only order (i.e., the order will not be crossed against the existing contra-side interest). Where a directed order submitted to the ATS by a Brokerage Customer or Liquidity Provider would be marketable relative to the NBBO (including, for clarity, any market pegged order and, where applicable, midpoint and primary pegged orders with positive dollar offset instructions), the ATS will treat the order as a market pegged order with a -$0.01 offset (that is, an effective limit price of $0.01 below the NBO for buy orders or $0.01 above the NBB for sell orders). Notwithstanding the foregoing, where an order contains Midpoint Offset instructions and the NBBO is one penny wide, the ATS will disregard the Midpoint Offset instructions and treat the order as pegged to the midpoint of the NBBO (with no offset).

Time-in-Force

The ATS accepts orders with the following time-in-force ("TIF") instructions: (i) "day", (ii) immediate or cancel ("IOC") and (iii) good-til-time ("GTT").

Non-directed orders routed to the ATS by the IBKR SOR (i.e., where the subscriber has not directed the order to the ATS) are submitted as either IOC orders or as GTT

orders with a 1-second GTT instruction.

Directed orders submitted to the ATS, whether by a Liquidity Provider or other subscriber, may include a TIF instruction of day, IOC or GTT. Orders submitted with TIF instructions of longer than day (*e.g.*, GTD or GTT with an expiration time of post after trading hours) are treated as day orders by the ATS and cancelled back at the end of the trading day.

Priority

The ATS ranks resting Liquidity Provider orders based on the following factors in the following order: (i) price; (ii) size; and (iii) time. The ATS ranks resting Brokerage Customer orders based on the following factors in the following order: (x) price; (y) time; and (z) size. Where a resting Brokerage Customer order is on price parity with a resting Liquidity Provider order, the SOR will always attempt to interact with the Brokerage Customer order (please see Part III Items 9 and 11 for a further discussion of the IBKR SOR's manner of routing non-directed Brokerage Customer orders to the ATS).

~~Orders resting in the ATS are ranked based on the following factors in the following order: (i) price; (ii) size; and (iii) time.~~ Pegged orders are ranked based on their effective limit price and not on any ultimate limit price associated with the order. Where an order is pegged to the midpoint of the NBBO, the ATS will rank the order and any related IOI at the order's effective limit price (*i.e.*, the pegged price), even where the effective limit price is not in a $0.01 increment (*e.g.*, where the NBBO is $20.00 by $20.05, a buy order pegged to the midpoint of the NBBO will have a ranking price of $20.025 and, accordingly, will have priority over buy orders with limit prices of $20.02). For clarity, orders pegged to the midpoint of the NBBO that include Midpoint Offset instructions are ranked at their effective limit prices (which, except where the order's Midpoint Offset instructions are disregarded, are always priced in full-penny increments).

For purposes of establishing time priority the ATS treats pegged orders, other than PegBest orders, as received at the time of original order receipt, rather than as received at each subsequent price change. For purposes of establishing time priority, the ATS treats PegBest orders as being resubmitted at the time of any increase in the PegBest order's offset relative to the Combined NBBO (*e.g.*, where a PegBest order's offset increases from +$0.01 to +$0.02 due to the introduction of a competing PegBest order). Reductions in a PegBest order's offset (*e.g.*, where a PegBest order's offset to the Combined NBBO is reduced from +$0.02 to +$0.01) do not impact time of receipt for priority purposes. For clarity, changes in the Combined NBBO or midpoint of the NBBO, without more, do not impact a PegBest order's time of receipt for time priority purposes. Where a subscriber modifies the price or size instruction associated with an order (e.g., changing an order's limit price or increasing or decreasing the size of any order), the ATS treats the order as received at the time of modification.

Order Routing

The ATS does not route-out. All orders not executed in the ATS are cancelled back to the subscriber or the SOR, as applicable.

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.

Liquidity Providers may only add liquidity on the ATS. Additionally, any order directed to the ATS by a subscriber who is not a Liquidity Provider may only add liquidity on the ATS.

Only non-directed orders submitted to the ATS via IBKR's SOR may remove liquidity from the ATS.

Only Brokerage Customers (including Liquidity Providers in their capacities as Brokerage Customers) may (i) submit PegBest orders and (ii) utilize minimum quantity instructions. All other order instructions are available to both Liquidity Providers and Brokerage Customers. However, except for directed orders submitted to the ATS by Brokerage Customers, as a matter of policy IBKR does not rest non-marketable orders in the ATS, utilize peg instructions or utilize minimum quantity instructions.

Item 9: Conditional Orders and Indications of Interest

a. Does the NMS Stock ATS send or receive any messages indicating trading interest (e.g., IOIs, actionable IOIs, or conditional orders)?

☒ *Yes* ☐ *No*

If yes, identify and explain the use of the messages, including information contained in messages (e.g., price or size minimums), how the message is transmitted (e.g., order management system, smart order router, FIX), when the message is transmitted (e.g., automatically by the ATS, or upon the sender's request), the type of Persons that receive the message (e.g., Subscribers, Trading Centers), responses to conditional orders or IOIs (e.g., submission to firm-up conditional orders), and the conditions under which the message might result in an execution in the ATS (e.g., response time parameters, interaction, and matching).

The ATS, on a security-by-security basis, disseminates indications of interests ("IOIs") to the IBKR SOR identifying the symbol, size, side and ranking price of (i) the best-priced resting order of each Liquidity Provider and (ii) the best-priced resting order amongst all other subscribers (i.e., among all Brokerage Customers).

The ATS, on a security-by-security basis, may also disseminate to the IBKR SOR information regarding the smallest minimum quantity instruction (which may be zero) among resting Brokerage Customer orders priced at or inside the NBBO. This may include information sufficient for the IBKR SOR to determine whether the order associated with such minimum quantity instruction has an effective limit price that equals or betters (x) the effective limit price of competing Liquidity Providers' orders and/or (y) the NBBO.

The SOR utilizes the information contained in these IOIs (including information regarding minimum quantity instructions) in determining whether to route orders to the ATS. For instance, if an IOI indicates an eligible order(s) resting in the ATS is priced at or inside the NBBO, the SOR may route contraside interest to the ATS. The SOR ranks, for routing decision purposes, IOIs disseminated by the ATS based on ranking price. Where the ranking price of an IOI "generated" by a Liquidity Provider's order equals the ranking price of an IOI "generated" by an eligible order of a Brokerage Customer, the SOR will rank the IOI "generated" by the Brokerage Customer higher than the IOI "generated" by the Liquidity Provider. Where the IOIs of multiple Liquidity Providers are on ranking price parity, the SOR will rank those IOIs based on the following factors in the following order: (x) size and (y) time.

~~The SOR utilizes the information contained in these IOIs (including information regarding minimum quantity instructions) in determining whether to route orders to the ATS. For instance, if an IOI indicates an eligible order(s) resting in the ATS is priced at or inside the NBBO, the SOR may route contraside interest to the ATS.~~ Where the SOR routes an order to the ATS in response to an IOI "generated" by a Liquidity Provider's order, the order will only be eligible to interact with orders submitted by the applicable Liquidity Provider. Where, however, the SOR routes

an order to the ATS in response to an IOI "generated" by the directed order of a Brokerage Customer, the order will be eligible to interact with any order directed to the ATS by a Brokerage Customer (but will be ineligible to interact with orders of Liquidity Providers, except, for clarity, in their capacities as Brokerage Customers). ~~Where the ranking price of an IOI "generated" by a Liquidity Provider's order equals the ranking price of an IOI "generated" by an eligible order of a Brokerage Customer, the SOR will preference the IOI "generated" by the Brokerage Customer and any order routed to the ATS by the SOR in response thereto will only be eligible to interact with orders submitted by Brokerage Customers.~~

The IOIs discussed above are disseminated via proprietary binary protocol between the ATS and the SOR. The IOIs are not transmitted to any other person or functionality. The ATS does not otherwise transmit IOIs. The ATS does not receive IOIs.

b. *If yes to Item 9(a), are the terms and conditions governing conditional orders and indications of interest the same for all Subscribers and the Broker-Dealer Operator?*

☒ *Yes* ☐ *No*

If no, identify and explain any differences.

Item 11: Trading Services, Facilities and Rules

a. *Provide a summary of the structure of the NMS Stock ATS marketplace (e.g., crossing system, auction market, limit order matching book) and explain the means and facilities for bringing together the orders of multiple buyers and sellers on the NMS Stock ATS.*

The ATS operates as a limit order crossing book and allows customers of IBKR to interact with orders submitted by market makers and other principal trading firms (i.e., the Liquidity Providers) at prices at or inside the NBBO. Additionally, the ATS allows customers of IBKR to direct liquidity adding orders to the ATS for interaction with orders submitted by IBKR customers at prices at or inside the NBBO. The ATS supports trading in all NMS stocks (subject to the restrictions discussed in Part III Item 20).

Brokerage Customers' orders access the ATS via the SOR. Brokerage Customers may submit directed orders to the ATS; such orders may only add liquidity to the ATS. Where a Brokerage Customer submits a non-directed order to the SOR, the SOR may route the order to the ATS; such orders will always be deemed to remove liquidity from the ATS when interacting with a directed order submitted to the ATS (whether such directed-order was submitted by a Liquidity Provider or other Brokerage Customer). In the limited circumstances where the SOR routes two non-directed Brokerage Customer orders to the ATS with overlapping effective limit prices, the order that was marketable relative to the NBBO when routed to the ATS by the SOR will always be deemed to remove liquidity (the SOR will only route non-directed Brokerage Customer orders with overlapping effective limit prices to the ATS where one order, but not the other, is marketable relative to the NBBO at the time of routing).

Certain market-makers and other principal trading firms willing to offer opportunities for price improvement to IBKR's customers act as liquidity providers in the ATS (i.e., the Liquidity Providers). Liquidity Providers' orders may only interact with Brokerage Customers' non-directed orders. Liquidity Providers may only add liquidity to the ATS.

The ATS, on a security-by-security basis, disseminates IOIs to the IBKR SOR identifying the symbol, size, side and ranking price of (i) the best-priced resting order of each Liquidity Provider and (ii) the best-priced resting order amongst all other subscribers (i.e., of all Brokerage Customers). Additionally, and as further discussed at Part III Item 9 above, the ATS may also disseminate to the IBKR SOR information regarding the smallest minimum quantity instruction (which may be zero) among resting Brokerage Customer orders priced at or inside the NBBO.

The SOR utilizes the information contained in these IOIs (including information regarding minimum quantity instructions) in determining whether to route orders to the ATS. For instance, if an IOI indicates an eligible order(s) resting in the ATS is priced at or inside the NBBO, the SOR may route contraside interest to the ATS. The SOR ranks, for routing decision purposes, IOIs disseminated by the ATS based on ranking price. Where the ranking price of an IOI "generated" by a Liquidity Provider's order equals the

ranking price of an IOI "generated" by an eligible order of a Brokerage Customer, the SOR will rank the IOI "generated" by the Brokerage Customer higher than the IOI "generated" by the Liquidity Provider. Where the IOIs of multiple Liquidity Providers are on ranking price parity, the SOR will rank those IOIs based on the following factors in the following order: (x) size and (y) time.

~~The SOR utilizes the information contained in these IOIs (including information regarding minimum quantity instructions) in determining whether to route orders to the ATS. For instance, if an IOI indicates an eligible order(s) resting in the ATS is priced at or inside the NBBO, the SOR may route contraside interest to the ATS.~~ Where the SOR routes an order to the ATS in response to an IOI "generated" by a Liquidity Provider's order, the order will only be eligible to interact with orders submitted by the applicable Liquidity Provider. Where, however, the SOR routes an order to the ATS in response to an IOI "generated" by the directed order of a Brokerage Customer, the order will be eligible to interact with any order directed to the ATS by a Brokerage Customer (but will be ineligible to interact with orders of Liquidity Providers, except, for clarity, in their capacities as Brokerage Customers). ~~Where the ranking price of an IOI "generated" by a Liquidity Provider's order equals the ranking price of an IOI "generated" by an eligible order of a Brokerage Customer, the SOR will preference the IOI "generated" by the Brokerage Customer and any order routed to the ATS by the SOR in response thereto will only be eligible to interact with orders submitted by Brokerage Customers.~~

The IOIs discussed above are not transmitted to any other person or functionality. The ATS does not otherwise transmit IOIs. The ATS does not receive IOIs.

b. *Are the means and facilities required to be identified in Item 11(a) the same for all Subscribers and the Broker-Dealer Operator?*

☐ *Yes* ☒ *No*

If no, identify and explain any differences.

All orders submitted by Brokerage Customers pass through the SOR. Orders submitted by Liquidity Providers do not pass through the SOR.

Directed orders submitted to the ATS, whether by a Liquidity Provider or other subscriber, may only add liquidity. Further, Liquidity Providers may only add liquidity on the ATS. Only non-directed orders submitted by Brokerage Customers may remove liquidity.

Orders submitted by a Liquidity Provider may not interact with other orders submitted by that Liquidity Provider. Orders submitted by a Liquidity Provider may not interact with orders submitted by other Liquidity Providers, nor may such orders interact with directed orders submitted to the ATS by subscribers that are not Liquidity Providers.

Directed orders submitted to the ATS by non-Liquidity Providers may not interact with orders submitted to the ATS by Liquidity Providers. Non-directed orders submitted to the ATS by the IBKR SOR may, subject to the terms of the orders,

interact with any other order in the ATS.

c. *Explain the established, non-discretionary rules and procedures of the NMS Stock ATS, including order interaction rules for the priority, pricing methodologies, allocation, matching, and execution of orders and trading interest, and other procedures governing trading, such as price improvement functionality, price protection mechanisms, short sales, locked-crossed markets, the handling of execution errors, and the time-stamping of orders and executions.*

Priority: ~~Orders resting in the ATS are ranked~~**The ATS ranks resting Liquidity Provider orders** based on the following factors in the following order: (i) price; (ii) size; and (iii) time. **The ATS ranks resting Brokerage Customer orders based on the following factors in the following order: (x) price; (y) time; and (z) size. Where a resting Brokerage Customer order is on price parity with a resting Liquidity Provider order, the SOR will always attempt to interact with the Brokerage Customer order (please see Part III Items 9 and 11 for a further discussion of the IBKR SOR's manner of routing non-directed Brokerage Customer orders to the ATS).**

Pegged orders are ranked based on their effective limit price and not on any ultimate limit price associated with the order. Where an order is pegged to the midpoint of the NBBO, the ATS will rank the order and any related IOI at the order's effective limit price (*i.e.*, the pegged price), even where the effective limit price is not in a $0.01 increment (*e.g.*, where the NBBO is $20.00 by $20.05, a buy order pegged to the midpoint of the NBBO will have a ranking price of $20.025 and, accordingly, will have priority over buy orders with limit prices of $20.02). For clarity, orders pegged to the midpoint of the NBBO that include Midpoint Offset instructions are ranked at their effective limit prices (which, except where the order's Midpoint Offset instructions are disregarded, are always priced in full-penny increments). See Part III Item 7 for further discussion of Midpoint Offset instructions' manner of operation.

For purposes of establishing time priority the ATS treats pegged orders, other than PegBest orders, as received at the time of original order receipt, rather than as received at each subsequent price change. For purposes of establishing time priority, the ATS treats PegBest orders as received at the time of any increase in the PegBest order's offset relative to the Combined NBBO (*e.g.*, where a PegBest order's offset increases from +$0.01 to +$0.02 due to the introduction of a competing PegBest order). Reductions in a PegBest order's offset (*e.g.*, where a PegBest order's offset is reduced from +$0.02 to +$0.01) do not impact time of receipt for priority purposes. For clarity, changes in the Combined NBBO or midpoint of the NBBO, without more, do not impact a PegBest order's time of receipt of time priority purposes. Where a subscriber modifies the price or size instruction associated with an order (e.g., changing an order's limit price or increasing or decreasing the size of any order), the ATS treats the order as received at the time of modification.

The ATS, on a security-by-security basis, disseminates IOIs to the IBKR SOR identifying the symbol, size, side and ranking price of (i) the best-priced resting order of each Liquidity Provider and (ii) the best-priced resting order amongst all other subscribers. Additionally, and as further discussed at Part III Item 9 above, the ATS may also disseminate to the IBKR SOR information regarding the smallest

minimum quantity instruction (which may be zero) among resting Brokerage Customer orders priced at or inside the NBBO. Where the SOR routes an order to the ATS in response to an IOI, the order is only eligible to interact with the Liquidity Provider whose order was identified as top-of-book in the most recent IOI received by the SOR (where the IOI identifies a non-Liquidity Provider's order as top-of-book, orders of non-Liquidity Providers, as a group, are eligible to interact with any non-directed order routed to the ATS by the SOR, while orders of Liquidity Providers are not). Where the ranking price of an IOI "generated" by a Liquidity Provider's order equals the ranking price of an IOI "generated" by a ~~non-Liquidity Provider's~~**Brokerage Customer's** order, the SOR will preference the IOI "generated" by the ~~non-Liquidity Provider~~**Brokerage Customer** and any order routed to the ATS by the SOR in response thereto will only be eligible to interact with orders submitted by non-Liquidity Providers. **Where the IOIs of multiple Liquidity Providers are on ranking price parity, the SOR will preference those IOIs based on the following factors in the following order: (x) size and (y) time.**

Price Improvement: In the event of a match, the order deemed to be removing liquidity receives all available price improvement. Generally, for two given orders to a match, the order received first by the ATS is deemed to be adding liquidity. Where a directed order matches with a non-directed order, the directed order is always deemed to be adding liquidity. Where two non-directed orders are routed to the ATS by the SOR, and one such order is marketable relative to the NBBO at the time of the SOR route, while the other is not, the ATS treats the marketable order as removing liquidity, regardless as to whether the order was actually received first.

Compliance with Applicable Law: To the extent that any ATS order may not, by law, rule, regulation or the terms of the order, be crossed with another order, or may not be crossed at a particular price, then such orders will be ineligible for matching. The ATS will apply the priorities detailed above with respect to eligible orders and prices only. In certain circumstances, orders may be ineligible to interact with certain other orders.

The ATS is programmed not to execute transactions outside the NBBO. The ATS will not effect a transaction involving a short sale order at the NBB when a Regulation SHO circuit breaker is in effect for the given security. Similarly, the ATS is programmed not to execute transactions during locked or crossed markets or at prices outside the Limit Up-Limit Down price bands.

Trading Errors: Trading errors resulting from executions in the ATS are recorded in IBKR's error accounts. IBKR views trading errors as transactions in the wrong security or side of the market, executions outside an order's limit price, executions based on latent market data and executions at clearly erroneous prices. IBKR handles executions at clearly erroneous prices consistent with the applicable rules of the self-regulatory organizations. Potential trading errors can be raised by Brokerage Customers, Liquidity Providers or IBKR personnel. After evaluating the activity to confirm a bona fide error, the Order Desk can correct the error in a manner that attempts to place the subscriber in the same position had the error not occurred.

d. *Are the established, non-discretionary rules and procedures required to be identified in Item 11(c) the same for all Subscribers and the Broker-Dealer Operator?*

☒ *Yes* ☐ *No*

If no, identify and explain any differences.