

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

Item 1: Broker-Dealer Operator Trading Activities on the ATS

- a. *Are business units of the Broker-Dealer Operator permitted to enter or direct the entry of orders and trading interest (e.g., quotes, conditional orders, or indications of interest) into the NMS Stock ATS?*

☒ Yes ☐ No

If yes, name and describe each type of business unit of the Broker-Dealer Operator that enters or directs the entry of orders and trading interest into the ATS (e.g., NMS Stock ATS, type of trading desks, market maker, sales or client desk) and, for each business unit, provide the applicable MPID and list the capacity of its orders and trading interest (e.g., principal, agency, riskless principal).

Interactive Brokers LLC (“IBKR”) operates a customer brokerage business (the “Customer Business”) whereby brokerage customers of IBKR (“Brokerage Customers”) may electronically submit trading interest to IBKR’s smart order router (“SOR”) for further routing. For clarity, the term “Brokerage Customer,” as used herein, includes broker-dealer clients of IBKR when submitting orders to the SOR for further routing, whether on an agency or principal basis, and may include broker-dealers and other entities that submit directed orders to the ATS through IBKR’s SOR and make no other use of IBKR’s services. Further, the term “Brokerage Customer” includes Execution Customers (as defined at Part III Item 2), which are a subset of Brokerage Customers.

Additionally, and as separately noted herein (see, e.g., Part III Items 7, 9 and 11), entities acting as Liquidity Providers may separately act as Brokerage Customers of IBKR- (and, for clarity, may separately act as Execution Customers).

Specifically, an entity that is otherwise approved to act as a Liquidity Provider may also separately connect to IBKR as a brokerage customer in order to represent customer agency orders in the ATS and/or to utilize IBKR’s other order routing services (a “Dual Role Subscriber”). Where such a Dual Role Subscriber submits an order to the SOR for further routing, the ATS treats such orders as being submitted by a “Brokerage Customer.” Where, instead, such Dual Role Subscriber submits an order to the ATS via a direct FIX connection to the ATS (such that its order does not pass through the SOR), the ATS treats such order as being submitted by a “Liquidity Provider.” Accordingly, where IBKR has approved a subscriber to access the ATS as a Liquidity Provider, the subscriber’s manner of accessing the ATS on a given order dictates whether the ATS treats the order as being submitted by a “Brokerage Customer” or, alternatively, a “Liquidity Provider.”

Non-directed orders submitted to the SOR may be routed to the ATS in accordance with the SOR’s routing logic. Brokerage Customers may also direct orders to the ATS via the SOR (i.e., submit a “directed order” to the SOR for routing to the ATS). Except as noted below, orders routed via the SOR utilize the “IBKR” MPID. Brokerage Customers who are broker-dealers and make no use of IBKR’s services beyond submitting directed orders to the ATS via IBKR’s SOR may also, at their option, access the ATS via their own MPIDs (without the intermediation of the

“IBKR” MPID).

While the vast majority of IBKR customers submit orders electronically (e.g., via order management systems offered by IBKR), IBKR maintains a customer support team (the “Order Desk”) that may, upon customer request, submit customer trading interest to the SOR for further routing. Generally, the Order Desk is used by Brokerage Customers experiencing technical difficulties (e.g., an inability to submit trading interest via an IBKR order management system) and urgently wanting to close a position. The Order Desk acts as agent. Orders routed by the Order Desk use the “IBKR” MPID.

IBKR also maintains a block order desk (the “Block Desk”). The Block Desk handles larger-sized orders (generally 10,000 shares or larger) on behalf of Brokerage Customers. The Block Desk acts as agent. All orders routed by the Block Desk are submitted to the SOR for further routing. Orders routed by the Block Desk use the “IBKR” MPID.

Additionally, IBKR’s risk department maintains desks (the “Risk Desks”) that facilitate, as agent, the liquidation of customer positions in connection with margin calls and similar situations. Orders routed by the Risk Desks use the “IBKR” MPID. IBKR does not otherwise maintain an agency trading desk (i.e., other than the Risk, Block and Order Desks).

The following IBKR business units (the “Principal Accounts”) may submit principal order interest to the ATS:

- i. Error Account (used to close-out IBKR positions related to IBKR errors);
- ii. Customer accommodation (used to take over legs of customer multi-leg orders where one or more legs did not fill in the specified ratios; and also on occasion to accommodate customer errors);
- iii. Buy-in/Close-out (used to close-out fails to deliver and related positions); and
- iv. Liquidation of positions taken over in foreclosure.

The MPID for each Principal Account is “IBKR.” No other business units of IBKR may submit principal order interest to the ATS.

Note that the Risk, Block and Order Desks and the Principal Accounts do not send directed orders to the ATS; rather, non-directed orders submitted by the Risk, Block and Order Desks and the Principal Accounts may be routed to the ATS by the SOR.

- b. *If yes to Item 1(a), are the services that the NMS Stock ATS offers and provides to the business units required to be identified in Item 1(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 here.

Brokerage Customers, including the IBKR Affiliates identified at Part II Item 2(a), and IBKR's business units, including the Risk, Block and Order Desks and the Principal Accounts, access the ATS via the SOR. Only subscribers acting as Liquidity Providers do not access the ATS via the SOR.

As further discussed herein, only orders that access the ATS via the SOR may remove liquidity from the ATS. Subscribers that bypass the SOR and access the ATS via direct FIX connection (i.e., the Liquidity Providers) may not remove liquidity from the ATS. Please see Part III Items 5 and 7 for additional discussion of the means of order entry and available order instructions.

- c. *Are there any formal or informal arrangements with any of the business units required to be identified in Item 1(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 business unit 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 the Broker-Dealer Operator?*

☐ Yes ☒ No

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

Item 6: Activities of Service Providers

- a. *Does any employee of the Broker-Dealer Operator or its Affiliate that services both the operations of the NMS Stock ATS and any other business unit or any Affiliate of the Broker-Dealer Operator ("shared employee") have access to confidential trading information on the NMS Stock ATS?*

☒ Yes ☐ No

If yes, identify the business unit, Affiliate, or both that the shared employee services, and provide a summary of the role and responsibilities of the shared employee at the ATS and the business unit, Affiliate, or both that the shared employee services.

Programming, system administration and technology personnel involved in operating IBKR's systems, including operation of IBKR's order management systems, SOR, matching engines and order gateways have live audit trail access and, as such, may be able to view an order that has been routed to the ATS. Programming and technology personnel are employed by IBKR's affiliates, IBG LLC and Interactive Brokers Hungary Informatikai Kft. System administration personnel are employed by IBG LLC. These personnel support the development and maintenance of the ATS' FIX engine, matching engine software, market data

and various other technologies utilized in the ATS and provide similar services (e.g., technology development and maintenance) to IBKR's brokerage affiliates, including Affiliates that may submit trading interest to the ATS. Such personnel are subject to the IBG Information Barrier Policy.

IBG risk department personnel also have live audit trail access. IBG risk department personnel are employed by IBG LLC. IBG risk department personnel provide risk management support to IBKR and its affiliates, including through credit and related risk assessments of Brokerage Customers and Liquidity Providers.

Personnel responsible for IBKR's clearing operations, stock borrow operations, trade and CAT reporting and the generation of account statements, as well as members of IBKR's compliance department, have access to post-trade information which may include information relating to transactions effected in the ATS. Such personnel are involved in the clearance and settlement of transactions effected in the ATS and the ATS' compliance with applicable rules. Such personnel may provide related support (e.g., clearance, settlement or compliance) to IBKR's Customer Business, as well as to IBKR's affiliates.

- b. *Does any entity, other than the Broker-Dealer Operator, support the services or functionalities of the NMS Stock ATS ("service provider") that are required to be explained in Part III of this form?*

☒ Yes ☐ No

If yes, both identify the service provider and provide a summary of the role and responsibilities of the service provider in response to the applicable Item number in Part III of this form, as required. List the applicable Item number here. If there are services or functionalities that are not applicable to Part III, identify the service provider, the services and functionalities, and also provide a summary of the role and responsibilities of the service provider here.

IBKR's affiliates, IBG LLC and Interactive Brokers Hungary Informatikai Kft, support the development and maintenance of the ATS' FIX engine, matching engine software, market data and various other technologies utilized in the ATS.

The ATS servers are located at the Equinix NY5 data center. Equinix, as host of the datacenter, services the location at which subscribers connect to the ATS. Please see Part III Item 5 for additional information.

- c. *If yes to Item 6(b), does the service provider, or any of its Affiliates, use the NMS Stock ATS services?*

☒ Yes ☐ No

If yes, identify the service provider, or the Affiliate as applicable, and the ATS services that the service provider or its Affiliates use.

IBG LLC is the parent entity of both IBKR and the IBKR Affiliates. The IBKR

Affiliates' use of the ATS is detailed in response to Part II, Item 2 above.

- d. *If yes to Item 6(c), are the services that the NMS Stock ATS offers and provides to the entity required to be identified in Item 6(c) the same for all Subscribers?*

☐ Yes ☒ No

If no, identify and explain any differences.

IBKR Affiliates may access the ATS via IBKR's SOR. As further discussed herein, only orders that access the ATS via the SOR may remove liquidity from the ATS.

~~However, subscribers that access the ATS via direct FIX connection (and bypass the SOR) are able to utilize different order types and instructions than subscribers that access the ATS via the SOR.~~ While a subset of Brokerage Customers (Execution Customers, as defined at Part III Item 2) may submit Conditional Orders and Firm Up Orders, IBKR Affiliates may not submit Conditional Orders and Firm Up Orders (even where such affiliate meets the definition of Execution Customer).

Orders submitted by IBKR's affiliate, Covestor Ltd, are configured to only interact with trading interest of Liquidity Providers. Such counter-party permissioning functionality is not available to other subscribers.

Item 7: Protection of Confidential Trading Information

- a. *Describe the written safeguards and written procedures to protect the confidential trading information of Subscribers to the NMS Stock ATS, including:*
- i. *written standards controlling employees of the ATS that trade for employees' accounts; and*
 - ii. *written oversight procedures to ensure that the safeguards and procedures described above are implemented and followed.*

DATA PROTECTION:

Client data protection (including the protection of subscriber confidential trading information) is governed by formally instituted policies. Records containing clients' data stored in IBKR's databases, as well as on tape backups, are encrypted. Encryption algorithms, ciphers, and key parameters are consistent with the industry best practices. In addition to technical data protection measures, IBKR administers mandatory security awareness training to all its employees emphasizing data protection best practices.

INFORMATION BARRIERS:

Interactive Brokers Group ("IBG") has in place barriers designed to help ensure that information relating to subscriber trading interest in the ATS is maintained on systems that are separate from, and inaccessible by, IBKR's affiliates. IBKR compliance personnel review various daily, monthly and quarterly reports intended to help identify potential instances of IBKR customer information (including ATS

confidential trading information which, for the avoidance of doubt, includes confidential trading information of Liquidity Providers and information relating to Conditional Orders and Firm-Up Orders) being impermissibly accessed by employees of IBKR affiliates. IBKR compliance personnel also review a sample of communications between IBKR personnel and personnel of its affiliates to assess whether subscriber confidential trading information is being impermissibly accessed or shared.

All new IBKR employees must review the IBG Information Barrier Policy, which is included in the IBG employee manual, and must acknowledge receipt of the current version of the IBG Information Barrier Policy annually. The IBG Information Barrier Policy states that employees of IBG and its affiliates (including IBKR employees) shall treat customer trading information (including subscriber trading information) as confidential and shall only share such information to the extent reasonably necessary to provide the relevant services and otherwise service the relevant account. As applied to ATS confidential trading information, the IBG Information Barrier Policy limits the sharing of such information within IBG to the extent reasonably necessary for the operation of the ATS and related systems (that is, IBKR's market data, clearing, stock borrow and audit trail systems), and to ensure the ATS' compliance with applicable law. In addition, IBG provides training regarding the confidentiality of customer orders and information.

ACCESS TO SUBSCRIBER CONFIDENTIAL TRADING INFORMATION:

Access to IBKR trading systems, including those that maintain ATS confidential trading information, (e.g., systems through which Conditional Orders and Firm-Up Orders are routed), is limited to authorized individuals. Prior to granting any employee, shared employee, or third-party service provider access (each an "Accessing Party") to ATS data, IBKR reviews the level of access requested, the roles and responsibilities of the prospective Accessing Party, and the proposed uses of the data to which the prospective Accessing Party would have access. As a threshold matter, access to ATS confidential trading information is limited to individuals responsible for either the operation of the ATS and related systems (that is, IBKR's market data, clearing, stock borrow and audit trail systems), or the ATS' compliance with applicable law. As noted above, the IBG Information Barrier Policy provides that Accessing Parties may only use ATS confidential trading information to the extent necessary to fulfill their responsibilities regarding the operation of the ATS and related systems (that is, IBKR's market data, clearing, stock borrow and audit trail systems), or the ATS' compliance with applicable law; Accessing Parties are expressly prohibited from sharing ATS confidential trading information with Brokerage Customers and other clients of IBKR (e.g., Liquidity Providers and introducing brokers), except where such confidential trading information belongs to the relevant Brokerage Customer or client (e.g., information regarding a Brokerage Customer's own trading interest or transactions).

Access to internal systems and applications is provisioned on the least-privilege basis and controlled using passwords or, in some instance, multi-factor authentication (MFA). In particular, MFA is used for all remote access and also for onsite access to particularly sensitive systems. Password length and complexity requirements are established and enforced.

Periodically, as prescribed by IBKR's policies and procedures, all employees, shared employees, and third party service providers are reviewed to determine whether their level of access to ATS data is appropriate. This includes assessing whether the Accessing Party continues to have responsibilities in connection with the operation of the ATS or the ATS' compliance with applicable rules.

Access to IBKR office and data center spaces is strictly controlled and limited to authorized personnel. Electronic door entry systems are in use and configured to allow personnel access only to the areas required to fulfill their job functions. Additionally, video recording/surveillance systems are employed in data centers and select office locations. Activity logs, including records of permitted and denied entry attempts captured by the access control and footage of the video surveillance system, are maintained.

EMPLOYEE TRADING:

The IBKR Employee Trading Policy prohibits IBKR employees from trading securities or commodity futures between the hours of 8:30 a.m. and 6:00 p.m. in their time zone. One of the intended purposes of this policy is to prohibit IBKR employees from trading on the basis of open customer trading interest (including Liquidity Provider trading interest and whether such trading interest has been submitted to the ATS or to another market center).

All IBKR employees, at onboarding and annually thereafter, are reminded of their obligation to identify all brokerage accounts in which the employee or any related person (as noted at FINRA rule 3210/.02) maintains an interest, including any brokerage accounts subsequently opened. IBKR obtains copies of such employee's account statements and trade confirmations from the relevant brokerage firm. IBKR prohibits an employee from opening or otherwise maintaining an account with a brokerage firm that will not provide IBKR with duplicate account statements and trade confirmations. IBKR compliance and supervisory personnel review employee account statements and trade confirmations on a monthly basis. As part of these reviews, IBKR compliance and supervisory personnel assess whether an employee has violated IBKR's Employee Trading Policy, including any indication of misuse of subscriber confidential trading information (in particular, the IBKR Employee Trading Policy, among other things, prohibits employees from trading on the basis of material non-public information). Employee trading conduct specifically reviewed for includes particularly active accounts and trading in any restricted securities outside of the "open window" period (presently limited to securities issued by Interactive Brokers Group, Inc.).

- b. *Can a Subscriber consent to the disclosure of its confidential trading information to any Person (not including those employees of the NMS Stock ATS who are operating the system or responsible for its compliance with applicable rules)?*

☐ Yes ☒ No

If yes, explain how and under what conditions.

- c. *If yes to Item 7(b), can a Subscriber withdraw consent to the disclosure of its*

confidential trading information to any Person (not including those employees of the NMS Stock ATS who are operating the system or responsible for its compliance with applicable rules)?

☐ Yes ☐ No

If yes, explain how and under what conditions.

- d. *Provide a summary of the roles and responsibilities of any Persons that have access to confidential trading information, the confidential trading information that is accessible by them, and the basis for the access.*

Programming and technology personnel involved in operating IBKR's systems, including operation of IBKR's order management systems, SOR, matching engines and order gateways have live audit trail access and, as such, may be able to view ~~an~~ order Trading Interest (as defined in Part III, Item 7) that has been routed to the ATS, as well as Invite information (as defined in Part III, Item 9). System administration and IB risk departments also have live audit trail access. Additionally, as further discussed at Part III Item 15, the ATS disseminates indications of interest to the SOR identifying the symbol, size, side and ranking price of certain orders resting in the ATS; the SOR may utilize this information in its order-routing processes.

Personnel responsible for IBKR's clearing operations, stock borrow operations, audit trail reporting and the generation of account statements, as well as members of IBKR's compliance department, have access to post-trade information which may include information relating to transactions effected in the ATS.

Part III: Manner of Operations

Item 2: Eligibility for ATS Services

a. Does the NMS Stock ATS require Subscribers to be registered broker-dealers?

☐ Yes ☒ No

b. Are there any other conditions that the NMS Stock ATS requires a Person to satisfy before accessing the ATS services?

☒ Yes ☐ No

If yes, list and provide a summary of the conditions.

Generally, IBKR accepts the following types of subscribers to the ATS: (i) Liquidity Providers; (ii) “full-service” customers of IBKR that utilize IBKR’s non-ATS service offerings (including introducing brokers trading on behalf of their customers and advisors trading on behalf of their customers, and including, for clarity, other broker-dealers that submit directed orders to the ATS through IBKR’s SOR, even if such broker-dealers make no other use of IBKR’s services) and (iii) Affiliates of IBKR. The conditions that must be satisfied before such persons may access the ATS services are noted below.

LIQUIDITY PROVIDERS: Only market-makers and other principal trading firms willing to offer opportunities for price improvement to IBKR’s customers on their marketable orders may, subject to the approval of IBKR management, access the ATS as Liquidity Providers. Management approval is subject to a number of factors, including: (i) anticipated quoting activity (e.g., anticipated price improvement, order size and number of symbols traded); (ii) financial data (e.g., net capital levels); (iii) operating history (e.g., how long has the entity been a market maker or otherwise acted as a liquidity provider); and (iv) execution quality being provided by current Liquidity Providers (that is, due to systems limitations IBKR may elect not to onboard a prospective Liquidity Provider if anticipated quoting activity is merely comparable to quoting activity of current Liquidity Providers). Liquidity Providers must agree to restrict their ATS orders to liquidity-adding orders. Liquidity Providers, in their capacities as Liquidity Providers, are not required to enter into a written agreement to use the ATS services. IBKR business units and IBKR Affiliates may not act as Liquidity Providers. Liquidity Providers may separately apply to be brokerage customers of IBKR.

BROKERAGE CUSTOMERS (INCLUDING INTRODUCING BROKERS AND ADVISORS): Retail and institutional customers of IBKR (including, for clarity, Execution Customers) complete applications for an IBKR brokerage account and complete various IBKR customer documentation steps, including signing an IBKR customer agreement. Access to an IBKR brokerage account is open to the public and subject to various “know your customer,” anti-money laundering and anti-fraud steps. Advisors whose customers’ transactions are cleared and carried by IBKR will complete

the required onboarding documentation. Introducing brokers whose customers' transactions are cleared and carried by IBKR will complete the required onboarding documentation and clearing agreement, which are required under FINRA Carrying Broker rules and are subject to FINRA approval.

AFFILIATES: The ability of an Affiliate to access IBKR's brokerage services is subject to approval by IBKR management. To the extent IBKR Affiliates submit orders in U.S. stocks, including NMS stocks, those orders will be routed through IBKR's SOR and may ultimately access the ATS.

IBKR may perform additional background checks (e.g., in addition to the reviews noted above) on prospective subscribers. These background checks may include an assessment of the prospective subscriber's regulatory history and any other news items and information relating to the prospective subscriber. Based on the results of such background checks, IBKR may decide to reject a prospective ATS subscriber.

- c. *If yes to Item 2(b), are the conditions required to be identified in Item 2(b) the same for all Persons?*

☐ Yes ☒ No

If no, identify and describe any differences.

IBKR, in its sole discretion, retains the right to refuse any prospective subscriber (including, for example, when assessing the qualifications of any prospective Liquidity Provider).

Onboarding of Brokerage Customers is largely automated. Any prospective Brokerage Customer that meets IBKR's account minimum, provides the required documentation (including agreeing to IBKR's terms and conditions of use) and does not generate any CIP/AML "alerts" will be onboarded. However, when an account application is flagged (e.g., due to potential negative news), IBKR, subject to applicable law, will exercise its discretion in determining whether to onboard the prospective customer. Additionally, IBKR exercises discretion in determining whether to accept a prospective customer's proposed revisions to IBKR's account agreement and/or fee schedule.

"Execution Customers" are a subset of Brokerage Customers (specifically, Brokerage Customers that are either (i) broker-dealers and other entities whose assets are not custodied by IBKR or (ii) broker-dealers and other entities that custody assets at IBKR but have the ability to execute away from IBKR). Execution Customers are subject to the onboarding processes applicable to Brokerage Customers discussed above. While IBKR does not have a specific onboarding process for Execution Customers (that is, separate from the onboarding process applicable to Brokerage Customers generally), Execution Customers must either have separate (third-party) custody arrangements and/or meet IBKR's standard requirements to execute away (e.g., meet the minimum account equity requirements of the SEC's Jan. 25, 1994 "prime brokerage" no-action letter to Mr. Jeffrey C. Bernstein and any

additional account equity requirements or other requirements imposed by IBKR).

- d. *Does the NMS Stock ATS require Subscribers to enter a written agreement to use the ATS services?*

☐ Yes ☒ No

Item 3: Exclusion from ATS Services

- a. *Can the NMS Stock ATS exclude, in whole or in part, any Subscriber from the ATS services?*

☒ Yes ☐ No

If yes, list and provide a summary of the conditions for excluding, in whole or in part, a Subscriber from the ATS services.

Subscribers may be excluded from the ATS, or from utilizing any ATS functionality, at any time and for any reason subject to IBKR's sole discretion. Subscribers that have entered into an execution, licensing, account or clearing agreement with IBKR may be terminated as clients or correspondents (and, as such, will no longer be ATS subscribers) for breach of their agreement(s) with IBKR.

IBKR may exclude a specific subscriber from accessing the ATS for the following non-exhaustive reasons:

- (1) Failure to make timely and proper settlement of transactions;
- (2) Failure to deliver funds or securities as required;
- (3) Violation of the terms and conditions of the limited license granted to the subscriber for the use of any IBKR product (e.g., an IBKR OMS or algorithm);
- (4) Credit or other risk; and
- (5) Negative news events relating to the subscriber (including regulatory actions, government sanctions or prohibitions).

Only subscribers that access the ATS by submitting non-directed orders to the SOR may remove liquidity from the ATS. Orders directed to the ATS, whether by a Liquidity Provider or other subscriber, may only add liquidity.

Liquidity Providers are not subject to any objective quoting requirements. However, IBKR periodically reviews the activity of each Liquidity Provider in the ATS, including average fill size and price improvement provided, and may request that a Liquidity Provider alter its activity (e.g., submit larger orders or provide increased price improvement levels). Liquidity Providers that fail to act in a manner that IBKR, in its discretion, deems satisfactory may be terminated as Liquidity Providers or otherwise lose access to ATS services.

Among Brokerage Customers, only Execution Customers accessing the SOR via FIX connection may submit Conditional Orders and Firm-Up Orders to the ATS. See Part III, Item 5 for additional information regarding such manner of access. IBKR tracks each Execution Customer's firm-ups. As noted below, firm-up rates are used by the ATS in determining priority among Conditional Orders on price parity (see, e.g., Part III Items 7 and 11 below). Additionally, IBKR may restrict an Execution Customer from submitting Conditional Orders in its sole discretion (e.g., if a large percentage of such customer's Firm-Up orders would not be marketable against the triggering order).

- b. *If yes to Item 3(a), are the conditions required to be identified in Item 3(a) the same for all Subscribers?*

☐ Yes ☒ No

If no, identify and explain any differences.

IBKR may exercise its discretion in determining whether to exclude a subscriber from accessing the ATS, or from accessing any ATS functionality. For instance, IBKR may terminate a customer relationship due to the customer's breach of its account agreement with IBKR while allowing another customer continued access to the ATS despite the existence of a similar breach. Additionally, IBKR exercises its discretion when assessing each Liquidity Provider's quoting activity in the ATS and, separately, in determining whether to restrict an Execution Customer from submitting Conditional Orders in its sole discretion.

Item 5: Means of Entry

- a. *Does the NMS Stock ATS permit orders and trading interest to be entered directly into the ATS (e.g., via Financial Information eXchange ("FIX") protocol, Binary)?*

☒ Yes ☐ No

If yes, explain the protocol that can be used to directly enter orders and trading interest into the ATS.

Liquidity Providers may directly access the ATS via FIX protocol. The ATS is compliant with version 4.2 of the FIX Protocol. Liquidity Providers can connect via cross connects within Equinix NY5 or CH4 or, alternatively, through dedicated FIX connections. In the event a Liquidity Provider cross-connects with the ATS, the hardware used for connection is provided, installed, and maintained by the Liquidity Provider and/or datacenter operator. IBKR does not charge a fee for cross-connects.

- b. *If yes to Item 5(a), are the protocols required to be identified in Item 5(a) the same for all Subscribers and the Broker-Dealer Operator?*

☐ Yes ☒ No

If no, identify and explain any differences.

Only Liquidity Providers may access the ATS via direct FIX connection. All other subscribers access the ATS via the SOR.

- c. *Are there any other means for entering orders and trading interest into the NMS Stock ATS (e.g., smart order router, algorithm, order management system, sales desk)?*

☒ Yes ☐ No

If yes, identify and explain the other means for entering orders and trading interest, indicate whether the means are provided through the Broker-Dealer Operator, either by itself or through a third-party contracting with the Broker-Dealer Operator, or through an Affiliate of the Broker-Dealer Operator, and list and provide a summary of the terms and conditions for entering orders or trading interest into the ATS through these means.

Subscribers access the ATS via direct FIX connection or via the SOR.

All Brokerage Customers' orders access the ATS via the SOR. Brokerage Customers may submit orders to the SOR via a Trading Product, third-party order management system or FIX connection (i.e., FIX connection to the SOR, as distinct from the Liquidity Providers' direct FIX connections to the ATS). Only persons onboarded as Brokerage Customers may access the ATS via the SOR; there are no other conditions that must be satisfied to access the ATS via the SOR. [The SOR accesses the ATS via proprietary binary protocol between the ATS and the SOR.](#)

Orders submitted by Liquidity Providers (in their ~~capacity~~capacities as Liquidity Providers) access the ATS via direct FIX connections and do not pass through the SOR. Only entities onboarded as Liquidity Providers may access the ATS via direct FIX connection; there are no other conditions that must be satisfied to access the ATS via direct FIX connection.

Only orders routed to the ATS via the SOR may remove liquidity from the ATS. [Only Execution Customers may submit Conditional Orders and Firm-Up Orders, and only when accessing the SOR via FIX connection. For clarity, Execution Customers do not directly access the SOR via FIX connection; rather, they access IBKR's systems via FIX connection, and such orders are subsequently transmitted to the SOR.](#) See Part III Item 7 for a discussion of available attributes for orders submitted to the ATS via the SOR and direct FIX connection.

- d. *If yes to Item 5(c), are the terms and conditions required to be identified in Item 5(c) the same for all Subscribers and the Broker-Dealer Operator?*

☐ Yes ☒ No

If no, identify and explain any differences.

~~Only~~ Liquidity Providers ~~may directly~~ access the ATS ~~(i.e. via direct FIX~~

connection, bypassing the SOR). Only principal trading firms permissioned by IBKR management may act as Liquidity Providers.

Only subscribers that access the ATS via the SOR (e.g., IBKR brokerage customers and IBKR Affiliates) may remove liquidity from the ATS. As a general matter, all IBKR customers may direct liquidity-adding orders to the ATS. However, certain brokerage products offered by IBKR (e.g., IBKR's smartphone mobile app and web-based order entry tools) do not permit subscribers to direct orders to the ATS. Only Execution Customers (a subset of Brokerage Customers) accessing the SOR via FIX connection may submit Conditional Orders and Firm-Up Orders.

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 firm orders (including “Firm-Up Orders,” as defined below) and Conditional Orders (as defined below) (collectively, “Trading Interest”). Except as noted under the time-in-force heading, all order types and instructions discussed below (e.g., pricing conditions, permitted reference prices etc.) are available to Conditional Orders and firm orders (including Firm-Up Orders).

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 continue to rest in the ATS until its remaining quantity falls below its minimum quantity instruction, at which point the ATS will cancel back the order. Liquidity Providers may not include minimum quantity instructions with their orders.

Only Brokerage Customers (including [Execution Customers and, separately, Liquidity Providers in their capacities as Brokerage Customers](#)) may (i) submit PegBest orders and (ii) utilize minimum quantity instructions. [Only Execution Customers may submit Conditional Orders and Firm-Up Orders, and only when accessing the SOR via FIX connection.](#) 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 [be deemed to](#) 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~~ [directed orders resting](#) 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, [however](#), a

directed order submitted to the ATS by a Brokerage Customer is marketable against a resting non-directed order (i.e., a non-directed order waiting for a subscriber to submit a Firm-Up Order in response to an Invite), the orders, subject to their terms, may interact with one another. In such instances, the non-directed order will be deemed to remove liquidity from the ATS (notwithstanding that it was received by the ATS first).

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).

Conditional Orders & Firm-Up Orders

The ATS accepts Conditional Orders and Firm-Up Orders. Please see Part III Item 9 for additional information.

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-till-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 and, in all instances, with an effective TIF of 1-second GTT instruction or less.

Directed orders submitted to the ATS, whether by a Liquidity Provider or other subscriber, may include a TIF instruction of day, IOC or GTT; provided, however, that Conditional Orders must be designated as day or GTT and Firm-Up Orders have a mandatory TIF of IOC, irrespective of the TIF specified in the order.

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

See Part III Item 11.c for a discussion of 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).~~

~~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 Execution Customers and, separately, Liquidity Providers in their capacities as Brokerage Customers) may (i) submit PegBest orders and (ii) utilize minimum quantity instructions. Only Execution

Customers accessing the SOR via FIX connection may submit Conditional Orders and Firm-Up Orders.

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).

Indications of Interest

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). ~~such IOIs, "Brokerage Customer IOIs").~~ **The ATS disseminates two "types" of Brokerage Customer IOIs, one relating to the best-priced resting Conditional Orders and one relating to the best-priced resting firm orders among Brokerage Customers. This is due, in part, to the fact that the SOR may submit non-directed orders to the ATS with instructions to ignore Conditional Orders.**

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, including among resting Conditional 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, except where the IOI was “generated” by an Execution Customer’s Conditional Order; in those instances the SOR will rank the IOI generated by the Liquidity Provider higher. 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.

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 (including the directed order of an Execution Customer), the order will be eligible to interact with any order directed to the ATS by a Brokerage Customer ~~+~~, subject to such orders’ terms, but will be ineligible to interact with orders of Liquidity Providers ~~-~~ (except, for clarity, in their capacities as Brokerage Customers). Notwithstanding the immediately preceding sentence, where the SOR routes an order to the ATS in response to an IOI “generated” by a Conditional Order (the “Triggering Conditional Order”), the order will be eligible to interact with any order directed to the ATS by a Brokerage Customer, provided such directed order’s limit price is equal to or better (higher for buy orders, lower for sell orders) than the limit price associated with the Triggering Conditional Order.

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.

Conditional Orders

The ATS accepts “Conditional Orders.” A Conditional Order is an instruction to the ATS that the subscriber wants to interact on a conditional basis. A Conditional Order never executes; instead, when a Conditional Order would have otherwise matched with another order, the Conditional Order is canceled by the ATS and an Invite is sent to the originating subscriber, inviting the subscriber to send a firm order in response (such firm orders, “Firm-Up Orders”).

Only Execution Customers may submit Conditional Orders, and only when accessing the SOR via FIX connection. Only directed orders may be designated as Conditional Orders. Conditional Orders may include any of the order instructions available to Brokerage Customers’ directed orders (see Part III, Item 7); provided, however, Conditional Orders must include a TIF of “day” or “GTT” and may not be designated as IOC orders.

Conditional Order Interaction: As directed orders, Conditional Orders may only interact with non-directed orders routed to the ATS by the SOR. In the event a

non-directed order is submitted to the ATS by the SOR, the ATS, as further discussed below, will notify the submitters of those Conditional Orders that are subject to a preliminary “match” (such notification, the “Invite”) and request that the subscriber(s) “firm-up” by submitting a firm order (such firm orders, “Firm-Up Orders”). The ATS will cancel any Conditional Order receiving an Invite. For purposes of determining whether to generate an Invite, only Conditional Orders that would have permitted an execution at the time of the preliminary match (had the Conditional Order been a firm order) are considered “eligible.” A single non-directed order may generate multiple Invites, limited by the size of the non-directed order. For example, if there are three (3) 100-share resting Conditional Orders in the ATS, all on price parity, and a 200-share non-directed order is routed to the ATS, only two (2) of the Conditional Orders would receive Invites (that is, the ATS would only send Invites to the extent necessary to fill the non-directed order). Whether a Conditional Order receives an Invite is determined by the Conditional Order’s ranking in the order book. See Part III, Item 11 for a discussion of ATS priority, including how the ATS determines “priority” among Conditional Orders on price parity.

The SOR, when routing a non-directed order to the ATS, may designate the order as ineligible to interact with Conditional Orders. In such instances the non-directed order will not interact with any resting Conditional Order (that is, it will not invite such orders to firm-up) even if the resting Conditional Order is at a better price than competing orders in the ATS.

Conditional Orders submitted after a non-directed order has been received by the ATS, but prior to such non-directed order executing and/or being cancelled back to the SOR for further routing, will not be invited to firm-up by such “resting” non-directed order.

While an Invite effectively notes that eligible contraside interest has been submitted to the ATS, the Invite does not otherwise provide any information regarding the non-directed order that triggered the Invite. Invites contain an identifier that must be included in the Firm-Up Order submitted in response to the Invite. Firm-Up Orders that fail to include the identifier will be rejected. The recipient of an Invite has 20 milliseconds (the “Firm-Up Period”) in which to submit a Firm-Up Order. The ATS rejects any Firm-Up Order received after the Firm-Up Period.

Firm-Up Orders

Firm-Up Orders are firm orders submitted in response to an Invite. As such, only Execution Customers may submit Firm-Up Orders, and only when accessing the SOR via FIX connection. Only directed orders may be designated as Firm-Up Orders.

As noted above, Firm-Up Orders must be received prior to the expiration of the Firm-Up Period and must include the identifier provided on the corresponding Invite or they will be rejected. Firm-Up Orders may include any of the order instructions available to Brokerage Customers’ directed orders (see Part III,

Item 7); provided, however, Firm-Up Orders have a mandatory TIF of IOC, irrespective of the TIF contained in the order. A Firm-Up Order must contain the same symbol and side as the corresponding Conditional Order, but may otherwise vary from the corresponding Conditional Order (e.g., a Firm-Up Order may be for a different price or size than the corresponding Conditional Order).

The ATS does not prevent subscribers from submitting firm orders that are not Firm-Up Orders following receipt of an Invite, although, in such instances, such firm order is not counted as a “firm up” in response to the Invite (and, absent an independent Firm-Up Order in response to the Invite, the subscriber will be treated as having failed to “firm up”).

- 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.

Only Execution Customers accessing the SOR via FIX connection may submit Conditional and Firm-Up Orders.

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, including, for certain customers, by directing orders that interact on a “conditional” basis (i.e., “Conditional Orders,” further discussed at Part III, Items 7 and 9 below). 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. Only Execution Customers accessing the SOR via FIX connection may submit Conditional Orders and Firm-Up Orders.

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), including, for clarity, when interacting with a Firm-Up

Order or other firm order subsequently received by the ATS. 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 firm order amongst all other subscribers (i.e., of all Brokerage Customers), including Execution Customers and (iii) the best-priced resting Conditional Order. 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:

, including among resting Conditional Orders priced at or inside the NBBO. See Part III Item 9 above for additional information regarding the manner in which the ~~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.~~

As noted herein, Execution Customers may route "Conditional Orders" to the ATS. A Conditional Order is an instruction to the ATS that the subscriber wants to interact on a conditional basis. A Conditional Order never executes; instead, when a Conditional Order would have otherwise matched with another order, the Conditional Order is canceled by the ATS and an Invite is sent to the originating subscriber, inviting the subscriber to send a Firm-Up Order in response. See Part III, Item 9 for additional discussion of Conditional Orders and Firm-Up Orders.

~~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).~~

~~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.

Only Execution Customers accessing the SOR via FIX connection may submit Conditional Orders and Firm-Up Orders to 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: 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: ~~(w) price;~~ **(x) conditional status (with firm orders having priority over Conditional Orders at the same ranking price)**; (y) time; and (z) size. ~~Where a resting~~

Notwithstanding the foregoing, among Conditional Orders on price parity, priority is based on a random weighted selection process (rather than time or size). Between two Execution Customers, the Execution Customer with the shorter median response times is given a higher “weight” by the ATS (with Firm-Up Orders that are rejected by the ATS being treated as the equivalent of the Execution Customer having not responded to the Invite). Accordingly, between the two Execution Customers, Conditional Orders submitted by the Execution Customer with the shorter median response times have a higher probability of being selected to interact with an eligible non-directed order, regardless of competing Conditional Orders’ times of submission or order sizes. For instance, assume Execution Customer A’s median response times to Invites is 10 milliseconds and Execution Customer B’s median response times to Invites is 15 milliseconds and they have resting Conditional Orders in the ATS on price parity. Where an eligible non-directed order has been routed to the ATS, the ATS will effectively spin a wheel to determine which Conditional Order has priority. However, Execution Customer A’s shorter median response time means its Conditional Order has a higher likelihood of being selected, regardless of time of submission or size (for clarity, Execution Customer B’s Conditional Order may nevertheless be selected, notwithstanding its longer median response time and correspondingly lower likelihood of selection).

Where a Brokerage ~~Customer order~~ Customer’s resting firm order (including, for clarity, an Execution Customer’s resting firm 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)-first. Where, however, an Execution Customer’s resting Conditional Order is on price parity with a Liquidity Provider’s resting firm order, the SOR will always attempt to interact with the Liquidity Provider’s order first.

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 firm order amongst all other subscribers (i.e., of all Brokerage Customers) and (iii) the best-priced resting Conditional Orders. 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 ~~—, including among resting Conditional Orders priced at or inside the NBBO.~~

Where the SOR routes an order to the ATS in response to an IOI “generated” by a Liquidity Provider’s order, the order ~~is~~will only be eligible to interact with ~~the orders submitted by the applicable 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~~ 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 ~~non-directed~~ order routed directed to the ATS by a Brokerage Customer, subject to such orders’ terms, but will be ineligible to interact with orders of Liquidity Providers (except, for clarity, in their capacities as Brokerage Customers). Notwithstanding the immediately preceding sentence, where the SOR routes an order to the ATS in response to an IOI “generated” by a Conditional Order (the “Triggering Conditional Order”), the order will be eligible to interact with any order directed to the ATS by a Brokerage Customer, provided such directed order’s limit price is equal to or better (higher for buy orders, lower for sell orders) than the limit price associated with the Triggering Conditional Order.

~~the SOR, while orders of Liquidity Providers are not).~~ ~~Where~~ Where a firm order and a Conditional Order are on ranking price parity, the SOR will rank the firm order over the Conditional Order (whether such firm order was submitted by a Brokerage Customer or Liquidity Provider). Except as noted in the immediately preceding sentence, where the ranking price of an IOI “generated” by a Liquidity Provider’s order equals the ranking price of an IOI “generated” by a Brokerage Customer’s order, 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 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.

Conditional Orders & Firm-Up Orders: The ATS accepts Conditional Orders and Firm-Up Orders. Please see Part III Item 9 for additional information.

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 (including, for clarity, a Firm-Up 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.

Item 13: Segmentation; Notice

- a. *Are orders and trading interest in the NMS Stock ATS segmented into categories, classifications, tiers, or levels (e.g., segmented by type of participant, order size,*

duration, source, or nature of trading activity)?

☒ Yes ☐ No

If yes, explain the segmentation procedures, including (i) a description for how orders and trading interest are segmented; (ii) identify and describe any categories, classification, tiers, or levels and the types of orders and trading interest that are included in each; (iii) provide a summary of the parameters for each segmented category and length of time each segmented category is in effect; (iv) any procedures for overriding a determination of segmented category; and (v) how segmentation can affect order interaction.

Trading ~~interest~~Interest (as defined in Part III Item 7) on the ATS is segmented based on whether the subscriber is acting as a Liquidity Provider and, amongst non-Liquidity Providers, whether the subscriber directed the order to the ATS.

Additionally, only Execution Customers (a subset of Brokerage Customers) accessing the SOR via FIX connection may submit Conditional and Firm-Up Orders.

Only non-directed orders submitted by subscribers other than Liquidity Providers may remove liquidity from the ATS.

Orders submitted by Liquidity Providers may only interact with non-directed orders entered by non-Liquidity Providers. Similarly, orders directed to the ATS by non-Liquidity Providers may only interact with non-directed orders entered by non-Liquidity Providers.

- b. *If yes to Item 13(a), is the segmentation of orders and trading interest the same for all Subscribers and the Broker-Dealer Operator?*

☒ Yes ☐ No

If no, identify and explain any differences.

- c. *Does the NMS Stock ATS identify orders or trading interest entered by a customer of a broker-dealer on the NMS Stock ATS as a customer order?*

☐ Yes ☒ No

- d. *If yes to Item 13(a), does the NMS Stock ATS disclose to any Person the designated segmented category, classification, tier, or level of orders and trading interest?*

☒ Yes ☐ No

If yes, provide a summary of the content of the disclosure, when and how the disclosure is communicated, who receives it, and whether and how such designation can be contested.

Liquidity Providers are informed of their status as Liquidity Providers as part of their onboarding process.

- e. *If yes to Item 13(d), are the disclosures required to be identified in 13(d) the same for all Subscribers and the Broker-Dealer Operator?*

☒ Yes ☐ No

If no, identify and explain any differences.

Item 14: Counter-Party Selection

- a. *Can orders or trading interest be designated to interact or not interact with certain orders or trading interest in the NMS Stock ATS (e.g., designated to execute against a specific Subscriber's orders or trading interest or prevent a Subscriber's order from executing against itself)?*

☒ Yes ☐ No

If yes, explain the counter-party selection procedures, including how counter-parties can be selected, and whether the designations affect the interaction and priority of trading interest in the ATS.

Orders submitted by IBKR's affiliate, Covestor Ltd, are configured to interact only with trading interest of Liquidity Providers. Such counter-party permissioning functionality is not available to other subscribers.

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 orders directed to the ATS by subscribers that are not acting as Liquidity Providers. Notwithstanding the foregoing, where a Liquidity Provider is separately a Brokerage Customer of IBKR, the ATS treats orders submitted to the ATS by the Liquidity Provider in its capacity as a Brokerage Customer in the same manner that the ATS treats orders received from other Brokerage Customers (including subject to the below counterparty restrictions); such orders may interact with orders submitted by the subscriber in its capacity as a Liquidity Provider.

Directed orders submitted to the ATS by non-Liquidity Providers (including Liquidity Providers acting as Brokerage Customers) may not interact with orders submitted by Liquidity Providers (in their capacities as Liquidity Providers), nor may they interact with directed orders submitted by non-Liquidity Providers (including directed orders submitted by Liquidity Providers acting as Brokerage Customers). 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.

The SOR may designate a non-directed order as ineligible to interact with Conditional Orders.

- b. *If yes to Item 14(a), are the procedures for counter-party selection required to be identified in Item 14(a) the same for all Subscribers and the Broker-Dealer Operator?*

☐ Yes ☒ No

If no, identify and explain any differences.

Orders submitted by IBKR's affiliate, Covestor Ltd, are configured to interact only with trading interest of Liquidity Providers. Such counter-party permissioning functionality is not available to other subscribers.

Item 15: Display

- a. *Does the NMS Stock ATS operate as an Electronic Communication Network as defined in Rule 600(b)(23) of Regulation NMS?*

☐ Yes ☒ No

- b. *Are Subscriber orders and trading interest bound for or resting in the NMS Stock ATS displayed or made known to any Person (not including those employees of the NMS Stock ATS who are operating the system)?*

☒ Yes ☐ No

If yes, explain the display procedures, including how and when Subscriber orders and trading interest are displayed, how long orders and trading interest are displayed, what information about orders and trading interest is displayed, and the functionality of the Broker-Dealer Operator and types of market participants that receive the displayed information.

Indications of Interest: 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 firm order amongst all other subscribers (i.e., of all Brokerage Customers) and (iii) the best-priced resting Conditional Order amongst all Brokerage Customers. For Liquidity Providers, the IOI identifies the best-priced order based on its distance from the NBBO (e.g., NBB + \$0.01). Accordingly, for Liquidity Providers, changes to the top-of-book relative to the NBB or NBO (as applicable), will generate a new IOI, as will increases in the size of an order at top of book; *however*, changes in an order's effective limit price due to changes in the NBBO will not, without more, generate a new IOI. For Brokerage Customers (as a group), IOIs identify the group's best-priced resting buy and sell orders (e.g., if the best-priced buy order has an effective limit price of \$20.00, and the best-priced sell order has an effective limit price of \$20.05, the relevant IOI will identify the best priced buy and sell order among Brokerage Customers as being \$20.00 and \$20.05, respectively, rather than such orders' respective distances from the NBBO). The IOIs may also include information regarding the smallest minimum quantity instruction (which may be zero) among resting Brokerage Customer orders priced at or inside the NBBO (including among Conditional Orders priced at or inside the NBBO), including 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.

Accordingly, any changes to the price or size of the top of book for resting Brokerage Customers orders (including resting Conditional Orders), including changes resulting from changes in the NBBO, or to the smallest minimum quantity instruction among resting Brokerage Customer orders priced at or inside the NBBO, including among resting Conditional Orders priced at or inside the NBBO, will generate a new IOI.

The SOR utilizes the information contained in the above IOIs in determining whether to route orders to the ATS. All trading interest submitted to the ATS, other than orders directly submitted by Liquidity Providers via FIX connection, passes through the IBKR SOR.

The ATS begins transmitting the above IOIs to the SOR at 9:30 ET; the ATS does not transmit the IOIs to any other person or functionality. The ATS does not otherwise transmit IOIs. The ATS does not receive IOIs.

Invites: As noted above, Execution Customers may submit Conditional Orders to the ATS. Conditional Orders operate on a conditional basis and require that the submitter “firm-up” its trading interest prior to execution. Where a Conditional Order is the subject of a conditional match, the ATS will notify the subscriber that submitted the Conditional Order (such notification, the “Invite”) and request that the subscriber “firm-up” by submitting a firm order (“Firm-Up Orders”) in response. While an Invite effectively notes that eligible contraside interest has been submitted to the ATS, the Invite does not otherwise provide any information regarding the non-directed order that triggered the Invite.

IBKR Systems (Generally): To the extent an IBKR customer submits an order or other Trading Interest through an IBKR service or functionality, including any order management system, algorithmic trading product or order router operated by IBKR, such service or functionality will have information relating to the order route and any resulting execution or cancellation and persons involved in the operation of these systems will have access to information about orders submitted to or passing through such systems. For instance, those systems through which Conditional Orders and Firm-Up Orders are transmitted prior to reaching the SOR (and through which Invites are transmitted prior to reaching the relevant Execution Customer) will have access to information about such Conditional Orders, Firm-Up Orders and Invites.

- c. *If yes to Item 15(b), are the display procedures required to be identified in 15(b) the same for all Subscribers and the Broker-Dealer Operator?*

☒ Yes ☐ No

If no, identify and explain any differences.