

**Part I: Identifying Information**

Item 8: Attach as Exhibit 1, the most recently filed or amended Schedule A of Form BD for the Broker-Dealer Operator disclosing information related to direct owners and executive officers.

**Schedule A-Direct Owners**

Full Legal Name	CRD / Tax ID	Entity Type	Roles	Date Role Acquired	Ownership %	Control Person	Public Reporting Company
NB Holdings Corporation	56-1857749	Domestic Entity	Sole Stockholder	05/2019	75 or more	Y	N
Montag, Thomas-Kell	1474696	Individual	Director & Chief Executive Officer	09/2015	Less than 5	Y	N
Gallo, Fabrizio	4529600	Individual	Director	01/2016	Less than 5	Y	N
Rae, Glen Alexander	6300829	Individual	Chief Legal Officer	08/2019	Less than 5	N	N
McLaren, Edward Walter III	1686530	Individual	Chief Compliance Officer/Broker-Dealer	10/2020	Less than 5	N	N
Guardino, Joseph Anthony Jr	2907957	Individual	Chief Operations Officer & FINOP	09/2015	Less than 5	N	N
Alam, Syed Faruque	2394838	Individual	Chief Financial Officer	09/2019	Less than 5	N	N
Smith, Andrea Bradley	6938616	Individual	Outside Director	04/2018	Less than 5	Y	N
Cartaina, John Andrew	6558455	Individual	Chief Compliance Officer/Registered Investment Adviser	02/2018	Less than 5	N	N
Zuberi, Soofian J Jalil	2372292	Individual	Director & Chief Executive Officer	02/2022	Less than 5	Y	N
Chepucavage, Laura P	4672504	Individual	Director	02/2022	Less than 5	Y	N
Gadkari, Sarang Rajan	2522409	Individual	Director	02/2022	Less than 5	Y	N
Magasiner, Andrei Grischka	4368115	Individual	Director	02/2022	Less than 5	Y	N

**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).

**Instinct X accepts orders and conditional placements. Responses to questions regarding ATS trading interest refer to conditional placements. References to “Customer” in this Form ATS-N represent non-broker-dealers. References to “Clients” in this Form ATS-N represent Customers and broker-dealers. The following BofA Securities, Inc. (“BofAS”) business units are permitted to enter orders and conditional placements into Instinct X. Each business unit is part of the Global Banking and Markets (“GBAM”) Division of Bank of America Corporation (“BAC”). These business units can enter orders and conditional placements in a principal, agency, or riskless principal capacity. All GBAM orders and conditional placements: (i) are received by Instinct X under the market participant identifier (“MPID”) “MLCO”; (ii) are routed to Instinct X based on determinations made by a BofAS sales or trading desk, a BofAS algorithm, or the BofAS smart order router (“SOR”); and (iii) are treated as principal orders if routed in a principal or riskless principal capacity. Note, orders and conditional placements that a BofAS algorithm determines to route to Instinct X can only access Instinct X after passing through the BofAS SOR.**

**EQUITY EXECUTION SERVICES (“EES”) - ~~The EES business unit~~ trades equities, ETFs, swaps, and options on behalf of Clients as agent or principal. EES is comprised of the following desks: (1) Core Cash, (2) Portfolio, (3) NYSE Floor Brokerage, (4) ETF Trading, and (5) Swaps, and ~~(6) Central Risk Book. The EES line of business routes~~ may route orders and conditional placements to Instinct X in a principal, agency, or riskless principal capacity.**

**EQUITY CLIENT SOLUTIONS (“ECS”) - ~~The ECS business unit~~ handles: (1) agency orders in equity-derivative instruments on behalf of BofAS**

Clients, (2) principal orders in connection with the facilitation of Client orders, and (3) principal orders to establish or unwind hedge positions taken in connection with Client facilitation trades. ECS ~~is divided into trading~~ consists of the desks that handle equity and equity-derived products including: (1) Index, (2) Single Name, (3) Corporates, (4) Exotics, (5) ~~Constant Proportion Portfolio Insurance~~ Investable Indices, (6) Equity Structured Finance, (7) Corporate Actions, (8) Convertibles Primary; (9) Convertibles Secondary, and (10) Emerging Markets. ~~The ECS line of business~~ routes orders and conditional placements to Instinct X in a principal capacity.

EQUITY SYNTHETICS AND SECURITIES LENDING (“ESSL”) - ESSL trades equities, ETFs, swaps, and options on behalf of BofAS Clients as agent or principal. ESSL consists of the Swaps and Stock Loan Desks. ESSL routes orders and conditional placements to Instinct X in a principal capacity.

ELECTRONIC TRADING ~~SERVICES~~ (“~~ETSET~~”) - ~~The ETS business unit~~ ET offers BofAS Clients a wide range of electronic order handling and execution services on its platform, including BofAS algorithmic trading products, the BofAS SOR, third-party external market access gateways (i.e., separate from BofAS’s internal electronic trading technology), and access to Instinct X. ~~The ETS line of business~~ ET may route orders and conditional placements to Instinct X through its platform in a principal or agency capacity.

~~EQUITY SYNTHETICS AND SECURITIES LENDING (“ESSL”) - The ESSL business unit trades equities, ETFs, swaps, and options on behalf of BofAS Clients as agent or principal. ESSL consists of the Swaps and Stock Loan Desks. The ESSL line of business routes orders and conditional placements to Instinct X in a principal capacity.~~

- 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.

**Business units cannot enter orders or conditional placements directly into Instinct X via a FIX connection (See Part III, Item 5(a) for a discussion of Direct and Indirect Subscribers to Instinct X). Rather, business units can enter orders only using a BofAS algorithm or the BofAS SOR.**

- 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

- 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

Item 2: Affiliates Trading Activities on the ATS

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

Yes No

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

**BofAS Affiliates do not have direct access to Instinct X (See Part II, Item 5 for a discussion of Direct and Indirect Subscribers to Instinct X). Any Affiliate of BofAS may send orders to a BofAS trading desk for handling and, based on the discretion of the desk handling the orders, all or some of the Affiliate's orders may be routed to Instinct X at the discretion of a BofAS algorithm or the BofAS SOR used by the desk. Set forth below are the BofAS Affiliates whose orders or conditional placements accessed Instinct X in the last calendar quarter.**

Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPFS") is a U.S. registered affiliated broker-dealer that may use a BofAS algorithm or the BofAS SOR to handle an order and, based on the discretion of the algorithm or SOR, some or all of MLPFS's orders may be routed to Instinct X. ~~The determination of whether to send a conditional placement to Instinct X on behalf of an Affiliate is made by the BofAS algorithm or BofAS SOR handling the Affiliate's original order.~~ MLPFS orders that ultimately access Instinct X do so using the MPIDs "MLWM" and "MLMA." Instinct X receives MLPFS orders in an agency capacity with the exception of the principal orders Instinct X may receive in connection with MLPFS's unwinding of bona fide errors or positions resulting from customer accommodations. The determination of whether to send a conditional placement to Instinct X on behalf of an Affiliate is made by the BofAS algorithm or BofAS SOR handling the Affiliate's original order.

**Orders and conditional placements of Bank of America, N.A. (“BANA”), a U.S. affiliated national bank, also can be routed to Instinct X (through a BofAS trader authorized to act on behalf of BANA). Instinct X receives and handles these BANA orders and conditional placements, under the MPID “MLCO,” in an agency capacity.**

**Merrill Lynch International (“MLI”) is a foreign affiliated broker-dealer (or local equivalent) that sends orders to BofAS that ultimately access Instinct X using the MPID “MLCO.” Note, as a foreign entity, MLI does not have its own MPID. Instinct X receives principal or agency orders from MLI. However, orders and conditional placements associated with MLI are treated as principal in Instinct X.**

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

Yes No

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

Yes No

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

Yes No

Item 5: Other Products and Services

- a. Does the Broker-Dealer Operator offer Subscribers any products or services for the purpose of effecting transactions or submitting, disseminating, or displaying orders and trading interest in the NMS Stock ATS (e.g., algorithmic trading products that send orders to the ATS, order management or order execution systems, data feeds regarding orders and trading interest in, or executions occurring on, the ATS)?

Yes No

If yes, identify the products or services offered, provide a summary of the terms and conditions for use, and list here the applicable Item number in Part III of this form where the use of the product or service is explained. If there is no applicable Item in Part III, explain the use of the product or service with the ATS here.

**BofAS offers its Clients a wide range of electronic order handling and execution products and services on its electronic trading platform. These products and services include BofAS and vendor order and execution**

management systems, BofAS algorithmic trading products, the BofAS SOR, and access to Instinct X. The use of these algorithmic trading and SOR services to enter orders into Instinct X is discussed in Part III, Item 5(a). Use of these services is governed by relevant contractual agreements, which contain no specific terms and conditions for routing orders and conditional placements into Instinct X. Orders and conditional placements can only be entered into the ATS by means of a direct FIX connection (including a cross-connection from a third-party external market access gateway) or the BofAS SOR. For purposes of this Form ATS-N, Instinct X Subscribers fall into one of two classes. First, Direct Subscribers, ~~which~~ are BofAS Clients that have been approved to send orders and conditional placements directly into Instinct X via a FIX connection or using a third-party external market access gateway with a cross-connection to access Instinct X. Note, a Direct Subscriber can enter orders directly into Instinct X either through a dedicated FIX connection or the use of an external market access gateway, not both. Second, Indirect Subscribers, ~~which~~ are BofAS Clients that have been approved to use BofAS's electronic order handling and execution services platform and whose orders and conditional placements can be routed to the ATS based on determinations made by a BofAS algorithm or the BofAS SOR. Direct and Indirect Subscribers are collectively referred to as "Subscribers." Note, a BofAS Client can be both a Direct Subscriber and an Indirect Subscriber depending on the manner in which the Subscriber's orders are sent to Instinct X (i.e., direct FIX connection or by the BofAS SOR). Set forth below are the products and services BofAS offers Subscribers.

**DIRECT SUBSCRIBERS** BofAS offers Direct Subscribers the ability to enter orders and conditional placements directly into Instinct X utilizing a standard FIX connection--FIX 4.2 Application Programming Interface ("API") (See Part III, Item 5), as well as the ability to establish a cross-connection to access Instinct X (See Part III, Item 6). Some Direct Subscribers use a third-party algorithm or SOR approved by BofAS to access Instinct X via cross-connection; in this case, the third-party provider is responsible for the Direct Subscriber's FIX communications and references throughout this Form to Direct Subscribers' FIX messages and tags refers in this instance to the third-party provider's FIX messages and tags on behalf of the Direct Subscriber. In addition to being approved and onboarded as a BofAS Client with access to the electronic trading platform, Direct Subscribers of Instinct X must have separately completed a Due Diligence Questionnaire through the BofAS Sales team and been approved for direct connections to Instinct X. The U.S. Equities ATS Working Group ("ATS Working Group") reviews responses to the Due Diligence Questionnaire (See Part III, Item 2) and approves Persons as Direct Subscribers.

**INDIRECT SUBSCRIBERS** BofAS offers Indirect Subscribers the ability to enter orders and conditional placements indirectly into Instinct X utilizing BofAS's electronic order handling and execution products and services mentioned above. Specifically, BofAS's SOR provides access to national securities exchanges, alternative trading systems, and other market centers, as well as access to Instinct X (See Part III, Item 5). BofAS offers Indirect Subscribers access to third-party and proprietary order management systems to route orders to a BofAS algorithm or the BofAS SOR for handling. These order management systems do not access Instinct X; rather, they must route orders to a BofAS algorithm or the BofAS SOR and the orders can then access Instinct X through the BofAS SOR. Indirect Subscriber orders handled by a BofAS algorithm or the BofAS SOR can be routed to Instinct X by the BofAS SOR depending on marketability and the Indirect Subscriber's order handling instructions. Alternatively, Indirect Subscribers can request customizations to their algorithmic or SOR trading strategies at the session- or Client ID-level to exclude all external market centers, except when regulatory requirements preclude them from doing so, and limit their interactions to Instinct X only.

- b. If yes to Item 5(a), are the terms and conditions of the services or products required to be identified in Item 5(a) the same for all Subscribers and the Broker-Dealer Operator?

Yes No

- c. Does any Affiliate of the Broker-Dealer Operator offer Subscribers, the Broker-Dealer Operator, or both, any products or services for the purpose of effecting transactions or submitting, disseminating, or displaying orders or trading interest in the NMS Stock ATS?

Yes No

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.

**GENERAL BACKGROUND AND SCOPE OF SUBSCRIBER CONFIDENTIAL TRADING INFORMATION** Instinct X is comprised of a standalone hardware (i.e., server) and software application (collectively, the operating plant). Instinct X does not share an operating plant with any **other** BofAS system, but it is housed in the same data center as other BofAS

systems. BofAS maintains physical restrictions and policies and procedures designed to safeguard the confidential trading information of Subscribers. BofAS considers a Subscriber's identity, orders, and conditional placements routed to, and trades effected by, Instinct X (including data analytics related to a Subscriber's transactions) confidential trading information. However, BofAS may include certain post-execution information involving Instinct X transactions in various reports, data, and commentary communicated internally and externally to Clients directly or through vendors, provided BofAS has anonymized (i.e., does not identify an individual Subscriber) such information, aggregated such information with execution information from other desks or from BofAS as a whole (such that no individual trade, Client, or Subscriber is identifiable), and communicated such information with appropriate delay. As noted in "Systems with Access to Subscriber Confidential Trading Information" in Part II, Item 7, the BofAS algorithms and SOR can transmit Subscribers' confidential trading information to the extent these systems route Subscribers' orders or conditional placements and related messages to Instinct X. Subject to the above, access to Subscriber confidential trading information is limited to BofAS employees and systems responsible for operating Instinct X or responsible for its compliance with applicable rules. Set forth below are the BofAS employees and systems with access to Subscriber confidential trading information, as well as a description of the applicable safeguards and oversight procedures. Subject to the above, access to Subscriber confidential trading information is limited to BofAS employees and systems responsible for operating Instinct X or responsible for its compliance with applicable rules. Set forth below are the BofAS employees and systems with access to Subscriber confidential trading information, as well as a description of the applicable safeguards and oversight procedures.

**EMPLOYEES WITH ACCESS TO SUBSCRIBER CONFIDENTIAL TRADING INFORMATION** BofAS does not have any employees solely responsible for Instinct X. The shared employees described in response to Part II, Item 6(a) are the only employees who have access to Subscriber confidential trading information. These employees are prohibited from sharing any Subscriber confidential trading information with Persons not authorized to receive such information. BofAS does not provide Subscriber confidential trading information to BofAS business units or BANA authorized traders in furtherance of BofAS principal trading activities or BANA trading activity.

**SYSTEMS WITH ACCESS TO SUBSCRIBER CONFIDENTIAL TRADING INFORMATION** BofAS offers third-party external direct market access gateways to customers and clients which are used by some Direct Subscribers to transmit orders and/or conditional placements, including Subscriber confidential trading information, to Instinct X. These



gateways communicate to the employees of the third-party responsible for managing the health of the respective gateway (as described in response to Part II, Item 7(d)), real-time information about where the Direct Subscriber's orders and/or conditional placements were routed and or executed, which could be Instinct X or any other market center. The order and execution management systems used by the Sales and Trading employees described in response to Part II, Item 6(a) can transmit Indirect Subscribers' confidential trading information to the extent orders handled by a Sales and Trading employee is routed to Instinct X. These systems communicate information to Sales and Trading employees with respect to where their Clients' orders were routed and/or executed, which could be Instinct X or any other market center. Separately, BofAS algorithms and the BofAS SOR can transmit Indirect Subscribers' confidential trading information to the extent these systems route Indirect Subscribers' orders or conditional placements to Instinct X. Neither the BofAS algorithms nor the BofAS SOR make routing determinations based on information about orders or conditional placements the respective system routes to Instinct X. All Subscriber orders and conditional placements entering Instinct X pass through the FIX interface. The FIX interface does not retain information about the orders or conditional placements entering Instinct X. The FIX interface does not communicate order or conditional placement information to any other BofAS system. BofAS maintains a research database containing historical trading information. The ET Products team uses this database to run queries and generate reports as described above. This database includes post-trade Subscriber confidential trading information. BofAS maintains an internal system containing order, conditional placement, and execution information routed through the BofAS SOR. The ET Consulting group uses this internal system to run queries and generate reports at the request of BofAS business units and Clients using the BofAS algorithms or SOR, including Indirect Subscribers. BofAS employs a proprietary application for real-time monitoring of Instinct X. The MAG team uses this application to research Subscriber's orders, conditional placements, and executions and monitor the health of Instinct X (e.g., monitor the number of rejections, pending orders or conditional placements, order-to-fill ratios). BofAS uses internal and external systems to comply with its books and records, trade reporting, surveillance and supervisory obligations. These systems can receive Subscriber order and execution information for purposes of creating surveillance, supervisory and **OATSCAT** reports.

**SAFEGUARDING AND OVERSEEING SUBSCRIBER CONFIDENTIAL TRADING INFORMATION** Access to Instinct X, Other Relevant BofAS Systems, and Subscriber Confidential Trading Information: BofAS requires permissioned logins to access Instinct X. In addition, BANA's global cyber security efforts, including measures to detect and prevent unauthorized

intrusions of BANA systems, apply to BofAS, including the operation of Instinct X. Relevant Business Control Officers ~~and Compliance control functions~~ must approve all employee access to Instinct X, including the operating plant, development code (including the FIX interface), and production logs. Any individual seeking access to Instinct X must submit a request through BofAS's Access ~~Review~~Request Management ~~System~~ ~~("ARMS")~~tool ("ARM"). ARM is the enterprise tool used to manage user access to enterprise resources such as applications, databases, collaboration sites and platforms. ARM tracks and records all requests and approvals for new access, access modifications and revocations, and communicates status to requestors and approvers throughout the request lifecycle. A registered principal must review and approve such request before an individual is granted access to Instinct X. In reviewing access requests, the registered principal considers factors including the employee's current role and whether the employee performs a function related to Instinct X. An employee's request to gain access may be denied if it is deemed to be unnecessary or inappropriate. Employees granted access to a system will have access to all Subscriber confidential trading information available in the system. If an employee changes roles, both the prior supervisor and new supervisor are required to review and adjust the employee's access entitlements to appropriately reflect the employee's new role. Additionally, all approved access requests are subject to a periodic review pursuant to BofAS's written supervisory procedures ("WSPs") described below. Pursuant to the BofAS WSPs, on a quarterly basis, the ATS Supervisor or delegate conducts a review to confirm the appropriateness of user access entitlements to Instinct X, ~~including verification that users whose roles have changed and/or, employees who have been inactive, transferred or terminated have their permissioned access removed from the system.~~ This WSP governs access to the interface used to view and/or interact with Instinct X's order book and how the access entitlements to Instinct X should be handled once an individual submits a request for access through the ~~ARMS~~ARM process, as well as on an ongoing basis after a registered principal has granted access to an individual. Based on this review, the ATS Supervisor or delegate may revoke access rights to Instinct X's order book. Pursuant to another BofAS WSP, on a quarterly basis, the ATS Supervisor or delegate conducts a review to confirm the appropriateness of user access entitlements to Instinct X's server logs, ~~including verification that users whose roles have changed and/or, employees who have been inactive, transferred or terminated have their permissioned access removed from the system.~~ This WSP governs access to the server logs and those with direct business responsibility, or who provide development or other technology support to Instinct X. Based on this review, the ATS Supervisor or delegate may revoke access rights to Instinct X's server logs. Additionally, BofAS's

contracts with the third-party external market access gateway providers and the third-party service providers described above require such providers to protect Subscriber confidential trading information. Specifically, and among other things, these third-parties must: (i) keep Subscriber trading information confidential, (ii) not share Subscriber confidential trading information with any Person who does not have a reasonable need to know or access such information, and (iii) not use or act on Subscriber confidential trading information other than to perform their responsibilities under their agreements (including the use of aggregated and anonymous data for internal statistical, forensic and similar purposes). These third-parties also perform periodic reviews of platform access to confirm the system access entitlements remain accurate, i.e., verify that users whose roles have changed and/or, employees who have been inactive, transferred or terminated have their permissioned access removed from the system.

**SEPARATION:** BofAS has physical and information barriers in place to separate employees and systems with access to Subscriber confidential trading information from those not permitted to access such information. Technology department employees are located in a separate physical location from other BofAS business units--either a different building or a different floor. MAG and ET Product and Consulting employees are located in the same building as other BofAS business units, but in a separate area. As noted above, Instinct X does not share an operating plant with any other BofAS system, but it is housed in the same data center as other BofAS systems.

**PERSONAL TRADING RESTRICTIONS:** BofAS prohibits all employees, including those with access to Subscriber confidential trading information, from trading based on non-public or other confidential information, which would include Subscriber confidential trading information. Pursuant to the Associate Investment Policy these employees must enter a trade pre-approval request via the Associate Investment Monitoring ("AIM") website for every purchase and sale of a security executed in an employee investment account, which among other things, requires the approval of the employee's supervisor and the AIM Group. When requesting approval for a trade, the employee must provide certain attestations, depending on the employee's role, including whether he or she: (i) reviewed the restricted list and that there are no restrictions, (ii) has no material non-public information, (iii) is not aware that Firm is effecting or proposing to effect a principal or customer trade in the security, and (iv) has held the security for 30 days (for sells). Prior to approving any request, the employee's supervisor and the AIM Group review the attestations. BofAS imposes a 30-day minimum holding period on any approved trades. Pursuant to a BofAS WSP, on a daily basis, the registered principal (or delegate) with supervisory oversight responsibility for the relevant employee conducts a

review of the employee's personal trading activity. Specifically, the relevant supervisor or delegate receives a daily report reflecting the prior day's trade activity for each such employee. The relevant supervisor or delegate assesses whether the employee obtained the appropriate pre-approval or pre-clearance for such trades and for any red flags (e.g., excessive trading).

**FIRM-WIDE CONFIDENTIAL INFORMATION RESTRICTIONS:** As a general matter, BofAS requires all employees to undergo a comprehensive screening before commencing employment and each BofAS employee is bound by and required to observe the BAC Code of Conduct, which includes provisions that address the handling of Client information and impose a duty of confidentiality.

- 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

- 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.

**The shared employees described in response to Part II, Item 6(a) have access to Subscriber confidential trading information.**

**THIRD-PARTY EXTERNAL MARKET ACCESS GATEWAY**

**PROVIDERS:** As noted in response to Part II, Item 7(a), BofAS operates external direct market access gateways, which are managed by third-parties, that can transmit Direct Subscriber confidential trading information. These platforms receive information about Direct Subscribers' orders, conditional placements, and executions to the extent such information is routed to Instinct X. Similar to systems used by Sales and Trading personnel, these gateways handle orders that may, based on the direction of the Direct Subscriber, be routed directly to Instinct X. Dedicated support personnel for these gateways are responsible for addressing BofAS inquiries related to Direct Subscribers' orders or conditional placements routed to Instinct X and for managing the health of the platform. These employees can access real-time order, conditional placement, and execution information through the respective activity logs for Direct Subscribers using the respective gateway. However, they do not have access to the Instinct X order book.

**THIRD-PARTY BOFAS SERVICE PROVIDERS:** As noted in response to Part II, Item 7(a), BofAS uses third parties to store the trading information associated with BofAS's electronic trading business, which includes trading activity on Instinct X, i.e., Subscriber confidential trading information. As

requested by BofAS, dedicated support personnel from the third-party are responsible for generating reports, e.g., regulatory reports, client reports, booking records, based on the stored trading information. Through activity logs, these dedicated support personnel can access real-time order, conditional placement, and execution information. However, they do not have access to the Instinct X order book.

**Part III: Manner of Operations**

**Item 10: Opening and Reopening**

- a. Explain how the NMS Stock ATS opens or re-opens for trading, including when and how orders and trading interest are priced, prioritized, matched, and executed, and identify any order types allowed prior to the start of regular trading hours or following a stoppage of trading in a security during regular trading hours.

**Trading in Instinct X begins after the opening or re-opening print on the primary listing exchange for a security. Orders and conditional placements are priced, prioritized, matched, and executed consistent with the crossing priority described in Part III, ~~Item~~Items 9 and 11. Instinct X does not employ any special opening or re-opening processes, auctions or order types. Conditional placement message functionality begins after the opening or re-opening print on the primary listing exchange for a security.**

- b. Are the processes and procedures governing opening and re-opening the same for all Subscribers and the Broker-Dealer Operator?

Yes    No

- c. Explain how unexecuted orders and trading interest are handled at the time the NMS Stock ATS begins regular trading at the start of regular trading hours or following a stoppage of trading in a security during regular trading hours.

**Unexecuted orders and conditional placements are handled at the start of regular trading as described in Part III, Item 10(a) above. In the event of a regulatory halt, unexecuted orders and conditional placements will reside in Instinct X until the halt is lifted and the primary listing exchange resumes trading in the stock; however, conditional placement Firm-Up messages can lapse during a stoppage of trading as a function of the expiration of the Firm-Up timer and no new messages will be sent. Instinct X will not execute a firmed-up order during a regulatory halt even if Instinct X already generated a Firm-Up Invite before the halt.**

- d. Are the processes or procedures governing unexecuted orders and trading at the time the NMS Stock ATS begins regular trading at the start of regular trading hours, or following a stoppage of trading in a security during regular trading hours, the same for all Subscribers and the Broker-Dealer Operator?

Yes No

- e. Are there any differences between pre-opening executions, executions following a stoppage of trading in a security during regular trading hours, and/or executions during regular trading hours?

Yes No

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.

**Generally, Instinct X is an NMS Stock ATS that operates within BofAS as part of the GBAM Division of BAC and offers matching services in all NMS Stocks. Specifically, Instinct X is a crossing system that matches non-displayed orders based on a Price/Capacity/Time priority and Subscriber selected order attributes. Instinct X also supports conditional placement trading interest as described in Part III, Item 9, which allows a Subscriber to place non-firm trading interest into Instinct X for matching through a Firm-Up process. Instinct X will establish a non-displayed “book” (subject to further discussion in Part III, Item 15) for each security made available for matching (the book is the conceptual file that maintains all individual orders and conditional placements deemed eligible for crossing in a particular security).**

- 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

- 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.

**Instinct X evaluates each Subscriber incoming order and conditional placement to determine whether: (i) the Instinct X system is available for trading and (ii) the symbol is available for trading. If so, Instinct X assesses the market conditions applicable to each order or conditional placement including the: (i) availability of market data (updated in real-time), (ii) the symbol’s trading status (updated in real-time), and (iii) validity of the trading**

session. If the market conditions are acceptable, Instinct X then evaluates each order's or conditional placement's Subscriber required attributes.

**PRIORITY** Instinct X will match orders and conditional placements based on Price/Capacity/Time priority, in order of precedence. First, Instinct X will consider price and will prioritize the more conservative of the Limit and Relative Price defined in any peg instruction. Next, Instinct X will consider the capacity in which it handles equally priced orders or conditional placements. Specifically, orders and conditional placements BofAS handles in an agency capacity (including, as described above, MLPFS and BANA orders and conditional placements) maintain priority over BofAS principal and riskless principal orders. Among agency orders and conditional placements, those originating from Subscribers in the Institutional, Broker-Dealer, and Private Client segment classifications maintain priority over agency orders of Subscribers in the Market Maker Client segment classification (as defined in Part III, Item 13). After assessing the price and capacity of an order or conditional placement, Instinct X will consider the time it received the order or conditional placement and will prioritize orders or conditional placements received earlier in time.

**PRICE IMPROVEMENT** Instinct X offers Subscribers the ability to choose price protection mechanisms in the form of the following pegged orders: (i) **MIDPOINT PEG** -- an order that is pegged to the midpoint of the BBO; (ii) **PRIMARY PEG** -- an order that is pegged to the BBO on the same side of the market (i.e., near touch); and (iii) **MARKET PEG** -- an order that is pegged to the BBO on the opposite side of the market (i.e., far touch). Instinct X will split price improvement equally between counterparties within the bounds of the BBO for two limit orders with overlapping limit prices. If the calculated midpoint between the two orders falls outside the BBO, the execution price will be the outer bound of the BBO. Instinct X will treat a resting midpoint pegged order as a limit order and will split price improvement equally between counterparties when executing against an opposite limit priced order. Similarly, Instinct X will treat a far side pegged order as a limit order and will split price improvement equally between counterparties when executing against an opposite limit priced order as well as a resting midpoint pegged order. For example, Instinct X will split price improvement and execute halfway between the midpoint of the BBO and the far side bid or offer when a resting midpoint pegged order crosses with a far side pegged order. Instinct X will not provide price improvement to a market order when matching against a limit order and will instead execute such orders at the assigned limit price. For example, Instinct X will execute a resting midpoint pegged order and a market order at the midpoint of the BBO assuming the realized pegged price is more conservative than any specified absolute limit on the midpoint pegged order. Instinct X will not provide price improvement to an amended

midpoint pegged orders. For example, Instinct X would execute a limit order priced at the far side interacting with an amended midpoint pegged order at the midpoint of the BBO resulting in price improvement for the limit order priced at the far side. Instinct X will split price improvement between orders and will execute at the midpoint of the BBO when matching two unpriced orders. Additionally, because Instinct X treats an order pegged to the far side as a limit order, Instinct X will execute at the far side and will not provide price improvement when matching a market order and a resting order pegged to the far side.

#### **COMPLIANCE WITH VARIOUS FEDERAL SECURITIES**

**REQUIREMENTS** Instinct X is designed to operate in compliance with the requirements of Reg SHO when accepting and/or executing orders and conditional placements. In accordance with Rule 201 of Reg SHO, once a circuit breaker has been triggered, the short sale price test restriction will apply to short sale orders and conditional placements in that security for the remainder of the day and the following day, unless an exemption applies. Instinct X accepts orders and conditional placements marked as “short exempt” from broker-dealer Subscribers. Instinct X will not cross orders or conditional placements in a locked or crossed market environment. Similarly, Instinct X will only cross orders and conditional placements if Limit Up/Limit Down (“LULD”) bands are being disseminated and the proposed crossing price is within the LULD bands. Instinct X will not execute orders or firmed-up conditional placements in a security subject to a LULD trading pause or regulatory halt. Pursuant to applicable rules, Instinct X will only resume crossing once trading has commenced on the primary listing exchange and LULD price bands are available. BofAS handles execution errors occurring within Instinct X in accordance with the Firm’s Errors and Error Correction Transactions Policy (“Error Policy”). The Error Policy applies to bona fide errors (e.g., wrong security or side of the market, execution outside the limit price of an order, executions at clearly erroneous prices). BofAS handles executions at clearly erroneous prices consistent with the applicable rules of the self-regulatory organizations. The Error Policy requires that bona fide errors involving Instinct X be recorded in BofAS error accounts and reported to the ATS Supervisor. Bona fide errors can be raised by Clients to BofAS sales traders or identified by BofAS. After evaluating the activity to confirm it is a bona fide error, the ATS Supervisor or the ETS Supervisor can correct the error in a manner that attempts to place the Subscriber in the same position had the error not occurred. The ATS supervisor or delegate reviews execution errors daily or as they occur to ensure that they are handled in accordance with BofAS procedures. Instinct X time stamps orders upon receipt in the ATS and executions at the time they occur in accordance with applicable ~~FINRA Order Audit Trail System~~[CAT](#) and trade reporting rules. Instinct X determines queue position by new order receipt time and



**updates queue positions in connection with an amendment to the specified price, an increase in quantity, a change/addition to the pegging instruction (a pegged order will maintain its queue position based on changes to the BBO unless there is action taken with respect to pegging instructions), or an update to MinQty. Instinct X will maintain an order's and conditional placement's queue position when the Subscriber amends the order or conditional placement to reduce the quantity.**

- 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