

Exhibit 3

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

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

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

Yes No

If yes, explain the opt-out process.

As detailed below, Subscribers can opt out from interacting with Firm/Conditional Orders of JPMS. As described in Part III, Item 13, principal Firm/Conditional Orders of JPMS are assigned to Tier 1 in JPB-X. Subscribers can opt out from interacting with JPMS principal orders by requesting to disable interaction with JPMS principal orders or opting out of interacting with Tier 1 entirely. By disabling interaction with JPMS principal orders, Subscribers do not opt out of interacting with any of the institutional investor client flow that accesses JPB-X via the algorithms/SOR, JPMS affiliates flow that accesses JPB-X via the algorithms/SOR, and broker-dealer client flow that accesses JPB-X via the algorithms/SOR. Tier 1 consists of institutional investor client flow that accesses JPB-X via the algorithms/SOR, JPMS affiliates flow that accesses JPB-X via the algorithms/SOR assigned to Tier 1, broker-dealer client flow that accesses JPB-X via the algorithms/SOR, and internal (JPMS) principal trading desks' flow that accesses JPB-X via the algorithms/SOR. Subscribers can opt out from interacting with Tier 1 assigned to Tier 1 and JPMS affiliates flow assigned to Tier 1 (such order flows assigned to Tier 1 are described in Part III, Item 13).

As described in Part III, Item 14, a Subscriber can specify the tiers with which the Subscriber has opted out from interacting with and/or specify opt out from principal interaction (i) on an order-by-order basis in the Firm/Conditional Order instructions submitted to JPMS or (ii) by contacting the Subscriber's JPMS sales representative with respect to a subset of Firm/Conditional Orders or all order flow. In each case, JPMS implements the restriction as soon as reasonably practicable.

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

Yes No

If yes, explain the opt-out process.

Subscribers can opt out from interacting with Firm/Conditional Orders of JPMS' affiliates. As described in Part III, Item 13, Firm/Conditional Orders of JPMS' affiliates are assigned to Tier 1 in JPB-X. ~~Tier 1 consists of institutional investor client flow that accesses JPB-X via the algorithms/SOR, JPMS affiliates flow that accesses JPB-X via the algorithms/SOR, broker-dealer client flow that accesses JPB-X via the algorithms/SOR, and internal (JPMS) principal trading desks' flow that accesses JPB-X via the algorithms/SOR.~~ Subscribers can opt out from interacting with Tier 1. Note that, ~~because there are no sub-tiers in Tier 1,~~ Subscribers cannot opt out from interacting with Firm/Conditional Orders of JPMS' affiliates without also opting out from interacting with institutional investor client flow ~~that accesses JPB-X via the algorithms/SOR~~ assigned to Tier 1, broker-dealer client flow ~~that accesses JPB-X via the algorithms/SOR~~ assigned to Tier 1, and internal (JPMS) principal trading desks' flow ~~that accesses JPB-X via the algorithms/SOR~~ assigned to Tier 1 (such order flows assigned to Tier 1 are described in Part III, Item 13).

As described in Part III, Item 14, a Subscriber can specify the tiers with which the Subscriber has opted out from interacting with and/or specifying opt out from principal interaction (i) on an order-by-order basis in the Firm/Conditional Order instructions submitted to JPMS or (ii) by contacting the Subscriber's JPMS sales representative with respect to a subset of Firm/Conditional Orders or all order flow. In each case, JPMS implements the restriction as soon as reasonably practicable.

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

Yes No

If no, identify and explain any differences.

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.

Confidential trading information consists of data regarding open or partially open Firm/Conditional Orders in JPB-X ("real-time data") and data regarding fully or partially completed Firm/Conditional Orders in JPB-X, including executions and cancellations ("historical data"). Confidential trading information, however, does not include post-execution reporting under applicable reporting rules or regulations. Confidential trading information also does not include aggregated data resulting from the combination of the JPB-X historical data associated with a Subscriber's Firm/Conditional Order with data regarding other Firm/Conditional Orders of the Subscriber or other JPMS clients, whether or not such Firm/Conditional Orders were routed to JPB-X ("Aggregated Data"). Aggregated Data includes JPB-X historical data from only the prior trading day, including end of trading on trade date, or earlier. Aggregated Data can include any JPB-X historical data or some subset of JPB-X historical data. Aggregated Data sourced only from JPB-X historical data does not provide Subscriber-specific or symbol-specific information. Aggregated Data can be used (i) by JPMS to provide market color or trend analyses externally and/or to internal principal or agency trading desks or senior management (e.g., JPMS has included in marketing materials aggregate statistics regarding JPB-X such as executed volume); (ii) by JPMS to advertise, report on, or enhance the quality of its execution or other services offered to clients (e.g., JPMS has included in marketing materials aggregate VWAP slippage statistics that incorporate execution data from JPB-X and other venues to which Subscribers' VWAP orders were routed); and (iii) by third parties so they can provide JPMS with analytics (regarding, e.g., its market share or other performance metrics on a client-by-client basis). Such data sets are sufficiently aggregated and/or anonymized that they protect the confidentiality of Subscribers' trading strategies and are not themselves confidential trading information. Moreover, the use of such data sets, depending on the context, may be subject to confidentiality restrictions under agreements with recipients of the data sets and/or JPMS policies and procedures.

No employee or contingent worker ("workforce member") of JPMS or its affiliates is dedicated solely to servicing the operations of JPB-X. Shared workforce members with some level of access to confidential trading information on JPB-X include those described below to the extent they have a need to know such information to perform their respective responsibilities in connection with: (i) the operations and support of JPB-X; (ii) JPMS' risk management and compliance with applicable law in operating JPB-X; (iii) assisting clients, senior management, and business units that send orders to JPB-X; or (iv) developing or maintaining JPMS's

infrastructure and applications, including those related to JPB-X. In particular, as detailed below, limited groups of shared workforce members have access to all real-time and historical data in JPB-X (1), and limited groups of shared workforce members have access to all historical data from JPB-X (2). Separately, there are groups of shared workforce members that have access to real-time and/or historical data regarding subsets of orders and executions that occur in JPB-X to perform their respective responsibilities (3). Shared workforce members authorized to access confidential trading information in connection with the responsibilities noted below are prohibited from using confidential trading information for purposes other than those described below.

Shared workforce members may be employed by (i) JPMS; (ii) an affiliate listed in Part II, Item 2; or (iii) a non-securities trading JPMS affiliate. References below to "affiliates worldwide" generally include an affiliate listed in Part II, Item 2, e.g., JPMorgan Chase Bank, National Association ("JPMCB"). While some individual shared workforce members may be employed by a JPMS affiliate listed in Part II, Item 2, only those shared workforce members described below as having trading responsibilities may in fact enter or direct the entry of Firm/Conditional Orders that ultimately access JPB-X. For example, those JPMCB-employed shared workforce members outlined in Section 1(b) below have access to certain confidential trading information but do not engage in trading activity while those JPMCB-employed shared workforce members outlined in Section 3(e) below have access to certain confidential trading information and can engage in trading activity. As noted above and in Part II, Item 7(a), shared workforce members with access to confidential trading information, including those employed by a JPMS affiliate listed in Part II, Item 2, have such access to the extent they have a need to know such information to perform their respective responsibilities and are prohibited from unauthorized or improper use of such information, e.g., front-running client orders.

(1) The following groups have access to all real-time and all historical data in JPB-X for the purposes described below:

a) The Electronic Client Solutions ("ECS") ~~Liquidity~~-Product ~~Specialists~~Team (workforce members of JPMS and its affiliates worldwide) responsible for the development and day-to-day operation of the electronic trading products, including the algorithms/SOR, and JPMS' alternative trading systems, including JPB-X, who can access the JPB-X order book, which contains all real-time and historical data. This access allows the ECS ~~Liquidity~~-Product ~~Specialists~~Team to monitor the performance of JPB-X, prepare aggregated data sets as described above, detect any Subscriber behavior resulting in a materially negative impact to

the operation of JPB-X or to other Subscribers or indicating a need to change a Subscriber's tier assignment, work to resolve issues related to the foregoing that may arise, develop further product initiatives, and respond to client inquiries and regulatory requests; and

b) Personnel in technology groups (workforce members of JPMS affiliates worldwide) responsible for providing technical support or developing and maintaining applications, e.g., trading applications and other applications or services that support trading personnel described below, or infrastructure across JPMS, including the applications and infrastructure on which JPB-X relies, can access real-time and historical data regarding orders and executions that occur in JPB-X as necessary in the course of their work to provide support and develop and maintain the applications and infrastructure.

(2) The following groups have access to all historical data from JPB-X for the purposes described below:

a) Operations personnel (workforce members of JPMS affiliates worldwide) responsible for processing and providing operational support for transactions effected by JPMS and its affiliates, including trades in JPB-X, who can access historical data so they can monitor the post-trade processing of and provide operational support for transactions executed in JPB-X, including with respect to the clearance, settlement, and allocation of such transactions, and work to resolve any processing or other operational issues that may arise; and

b) Personnel in Compliance, Conduct and Operational Risk, Business Control Management, and technology groups (workforce members of JPMS affiliates worldwide), who can access historical data so they can maintain (i) JPMS' and its affiliates' compliance with laws applicable to the operation of JPB-X, including through supervision, surveillance and the preparation of regulatory reports and responses to regulatory request; and (ii) related systems.

(3) The following groups have access to real-time and/or historical data regarding subsets of orders and executions that occur in JPB-X for the purposes described below:

a) The ECS Client Coverage, ~~ECS Product~~, ECS Connectivity, and ECS Sales groups (workforce members of JPMS and its affiliates worldwide), which provide client services to ECS clients, including JPB-X Subscribers, and can access real-time data and historical data regarding subsets of orders and executions that occur in JPB-X so they can field

inquiries from clients regarding orders routed to JPB-X by or on behalf of the clients;

b) ECS senior management (workforce members of JPMS and its affiliates worldwide) responsible for the ECS business, including the JPB-X offering and its operation, who can access real-time and historical data at a summary level (e.g., aggregated order quantities by client or symbol), and historical data so they can appropriately supervise and manage the ECS ~~Liquidity Product Specialists, Team and the~~ ECS Client Coverage, ~~ECS Product~~, ECS Connectivity, and ECS Sales groups;

c) Personnel in the equities Analytics, Automation and Optimization quantitative research groups, Electronic Trading quantitative research groups, and the Markets Business Intelligence Group (together, the "Equities Quantitative Research Groups") (workforce members of JPMS and its affiliates worldwide) and the ECS Execution Research group (workforce members of JPMS and its affiliates worldwide), who can access real-time and/ or historical data regarding JPB-X activity occurring through the upstream systems or desks they support when necessary in the course of their work to support the ECS Product Team (in the case of the ECS Execution Research group, e.g., suggest system changes to improve the operation of JPB-X) or provide support or develop and maintain applications and infrastructure (including, in the case of (i) the Electronic Trading quantitative research group, to, e.g., develop quantitative models employed by the applications and to analyze the performance of these applications and their underlying models, (ii) the Analytics, Automation, and Optimization quantitative research group to, e.g., maintain the applications that support trading personnel described below and the integrity of data used by such applications; and (iii) the Markets Business Intelligence Group to, e.g., provide senior management with aggregated trading analytics);

d) Personnel in Operations and Business Control Management (described in section 2 above), who can access real-time data on a limited basis in connection with their responsibilities described above;

e) Business unit sales and trading personnel who are responsible for Firm/Conditional Orders routed to JPB-X via the algorithms/SOR (workforce members of JPMS and its affiliates worldwide), can access real-time and historical data regarding orders and executions that occur in JPB-X regarding only that business unit's or a subset of that business unit's Firm/Conditional Orders so they can monitor such Firm/Conditional Orders, field inquiries regarding their orders, including those

Firm/Conditional Orders routed to JPB-X, or provide technical support for related trading application; and

f) Personnel in Model Risk Governance and Review (workforce members of JPMS and its affiliates worldwide) who can access historical data so they can perform model governance and model review functions, including conducting independent assessment and monitoring of the performance of Firm models that execute transactions in JPB-X.

- 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.

Equinix, Inc., a third-party data center provider, maintains the Equinix NY4 New York IBX Data Center, the data center in which the JPB-X matching system is located. Redline, a market data provider, is described in Part III, Item 23.

- 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.

Redline, a market data provider used by JPB-X, is wholly owned by an entity in which a JPMS affiliate that is not a Subscriber of JPB-X owns a minority interest. JPMS understands that other market participants (or affiliated entities of other market participants) who may be Subscribers of JPB-X also may own an interest in Redline's affiliate.

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- 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.

Part III: Manner of Operations

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.

JPMS can deny a Subscriber access to JPB-X if the Subscriber fails to satisfy the requirements for becoming a JPMS client or accessing JPB-X (see Part III, Item 2) or based on considerations suggesting high-risk activity, including regulatory actions, surveillance findings indicating potential market manipulation, or other inappropriate activity, or JPMS' overall business relationship with the Subscriber and its affiliates. JPMS also can deny a Subscriber access to JPB-X if ~~the ECS Liquidity~~ Specialists Team, responsible for the operation of JPB-X, detect systematic behavior with respect to (i) the routing of Firm/Conditional Orders designated for VWAP Price Match or Multi-Duration VWAP Price Match (see Part III, Item 7) resulting in a materially negative impact to the operation of JPB-X or to other Subscribers as evidenced by, e.g., a high cancellation rate or high VWAP slippage of the Subscriber's orders or (ii) the routing of Firm/Conditional Orders designated for Close Price Match (see Part III, Item 7) resulting in a materially negative impact to the operation of JPB-X or to other Subscribers as evidenced by, e.g., a high cancellation rate or late cancellation attempts of the Subscriber's orders. Moreover, JPMS reserves the right (i) to disable any JPB-X functionality, in whole or in part, if such functionality experiences technical issues or could otherwise pose a detrimental risk to Subscribers, JPB-X, or the capital markets and (ii) to restrict the entry of a Subscriber's Firm/Conditional Orders into JPB-X if certain thresholds are exceeded (e.g., risk limits imposed by JPMS pursuant to its obligations under SEC Rule 15c3-5) or to mitigate operational risk by reducing the volume of messaging in JPB-X.

- 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.

Item 5: Means of Entry

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- 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.

Subscribers can enter Firm/Conditional Orders directly into JPB-X by routing through JPMS' JISU technology, a low-latency platform accessible through a standard FIX messaging protocol (FIX 4.2 API). JPMS' JISU technology accesses JPB-X through a proprietary FIX messaging protocol and is the only means by which Subscribers can access JPB-X directly.

- 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 institutional investor clients of JPMS can enter Firm/Conditional Orders directly into JPB-X, but only if such Firm/Conditional Orders are designated for the VWAP Price Match. JPMS trading desks, JPMS' affiliates, and U.S.-registered and/or non-U.S.-registered broker-dealer clients (whether acting as agent or principal) cannot enter Firm/Conditional Orders directly into JPB-X.

- 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.

For the avoidance of doubt, (i) "Firm Orders" refers to the firm orders that the algorithms/SOR is able to enter, or direct the entry of, into JPB-X, but does not refer to the firm orders that the Subscribers enter into the algorithms/SOR, and (ii) "Conditional Orders" refers to the trading interest

in the form of conditional orders that the algorithms/SOR is able to enter, or direct the entry of, into JPB-X.

Subscribers can (i) enter firm orders into JPMS' algorithmic trading strategies, which can direct the SOR to enter child Firm/Conditional Orders into JPB-X based on the algorithmic trading strategies' own routing determinations, or (ii) enter firm orders into JPMS' algorithmic trading strategies, which can direct the SOR to enter the initial Conditional Order(s) into JPB-X based on the routing determinations of such Subscribers. Subscribers also can (i) enter firm orders into the SOR, which can enter child Firm/Conditional Orders into JPB-X based on the SOR's own routing determinations, or (ii) enter firm orders into the SOR, which can enter the initial Conditional Order(s) into JPB-X based on the routing determinations of such Subscribers. The SOR accesses JPB-X through a proprietary FIX messaging protocol. Subscribers can enter firm orders into JPMS algorithmic trading strategies and the SOR via a client gateway (JPMS' JISU technology or an order management system selected by the Subscriber). Subscribers can opt out of having the algorithms/SOR route Firm/Conditional Orders to JPB-X. Subscribers that access the algorithms/SOR are subject to any applicable contractual agreements with JPMS, such as any Electronic Trading Terms of Service, the terms of which (regarding, e.g., intellectual property rights, warranties, indemnification obligations, and limitations of liability) are sometimes negotiated and generally do not contain specific terms and conditions for accessing JPB-X through the algorithms/SOR. There is no means by which to access JPB-X through the algorithms/SOR that is available to JPMS business units or JPMS affiliates but not to Subscribers. Unless otherwise noted, the description above applies to ~~both~~ Firm/Conditional Orders designated for VWAP Price Match, Firm/Conditional Orders designated for Multi-Duration VWAP Price Match, and Firm/Conditional Orders designated for Close Price Match (see Part III, Item 7).

- 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.

Item 7: Order Types and Attributes

- a. Identify and explain each order type offered by the NMS Stock ATS. In your explanation, include the following:
- i. priority, including the order type's priority upon order entry and any subsequent change to priority (if applicable); whether and

- when the order type can receive a new time stamp; the order type's priority vis-à-vis other orders on the book due to changes in the NBBO or other reference price; and any instance in which the order type could lose execution priority to a later arriving order at the same price;
- ii. conditions, including any price conditions (e.g., how price conditions affect the rank and price at which it can be executed; conditions on the display or non-display of an order; or conditions on executability and routability);
 - iii. order types designed not to remove liquidity (e.g., post-only orders), including what occurs when such order is marketable against trading interest on the NMS Stock ATS when received;
 - iv. order types that adjust their price as changes to the order book occur (e.g., price sliding orders or pegged orders) or have a discretionary range, including an order's rank and price upon order entry and whether such prices or rank may change based on the NBBO or other market conditions when using such order type; when the order type is executable and at what price the execution would occur; whether the price at which the order type can be executed ever changes; and if the order type can operate in different ways, the default operation of the order type;
 - v. whether an order type is eligible for routing to other Trading Centers;
 - vi. the time-in-force instructions that can be used or not used with each order type;
 - vii. the circumstances under which order types may be combined with another order type, modified, replaced, canceled, rejected, or removed from the NMS Stock ATS; and
 - viii. the availability of order types across all forms of connectivity to the NMS Stock ATS and differences, if any, in the availability of an order type across those forms of connectivity.

Conditional and Firm Orders. The algorithms/SOR and Subscribers that access JPB-X directly can route to JPB-X (i) conditional orders and (ii) if any of the conditional orders match with other conditional orders in JPB-X, firm orders routed in response to firm-up invitations received directly from JPB-X (in the case of the SOR ~~with respect to orders designated for Close Price Match~~ and in the case of Subscribers that access JPB-X directly) or from JPB-X via the SOR (in the case of JPMS algorithmic trading strategies).

Matching Types. JPB-X accepts Firm/Conditional Orders designated for the following ~~two~~three matching types:

-- Volume-Weighted Average Price Match ("VWAP Price Match"), which matches orders, using the conditional order process described in Part III, Item 9, and crosses them at a VWAP price determined by JPB-X over the course of a pre-determined match period; ~~and~~

-- Multi-Duration Volume-Weighted Average Price Match ("Multi-Duration VWAP Price Match"), which matches orders, using the conditional order process described in Part III, Item 9, and crosses them at a VWAP price determined by JPB-X over the span of the Selected Match Period (defined below), as described in Part III, Item 11; and

-- Close Price Match, which matches orders, using the conditional order process described in Part III, Item 9, and crosses them at the security's official closing price as determined by the closing auction at the primary exchange for the security.

Firm/Conditional Orders designated for each matching type are maintained in separate order books within JPB-X and do not interact with each other.

Firm/Conditional Order Types. JPB-X accepts (1) limit and market Firm/Conditional Orders for the VWAP Price Match ~~and Multi-Duration VWAP Price Match~~ matching ~~types~~ and (2) market-on-close Firm/Conditional Orders for the Close Price Match matching type. A limit Firm/Conditional Order is a Firm/Conditional Order to buy or sell stock at a specific price or better. A market Firm/Conditional Order is a Firm/Conditional Order to buy or sell stock at the best available price. A market-on-close Firm/Conditional Order is a Firm/Conditional Order to buy or sell stock at its closing price as determined by the primary exchange for the stock. JPB-X does not offer post-only Firm/Conditional Order types, and none of the above Firm/Conditional Order types is eligible for routing to other Trading Centers. The above Firm/Conditional Order types cannot be combined (i.e., a Firm/Conditional Order cannot be more than one Firm/Conditional Order type).

Time-In-Force Instructions. For ~~both~~ VWAP Price Match, Multi-Duration VWAP Price Match, and Close Price Match matching types, JPB-X only accepts a "day" time-in-force instruction. A day Firm/Conditional Order is a Firm/Conditional Order intended to rest in an order book maintained by JPB-X until the Firm/Conditional Order is executed or cancelled at the end of the trading day or earlier. A blank time-in-force field is treated as a "day" time-in-force instruction.

Minimum Quantity Instructions. JPB-X accepts a minimum quantity instruction on Conditional Orders designated for the VWAP Price Match,

Multi-Duration VWAP Price Match, and Close Price Match. This instruction specifies the minimum number of shares to be matched against any single contra-side order. For all matching types, any minimum quantity instruction included on a Conditional Order will carry over to the corresponding Firm Order, i.e., any Firm Orders resulting from the firm-up process as described in Part III, Item 9. For JPB-X to evaluate individual Match Durations (as defined in Part III, Item 11) for the Multi-Duration VWAP Price Match, the number of shares eligible to be matched over such Match Durations in respect of a given Conditional Order must be equal to or greater than the Conditional Order's noted minimum quantity instruction. For example, if a Conditional Order has a minimum quantity of 1500 shares, the trading interest associated with a given Match Duration must be equal to or greater than 1500 shares for JPB-X to evaluate such trading interest for a potential match.

Modifications, Replacements, and Cancellations. The algorithms/SOR and Subscribers that access JPB-X directly can modify, replace, or cancel day Firm/Conditional Orders routed to JPB-X designated for VWAP Price Match, as described below. The algorithms/SOR can modify, replace, or cancel day Firm/Conditional Orders (which, for Conditional Orders designated for the Multi-Duration VWAP Price Match, include the associated Match Duration trading interest) routed to JPB-X, whether designated for the Multi-Duration VWAP Price Match or Close Price Match, as described below. The modification or replacement of a day conditional order results in the entry of a replacement conditional order with a new time stamp and lower priority in time than the original conditional order, unless the modification is a reduction in the quantity of the conditional order, in which case the replacement conditional order has a new time stamp but the same priority in time that the original conditional order had prior to its replacement. Note, however, that conditional orders designated for Close Price Match cannot be modified, replaced, or cancelled once the Close Price Match matching time is reached. The algorithms/SOR and Subscribers that access JPB-X directly can cancel or reduce the quantity of a firm-up order prior to its execution.

Rejections. JPB-X rejects (1) short sale exempt, buy-minus, and sell-plus Firm/Conditional Orders, (2) short sale Firm/Conditional Orders designated for Close Price Match, (3) Firm/Conditional Orders priced at or above \$1.00 per share if priced in a sub-penny increment, (4) Firm/Conditional Orders priced below \$1.00 per share if priced in an increment of less than \$.0001, (5) Firm/Conditional Orders that exceed limits imposed by JPMS pursuant to its obligations under SEC Rule 15c3-5, ~~and~~ (6) any order type and/or orders with any time-in-force instructions not identified above (for example, pegged orders) - and (7) Firm/Conditional Orders designated for any of the matching sessions

where the number of shares eligible for matching or execution is less than the noted minimum quantity instruction. With respect to (7), for the Multi-Duration VWAP Price Match, JPB-X will reject a Conditional Order if the number of shares noted as eligible for matching during every Match Duration (as defined in Part III, Item 11) associated with that Conditional Order is each less than the Conditional Order's noted minimum quantity.

Eligibility for Matching and Execution. A Firm/Conditional Order is ineligible for matching in JPB-X unless the price, minimum quantity, and counterparty preference instructions (see Part III, Items 13-14) associated with the Firm/Conditional Order, if any, are satisfied. Conditional ~~orders~~Orders, but not ~~firm orders~~Firm Orders, can have minimum match size requirements. As described in response to Part III, Item 9, when JPB-X sends a firm-up invitation, JPB-X cancels the corresponding ~~conditional order~~Conditional Order, irrespective of the ~~conditional order's~~Conditional Order's minimum quantity instruction. As also described in response to Part III, Item 9, a firm-up order is ineligible for execution in JPB-X during the order's applicable firm-up period.

Matching of VWAP Price Match Orders. As described in response to Part III, Item 11, once JPB-X matches firm-up orders designated for VWAP Price Match and the match period has elapsed, the firm-up orders are crossed, at the VWAP determined by JPB-X. If there are insufficient eligible trades in the security (i.e., fewer than three eligible trades in the security) during the match period for VWAP Price Match firm-up orders and therefore a representative VWAP cannot be determined, the matched firm-up orders are cancelled without a fill. In the event of (1) the cancellation of a firm-up order by the algorithms/SOR or a Subscriber that accesses JPB-X directly, (2) a response to a production issue, (3) the National Best Bid moving lower than or becoming equal to the limit of a matched sell order or the National Best Offer moving higher than or becoming equal to the limit of a matched buy order, (4) the triggering of a Rule 201 price test, or (5) the stock closing at the primary exchange, JPB-X will terminate the match period and issue partial fills before cancelling all matched firm-up orders. The quantity of a matched order's fill will be proportional to the duration of the match period and the price of the fill will be the VWAP over the duration of the match period (or, if a Rule 201 price test is in effect, at a price that is allowed by the rule). In addition, JPB-X does not execute a cross in any NMS stock that is subject to a regulatory or trading halt (a "Halt"), although, as described in response to Part III, Item 20, JPB-X will continue to accept Firm/Conditional Orders in such an NMS stock and instructions to modify, cancel, or replace Firm/Conditional Orders in that NMS stock using the priority logic described in response to Part III, Item 11(c). Firm-up orders that were

matched but for which the match period has not elapsed will be cancelled by JPB-X immediately after the Halt goes into effect. If a Halt in an NMS stock occurs during regular trading hours while a firm-up period for one or more conditional orders in that security is underway, JPB-X rejects any firm-up order received during the firm-up period while the ~~halt~~Halt is in place.

Matching of Multi-Duration VWAP Price Match Orders. As described in response to Part III, Item 11, once JPB-X matches firm-up orders designated for Multi-Duration VWAP Price Match and the relevant time interval has elapsed, the firm-up orders are crossed at the VWAP determined by JPB-X. If there are insufficient eligible trades in the security (i.e., fewer than three eligible trades in the security) during the match period for Multi-Duration VWAP Price Match firm-up orders and therefore a representative VWAP cannot be determined, the matched firm-up orders are cancelled without a fill. In the event of (1) the cancellation of a firm-up order by the algorithms/SOR, (2) a response to a production issue, (3) the National Best Bid moving lower than or becoming equal to the limit of a matched sell order or the National Best Offer moving higher than or becoming equal to the limit of a matched buy order, (4) a Rule 201 Short Sale Restriction is triggered, or (5) the stock closing at the primary exchange, JPB-X will terminate the match period and issue partial fills before cancelling all matched firm-up orders. The quantity of a matched order's fill will be proportional to the duration of the match period and the price of the fill will be the VWAP over the duration of the match period (or, if a Rule 201 price test is in effect, at a price that is allowed by the rule). In addition, JPB-X does not execute a cross in any NMS stock that is subject to a Halt, although, as described in response to Part III, Item 20, JPB-X will continue to accept Firm/Conditional Orders in such an NMS stock and instructions to modify, cancel, or replace Firm/Conditional Orders in that NMS stock using the priority logic described in response to Part III, Item 11(c). Firm-up orders that were matched but for which the match period has not elapsed will be cancelled by JPB-X immediately after the Halt goes into effect without a fill. If a Halt in an NMS stock occurs during regular trading hours while a firm-up period for one or more conditional orders in that security is underway, JPB-X rejects any firm-up order received during the firm-up period while the Halt is in place.

Matching of Close Price Match Orders. As described in response to Part III, Item 11, once JPB-X matches firm-up orders designated for Close Price Match in a NMS stock, they are crossed, based on time priority, at the closing price as determined by the closing auction and published by the primary exchange for the NMS stock after the exchange closes. As described in response to Part III, Item 20, when a Halt is in effect for an NMS stock, JPB-X will continue to accept and match conditional orders

designated for Close Price Match and to accept instructions to modify, cancel, or replace conditional orders in that NMS stock using the priority logic described in response to Part III, Item 11(c) but will not execute orders if the primary exchange does not publish a close price as determined by the closing auction for the stock, in which case JPB-X will cancel the unexecuted orders immediately after JPMS determines that the primary exchange has not published a close price as determined by the closing auction for the stock and has been delayed in doing so as a result of the Halt. Firm-up orders that were matched but have not yet been executed will be cancelled by JPB-X immediately after the Halt goes into effect.

Changes in NBBO. Although a change in the NBBO would not affect the relative priority of matched firm-up orders that remain eligible for execution after the change, the change could affect whether a firm-up order designated for the VWAP Price Match or Multi-Duration VWAP Price Match with a price instruction associated with it is eligible for execution and the execution price at which orders that remain eligible for execution are crossed.

- 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.

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).

~~JPB-X receives conditional orders~~ Firm/Conditional Orders designated for the VWAP Price Match are routed to ~~it~~ JPB-X by the SOR, by JPMS trading algorithms via the SOR, or by Subscribers that access JPB-X

directly. Firm/Conditional Orders designated for the Multi-Duration VWAP Price Match or the Close Price Match are routed to JPB-X by the SOR and/or by JPMS trading algorithms via the SOR.

A ~~conditional order~~ Conditional Order describes the price, size, side, symbol, and minimum match size of the trading interest. ~~Conditional orders~~ In addition to the foregoing, as described in Part III, Item 11, each Conditional Order designated for the Multi-Duration VWAP Price Match specifies the amount of trading interest eligible for matching for at least one Match Duration.

Conditional Orders can take the form of the Firm/Conditional Order types described in response to Part III, Item 7. JPB-X matches ~~conditional orders~~ Conditional Orders designated for the VWAP Price Match, Multi-Duration VWAP Price Match and Close Price Match as described in response to Part III, Item 11. If two or more ~~conditional orders~~ Conditional Orders match (as applicable), JPB-X sends a firm-up invitation to (i) the SOR, if it had routed one of the matched ~~conditional orders~~ Conditional Orders without instruction to do so from a JPMS algorithmic trading strategy, (ii) any JPMS algorithmic trading strategy that instructed the SOR to route one of the matched ~~conditional orders~~ Conditional Orders, and/or (iii) any Subscriber that routed one of the matched ~~conditional orders~~ Conditional Orders directly to JPB-X (with multiple firm-up invitations being sent to (a) any JPMS algorithmic trading strategy that routed more than one of the matched ~~conditional orders~~ Conditional Orders or (b) the SOR if it had routed more than one of the matched ~~conditional orders~~ Conditional Orders without instruction to do so from a JPMS algorithmic trading strategy). The firm-up invitation includes the symbol, quantity, and price of the associated same-side ~~conditional order~~ Conditional Order that prompted the firm-up invitation and the matched size of contra-side trading interest. For trading interest participating in the Multi-Duration VWAP Price Match, the firm-up invitation also specifies the Selected Match Period (as defined below in Part III, Item 11).

When JPB-X sends a firm-up invitation, JPB-X cancels the corresponding ~~conditional order~~ Conditional Order, and the recipient of the firm-up invitation (i.e., the SOR, a JPMS algorithmic trading strategy, or a Subscriber) has the duration of the firm-up period to determine whether to send a firm-up order in response to the firm-up invitation. The price and size attributes reflected in a Subscriber's firm-up order may differ from the corresponding attributes reflected in the Subscriber's earlier ~~conditional order~~ Conditional Order. The firm-up period is the shorter of (i) the time it takes for JPB-X to receive firm-up orders corresponding to the matched ~~conditional orders~~ Conditional Orders or (ii) the default firm-up period,

which is five seconds for the Close Price Match, and one second for both the VWAP Price Match and the Multi-Duration VWAP Price Match. JPB-X does not match any firm-up orders until the firm-up period elapses. When the firm-up period elapses, JPB-X matches the firm-up orders designated for the VWAP Price Match, Multi-Duration VWAP Price Match, and Close Price Match as described in response to Part III, Item 11.

By default, the algorithms/SOR can route conditional orders to JPB-X. Subscribers can opt out of the routing of conditional orders on their behalf. Subscribers can opt out in whole or in part (with respect to a subset of conditional orders or all conditional orders) by contacting their JPMS sales representatives. JPMS implements such restrictions as soon as reasonably practicable. In addition, JPMS reserves the right to limit or prohibit the use of conditional orders for Subscribers at JPMS' discretion if, as described in response to Part III, Item 3, the ECS Liquidity Product Specialists Team responsible for the operation of JPB-X ~~detect~~detects systematic behavior resulting in a materially negative impact to the operation of JPB-X or to other Subscribers as evidenced by, e.g., a high cancellation rate or, with respect to orders designated for VWAP Price Match, or Multi-Duration VWAP Price Match, high VWAP slippage of the Subscriber's orders, or, with respect to orders designated for Close Price Match, late cancellation attempts.

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

Yes No

If no, identify and explain any differences.

Item 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.

JPB-X accepts the Firm/Conditional Order types described in response to Part III, Item 7(a) prior to the start of the trading day and during any regulatory or trading halt (but not during a suspension or technical system outage, described in response to Part III, Item 20(a)). JPB-X begins matching conditional orders and crossing firm orders in an NMS stock after the stock has opened on its primary exchange and, in the case of a

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stoppage during regular trading hours, after trading has resumed. Firm/Conditional Orders are priced, prioritized, matched, and executed after JPB-X opens or re-opens for trading as described in response to Part III, Items 7, 9, and 11.

- b. Are the processes and procedures governing opening and re-opening the same for all Subscribers and the Broker-Dealer Operator?
 Yes No

If no, identify and explain any differences.

- 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.

Once the trading day commences or a stoppage has been lifted, JPB-X handles Firm/Conditional Orders as described in response to Part III, Items 7, 9, and 11. If a stoppage of trading in an NMS stock occurs during regular trading hours while a firm-up period for one or more conditional orders designated for VWAP Price Match or Multi-Duration VWAP Price Match in that security is underway, JPB-X rejects any firm-up order received during the firm-up period while the stoppage is in place.

- 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

If no, identify and explain any differences.

- 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

If yes, identify and explain the differences.

There is no difference between executions following a stoppage of trading during regular trading hours and other executions during regular trading hours; however, as described in response to Part III, Item 10(a), pre-opening execution do not occur in JPB-X.

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.

JPB-X is an NMS Stock ATS that operates within JPMS as part of the Equities Division of the Commercial and Investment Bank in JPMC, of which JPMS is a subsidiary, and offers matching services in NMS stocks. JPB-X is a crossing system that matches non-displayed conditional orders, and crosses non-displayed firm-up orders, designated to receive either a volume-weighted average price or the closing price of the NMS stock being traded.

- 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.

- 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.

JPB-X rejects ~~(1)~~ short sale exempt, buy-minus, and sell-plus Firm/Conditional Orders, (2) short sale Firm/Conditional Orders designated for Close Price Match, (3) Firm/Conditional Orders priced at or above \$1.00 per share if priced in a sub-penny increment, (4) Firm/Conditional Orders priced below \$1.00 per share if priced in an increment of less than \$.0001, (5) Firm/Conditional Orders that exceed limits imposed by JPMS pursuant to its obligations under SEC Rule 15c3-5, ~~and~~ (6) any order type and/or orders with any time-in-force instructions not identified in Part III, Item 7 above (for example, pegged orders); and (7) Firm/Conditional Orders designated for any of the matching sessions where the number of shares eligible for matching or execution is less than the noted minimum quantity instruction. With respect to (7), for the Multi-Duration VWAP Price Match, JPB-X will reject a Conditional Order if the number of shares noted as eligible for matching during every Match Duration (as defined in Part III, Item 11) associated with that

Conditional Order is each less than the Conditional Order's noted minimum quantity.

A Firm/Conditional Order is ineligible for matching in JPB-X unless the price, minimum quantity, and counterparty preference instructions (see Part III, Items 13-14) associated with the Firm/Conditional Order, if any, are satisfied. Conditional orders, but not firm orders, can have minimum match size requirements. As described in response to Part III, Item 9, a firm-up order is ineligible for execution in JPB-X during the order's applicable firm-up period.

In JPB-X, for ~~both~~ the VWAP Price Match, Multi-Duration VWAP Price Match, and the Close Price Match, eligible JPMS principal orders can match with other eligible JPMS principal orders within the same aggregation unit.

VWAP Price Match Rules and Procedures:

When ~~two or more conditional orders~~ there is at least one Conditional Order on each side designated for VWAP Price Match ~~on opposite sides~~ are eligible for matching in JPB-X, JPB-X matches them based on one-to-one random matching logic and sends firm-up invitations to the algorithms/SOR or Subscribers (as described in response to Part III, Item 9). Specifically, when assessing all eligible conditional orders able to be matched, JPB-X will, beginning with the side with fewer orders, randomly choose one conditional order on one side and one conditional order on the other side. A conditional order routed by the algorithms/SOR or directly by a Subscriber can be cancelled by the algorithms/SOR or Subscriber, respectively, before the conditional order is matched. Short sale conditional orders are not eligible for matching when a price test under Rule 201 of Regulation SHO is in effect.

Once the firm-up period described in Part III, Item 9 has elapsed, JPB-X matches the firm-up orders it received during the firm-up period (subject to the eligibility criteria for the firm-up orders discussed above and the firm-up orders' participation instructions). If either firm-up order quantity is less than the firm-up invitation quantity, JPB-X will match the firm-up orders (for the quantity that will satisfy the smaller firm-up order) at the end of the match period and cancel back any residual (see example below). A pre-determined default match period commences upon the earlier of (i) JPB-X's receipt of firm-up orders corresponding to all firm-up invitations sent by JPB-X or (ii) the expiration of the firm-up period. The default match period is currently five minutes for all firm-up orders.

As noted above, for the VWAP Price Match, JPB-X will commence the five minute match period with a match quantity that will satisfy the smaller firm-up order. For example, JPB-X can match a Conditional Order to buy 1000 shares of ABC with a minimum quantity of 200 shares designated for the VWAP Price Match ("Order 1") with a Conditional Order to sell 500 shares of ABC with a minimum quantity of 250 shares designated for the VWAP Price Match ("Order 2") with a match quantity of 500 shares. If Order 1 firms up with 500 shares and Order 2 firms up with 300 shares, JPB-X will commence the five minute match period with a final match quantity of 300 shares. JPB-X will indicate the final match quantity of 300 shares on the firm-up order acknowledgement for Order 1 and Order 2 and will indicate the cancellation of 200 shares for Order 1 at the end of the match period. Note, if the matched firm up quantity would not satisfy the minimum quantity noted on each of the matched Conditional Orders, JPB-X would cancel the match.

During the match period, JPB-X monitors market data reported via the SIP (see Part III, Item 23) and any changes to parent order attributes. Once the match period elapses, JPB-X crosses the matched firm-up orders at the VWAP (if one exists and it is within the matched orders' price limits, if any), determined by JPB-X based on executed trades reported via the SIP during the match period. Trade prices reported pursuant to the UTP Plan with the following sale conditions will be excluded when calculating the VWAP for the match period: Cash Sale, Price Variation Trade, Bunched Sold Trade, Sold Last, Market Center Official Close, Prior Reference Price, Market Center Official Open, Seller, Form T, Extended trading hours (Sold Out of Sequence), Contingent Trade, Average Price Trade, Sold (out of sequence), Derivatively priced, and Qualified Contingent Trade (QCT). Trade prices reported pursuant to the CTA Plan with the following sale conditions will be excluded when calculating the VWAP for the match period: Average Price Trade, Cash Trade (Same Day Clearing), Price Variation Trade, Sold Last (Late Reporting), Market Center Official Close, Prior Reference Price, Market Center Official Open, Seller, Extended Hours Trade, Extended Hours Sold (Out of Sequence), Contingent Trade, Sold (Out of Sequence), Derivatively Priced, and Qualified Contingent Trade. If there are ~~no~~insufficient eligible trades in the security (i.e., fewer than three eligible trades in the security) during the match period for VWAP Price Match firm-up orders and therefore a representative VWAP cannot be determined, the matched firm-up orders are cancelled without a fill.

In the event of (1) the cancellation of a firm-up order by the algorithms/SOR or a Subscriber that accesses JPB-X directly, (2) a response to a production issue, (3) the National Best Bid moving lower than or becoming equal to the limit of a matched sell order or the National

Best Offer moving higher than or becoming equal to the limit of a matched buy order, (4) the triggering of a Rule 201 price test, or (5) the stock closing at the primary exchange, JPB-X will terminate the match period and issue partial fills before cancelling all matched firm-up orders. The quantity of a matched order's fill will be proportional to the duration of the match period and the price of the fill will be the VWAP over the duration of the match period (or, if a Rule 201 price test is in effect, at a price that is allowed by the rule). For example, if the full match quantity is 5,000 shares over five minutes and one of the firm-up orders is cancelled two minutes after the match period began, JPB-X will end the match period and will execute 2,000 shares. The price of the fill will be the VWAP over the duration of the match period up until the time of cancellation of the matched firm-up order.

JPB-X does not execute a cross in any NMS stock that is subject to a Halt (although, as described in response to Part III, Item 20, JPB-X will continue to accept Firm/Conditional Orders in such an NMS stock and instructions to modify, cancel, or replace Firm/Conditional Orders in that NMS stock). Firm-up orders that were matched but for which the match period has not elapsed are cancelled by JPB-X immediately after the Halt goes into effect. If a Halt in an NMS stock occurs during regular trading hours while a firm-up period for one or more conditional orders in that security is underway, JPB-X rejects any firm-up order received during the firm-up period while the halt is in place.

~~Close~~ [Multi-Duration VWAP Price Match Rules and Procedures:](#)

[Multi-Duration VWAP Price Match offers Subscribers the ability to use the conditional order process described in Part III, Item 9, to receive executions at a VWAP price determined by JPB-X over the span of the Selected Match Period \(as defined below\).](#)

[A Conditional Order designated for the Multi-Duration VWAP Price Match indicates the trading interest eligible to be matched over at least one time interval representing, or up to the four available time intervals each representing, the duration of an eligible match period \(i.e., the number of shares for a one minute match period, the number of shares for a two minute match period, the number of shares for a five minute match period and/or the number of shares for a ten minute match period\) \(each, a "Match Duration"\). Each Conditional Order may only participate in one Match Duration. Specifically, once trading interest associated with a Conditional Order is selected to match during a given Match Duration, any remaining unmatched trading interest associated with that Conditional Order will be cancelled.](#)

When there is at least one Conditional Order on each side designated for the Multi-Duration VWAP Price Match eligible for matching in JPB-X, JPB-X first evaluates the individual Match Durations for each eligible Conditional Order to determine the number of shares eligible to be matched at each Match Duration and then selects the Match Duration that has the greatest number of shares eligible to be matched (the "Initial Match Period").

Upon selecting the Initial Match Period, JPB-X applies the below noted matching priority to all eligible Conditional Orders/trading interest in that Initial Match Period. After eligible Conditional Orders are matched for the Initial Match Period but before JPB-X sends any firm-up invitations, JPB-X evaluates each next shorter Match Duration(s) to assess the remaining eligible Conditional Orders/trading interest for matching ("Subsequent Match Period(s)") using the matching priority described further below. The "Selected Match Period" shall mean, collectively, or individually, the Initial Match Period and any Subsequent Match Period(s).

Matching Priority and Process: Matching priority is determined based on the following factors in the following order: (i) size (Conditional Orders with the larger number of shares eligible to be matched for the Selected Match Period will be prioritized over Conditional Orders with the smaller number of shares willing to be matched for that same Selected Match Period) and (ii) time of order receipt (among Conditional Orders eligible to be matched for a Selected Match Period, Conditional Orders that are received earlier in time will be prioritized over Conditional Orders that are received later in time). JPB-X will consider any applicable price, minimum match size, counterparty preference, and other eligibility criteria. For each Selected Match Period, JPB-X will begin with the side with fewer eligible Conditional Orders and will match one or more Conditional Order(s) on one side with one or more Conditional Order(s) on the other side, based on the aforementioned matching priority.

A Conditional Order routed by the algorithms/SOR can be cancelled by the algorithms/SOR before the Conditional Order is matched. Short sale conditional orders are not eligible for matching when a Rule 201 Short Sale Restriction is in effect.

Once JPB-X has evaluated all possible Match Durations and identified all matching Conditional Orders in the final Selected Match Period, it will send all firm-up invitations to the algorithms/SOR (as described in response to Part III, Item 9) for all matched Conditional Orders across all Selected Match Periods.

The applicable time interval for each set of matched Conditional Orders (associated with the corresponding Selected Match Period, e.g., the ten minute interval) will commence upon the earlier of (i) JPB-X's receipt of firm-up orders corresponding to the firm-up invitations sent by JPB-X in connection with such matched Conditional Orders or (ii) the expiration of the firm-up period described in Part III, Item 9 corresponding to the firm-up invitations sent by JPB-X in connection with such matched Conditional Orders. At this point, JPB-X matches the firm-up orders it received during the firm-up period. If either firm-up order quantity is less than the firm-up invitation quantity corresponding to that firm-up order, JPB-X will match the firm-up orders for the quantity that will satisfy the smaller firm-up order at the end of the match period and cancel back any residual (see example below).

For example, JPB-X can match a Conditional Order to buy 1000 shares of ABC with a minimum match size quantity of 200 shares designated for the Multi-Duration VWAP Price Match ("Order 1") with a Conditional Order to sell 500 shares of ABC with a minimum match size quantity of 250 shares designated for the Multi-Duration VWAP Price Match ("Order 2") with a match quantity of 500 shares. If Order 1 firms up with 500 shares and Order 2 firms up with 300 shares, the final match quantity will be 300 shares. JPB-X will indicate the final match quantity of 300 shares on the firm-up order acknowledgement for Order 1 and Order 2 and will indicate the cancellation of 200 shares for Order 1 at the end of the match period. Note, if the matched firm up quantity would not satisfy the minimum quantity noted on each of the matched Conditional Orders, JPB-X would cancel the match.

During the match period, JPB-X monitors market data reported via the SIP (see Part III, Item 23) and any changes to parent order attributes. Once the match period elapses, JPB-X crosses the matched firm-up orders at the VWAP (if one exists and it is within the matched orders' price limits, if any), determined by JPB-X based on executed trades reported via the SIP during the match period. Trade prices reported pursuant to the UTP Plan with the following sale conditions will be excluded when calculating the VWAP for the match period: Cash Sale, Price Variation Trade, Bunched Sold Trade, Sold Last, Market Center Official Close, Prior Reference Price, Market Center Official Open, Seller, Form T, Extended trading hours (Sold Out of Sequence), Contingent Trade, Average Price Trade, Sold (out of sequence), Derivatively priced, and Qualified Contingent Trade (QCT). Trade prices reported pursuant to the CTA Plan with the following sale conditions will be excluded when calculating the VWAP for the match period: Average Price Trade, Cash Trade (Same Day Clearing), Price Variation Trade, Sold Last (Late Reporting), Market Center Official Close, Prior Reference Price, Market Center Official Open,

Seller, Extended Hours Trade, Extended Hours Sold (Out of Sequence), Contingent Trade, Sold (Out of Sequence), Derivatively Priced, and Qualified Contingent Trade. If there are insufficient trades in the security (i.e., fewer than three eligible trades in the security) during the match period for Multi-Duration VWAP Price Match firm-up orders and therefore a representative VWAP cannot be determined, the matched firm-up orders are cancelled without a fill.

In the event of (1) the cancellation of a firm-up order by the algorithms/SOR, (2) a response to a production issue, (3) the National Best Bid moving lower than or becoming equal to the limit of a matched sell order or the National Best Offer moving higher than or becoming equal to the limit of a matched buy order, (4) the triggering of a Rule 201 price test, or (5) the stock closing at the primary exchange, JPB-X will terminate the match period and issue partial fills before cancelling all matched firm-up orders. The quantity of a matched order's fill will be proportional to the duration of the match period and the price of the fill will be the VWAP over the duration of the match period (or, if a Rule 201 price test is in effect, at a price that is allowed by the rule). For example, if the full match quantity is 5,000 shares over five minutes and one of the firm-up orders is cancelled two minutes after the match period began, JPB-X will end the match period and will execute 2,000 shares. The price of the fill will be the VWAP over the duration of the match period up until the time of cancellation of the matched firm-up order.

JPB-X does not execute a cross in any NMS stock that is subject to a Halt (although, as described in response to Part III, Item 20, JPB-X will continue to accept Firm/Conditional Orders in such an NMS stock and instructions to modify, cancel, or replace Firm/Conditional Orders in that NMS stock). Firm-up orders that were matched but for which the match period has not elapsed are cancelled by JPB-X immediately after the Halt goes into effect. If a Halt in an NMS stock occurs during regular trading hours while a firm-up period for one or more Conditional Orders in that security is underway, JPB-X rejects any firm-up order received during the firm-up period while the Halt is in place.

Close Price Match Rules and Procedures:

A conditional order routed by the algorithms/SOR ~~or directly by a Subscriber~~ can be cancelled by the algorithms/SOR ~~or Subscriber~~, ~~respectively~~, before the Close Price Match matching time.

Following the Close Price Match matching time (see response to Part III, Item 4), JPB-X (i) matches conditional orders designated for Close Price Match on opposite sides that are eligible for matching in JPB-X based on

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time priority and (ii) sends firm-up invitations to the algorithms/SOR ~~or Subscribers~~ (as described in response to Part III, Item 9). JPB-X does not accept conditional orders or amendments or cancellations of conditional orders after the Close Price Match matching time. JPB-X accepts firm-up orders and amendments to firm-up orders (to reduce quantity) after the Close Price Match matching time, during the firm-up period. JPB-X does not accept cancellations of firm-up orders designated for Close Price Match from the algorithms/SOR ~~or Subscribers~~.

Once the firm-up period described in Part III, Item 9 has elapsed, JPB-X matches the firm-up orders designated for Close Price match received during the firm-up period (subject to the eligibility criteria for the firm-up orders discussed above and the firm-up orders' participation instructions) based on the time priority previously afforded the corresponding same-side conditional orders that preceded the firm-up orders, respectively. Unmatched firm-up orders are cancelled back to the SOR ~~or, for any unmatched firm-up orders routed directly by a Subscriber, the Subscriber~~. Note, if the matched firm up quantity would not satisfy the minimum quantity noted on each of the matched Conditional Orders, JPB-X would cancel the match. Once the official closing price as determined by the closing auction is published by the primary exchange for the NMS stock, JPB-X crosses the matched firm-up orders at that closing price as reported by the SIP (see Part III, Item 23). A Close Price Match firm-up order (a) will be cancelled if the primary exchange does not publish a close price as determined by the closing auction for the stock and (b) may not be executed fully or at all if it is partially or fully cancelled as a result of a response to a production issue.

As described in response to Part III, Item 20, when a Halt is in effect for an NMS stock, JPB-X will continue to accept and match conditional orders designated for Close Price Match and to accept instructions to modify, cancel, or replace conditional orders in that NMS stock using the priority logic described in this response but will not execute orders if the primary exchange does not publish a close price as determined by the closing auction for the stock, in which case JPB-X will cancel the unexecuted orders immediately after JPMS determines that the primary exchange has not published a close price as determined by the closing auction for the stock and has been delayed in doing so as a result of the Halt. Firm-up orders that were matched but have not yet been executed will be cancelled by JPB-X immediately after the Halt goes into effect.

Additional Rules and Procedures for JPB-X Generally:

JPMS, at the request of a Subscriber or on JPMS' own initiative, may determine to review any transaction in JPB-X to assess whether it was

adversely affected by a technical issue or "clearly erroneous" as defined by relevant regulators (e.g., under FINRA Rule 11891, "the terms of a transaction are 'clearly erroneous' when there is an obvious error in any term, such as price, number of shares, or other unit of trading, or identification of the security"). If JPMS determines that a transaction was adversely affected by a technical issue or clearly erroneous, whether or not as a result of JPMS or Subscriber error, JPMS, depending on the facts and circumstances, may work with the affected Subscriber(s) to resolve the error and may cancel (bust) the transaction or assume responsibility for one side of the transaction and work to cover the resulting position as soon as is practicable. JPB-X also may suspend matching in the event of volatile market conditions (e.g., wide bid/offer spreads).

JPB-X time stamps orders upon receipt and executions at the time they occur and reports them in milliseconds in accordance with applicable FINRA Consolidated Audit Trail System and trade reporting rules. JPB-X determines queue positions based on new order receipt times with microsecond precision, except in the case of a reduction in the quantity of an order, in which case, the replacement order assumes the queue position of the original order.

- 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.

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Subscriber Firm/Conditional Order flow is assigned to a tier. JPMS assigns a Subscriber's Firm/Conditional Order flow to a tier based upon order characteristics received (e.g., means of access to JPB-X). The tiers are provided below. For the avoidance of doubt, "institutional investor client flow" does not include any U.S.-registered or non-U.S.-registered "broker-dealer client flow" (and vice versa), and neither of them includes JPMS flow or JPMS affiliates' flow. Fills resulting from JPMS principal trading desk flow accessing JPB-X via the algorithms/SOR (Tier 1) may be provided to JPMS clients on a riskless principal basis. (Unlike JPM-X, another NMS Stock ATS operated by JPMS, JPB-X does not have a Tier 3, 4, or 5.)

Tier 1 –

(i) Tier 1 – ~~Institutional~~ comprises the following subsets of Subscriber Firm/Conditional Orders designated for Close Price Match and/or VWAP Price Match in JPB-X: institutional investor client flow accessing JPB-X via the algorithms/SOR, ~~JPMS affiliates flow accessing JPB-X via the algorithms/SOR,~~ U.S.- registered and non-U.S.- registered broker-dealer client flow (both agency and principal) accessing JPB-X via the algorithms/SOR, JPMS affiliates flow accessing JPB-X via the algorithms/SOR, and internal (JPMS) principal trading desks' flow accessing JPB-X via the algorithms/SOR; and

~~Tier 2 – Institutional investor client flow with direct access to JPB-X.~~

(ii) Tier 1 comprises the following subsets of Subscriber Firm/Conditional Orders designated for Multi-Duration VWAP Price Match in JPB-X: institutional investor client flow accessing JPB-X via the algorithms, U.S. registered and non-U.S.- registered broker-dealer client flow (both agency and principal) accessing JPB-X via the algorithms, JPMS affiliates flow accessing JPB-X via the algorithms, and internal (JPMS) principal trading desks' flow accessing JPB-X via the algorithms; and

(iii) Tier 1 comprises the following subsets of Subscriber Firm/Conditional Orders designated for VWAP Price Match in JPB-X: certain institutional investor client flow that utilizes third-party algorithms or third-party SOR where such third-party algorithms or third-party SOR has direct access to JPB-X (as described in response to Part III, Item 5, only institutional investor clients of JPMS can enter directly into JPB-X Firm/Conditional Orders, but only if such Firm/Conditional Orders are designated for VWAP Price Match).

Tier 2—

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(i) Tier 2 comprises the following subset of Subscriber Firm/Conditional Orders designated for VWAP Price Match in JPB-X: institutional investor client flow with direct access to JPB-X (as described in response to Part III, Item 5, only institutional investor clients of JPMS can enter directly into JPB-X Firm/Conditional Orders, but only if such Firm/Conditional Orders are designated for VWAP Price Match) that are not included in Tier 1 (iii); and

(ii) Tier 2 comprises the following subset of Subscriber Firm/Conditional Orders designated for Multi-Duration VWAP Price Match in JPB-X: institutional investor client flow accessing JPB-X via the SOR.

There is no specific length of time that a tier assignment for a Subscriber will remain in effect; however, JPMS conducts daily and quarterly review ~~reviews~~ of the trading activity in JPB-X of a sample set of Subscribers to confirm the accuracy of the Subscribers' tier assignments, and JPMS reserves the right to ~~review and~~ add, remove, or revise a tier assignment for a Subscriber at any time based off their order flow. JPMS would notify the Subscriber in the event of a change in the tier assignment for the Subscriber. JPMS may change a tier assignment for a Subscriber as described in response to Part III, Items 13-14 but does not otherwise override such an assignment once made.

The segmentation of order flow described above affects order interaction insofar as, in looking for matching opportunities for a Subscriber's Firm/Conditional Orders, JPB-X complies with the Subscriber's counterparty preferences regarding the tiers with which their Firm/Conditional Orders interact and/or the ability of their Firm/Conditional Orders to interact with principal liquidity of JPMS, as described in response to Part III, Item 14.

- 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.

JPMS informs Subscribers of their assigned tier classification at onboarding and upon request. A request by a Subscriber to contest such an assignment can be communicated through a JPMS sales representative and will be reviewed by the ECS Liquidity Product Specialists Team.

- 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.

Subscribers can restrict the tiers with which their Firm/Conditional Orders interact and/or restrict their Firm/Conditional Orders from interacting with principal liquidity of JPMS. Subscribers can identify tier restrictions and/or principal interaction restrictions (i) on an order-by-order basis in the Firm/Conditional Order instructions submitted to JPMS or (ii) by contacting the Subscriber's JPMS sales representative with respect to a subset of Firm/Conditional Orders or all order flow. In each case, the ECS Liquidity Product Specialists implement Team implements the restriction as soon as reasonably practicable. JPMS may further limit the tiers with which a Subscriber's Firm/Conditional Orders interact and/or the ability for a Subscriber's Firm/Conditional Orders to interact with principal liquidity of JPMS, based on the Subscriber's trading objectives, consistent with the Subscriber's order instructions (e.g., when a Subscriber has informed JPMS that the Subscriber seeks a low participation rate and so JPMS in light of that objective, reduces the liquidity available to the Subscriber in JPB-X by restricting the tiers with which the Subscriber's

Firm/Conditional Orders would interact and/or the ability of their Firm/Conditional Orders to interact with principal liquidity of JPMS).

Subscribers also can enable self-crossing restrictions (i) on an order-by-order basis in the Firm/Conditional Order instructions submitted to JPMS or (ii) by contacting the Subscriber's JPMS sales representative with respect to a subset of Firm/Conditional Orders or all order flow. In addition, JPMS can apply self-crossing restrictions to a subset or all of the Subscriber's Firm/Conditional Orders (e.g., to prevent wash sales) and may consult with the Subscriber in determining such restrictions.

A Subscriber also can enable Firm/Conditional Orders from that Subscriber to interact solely with other Firm/Conditional Orders from that same Subscriber ("self-cross-only"), provided that self-crossing restrictions have not been otherwise applied to such Firm/Conditional Order(s). The Subscriber can enable self-cross-only (i) on an order-by-order basis in the Firm/Conditional Order instructions submitted to JPMS or (ii) by contacting the Subscriber's JPMS sales representative with respect to a subset of Firm/Conditional Orders or all order flow.

- 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.

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

Firm/Conditional Orders are made known to the SOR when they are routed through it. As described in response to Part III, Item 9, when the algorithms/SOR routes conditional orders to JPB-X, JPB-X may send firm-up invitations back to the algorithms/SOR. Accordingly, when JPMS algorithmic trading strategies route conditional orders to JPB-X via the

SOR, any resulting firm-up invitations are sent by JPB-X to a JPMS algorithmic trading strategy via the SOR, and when the SOR routes conditional orders to JPB-X without instruction to do so from a JPMS algorithmic trading strategy, any resulting firm up invitations are sent by JPB-X to the SOR. A firm-up invitation includes the symbol, quantity, and price of the associated same-side conditional order that prompted the firm-up invitation and the matched size of contra-side trading interest. For Multi-Duration VWAP Price Match, the firm-up invitation also includes the Selected Match Period. The SOR does not retain information about Firm/Conditional Orders resident in the respective order books for VWAP Price Match orders, Multi-Duration VWAP Price Match, and Close Price Match orders other than Firm/Conditional Orders that the SOR routed to JPB-X without instruction to do so from a JPMS algorithmic trading strategy.

- 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.

Item 17: Closing

- a. Are there any differences between how orders and trading interest are treated on the NMS Stock ATS during the close and how orders and trading interest are treated during regular trading hours?
- Yes No

If yes, identify and explain the differences as compared to the information provided in the relevant Part III Items of this form.

For VWAP Price Match orders and Multi-Duration VWAP Price Match orders, there are no differences between how Firm/Conditional Orders are treated on JPB-X during the close and how Firm/Conditional Orders are treated during regular trading hours.

For Close Price Match orders, JPB-X crosses firm orders at closing prices outside of regular trading hours as described in response to Part III, Item 11(c).

- b. Is the treatment of orders and trading interest during the close the same for all Subscribers and the Broker-Dealer Operator?
- Yes No

If no, identify and explain any differences.

Item 20: Suspension of Trading

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

JPMS can, in its sole discretion, elect to suspend operation of JPB-X at any time, including the suspension of trading in individual NMS stocks for, among other reasons, approaching Regulation ATS Fair Access and Regulation SCI volume thresholds. JPMS also may suspend trading in an NMS stock if, e.g., (i) JPMS is unable to report trades in that stock as described in response to Part III, Item 21 or (ii) the market data received by JPB-X for the stock from the Securities Information Processors (discussed in response to Part III, Item 23) is unavailable, unstable, experiencing unacceptable latencies, or detected to be providing quotes that appear to have quality issues.

In the event of a technical system outage at JPB-X, the JPMS Electronic Trading Technology Production Management team can in its discretion:

-- Disable routing from the algorithms/SOR to JPB-X;

-- Disable the acceptance of orders in JPB-X; and

-- Cease the matching process in JPB-X by cancelling any open Firm/Conditional Orders.

If an NMS stock is subject to a Halt, JPB-X will handle Firm/Conditional Orders as follows, depending on the order type:

-- VWAP Price Match: When a Halt is in effect for an NMS stock, JPB-X will continue to accept Firm/Conditional Orders in that NMS stock designated for VWAP Price Match and instructions to modify, cancel, or replace Firm/Conditional Orders that NMS stock using the priority logic described in response to Part III, Item 11(c), but JPB-X will not match or execute Firm/Conditional Orders in that NMS stock. JPB-X will reject a firm-up order if a Halt occurred during the firm-up period for that order. Firm-up orders that were matched but for which the match period has not elapsed will be cancelled by JPB-X immediately after the Halt goes into effect.

-- Multi-Duration VWAP Price Match: When a Halt is in effect for an NMS stock, JPB-X will continue to accept Firm/Conditional Orders in that NMS stock designated for Multi-Duration VWAP Price Match and instructions to modify, cancel, or replace Firm/Conditional Orders that

NMS stock using the priority logic described in response to Part III, Item 11(c), but JPB-X will not match or execute Firm/Conditional Orders in that NMS stock. JPB-X will reject a firm-up order if a Halt occurred during the firm-up period for that order. Firm-up orders that were matched but for which the match period has not elapsed will be cancelled by JPB-X immediately after the Halt goes into effect.

-- Close Price Match: When a Halt is in effect for an NMS stock, JPB-X will continue to accept and match conditional order designated for Close Price Match and to accept instructions to modify, cancel, or replace conditional orders in that NMS stock using the priority logic described in response to Part III, Item 11(c) but will not execute orders if the primary exchange does not publish a close price as determined by the closing auction for the stock, in which case JPB-X will cancel the unexecuted orders immediately after JPMS determines that the primary exchange has not published a close price as determined by the closing auction for the stock and has been delayed in doing so as a result of the Halt. Firm-up orders that were matched but have not yet been executed will be cancelled by JPB-X immediately after the Halt goes into effect.

In the event of a halt in an NMS stock imposed by JPB-X, it will not accept, match, or execute Firm/Conditional Orders in that NMS stock and will not accept instructions to modify, cancel, or replace Firm/Conditional Orders in that NMS stock.

Moreover, as noted in response to Part III, Item 3(a), JPMS reserves the right (i) to disable any JPB-X functionality, in whole or in part, if such functionality experiences technical issues or could otherwise pose a detrimental risk to Subscribers, JPB-X, or the capital markets and (ii) to restrict the entry of a Subscriber's Firm/Conditional Orders into JPB-X if certain thresholds are exceeded (e.g., risk limits imposed by JPMS pursuant to its obligations under SEC Rule 15c3-5) to mitigate operational risk by reducing the volume of messaging in JPB-X. For instance, JPMS reserves the right to disable (i) the Close Price Match matching type in the event an exchange materially alters the functioning of its closing auction or (ii) ~~one or~~ both, or all three of the VWAP Price Match, Multi-Duration VWAP Price Match and Close Price Match matching types entirely when market conditions warrant a reduction of operational risk (e.g., in the event of excessive market volatility).

- b. Are the procedures for suspending or stopping trading the same for all Subscribers and the Broker-Dealer Operator?

Yes No

If no, identify and explain any differences.

Item 23: Market Data

- a. Identify the sources of market data used by the NMS Stock ATS (e.g., proprietary feed from a national securities exchange, feed from the securities information processor (“SIP”)), and how the ATS uses market data from these sources to provide the services that it offers, including how the ATS uses market data to determine the NBBO and protected quotes, and display, price, prioritize, execute, and remove orders and trading interest on the ATS.

JPMS determines the NBBO, protected quotes, and execution prices for Firm/Conditional Orders in JPB-X, including [VWAP Price Match orders and Multi-Duration](#) VWAP Price Match orders executed at the VWAP over the course of a match period and Close Price Match orders executed at the closing price as determined by the closing auction and published by the primary exchange, based on market data received from the Securities Information Processors (the "SIP"). The market data feeds consumed by JPB-X are provided by Redline, a market data provider. As described in response to Part III, Item 20, JPMS may suspend trading in an NMS stock if the market data received by JPB-X for the stock from the SIP is unavailable, unstable, experiencing unacceptable latencies, or detected to be providing quotes that appear to have quality issues.

- b. Are the sources of market data and how the NMS Stock ATS uses market data for the services that it offers the same for all Subscribers and the Broker-Dealer Operator?

Yes No

If no, identify and explain any differences.

Summary report:	
Litera Compare for Word 11.8.0.56 Document comparison done on 7/6/2026 10:38:28 AM	
Style name: Default Style	
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Original DMS: iw://jpmc.cloudimanager.com/AMER_ACTIVE/112164889/1	
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Delete	80
Move From	0
<u>Move To</u>	0
<u>Table Insert</u>	0
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<u>Table moves to</u>	0
Table moves from	0
Embedded Graphics (Visio, ChemDraw, Images etc.)	0
Embedded Excel	0
Format changes	0
Total Changes:	200