

Confidential Treatment Requested by J.P. Morgan Securities LLC

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

Item 2: Affiliates Trading Activities on the ATS

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

☒ Yes ☐ No

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

The JPMS affiliates listed below are able to enter, for their own or client accounts (e.g., as principal or agent), Firm/Conditional Orders into JPMS' algorithms/SOR as clients of the Electronic Client Solutions Trading desk described in response to Part II, Item 1(a). The affiliates also are able to route Firm/Conditional Orders to one or more of the other JPMS business units identified in Item 1(a), which in turn are able to enter or direct the entry of Firm/Conditional Orders into the algorithms/SOR on the affiliates' behalf and as discussed in Item 1(a). The algorithms/SOR is able to enter, or to be directed by the affiliate or a business unit to enter Firm/Conditional Orders into JPM-X (using the "JPMS" MPID). As non-FINRA members (with the exception of Global Shares Financial Services Inc.), the affiliates listed below do not have their own MPIDs.

1. Bear Stearns Asset Management Inc. ("BSAM") (regulated by the U.S. Securities and Exchange Commission ("SEC") which is registered with the SEC as an investment adviser; BSAM and affiliated investment advisers comprise J.P. Morgan Asset Management, the investment management business of J.P. Morgan Asset & Wealth Management)

2. JPMorgan Asset Management (China) Company Limited (regulated by the China Securities Regulatory Commission ("CSRC"), the People's Bank of China, and the State Administration for Market Regulation of the People's Republic of China), which issues and sells funds and engages in investment management and other businesses approved by CSRC

3. Highbridge Capital Management LLC (regulated by the SEC, Securities and Futures Commission in Hong Kong, and Financial Conduct Authority in the United Kingdom ("FCA-UK")), which is a registered investment adviser and has developed a diversified investment platform, including hedge funds, daily liquidity products, and other similar investment products

Confidential Treatment Requested by J.P. Morgan Securities LLC

4. J.P. Morgan Alternative Asset Management Inc. (regulated by the SEC), which is a U.S. investment advisory branch of J.P. Morgan Asset Management
5. J.P. Morgan Investment Management Inc. ("JPMIM") (regulated by the SEC, FCA-UK, Securities and Exchange Board India, Financial Supervisory Service in South Korea, and Financial Services Agency of Japan), which is registered with the SEC as an investment adviser; JPMIM and affiliated investment advisers comprise J.P. Morgan Asset Management
6. J.P. Morgan Private Investments Inc. (regulated by the SEC), which is an investment adviser registered with the SEC and operates within the Asset & Wealth Management line of business
7. J.P. Morgan Securities (Asia Pacific) Limited (regulated by the Hong Kong Monetary Authority and Securities and Futures Commission in Hong Kong), which engages in investment banking (corporate finance advisory and debt/equities securities origination and trading), market making of government bills and bonds, and the trading and marketing of FX, rate, money market, derivatives, cash equities, convertible bonds, distressed, and high yield assets
8. J.P. Morgan Securities Asia Private Limited (regulated by the Monetary Authority of Singapore), which holds a Capital Markets Services license to deal in securities and advise on corporate finance
9. J.P. Morgan Securities Australia Limited (regulated by the Australian Securities and Investments Commission), which is a market, clearing, and settlement participant on the ASX and engages in stockbroking, equity research and services in the ETO market for wholesale clients and makes markets in and advises on equity swaps, OTC options, and exchange listed warrants
10. JPMorgan Asset Management (Asia Pacific) Limited (regulated by the Securities and Futures Commission in Hong Kong), which provides investment management services
11. J.P. Morgan Securities (Far East) Limited (regulated by the Securities and Futures Commission in Hong Kong), which is a broker and lead underwriter in PRC and engages in securities dealing and investment banking activities in its Seoul Branch
12. J.P. Morgan Securities plc (regulated by the FCA-UK and Prudential Regulation Authority in the United Kingdom), the principal activity of which is to be a booking and processing entity for investment banking activities initiated by other JPMorgan Chase & Co. ("JPMC") entities
13. J.P. Morgan (Suisse) SA (regulated by the Swiss Financial Market Supervisory Authority), which serves Swiss and international clients across the Private Banking and Investor Services lines of business
14. JPMorgan Asset Management (Europe) S.a.r.l. (regulated by the

Commission de Surveillance du Secteur Financier), which is an investment management and management company

15. 55I, LLC (regulated by the SEC), which is a registered investment adviser and provides advisory services associated with tax harvesting solutions as well as ongoing trading and rebalancing services for clients

16. J.P. Morgan Markets Limited (regulated by the FCA-UK), which engages in global credit and equities trading

17. JPMorgan Asset Management (Japan) Limited (regulated by the Financial Services Agency of Japan), which engage in investment trust management, non-discretionary investment advisory services and discretionary investment management services, and the offering of beneficiary certificates of investment trusts and shares of non-Japanese pooled funds

18. JPMorgan Asset Management (Singapore) Limited (regulated by the Monetary Authority of Singapore), which engages in fund management

19. JPMorgan Asset Management (Taiwan) Limited (regulated by the Financial Supervisory Commission and Investment Commission of Ministry of Economic Affairs in Taiwan), which is an investment manager and securities investment trust

20. JPMorgan Asset Management (UK) Limited (regulated by the FCA-UK), which is a discretionary investment adviser

21. JPMorgan Chase Bank, National Association (regulated by the Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, and Federal Deposit Insurance Corporation in the United States; Hong Kong Monetary Authority and Securities and Futures Commission in Hong Kong; Monetary Authority of Singapore; and FCA-U and Prudential Regulation Authority in the United Kingdom), which is a wholly owned bank subsidiary of JPMC

22. JPMorgan Chase Funding Inc. (regulated by the Board of Governors of the Federal Reserve System), which may engage in activities permitted for a financial holding company as set forth in Board Regulation Y

23. JPMorgan Securities Japan Co., Ltd. ("JPMSJ") (regulated by the Financial Services Agency of Japan), which underwrites and trades securities, offers and brokers securities transactions, advises clients on business strategies, capital structures, and financial strategies, and engages in M & A derivative transactions booked outside of JPMSJ

24. Security Capital Research & Management Incorporated ("SCRM") (regulated by the SEC), which is registered with the SEC as an investment adviser; SCRM and affiliated investment advisers comprise J.P. Morgan Asset Management

25. J.P. Morgan SE (regulated by the German Federal Financial Supervisory Authority, German Central Bank, and European Central Bank),

Confidential Treatment Requested by J.P. Morgan Securities LLC

which facilitates the provision of J.P. Morgan Global capabilities to Commercial & Investment Banking clients in the European Economic Area, also to EMEA clients in Private Bank

26. J.P. Morgan Private Wealth Advisors LLC (regulated by the SEC), which is a registered investment advisor offering private wealth management services

27. Global Shares Financial Services Inc. (regulated by the SEC and FINRA), which is a registered broker-dealer (MPID: GSFS) and administers employee share account services (stock plans) on behalf of and under an arrangement with clients, including effecting transactions on an omnibus basis

28. Almea 2 Segregated Portfolio Company (regulated by Cayman Island Monetary Authority), which is a wholly owned subsidiary of JPMorgan Chase Holdings LLC established to acquire hedge positions (for client trades) to the extent permitted to be acquired by JPMC and its subsidiaries.

- 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

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.

- 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

If yes, identify the Affiliate and respond to the request in Part III, Item 12 of this form.

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

☐ Yes ☒ No

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

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

Confidential Treatment Requested by J.P. Morgan Securities LLC

- 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.

~~Until completion of the below described system change, which will begin on August 5, 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 4 in JPM-X. Specifically, the P-1 sub-tier in Tier 4 includes principal JPMS trading desk flow that accesses JPM-X via the algorithms/SOR. As described in Part III, Item 14, a Subscriber can specify the tiers or sub-tiers with which the Subscriber has opted out from interacting (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 Firm/Conditional Orders or all order flow. In each case, JPMS implements the restriction as soon as reasonably practicable.~~

~~Beginning on August 5, 2024 and once the changes to the segmentation, as described in Part III, Item 13, are effective:~~

As detailed below, Subscribers can opt-out of interacting with JPMS's principal or agency order flow by opting-out of specific tiers or opting-out of principal executions generally.

Tiers: Subscribers may opt-out from interacting with Firm/Conditional Orders that are assigned to Tier 3 - principal flow of JPMS and JPMS' s affiliates (excluding JPMS principal flow included in Tier 1 if the Subscriber has not opted-out of Tier 1 as well), that access JPM-X via JPMS algorithms/SOR and where the algorithms/SOR make a determination related to venue or price, as described in Part III, Item 13. Subscribers also may opt-out of JPMS principal and agency flows included in Tier 1, as described in Part III, Item 13, by opting out of Tier 1 entirely. By doing so, Subscribers would opt-out of JPMS principal flow within that tier along with institutional investor client order flow and broker-dealer client order flow received by JPMS or JPMS' s affiliates and handled on an agency basis that access JPM-X via JPMS algorithms/SOR and where the algorithms/SOR make a determination related to venue or price. Subscribers also may opt-out of order flow of institutional investors and non-U.S. registered broker-dealers received by JPMS or JPMS's affiliates and handled on an agency basis and routed directly to JPM-X via direct access or using directed orders through the algorithms/SOR included in Tier 2, as described in Part III, Item 13, by opting out of Tier 2 entirely.

Executions: Separately, Subscribers may request to opt-out of interacting with any orders from Tier 1 and Tier 3 that would result in a principal

execution (e.g., requested because of the client's inability to receive principal executions consistent with soft dollar arrangements). By doing so, Subscribers would not opt-out of interacting with institutional client order flow and broker-dealer client order flow received by JPMS or JPMS's affiliates and handled on an agency basis that access JPM-X via JPMS algorithms/SOR and where the algorithms/SOR make a determination related to venue or price from Tier 1.

As described in Part III, Item 14, a Subscriber can specify the tiers with which the Subscriber has opted out from interacting (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.

~~As noted in response to Part III, Item 13, beginning on August 5, 2024, JPM-X will gradually implement the tiering changes described therein by symbol range. The proposed daily symbol range implementation schedule, which will start on August 5 and may be subject to change, is as follows: Day 1: Z range; Day 2: W-Z range; Day 3: T-Z range; Day 4: L-Z range; and Day 5, A-Z range. A detailed implementation plan will be sent to Subscribers in advance and will be available to the public here: <https://www.jpmorgan.com/markets/aqua/#x>. JPM-X will disable the prior tiering logic for the migrated symbol range and will implement the above described opt-out selections for such migrated symbol range (as the tiering changes become available) in a manner that corresponds with Subscribers' existing/prior opt-out(s).~~

- 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.

~~Until completion of the below-described system change, which will begin on August 5, 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 JPM-X. Tier 1 consists of institutional investor clients and JPMS affiliates' flow that accesses JPM-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 clients' flow that accesses JPM-X via the algorithms/SOR. As described in Part III, Item 14, a Subscriber can specify~~

~~the tiers or sub-tiers with which the Subscriber has opted out from interacting (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.~~

~~Beginning on or after August 5, 2024 and once the changes to the segmentation, as described in Part III, Item 13, are effective:~~

Subscribers can opt-out from interacting with Firm/Conditional Orders of JPMS's affiliates by opting out of Tier 1, Tier 2, and/or Tier 3. As described in Part III, Item 13, Firm/Conditional Orders of JPMS's affiliates comprised of institutional investor client order flow and broker-dealer client order flow received by JPMS's affiliates and handled on an agency basis that access JPM-X via JPMS algorithms/SOR and where the algorithms/SOR make a determination related to venue or price are assigned to Tier 1, Firm/Conditional Orders of institutional investors and non-U.S.-registered broker-dealers received by JPMS or JPMS's affiliates and handled on an agency basis and routed directly to JPM-X via direct access or using directed orders through the algorithms/SOR (i.e., where the algorithms/SOR do not make a determination related to venue or price) are assigned to Tier 2, and principal flow of JPMS's affiliates, that access JPM-X via JPMS algorithms/SOR and where the algorithms/SOR make a determination related to venue or price are assigned to Tier 3. Subscribers can only opt-out of JPMS's affiliate flows identified and included in Tier 1 in Part III, Item 13, by opting out of Tier 1 entirely. By doing so, Subscribers would also opt-out of interacting with applicable JPMS principal flow as well as institutional investor client flow and external broker-dealer client flow received by JPMS and handled on an agency basis that access JPM-X via JPMS algorithms/SOR and where the algorithms/SOR makes a determination related to venue or price. Subscribers can only opt-out of JPMS's affiliate flows identified and included in Tier 2 in Part III, Item 13, by opting out of Tier 2 entirely. By doing so, Subscribers would also opt-out of interacting with order flow of institutional investor and non-U.S.-registered broker-dealer received by JPMS and handled on an agency basis and routed directly to JPM-X via direct access or using directed orders through the algorithms/SOR (i.e., where the algorithms/SOR do not make a determination related to venue or price). In addition, Subscribers can only opt-out of JPMS's affiliate flows identified and included in Tier 3 in Part III, Item 13, by opting out of Tier 3 entirely. By doing so, Subscribers would also opt-out of interacting with JPMS principal flow (excluding JPMS principal flow included in Tier 1 if the Subscriber has not opted-out of Tier 1 as well).

As described in Part III, Item 14, a Subscriber can specify the tiers with which the Subscriber has opted out from interacting (i) on an order-by-order basis in the Firm/Conditional Order instructions submitted to JPMS or (ii)

Confidential Treatment Requested by J.P. Morgan Securities LLC

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.

~~As noted in response to Part III, Item 13, beginning on August 5, 2024, JPM X will gradually implement the tiering changes described therein by symbol range. The proposed daily symbol range implementation schedule, which will start on August 5 and may be subject to change, is as follows: Day 1: Z range; Day 2: W-Z range; Day 3: T-Z range; Day 4: L-Z range; and Day 5, A-Z range. A detailed implementation plan will be sent to Subscribers in advance and will be available to the public here: <https://www.jpmorgan.com/markets/agua/x>. JPM X will disable the prior tiering logic for the migrated symbol range and will implement the above described opt-out selections for such migrated symbol range (as the tiering changes become available) in a manner that corresponds with Subscribers' existing/prior opt-out(s).~~

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

☒ Yes ☐ No

If no, identify and explain any differences.

Part III: Manner of Operations

Item 7: Order Types and Attributes

- a. Identify and explain each order type offered by the NMS Stock ATS. In your explanation, include the following:
 - i. priority, including the order type's priority upon order entry and any subsequent change to priority (if applicable); whether and when the order type can receive a new time stamp; the order type's priority vis-à-vis other orders on the book due to changes in the NBBO or other reference price; and any instance in which the order type could lose execution priority to a later arriving order at the same price;
 - ii. conditions, including any price conditions (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.

The following order types are eligible for execution in JPM-X:

Confidential Treatment Requested by J.P. Morgan Securities LLC

--Non-Peg Limit Order - an order to buy or sell at a specified fixed price or better;

--Primary Peg Order - an order to buy or sell at the inside quotation of the National Best Bid or Offer ("NBBO") on the same side of the market, even as the NBBO changes (with or without a limit price);

--Midpoint Peg Order - an order to buy or sell at the midpoint between the inside bid and the inside offer of the NBBO, even as the NBBO changes (with or without a limit price); and

--Market Peg Order - an order to buy or sell at the inside quotation of the NBBO on the opposite side of the market, even as the NBBO changes (with or without a limit price).

Each of the above order types can have one of the following two time-in-force instructions:

--Immediate-or-Cancel ("IOC"), which is an instruction that the order be executed immediately with any portion of the order that cannot be executed immediately being cancelled; and

--Day, which is an instruction that the order rest in the book maintained by JPM-X (the "Order Book") until the order is executed, with any portion of the order that cannot be executed by the end of the trading day, or earlier in accordance with the time interval specified by the Subscriber or an algorithm selected by the Subscriber, being cancelled.

A blank time-in-force field is treated as a Day time-in-force instruction.

The above order types are available for use by Subscribers that access JPM-X directly or via the algorithms/SOR, irrespective of whether such access occurs through JISU. JPM-X does not offer post-only order types, and none of the above order types is eligible for routing to other Trading Centers. As described in response to Part III, Item 9, JPM-X accepts limit and pegged conditional order messages corresponding to the order types described above with a day (but not IOC) time-in-force instruction.

The above order types cannot be combined (i.e., an order cannot be more than one order type). Subscribers that access JPM-X by routing to it or the SOR directly, and algorithms that access JPM-X via the SOR on behalf of Subscribers, can modify, replace, or cancel day orders routed to JPM-X. The modification or replacement of a day order results in the entry of a replacement order with a new time stamp and lower priority in time than the original order, unless the modification is reduction in the quantity of the order, in which case the replacement order has a new time stamp but the same priority in time that the original order had prior to its replacement.

JPM-X rejects (1) short sale exempt, buy-minus and sell-plus orders; (2) orders priced at or above \$1.00 per share if priced in a sub-penny increment; (3) orders priced below \$1.00 per share if priced in an increment of less than

\$.0001; (4) orders that exceed limits imposed by JPMS pursuant to its obligations under SEC Rule 15c3-5; (5) any order types and/or orders with any time-in-force instructions other than those identified above (for example, non-Peg Market orders and/or orders with a time-in-force instruction of “On the Open”); and (6) ~~beginning August 5,~~ orders that cannot be assigned to an order flow type, as defined in Part III, Item 13, because they lack the required information. ~~The change in (6) will be implemented by symbol range alongside the tiering changes described in Part III, Item 13.~~

An order is ineligible for execution in JPM-X unless the price, minimum quantity, and counterparty preference instructions associated with the order, if any, are satisfied. Accordingly, a partially executed order is cancelled if the leaves quantity is less than the minimum quantity instruction associated with the order. An order also is ineligible for execution in JPM-X if t order is a firm-up order or an order committed to a conditional order message during a firm-up period, as described in response to Part III, Item 9.

Once JPM-X determines that an order is eligible for execution, it is crossed with other eligible order(s) on the opposite side of the market based on price/tier/time priority (e.g., at a given price level, Tier 1 orders, regardless of order capacity, have higher priority than Tier 2 orders, and at a given price level within the same tier, orders received earlier in time have higher priority than orders received later in time). (As described in response to Part III, Item 11(c), as between firm orders and conditional order messages at the same price, firm orders always have priority over conditional order messages irrespective of their tier or when they were received by JPM-X.) When two orders eligible for execution are crossed, they are executed at or within their effective limit prices, as described in response to Part III, Item 11(c).

Accordingly, a peg order is executed at its pegged price or better. JPM-X does not execute a cross if the inside quotation of the NBBO is crossed (i.e., the inside bid exceeds the inside offer) or locked (i.e., the inside bid is equal to the inside offer). In addition, JPM-X does not execute a cross in any NMS stock that is subject to a regulatory or trading halt (although, as described in response to Part III, Item 20, JPM-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)).

Although a change in the NBBO would not affect the relative priority of orders (including peg orders) that remain eligible f execution after the change, the change could affect whether an order with a price instruction associated with it (including peg order) is eligible for execution and the execution price at which orders that remain eligible for execution (including peg orders) are crossed.

- b. Are the terms and conditions for each order type and attribute the same for all Subscribers and the Broker-Dealer Operator?

Confidential Treatment Requested by J.P. Morgan Securities LLC

☒ Yes ☐ No

If no, identify and explain any differences.

Item 11: Trading Services, Facilities and Rules

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

JPM-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. JPM-X is a crossing system that matches non-displayed firm orders and conditional order messages.

- 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.

JPM-X accepts non-peg limit, primary peg, midpoint peg, and market peg Firm/Conditional Orders unless they (i) are marked short sale exempt, buy-minus, or sell-plus; (ii) are priced in a sub-penny increment if priced at or above \$1.00 per share; (iii) are priced in an increment of less than \$.0001 if priced below \$1.00 per share; (iv) exceed limits imposed by JPMS pursuant to its obligations under SEC Rule 15c3-5; (v) any order types and/or orders with any time-in-force instructions other than those identified in the response to Part III, Item 7 above (for example, non-Peg Market orders and/or orders with a time-in-force instruction of "On the Open"); or (vi) ~~beginning August 5, cannot be assigned to an order flow type, as defined in Part III, Item 13, because they lack required information. The change in (vi) will be implemented by symbol range alongside the tiering changes described in Part III, Item 13.~~

All Firm/Conditional Orders accepted by JPM-X (whether routed directly by

a Subscriber or routed via the SOR by a Subscriber or JPMS trading algorithm on behalf of a Subscriber) -- other than firm-up orders and Resting Orders that are committed to a conditional order message during a firm-up period, as described in response to Part III, Item 9 -- are eligible for matching based on the liquidity available in the Order Book. JPM-X matches Firm/Conditional Orders on opposite side of the market in an NMS stock based on the price, size, and counterparty preference instructions associated with them.

Firm/Conditional Orders, once found eligible for crossing, are matched by JPM-X on the basis of price/tier/time priority, which means, e.g., that (i) at a given price level, orders in lower numbered tiers have priority over orders in higher numbered tiers and (ii) at a given price level within the same tier, orders received earlier in time have priority over orders received later in time. Accordingly, of two equally priced orders, the one that is in the lower numbered tier will have priority over the one that is in the higher numbered tier regardless of the times at which the orders were received by JPM-X. As between firm orders and conditional order messages at the same price, firm orders always have priority over conditional order messages irrespective of their tier or when they were received by JPM-X.

When crossing two orders matched for execution, JPM-X executes at or within their effective limit prices. For marketable limit orders, the effective limit price is the NBBO inside offer for buy orders and the NBBO inside bid for sell orders. For p orders, the effective limit price is the better of the limit price specified on the order, if any, and the price defined by the peg instruction. (For example, for a midpoint peg order with a limit price, the effective limit price is the better of the order's limit price and the NBBO midpoint.) If the effective limit prices of two orders overlap, the orders will cross within, or at one of, the effective limit prices. Note that JPM-X does not execute a cross if the inside quotation of the NBBO is crossed (i.e., the inside bid exceeds the inside offer) or locked (i.e., the inside bid is equal to the inside offer). JPM-X also does not execute a cross in any NMS stock that is subject to a regulatory or trading halt. In addition, when a circuit breaker has been triggered for an NMS stock under Rule 201 of Regulation SHO and JPM-X has matched a short sale order for execution, JPM-X will only execute at a price that is above the NBBO inside bid.

JPMS, at the request of a Subscriber or on JPMS' own initiative, may determine to review any transaction in JPM-X to assess whether it was adversely affected by a technical issue or "clearly erroneous" as defined by relevant regulators (e. 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. JPM-X also may suspend matching in the event of volatile market conditions (e.g., wide bid/offer spreads).

JPM-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. JPM-X determines queue position 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.

~~Until completion of the below described system change, which will begin on August 5, 2024, Subscriber Firm/Conditional Order flow is assigned to an order flow type, each of which corresponds to a tier used for purposes of determining priority (given JPM-X's use of price/tier/time priority as described in response to Part III, Item 11(c)). JPMS assigns a Subscriber's Firm/Conditional Order flow to an order flow type based upon an initial review of information received from the Subscriber at onboarding. The order flow types and corresponding tiers are provided below. For the avoidance of doubt, "institutional investor client flow" does not include "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 JPM-X via the algorithms/SOR (Order Flow Type P-1 in Tier 4) may be provided to JPMS clients on a riskless principal basis.~~

~~Tier 1 (Order Flow Type I-1) — Institutional investor client flow and JPMS affiliates' flow accessing JPM-X via the algorithms/SOR;~~

~~Tier 2 (Order Flow Type I-2) — Institutional investor client flow with direct access to JPM-X;~~

~~Tier 3 (Order Flow Type I-3) — U.S. registered broker-dealer client flow (both agency and principal) accessing JPM-X via the algorithms/SOR;~~

~~Tier 4 (Order Flow Type P-1) — Internal (JPMS) principal trading desk flow accessing JPM-X via the algorithms/SOR;~~

~~Tier 5 (Order Flow Type I-4 / ELP) — Flow of external broker-dealers categorized as electronic liquidity providers with direct access to JPM-X; and~~

~~Tier 5 (Order Flow Type I-5) — Flow of external broker-dealers not categorized as electronic liquidity providers (both agency and principal) with direct access to JPM-X.~~

~~Beginning on August 5, 2024:~~

~~Subscriber Firm/Conditional Order flow is assigned to an order flow type, each of which corresponds to a tier used for purposes of determining priority (given JPM-X's use of price/tier/time priority as described in response to Part III, Item 1 l(c)). JPMS assigns a Subscriber's Firm/Conditional Order flow to an order flow type based upon a review of information received from the Subscriber at onboarding and order characteristics received (e.g., for Tier 4 and Tier 5, based upon the order capacity of the order). The order flow types and corresponding tiers are provided below. For the avoidance of doubt, "institutional investor client flow" and "broker-dealer client flow" do not include JPMS principal flow or JPMS affiliates' principal flow. JPMS principal flow in Tier 3 may also include JPMS executing principally for clients on a riskless principal basis.~~

~~Tier 1 -- Comprised of the following flows, each of which access JPM-X via JPMS algorithms/SOR and where the algorithms/SOR makes a determination related to venue or price: (i) institutional investor client order flow and broker-dealer client order flow received by JPMS or JPMS's affiliates and handled on an agency basis; (ii) JPMS principal flow originating from the Equity Finance Trading desk and designated as hedging low-touch and no-touch client security-based swaps activity; and (iii) JPMS principal flow facilitating agency orders designated as non-standard settlement through JPMS' s Electronic Client Trading desk;~~

~~Tier 2 - Order flow of institutional investors and non-U.S.-registered broker-dealers received by JPMS or JPMS' s affiliates and handled on an~~

agency basis and routed directly to JPM-X via direct access or using directed orders through the algorithms/SOR (i.e., where the algorithms/SOR do not make a determination related to venue or price);

Tier 3 -Principal order flow of JPMS and JPMS's affiliates (excluding principal order flows identified in Tier 1 above), that access JPM-X via JPMS algorithms/SOR and where the algorithms/SOR make a determination related to venue or price;

Tier 4 - Order flow of U.S.-registered broker-dealers, received by JPMS with an order capacity designation of agency, and routed directly to JPM-X via direct access or using directed orders through the algorithms/SOR (i.e., where the algorithms/SOR do not make a determination related to venue or price); and

Tier 5 - Order flow of U.S.-registered broker-dealers, received by JPMS with an order capacity designation of principal, and routed directly to JPM-X via direct access or using directed orders through the algorithms/SOR (i.e., where the algorithms/SOR do not make a determination related to venue or price).

~~Beginning on August 5, 2024, JPM-X will gradually implement the above noted tiering changes by symbol range. The proposed daily symbol range implementation schedule, which will start on August 5 and may be subject to change, is as follows: Day 1: Z range; Day 2: W-Z range ; Day 3: T-Z range; Day 4: L-Z range; and Day 5, A-Z range. A detailed implementation plan will be sent to Subscribers in advance and will be available to the public here: <https://www.jpmorgan.com/markets/agua#x>. During implementation, JPM-X will disable the prior tiering logic for the migrating symbol range and will implement the new tiering logic for such symbol range.~~

There is no specific length of time that an order flow type or tier assignment for a Subscriber will remain in effect; however, JPMS conducts a quarterly review of the trading activity in JPM-X of a sample set of Subscribers to confirm the accuracy of the Subscribers' order flow type and tier assignments, and JPMS reserves the right to review and add, remove, or revise an order flow type or tier assignment for a Subscriber at any time. Based on a review of a Subscriber's trading activity (including, e.g., discussions with the Subscriber about changes in its business or observed changes in order flow characteristics), ECS Liquidity Product Specialists can request that the Subscriber modify its order flow and/or trading behavior to conform to its assigned order flow type or, if such a modification seems unlikely, determine to amend the Subscriber's order flow type assignment. JPMS would notify the Subscriber in the event of a change in the order flow type or tier assignment for the Subscriber. JPMS may change an order flow type or 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, JPM-X complies with the Subscriber's counterparty preferences regarding the order flow types or tiers with which the Subscriber would like to interact, as described in response to Part III, Item 14. In addition, Firm/Conditional Orders, once found eligible for crossing, are matched by JPM-X on the basis of price/tier/time priority, which means, e.g., that at a given price level, orders in lower numbered tiers have priority over orders in higher numbered tiers, regardless of order capacity, as described in response to Part III, Item 11(c). Accordingly, of two equally priced orders, the one that is in the lower numbered tier will have priority over the one that is in the higher numbered tier regardless of order capacity or the times at which the orders were received by JPM-X. As between firm orders and conditional order messages at the same price, firm orders always have priority over conditional order messages irrespective of their tier or when they were received by JPM-X.

- 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 order flow type and 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 ECS Liquidity Product Specialists.

- 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

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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

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

~~The anonymized, aggregated quantities of resting buy firm orders and resting sell firm orders, per symbol, available in each tier of the Order Book at (i) the National Best Bid, (ii) National Best Offer, or (iii) NBBO midpoint (based on the sources of market data described in response to Part III, Item 23), with non-peg limit orders that could be executed at more than one of the above prices aggregated with orders at the most aggressive of those prices, are made known to the SOR with a frequency of up to once per second, until the end of the symbol range implementation of the below-described change. The SOR uses this information solely to decide whether to route firm orders to JPM-X and does not share the information with any other trading system or desk. Any Subscriber that accesses JPM-X via the algorithms/SOR can opt out of the inclusion of the Subscriber's orders in the feed described above, in which case the SOR would not rely upon the feed when routing the Subscriber's orders.~~

Beginning on July 19, 2024, JPM-X will continually make known, on a JPM-X continuously makes known, on a real-time basis, the available resting firm orders of the JPM-X Order Book to the SOR. For resting firm liquidity (i.e., Day orders only), the symbol, price, side, quantity, order type (e.g., market vs limit and peg instructions), assigned segmentation tier, counter-party preference, and minimum quantity attributes will be provided from JPM-X to the SOR. Amongst other things, the SOR will not receive information concerning the Subscriber's identity. Subscribers accessing JPM-X cannot opt-out of the inclusion of their information in the feed. Consistent with Part II, Item 7, the SOR uses this information solely to decide whether to route firm orders to JPM-X and does not share the information with any other trading system

or desk.

~~or desk. As noted above, this change will be implemented by symbol range beginning on July 19, 2024. The proposed schedule, expecting to end on July 31, is as follows: Day 1: Z range; Day 2: W-Z range; Day 3: S-Z range; Day 4, L-Z range and Day 5, A-Z. This implementation plan will be available to the public here: <https://www.jpmorgan.com/markets/aqua#x>. During the implementation period, JPM-X will no longer make known the anonymized, aggregated quantities of resting buy and sell firm orders for the symbol range for which the above referenced change is enabled.~~

In addition, Firm/Conditional Orders are made known to the SOR when they are routed through it. When JPMS trading algorithms and Subscribers route conditional orders to JPM-X, JPM-X may send firm-up invitations back to the JPMS trading algorithms and Subscribers via the SOR. As described in response to Part III, Item 9, a firm-up invitation includes the symbol, quantity, price of the associated same-side conditional order that prompted the firm-up invitation, and, for a conditional order routed from JPMS' trading algorithms and transmitted to JPM-X via the SOR, the matched size of contra-side trading interest. The SOR does not retain information about Firm/Conditional Orders resident in the Order Book other than Firm/Conditional Orders that the SOR itself determined to route to JPM-X.

- 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 21: Trade Reporting

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

Once a cross has been executed JPMS will report any qualifying trades to a recognized trade reporting facility of a self-regulatory organization ("SRO") in accordance with applicable SRO rules. JPMS currently reports trades to the FINRA/Nasdaq Trade Reporting Facility (FINRA/Nasdaq TRF Carteret) or, as a backup, the FINRA Alternative Display Facility. ~~Beginning on August 5, 2024, and in~~ In accordance with FINRA Trade Reporting FAQs 100.4 and 104.7, where matches between two JPMS principal orders within the same aggregation unit occur, such matches will be treated as an internal transfer of shares (book transfer) and, therefore, not reported to a trade reporting facility, given there is no change of beneficial ownership. ~~This change will be implemented by symbol range alongside the tiering changes~~

~~described in Part III, Item 13.~~ JPMS also maintains audit trail information for orders submitted to JPM-X as required by Consolidated Audit Trail (“CAT”) reporting. JPMS will not submit CAT reports for conditional order messages in compliance with FINRA's CATNMSPLAN Frequently Asked Question - Compliance Number B40.

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

☒ Yes ☐ No

If no, identify and explain any differences.

Item 22: Clearance and Settlement

- a. Describe any procedures and material arrangements undertaken to facilitate the clearance and settlement of transactions on the NMS Stock ATS (e.g., whether the ATS becomes a counterparty, whether it submits trades to a registered clearing agency, or whether it requires Subscribers to have arrangements with a clearing firm).

JPM-X transactions are cleared and settled by JPMS using its existing clearance and settlement infrastructure. In its capacity as a self-clearing firm, JPMS submits transactions in JPM-X for clearance at the National Securities Clearing Corporation ("NSCC") and settlement at the Depository Trust Company ("DTC"), except as described below. All JPM-X transactions clear versus JPMS and according to the settlement instructions provided to JPMS by Subscribers. Subscribers either must self-clear or have their own clearing arrangements with broker-dealer clearing firms (such as JPMS) and/or a custodial relationship with a broker-dealer or bank. If JPMS' clearing counterparty is JPMS itself, JPMS will clear the transaction internally. If JPMS' clearing counterparty is an NSCC-eligible broker-dealer other than JPMS, JPMS will submit the transaction to the NSCC pursuant to a Qualified Service Representative Agreement, NASDAQ ACT Automated Give-Up Agreement, or Correspondent Clearing 9A/9B Authorization. If JPMS' clearing counterparty is a non NSCC-eligible broker-dealer or a custodial broker-dealer or bank, JPMS will settle the transaction DVP/RVP through DTC. ~~Beginning on August 5, 2024, and in~~ In accordance with FINRA Trade

Reporting FAQs 100.4 and 104.7, where matches between JPMS principal orders within the same aggregation unit occur, i.e., where there is no change of beneficial ownership, no transaction will need to clear or settle as such matches are treated as an internal transfer of shares (book transfer). ~~This change will be implemented by symbol range alongside the tiering changes described in Part III, Item 13.~~

- b. Are the procedures and material arrangements undertaken to facilitate the clearance and settlement of transactions on the NMS Stock ATS the same for all Subscribers and the Broker-Dealer Operator?

☒ Yes ☐ No

If no, identify and explain any differences.