

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-72603; File No. SR-Phlx-2014-24)

July 14, 2014

Self-Regulatory Organizations; NASDAQ OMX PHLX LLC; Order Approving a Proposed Rule Change and Amendment No. 1 Thereto to Modify the Order Execution Algorithm of NASDAQ OMX PSX

I. Introduction

On May 13, 2014, NASDAQ OMX PHLX LLC (“Exchange” or “Phlx”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)¹ and Rule 19b-4 thereunder,² a proposal to modify the order execution algorithm of Phlx’s NASDAQ OMX PSX facility (“PSX”). The Exchange filed Amendment No. 1 to the proposed rule change on May 16, 2014.³ The proposed rule, as amended, was published for comment in the Federal Register on May 30, 2014.⁴ The Commission received no comments on the proposal. This order approves the proposed rule change.

II. Description of the Proposed Rule Change

PSX currently uses a price/time model for the execution of incoming orders against orders resting on the PSX book.⁵ Phlx now proposes to adopt a system under which a security

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ In Amendment No. 1, the Exchange corrected figures in both the filing and the proposed rule text for price and share amounts used in examples of the proposed execution algorithms.

⁴ See Securities Exchange Act Release No. 72250 (May 23, 2014), 79 FR 31147 (May 30, 2014) (“Notice”).

⁵ See Securities Exchange Act Release No. 69452 (April 25, 2013), 78 FR 25512 (May 1, 2013) (SR-Phlx-2013-24). Phlx launched PSX in 2010 with an order execution algorithm that allocated executions of incoming orders to orders on the PSX book based on the

may trade using one of three execution algorithms: (1) the current price/time model (“Price/Time Algorithm”), (2) a pro rata algorithm based on the price and size of posted orders, with allocations made on a pro rata basis among orders with similar price and display characteristics (“Pro Rata Algorithm”), or (3) a variation of the Pro Rata Algorithm that awards a minimum 40% allocation of an incoming executable order to the displayed order that establishes the best price (“Price-Setting Variation”).⁶

A. Price/Time Algorithm

Phlx is not proposing to alter the operation of the price/time algorithm for those securities to which it currently applies, although it is modifying the applicable rule text in certain respects to improve its clarity. Under the Price/Time Algorithm, PSX executes trading interest in the following manner:

- Price—Better priced trading interest is executed ahead of inferior-priced trading interest.
- Display—Displayed Quotes/Orders⁷ at a particular price are executed in time priority among such interest.
- Non-Displayed Interest—Non-Displayed Orders⁸ and the reserve portion of Quotes and Reserve Orders⁹ (collectively, “Non-Displayed Interest”) at a particular price are executed in time priority among such interest.

price and size of posted orders. See Securities Exchange Act Release No. 62877 (September 9, 2010), 75 FR 56633 (September 16, 2010) (SR-Phlx-2010-79).

⁶ Id. at 31148.

⁷ Phlx Rule 3301(e)(2) defines a Displayed Order as one that is designated for display on an anonymous basis in PSX’s order display service.

⁸ Phlx Rule 3301(e)(3) defines a Non-Displayed Order as a limit order that is not displayed in the PSX system, but remains available for potential execution against all incoming orders.

⁹ Phlx Rule 3301(f)(2) defines a Reserve Order as a limit order that has both a round-lot displayed size as well as an additional non-displayed share amount.

B. Pro Rata Algorithm

Under the pro rata algorithm, PSX will execute trading interest in the following order:¹⁰

- Price—Better priced trading interest is executed ahead of inferior-priced trading interest.
- Display—Displayed Orders at a particular price with a size of at least one round lot will be executed ahead of Displayed Orders with a size of less than one round lot, Non-Displayed Interest with a size of at least one round lot, Minimum Quantity Orders¹¹, and Non-Displayed Interest with a size of less than one round lot.
- Allocation to Displayed Orders with a Size of One Round Lot or More—As among equally priced Displayed Orders with a size of at least one round lot, PSX will allocate portions of incoming executable orders to displayed trading interest pro rata based on the size of the Displayed Orders, rounding down to the nearest round lot.
- Next, portions of an order that would be executed in a size other than a round lot if they were allocated on a pro rata basis will be allocated for execution against available displayed trading interest, one round lot at a time, in the order of the displayed size (measured at the time when the pro rata allocation began) of the trading interest at that price (largest to smallest), or, as among orders with an equal size, based on time priority. Incoming orders with a size of less than one round lot will be allocated against available displayed trading interest in the order of the size of trading interest at that price (largest to smallest), or, as among orders with an equal size, based on time priority.

¹⁰ For examples of the Pro Rata Algorithm, please see Phlx Rule 3307(b)(2)(A).

¹¹ Phlx Rule 3301(f)(5) defines a Minimum Quantity Order as an order that will not execute unless a specified minimum quantity of shares can be obtained.

- **Displayed Odd-Lot Orders**—As among equally priced Displayed Orders with a size of less than one round lot, PSX will allocate incoming orders against available trading interest in the order of the size of the trading interest at that price (largest to smallest), or, as among orders with an equal size, based on time priority.
- **Non-Displayed Interest with a Size of One Round Lot or More**—As among equally priced Non-Displayed Interest with a size of at least one round lot (excluding Minimum Quantity Orders), PSX will allocate portions of incoming executable orders to Non-Displayed Interest pro rata based on the size of Non-Displayed Interest, rounding down to the nearest round lot. Next, portions of an order that would be executed in a size other than a round lot if they were allocated on a pro rata basis will be allocated for execution against available Non-Displayed Interest, one round lot at a time, in the order of the size (measured at the time when the pro rata allocation began) of the trading interest at that price (largest to smallest), or, as among orders with an equal size, based on time priority. Incoming orders with a size of less than one round lot will be allocated against available Non-Displayed Interest in the order of the size of trading interest at that price (largest to smallest), or, as among orders with an equal size, based on time priority.
- **Minimum Quantity Orders**—As among equally priced Minimum Quantity Orders, PSX will allocate incoming executable orders to Minimum Quantity Orders in the ascending order of the size of the minimum quantity conditions assigned to the orders. Thus, an order with a minimum quantity condition of 300 shares will be filled before an order with a minimum quantity condition of 400 shares. If there are two or more Minimum Quantity Orders with an equal minimum quantity condition, PSX will determine the order of execution based on time priority.

- Non-Displayed Odd-Lot Orders—As among equally priced Non-Displayed Interest with a size of less than one round lot, PSX will allocate incoming orders based on the size of the Non-Displayed Interest, in the order of the size of the trading interest at that price (largest to smallest), or, as among orders with an equal size, based on time priority.

C. Price-Setting Variation

For any security that trades under the Pro Rata Algorithm, Phlx may adopt a variation of the algorithm that guarantees a specified percentage allocation for an order that sets the best price on PSX under certain conditions. According to Phlx, the goal of the variation would be to increase the extent to which market participants commit capital to display significant size at a price that narrows the spread, thereby enhancing price discovery and transparency. The “Guaranteed Percentage” for all securities subject to this variation will be 40%.¹²

When this variation of the Pro Rata Algorithm is employed, a Displayed Order with a size of at least one round lot that establishes the best price in PSX when it is entered will be a “Price-Setting Order” if such order is executed; provided, however, that a better priced order will become the Price-Setting Order if it is executed. The allocation to the Price-Setting Order will be the greater of the Guaranteed Percentage or the allocation that the order would otherwise receive under the pro rata algorithm.¹³

If the Price-Setting Order receives an allocation greater than the Guaranteed Percentage, the remainder of the order will be allocated to other displayed trading interest in the manner provided for Displayed Orders when the variation for Price-Setting Orders is not in effect (as provided in Rule 3307(b)(2)(A)). If the Price-Setting Order receives the Guaranteed Percentage,

¹² If Phlx determines to change the Guaranteed Percentage, it will file a proposed rule change to do so.

¹³ For examples of the Price-Setting Variation to the Pro Rata Algorithm, please see Phlx Rule 3307(b)(2)(B).

PSX will then allocate round lot portions of the incoming order that are not allocated to the Price-Setting Order to other displayed trading interest pro rata based on the size of such Displayed Orders (excluding the Price-Setting Order), rounding down to the nearest round lot. Next, portions of an order that would be executed in a size other than a round lot if they were allocated on a pro rata basis will be allocated for execution against available displayed trading interest (excluding the Price-Setting Order), one round lot at a time, in the order of the displayed size (measured at the time when the pro rata allocation began) of the trading interest at that price (largest to smallest), or, as among orders with an equal size, based on time priority. In the case of incoming orders with a size of less than one round lot, the Price-Setting Order will receive the Guaranteed Percentage of the order, and the remainder of the order will be allocated to available displayed trading interest in the order of the size of displayed trading interest at that price (largest to smallest), or, as among orders with an equal size, based on time priority.

D. Selection of Applicable Algorithm and Notice to Member Organizations

The algorithm applicable to a particular security will be selected by the President of the Exchange or another officer of the Exchange designated by the President, and will be listed on a publicly available website. The Exchange will notify member organizations of changes in the algorithm applicable to a particular security through a notice that is widely disseminated at least one month in advance of the change. In selecting the applicable algorithm, the Exchange will conduct ongoing assessments of the depth of liquidity made available by member organizations in particular stocks, with the goal of maximizing the displayed size, minimizing the quoted spread, and increasing the extent of PSX's time at the national best bid and best offer. Factors to be considered for each security would include the size of member organizations' quotes, the amount of time that PSX is at the national best bid and best offer, PSX's market share, and

observed changes in volume, average execution size, and average order size. The Exchange represents that it would examine these factors and consider adjusting the algorithm applicable to a security if it concluded that improvements in the security's performance on PSX might result.

The Exchange states that it expects that immediately following the implementation of this proposed rule change, most if not all securities will trade using the Price-Setting Variation, with the goal of increasing the size of displayed liquidity in PSX, but that adjustments would then be made based on the observed performance of the securities.

III. Discussion and Commission Findings

After careful review, the Commission finds that the Exchange's proposal, as modified by Amendment No. 1, is consistent with the requirements of Section 6 of the Act¹⁴ and the rules and regulations thereunder applicable to a national securities exchange.¹⁵ In particular, the Commission finds that the proposed rule change is consistent with the requirements of Section 6(b)(5) of the Act,¹⁶ which requires, among other things, that the Exchange's rules be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. The Commission notes that the proposal will provide additional execution algorithms on PSX, which should provide PSX Participants with additional choices with regard to their execution needs and strategies.

¹⁴ 15 U.S.C. 78(f).

¹⁵ In approving this proposed rule change, the Commission notes that it has considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

¹⁶ 15 U.S.C. 78f(b)(5).

The Commission notes that the Price-Time Algorithm is the prevailing execution algorithm for the exchange trading of cash equity securities. The Commission has previously determined price-time execution algorithms to be consistent with the Act.¹⁷

The Commission further believes that PSX's Pro Rata Algorithm may encourage participants to display greater size on PSX.¹⁸ This in turn could facilitate a more efficient execution of larger orders and foster best execution and price discovery. Accordingly, the Commission believes that the Pro Rata Algorithm proposed by PHLX is consistent with the Act.

With respect to the Price-Setting Variation, the Exchange proposes that the allocation to the Price-Setting Order will be the greater of 40% (the Guaranteed Percentage) or the percentage that the order would otherwise be allocated under the Pro Rata algorithm.¹⁹ The Commission notes that, with respect to the options exchanges, the Commission has approved a 40% trade participation right as consistent with the Act.²⁰ The Price-Setting Order is designed to reward aggressive quoting by PSX Participants by granting such PSX Participants a Guaranteed

¹⁷ See, e.g., Securities Exchange Act Release No. 54155 (July 14, 2006), 71 FR 41291 (July 20, 2006) (SR-NASDAQ-2006-001); Securities Exchange Act Release No. 59154 (December 23, 2008), 73 FR 80468 (December 31, 2008) (SR-BSE-2008-48).

¹⁸ The Commission notes that when it originally approved Phlx's proposal to establish PSX, the execution algorithm for PSX allocated executions of incoming orders to orders on the PSX book based on the price and size of posted orders, rather than price and time, with allocations made on a pro rata basis among orders with similar price and display characteristics. See Securities Exchange Act Release No. 62877, supra note 5.

¹⁹ The proposed rule is also similar to NYSE Rule 72(a), which provides priority to a bid or offer that is established as the only displayable bid or offer made at a particular price (and such bid or offer is the only displayable interest when such price is or becomes the Exchange BBO (the "setting interest")).

²⁰ See, e.g., Securities Exchange Act Release No. 47628 (April 3, 2003), 68 FR 17697 (April 10, 2003) (approving proposal by the Chicago Board Options Exchange, Inc. to establish rules for CBOEdirect trading system); Securities Exchange Act Release No. 50819 (December 8, 2004), 69 FR 75093 (December 15, 2004) (approving proposal by the International Securities Exchange, LLC to establish the Price Improvement Mechanism).

Percentage. The Commission believes that the proposed priority provision for the Price-Setting Order constitutes an appropriate approach, consistent with the Act, for incentivizing and rewarding market participants who quote aggressively to set the Exchange BBO.

Finally, the Commission notes that the rule sets forth the criteria for selection of an execution algorithm for a particular security and provides timely public notice to PSX Participants of any changes to the execution algorithm. The Commission notes that the algorithm applicable to a particular security will be selected by the Exchange and listed on a publicly available website, at least one month in advance of the change.

IV. Conclusion

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Act,²¹ that the proposed rule change (SR-Phlx-2014-24) be, and it hereby is, approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.²²

Kevin M. O'Neill
Deputy Secretary

²¹ 15 U.S.C. 78s(b)(2).

²² 17 CFR 200.30-3(a)(12).