

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-79836; File No. SR-CBOE-2016-084)

January 18, 2017

Self-Regulatory Organizations; Chicago Board Options Exchange, Incorporated; Notice of Filing of Amendment No. 1, and Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment No. 1, to Amend Exchange Rules Related to the Automated Improvement Mechanism

I. Introduction

On November 29, 2016, Chicago Board Options Exchange, Incorporated (the “Exchange” or “CBOE”) filed with the Securities and Exchange Commission (“Commission”), pursuant to the provisions of Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change to make permanent those aspects of its Automated Improvement Mechanism (“AIM” or “Auction”) that are currently operating on a pilot basis. The proposed rule change was published for comment in the Federal Register on December 13, 2016.<sup>3</sup> The Commission received no comments regarding the proposal. On January 6, 2017, the Exchange filed Amendment No. 1 to the proposed rule change.<sup>4</sup> The Commission is publishing this notice to solicit comments on Amendment No. 1

---

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> See Securities Exchange Act Release No. 79499 (December 7, 2016), 81 FR 90012 (“Notice”).

<sup>4</sup> In Amendment No. 1, the Exchange described additional data relating to complex orders submitted through AIM and provided additional support for its proposal to approve the aspects of AIM currently operating on a pilot basis as applicable to complex orders. To promote transparency of its proposed amendment, when CBOE filed Amendment No. 1 with the Commission, it also submitted Amendment No. 1 as a comment letter to the file, which the Commission posted on its website and placed in the public comment file for SR-CBOE-2016-084 (available at <https://www.sec.gov/comments/sr-cboe-2016-084/cboe2016084-1475098-130456.pdf>). The Exchange also posted a copy of its Amendment No. 1 on its website

from interested persons, and is approving the proposed rule change, as modified by Amendment No. 1, on an accelerated basis.

## II. Description of the Proposal

AIM exposes certain orders electronically to an auction process to provide these orders with the opportunity to receive an execution at an improved price.<sup>5</sup> In addition, the AIM auction process for FLEX Options (“FLEX AIM”) exposes certain FLEX Options orders electronically to an auction process to provide these orders with the opportunity to receive an execution at an improved price.<sup>6</sup> The AIM and FLEX AIM auctions are available only for orders that a Trading Permit Holder represents as agent (“Agency Order”) and for which a second order of the same size as the Agency Order (and on the opposite side of the market) is also submitted (effectively stopping the Agency Order at a given price).

Three components of AIM were approved by the Commission on a pilot basis (the “Pilot”): (1) that there is no minimum size requirement for orders to be eligible for the AIM; (2) that the AIM will conclude prematurely anytime there is a quote lock on the Exchange pursuant to Rule 6.45A(d);<sup>7</sup> and (3) that there is no minimum size requirement for orders to be eligible for the FLEX AIM.<sup>8</sup> In connection with the Pilot, the Exchange has provided certain data to the Commission to provide supporting evidence that, among other things, there is meaningful

---

<http://www.cboe.com/aboutcboe/legal/submittedsecfilings.aspx>), when it filed it with the Commission.

<sup>5</sup> See CBOE Rule 6.74A. See also Securities Exchange Release No. 53222 (February 3, 2006), 71 FR 7089 (February 10, 2006) (SR-CBOE-2005-60) (“AIM Approval Order”).

<sup>6</sup> See Securities Exchange Release No. 66702 (March 30, 2012), 77 FR 20675 (April 5, 2012) (SR-CBOE-2011-123) (“FLEX AIM Approval Order”).

<sup>7</sup> A quote lock occurs when a CBOE Market-Maker’s quote interacts with the quote of another CBOE Market-Maker (i.e., when internal quotes lock).

<sup>8</sup> The pilot for the FLEX AIM auction process was modeled after the pilot for non-FLEX Options. See FLEX AIM Approval Order, *supra* note 6.

competition for all size orders and that there is an active and liquid market functioning on the Exchange outside of the AIM.<sup>9</sup> The Pilot is currently set to expire on January 18, 2017.<sup>10</sup> The Exchange proposes to make the Pilot permanent.

A. No Minimum Size Requirement Pilot

In support of its proposal, and in addition to data submitted to the Commission on a monthly and confidential basis since the Pilot's inception, the Exchange has provided the Commission with data for AIM executions from January through June 2015 (the "Report").<sup>11</sup> The Exchange believes the data provides evidence that AIM offers meaningful competition for all size orders and that there is an active and liquid market functioning on the Exchange outside of AIM.<sup>12</sup> The Exchange further notes that the data provided in the Report demonstrates the price improvement benefits of AIM.<sup>13</sup> According to the Exchange, approving the no minimum size pilot on a permanent basis will allow AIM to continue to offer meaningful price improvement and will not have an adverse effect on the market functioning on the Exchange outside of AIM.<sup>14</sup>

Specifically, the Report contains eight categories of non-customer and customer auction data, as well as three categories of summary auction data, during the period from January

---

<sup>9</sup> See Interpretation and Policy .03 to CBOE Rule 6.74A and Interpretation and Policy .03 to CBOE Rule 24B.5A.

<sup>10</sup> See Securities Exchange Act Release No. 78316 (July 13, 2016) 81 FR 46975 (July 19, 2016) (SR-CBOE-2016-056).

<sup>11</sup> See Exhibit 3 to SR-CBOE-2016-084.

<sup>12</sup> See Notice, supra note 3, at 90013-14.

<sup>13</sup> See id. The Commission notes that AIM currently requires price improvement for Agency Orders of fewer than 50 contracts. See CBOE Rule 6.74A(a)(3).

<sup>14</sup> See Notice, supra note 3, at 90014.

through June 2015.<sup>15</sup> Each of the eight categories is divided into subcategories based on the spread of the National Best Bid or Offer (“NBBO”) at the time an Auction was initiated. The data is further divided into the number of orders that were auctioned within each particular subcategory. Finally, for each subcategory, the Exchange identified the per contract price improvement that occurred at each NBBO spread, the average number of participants responding to the Auctions plus the initiator, the total volume the initiator received, the average percentage of orders the initiator received, and the percentage of contracts received by the Auction initiator.

The summary of all Auctions demonstrates that AIM offers competition and price improvement because the vast majority of contracts traded via AIM received price improvement beyond the NBBO. Specifically, with regards to Customer AIM auctions, of the 54,243,091 contracts traded via AIM during the Report period, 41,278,408 contracts received price improvement beyond the NBBO.<sup>16</sup> In addition, of the 54,504,717 total contracts traded via AIM during the Report period, 41,514,731 contracts received price improvement beyond the NBBO.<sup>17</sup>

For complex orders that are otherwise eligible for AIM,<sup>18</sup> the AIM eligibility requirements of CBOE Rule 6.74A(a) apply in the same manner as they apply for simple orders.

---

<sup>15</sup> See Exhibit 3 to SR-CBOE-2016-084. The various categories contained in the Report include: (1) Non-Customer Auction / Under 50 Contracts / CBOE not at NBBO; (2) Non-Customer Auction / Under 50 Contracts / CBOE at NBBO; (3) Non-Customer Auction / 50 Contracts and over / CBOE not at NBBO; (4) Non-Customer Auction / 50 Contracts and over / CBOE at NBBO; (5) Customer Auction / Under 50 Contracts / CBOE not at NBBO; (6) Customer Auction / Under 50 Contracts / CBOE at NBBO; (7) Customer Auction / 50 Contracts and over / CBOE not at NBBO; (8) Customer Auction / 50 Contracts and over / CBOE at NBBO; (9) Summary of all Non-Customer Auctions for the Period; (10) Summary of all Customer Auctions for the Period; and (11) Summary of all Auctions for the Period.

<sup>16</sup> See Exhibit 3 to SR-CBOE-2016-084.

<sup>17</sup> See *id.*

<sup>18</sup> A “complex order” is any order involving the execution of two or more different options series in the same underlying security occurring at or near the same time in a ratio that is

Thus, a complex order may be executed via AIM at a net debit or net credit price provided, for example, that an Agency Order that is a complex order of 50 contracts or more (as determined by the size of the smallest leg) is stopped at the better of the NBBO or the Agency Order's limit price (if the order is a limit order).<sup>19</sup> Similarly, a complex order of fewer than 50 contracts (as determined by the size of the smallest leg) may be executed via AIM at a net debit or net credit price provided that the Agency Order is stopped at the better of (A) the NBBO price improved by one minimum price improvement increment, which increment shall be determined by the Exchange but may not be smaller than one cent; or (B) the Agency Order's limit price (if the order is a limit order).<sup>20</sup>

In September 2016, there were 5,982 complex orders processed via AIM with an order size of 50 contracts or more (as determined by the size of the smallest leg), and there were 214,986 complex orders processed via AIM with an order size of fewer than 50 contracts (as determined by the size of the smallest leg).<sup>21</sup> With regards to having no minimum size requirement for orders to be eligible for the Auction, the Exchange believes small complex orders benefit from the price improvement offered by AIM in the same manner that small simple orders benefit from the price improvement offered by AIM, and that it is therefore appropriate to

---

equal to or greater than one-to-three (.333) and less than or equal to three-to-one (3.00) (or such lower ratio as may be determined by the Exchange on a class-by-class basis) and for the purpose of executing a particular investment strategy. For the purpose of applying the aforementioned ratios to complex orders comprised of both mini-option contracts and standard option contracts, ten (10) mini-option contracts will represent one (1) standard option contract. Only those complex orders with no more than the applicable number of legs, as determined by the Exchange on a class-by-class basis, are eligible for processing. See CBOE Rule 6.53C(a)(1).

<sup>19</sup> See CBOE Rule 6.74A(a)(2).

<sup>20</sup> See CBOE Rule 6.74A(a)(3). The Commission notes that, as with simple orders, AIM currently requires price improvement for complex Agency Orders where the smallest leg is fewer than 50 contracts.

<sup>21</sup> See Amendment No. 1.

approve the no minimum size pilot on a permanent basis.<sup>22</sup> The Exchange believes that, in addition to the simple order market, the complex order market both within and outside of AIM is robust, and therefore it is appropriate to approve the no minimum size pilot on a permanent basis.

B. Early Conclusion of the AIM

CBOE Rule 6.74A(b)(2)(E) provides that the AIM will conclude prematurely anytime there is a quote lock on the Exchange pursuant to CBOE Rule 6.45A(d). This condition is operating as part of the current Pilot.<sup>23</sup>

As with the no minimum size requirement, the Exchange has gathered data on the number of times an AIM auction was terminated early because of a quote lock on the Exchange pursuant to CBOE Rule 6.45A(d). From January through June 2015, for example, there were less than two Auctions ended early per month because of a quote lock. Thus, for both simple and complex orders, due to the infrequency with which a quote lock terminates an AIM auction, the Exchange believes permanent approval of the pilot program to end AIM auctions early when there is a quote lock on the Exchange will have a de minimis impact on the marketplace.<sup>24</sup>

C. FLEX AIM Pilot

Currently, in order to initiate a FLEX AIM auction, the initiating Trading Permit Holder must stop the entire Agency Order as principal or with a solicited order at the better of the BBO or the Agency Order's limit price. For purposes of CBOE Chapter XXIVB, the term "BBO" means the best bid or offer, or both, as applicable, entered in response to a Request for Quotes

---

<sup>22</sup> See id.

<sup>23</sup> See Interpretation and Policy .06 to CBOE Rule 6.74A.

<sup>24</sup> See Notice, supra note 3, at 90014. See also Amendment No. 1. The Exchange further notes that modifying the "Quote Lock" timer, which allows quotes from two or more CBOE Market-Makers to remain locked for a given time interval prior to trading with one another, will not impact AIM. See CBOE Rule 6.45A(d)(i)(B) and RG16-158.

(“RFQ”) or resting in the electronic book.<sup>25</sup> According to the Exchange, generally speaking, there is no existing BBO prior to a FLEX AIM because there either has not been an RFQ or a FLEX Order with the same terms as the order to be auctioned in FLEX AIM.<sup>26</sup> Therefore, the Exchange notes, the data does not show observable price improvement beyond the BBO because, generally speaking, no BBO exists prior to a FLEX AIM.<sup>27</sup> The Exchange has proposed to modify its FLEX AIM rules to require the Agency Order to be stopped at the better of the BBO price improved by one minimum price increment or the Agency Order’s limit price, although the Exchange does not believe there will be any difference in the way FLEX AIM functions. The Exchange notes that there likely will continue to be no BBO prior to a FLEX AIM; however, the Exchange believes FLEX AIM will continue to offer the possibility for price improvement beyond the initiator’s stop price.<sup>28</sup>

### III. Discussion and Commission Findings

After careful review, the Commission finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange and, in particular, with Section 6(b) of the Act.<sup>29</sup> In particular, the Commission finds that the proposed rule change is consistent with Section 6(b)(5) of the Act,<sup>30</sup>

---

<sup>25</sup> See CBOE Rule 24B.1(a). RFQ is defined as the initial request supplied by a Submitting Trading Permit Holder to initiate FLEX bidding and offering. See CBOE Rule 24B.1(r).

<sup>26</sup> FLEX Order is defined as (i) FLEX bids and offers entered by FLEX Market-Makers and (ii) orders to purchase and orders to sell FLEX Options entered by FLEX Traders, in each case into the electronic book. See CBOE Rule 24B.1(j).

<sup>27</sup> See Notice, supra note 3, at 90014.

<sup>28</sup> See id.

<sup>29</sup> 15 U.S.C. 78f(b). In approving this proposed rule change, the Commission has considered the proposed rule’s impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

<sup>30</sup> 15 U.S.C. 78f(b)(5).

which requires, among other things, that the rules of a national securities exchange 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 regulating, clearing, settling, processing information with respect to, and 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 customers, issuers, brokers and dealers.

As part of its proposal, the Exchange provided summary data on Exhibit 3 of its filing for the period January through June 2015, which the Exchange and Commission both publicly posted on their respective websites. Among other things, this data is useful in assessing the level of price improvement in the Auction, in particular for orders of fewer than 50 contracts; the degree of competition for order flow in such Auctions; and a comparison of liquidity in the Auctions with liquidity on the Exchange generally.<sup>31</sup> Based on the data provided by the Exchange, the Commission believes that the Exchange's price improvement auction generally delivers a meaningful opportunity for price improvement to orders, including orders for fewer than 50 contracts. In addition, the Commission notes that AIM currently requires price improvement for Agency Orders of fewer than 50 contracts.<sup>32</sup> The Commission further believes that the Exchange's proposed modification to the FLEX AIM to require the Agency Order to be stopped at the better of the BBO price improved by one minimum price increment or the Agency Order's limit price will better align the FLEX AIM auction rules with those applicable to standard AIM auctions and will provide price improvement for additional FLEX AIM orders.

The Commission believes that the data provided by the Exchange support its proposal to make the Pilot permanent. The data demonstrate that the Auction generally provides price

---

<sup>31</sup> See Exhibit 3 to SR-CBOE-2016-084.

<sup>32</sup> See CBOE Rule 6.74A(a)(3).



improvement opportunities to orders, including orders of retail customers; that there is meaningful competition for orders on the Exchange; and that there exists an active and liquid market functioning on the Exchange outside of the Auction.<sup>33</sup> Thus, the Commission has determined to approve the Exchange's proposed revisions to Interpretations and Policies .03 and .06 to Rule 6.74A, Rule 24B.5A(a)(2), and Interpretations and Policies .03 to Rule 24B.5A, and to approve the Pilot, as proposed to be modified, on a permanent basis.

#### IV. Solicitation of Comments on Amendment No. 1

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether Amendment No. 1 is consistent with the Act. Comments may be submitted by any of the following methods:

##### Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-CBOE-2016-084 on the subject line.

##### Paper comments:

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-CBOE-2016-084. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the

---

<sup>33</sup> See Exhibit 3 to SR-CBOE-2016-084.

proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-CBOE-2016-084 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

V. Accelerated Approval of Proposed Rule Change, as Modified by Amendment No. 1

The Commission finds good cause to approve the proposed rule change, as modified by Amendment No. 1, prior to the 30th day after the date of publication of the notice of Amendment No. 1 in the Federal Register. As noted above, in Amendment No. 1, the Exchange described additional data relating to complex orders submitted through AIM and provided further support for its proposal to approve the aspects of AIM currently operating on a pilot basis as applicable to complex orders. Because Amendment No. 1 provides additional support for the Exchange's original proposal and does not make any substantive changes to the proposal, the Commission believes that good cause exists for accelerated approval of the proposed rule change, as modified by Amendment No. 1. The Commission further notes that the original proposal was subject to a 21 day comment period and no comments were received on the proposal. Accordingly, the

Commission finds good cause, pursuant to Section 19(b)(2) of the Act,<sup>34</sup> to approve the proposed rule change prior to the 30th day after the date of publication of the notice of Amendment No. 1 in the Federal Register.

VI. Conclusion

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Act,<sup>35</sup> that the proposed rule change (SR-CBOE-2016-084), as modified by Amendment No. 1, be and hereby is approved on an accelerated basis.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>36</sup>

Eduardo A. Aleman  
Assistant Secretary

---

<sup>34</sup> 15 U.S.C. 78s(b)(2).

<sup>35</sup> 15 U.S.C. 78s(b)(2).

<sup>36</sup> 17 CFR 200.30-3(a)(12).