

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-84079; File No. SR-NYSEArca-2018-63)

September 11, 2018

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing of Proposed Rule Change to Amend NYSE Arca Rule 1.1 Official Closing Price to Exclude from the TWAP Calculation a Midpoint That Is Based on an NBBO That Is Not Reflective of the Security's True and Current Value

Pursuant to Section 19(b)(1)<sup>1</sup> of the Securities Exchange Act of 1934 (the "Act")<sup>2</sup> and Rule 19b-4 thereunder,<sup>3</sup> notice is hereby given that on August 29, 2018, NYSE Arca, Inc. (the "Exchange" or "NYSE Arca") filed with the Securities and Exchange Commission (the "Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend NYSE Arca Rule 1.1(II) ("Official Closing Price"). The proposed change is available on the Exchange's website at [www.nyse.com](http://www.nyse.com), at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of those statements may be examined at the places

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

<sup>2</sup> 15 U.S.C. 78a.

<sup>3</sup> 17 CFR 240.19b-4.

specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange recently amended Rule 1.1(II) to establish how the Official Closing Price is determined for an Exchange-listed security that is a Derivative Securities Product<sup>4</sup> if the Exchange does not conduct a Closing Auction or if a Closing Auction trade is less than a round lot.<sup>5</sup> The purpose of the OCP Filing was to adopt a method for deriving the Official Closing Price that would be more indicative of the actual value of the securities that are subject to the rule, in particular for listed securities that are thinly traded or generally illiquid. Prior to the recent rule change, the Official Closing Price for such securities would have been based on a last-sale trade that may have been hours, days, or even months old and therefore not necessarily indicative of their true and current value. The OCP Filing adopted a revised calculation to derive the value for securities that have a stale last-price. Specifically, for such securities, the Official Closing Price would be derived by adding a percentage of the time-weighted average price (“TWAP”) of the NBBO midpoint measured over the last five minutes before the end of Core

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<sup>4</sup> With respect to equities traded on the Exchange, the term "Derivative Securities Product" means a security that meets the definition of "derivative securities product" in Rule 19b-4(e) under the Securities Exchange Act of 1934. See NYSE Arca Rule 1.1(k). For purposes of Rule 19b-4(e), a “derivative securities product” means any type of option, warrant, hybrid securities product or any other security, other than a single equity option or a security futures product, whose value is based, in whole or in part, upon the performance of, or interest, in, an underlying instrument. 17 CFR 240.19b-4(e).

<sup>5</sup> See Securities Exchange Act Release No. 82907 (March 20, 2018), 83 FR 12980 (March 26, 2018) (SR-NYSEArca-2018-08) (Approval Order) (the “OCP Filing”).

Trading Hours and a percentage of the last consolidated last-sale eligible trade before the end of Core Trading Hours on that trading day.<sup>6</sup>

The Exchange proposes to further refine Rule 1.1(l)(1)(B) to exclude from the TWAP calculation a midpoint that is based on an NBBO that is not reflective of the security's true and current value. As proposed, the Exchange would exclude a NBBO midpoint from the calculation of the Official Closing Price if that midpoint, when multiplied by ten percent (10%), is less than the spread of that NBBO. The Exchange would also exclude a crossed NBBO from the calculation.

The proposed amendment to adopt a NBBO midpoint check is designed to validate whether an NBBO used in the calculation of the Official Closing Price bears a relation to the value of the underlying security. Under the proposal, the Exchange would calculate the midpoint of the NBBO and then multiply the midpoint by ten percent (10%) and compare this value to the spread of the NBBO. If the value of the midpoint when multiplied by ten percent (10%) is less than the spread of that NBBO, the Exchange would exclude the NBBO midpoint from the calculation. The Exchange believes that if the NBBO spread is greater than the value of the midpoint when multiplied by ten percent (10%), it would indicate that the spread is too wide, and therefore not representative of the value of the security. For example, assume the percentage for purposes of the NBBO midpoint calculation is set at 10%. Assume further that the NBBO is \$9.00 x \$11.00. The NBBO spread is therefore \$2.00, the midpoint of the NBBO is \$10.00, and the value of the midpoint is \$1.00 (10% of \$10.00). Given that the spread of the NBBO (\$2.00) is greater than the value of the NBBO midpoint (\$1.00), the \$9.00 x \$11.00 NBBO would be excluded from the calculation. Conversely, assume the NBBO is \$9.51 x \$10.49. The NBBO

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<sup>6</sup> See Rule 1.1(l)(1)(B)(i) - (vi).

spread is therefore \$0.98, the midpoint of the NBBO is \$10.00, and the value of the midpoint is \$1.00 (10% of 10.00). Given that the spread of the NBBO (\$0.98) is less than the value of the NBBO midpoint (\$1.00), the \$9.51 x \$10.49 NBBO would be included in the calculation.

The proposed amendment is similar to, and based on, the term “Auction NBBO” as defined in Rule 7.35-E(a)(5).<sup>7</sup> The Exchange currently uses the Auction NBBO as a basis for determining the Auction Reference Price for the Core Open Auction.<sup>8</sup> If there is no Auction NBBO, then the Exchange uses the prior trading day’s Official Closing Price. To qualify as an Auction NBBO for the Core Open Auction, there must be both a bid and an offer that is not zero, the NBBO cannot be crossed, and the midpoint of the NBBO when multiplied by a designated percentage, cannot be greater than or equal to the spread of the NBBO.<sup>9</sup> Although Rule 7.35-E(a)(5) currently specifies that the designated percentage used for determining the Auction NBBO for the Core Open Auction would be determined by the Exchange upon prior notice to ETP Holders, the Exchange proposes to codify within the proposed amendment to Rule 1.1(II)(1)(B) the percentage used in the TWAP calculation for the Official Closing Price at ten percent (10%).

The Exchange believes that the proposed NBBO midpoint check, which uses the same methodology as determining an Auction NBBO for the Core Open Auction, achieves the same purpose as the Auction NBBO because it would eliminate use of an NBBO that does not reflect the true value of a security. For the same reasons that the Exchange would not use an NBBO that does not pass the Auction NBBO test as an Auction Reference Price, the Exchange similarly

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<sup>7</sup> See Rule 7.35-E(a)(5). The term “Auction NBBO” means an NBBO that is used for purposes of pricing an auction.

<sup>8</sup> The Exchange also uses the Auction NBBO for determining the Indicative Match Price in specified situations for the Closing Auction. See Rule 7.35-E(a)(8)(C).

<sup>9</sup> See Rule 7.35-E(a)(5).

proposes that if an NBBO fails that same test, it would not be used for determining the TWAP calculation for the Official Closing Price of a security.

The Exchange also proposes a non-substantive clarifying change to Rule 1.1(II). Under Rule 1.1(II), if the Official Closing Price cannot be determined under paragraph (A) of Rule 1.1(II), then the procedure under paragraph (B) would be utilized. If the Official Closing Price cannot be determined under paragraphs (A) and (B) of Rule 1.1(II), then the procedure under paragraph (C) would be utilized. And lastly, if the Official Closing Price cannot be determined under paragraphs (A), (B), or (C) of Rule 1.1(II) then the procedure under paragraph (D) would be utilized. To reflect this decision tree methodology, the Exchange proposes to adopt rule text to reflect that the process under paragraph (D) of Rule 1.1(II)(1) would be utilized if the Official Closing Price cannot be determined under paragraphs (1)(A), (B) or (C) of the Rule. The Exchange is not proposing any substantive change to paragraph (D) of Rule 1.1(II)(1). The Exchange believes that the proposed rule change would provide additional clarity in the Rules and reflect current practice for the purpose of determining the Official Closing Price.

Because of the technology changes associated with this proposed rule change, the Exchange will announce the implementation date of this proposed rule change by Trader Update. The Exchange anticipates that the implementation date will be in the first quarter of 2019.

## 2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,<sup>10</sup> in general, and furthers the objectives of Section 6(b)(5) of the Act,<sup>11</sup> in particular, in that it is 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

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<sup>10</sup> 15 U.S.C. 78f(b).

<sup>11</sup> 15 U.S.C. 78f(b)(5).

facilitating transactions in securities, and to remove impediments to and perfect the mechanism of a free and open market and a national market system.

The Exchange believes that the proposed rule change would remove impediments to and perfect the mechanism of a free and open market and a national market system because creating a process to validate the NBBO midpoint to determine the Official Closing Price by comparing the midpoint value to the spread of the NBBO, and if the NBBO midpoint is not valid, to exclude it from the calculation, would ensure that the NBBO is sufficiently tight to guarantee that the midpoint of the NBBO would be a meaningful and accurate basis for determining the Official Closing Price. The Exchange also believes the proposed refined methodology for determining the Official Closing Price would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would provide for a more up-to-date indication of the value of the underlying security if there have not been any last-sale eligible trades leading in to the close of trading. The Exchange believes the proposed NBBO midpoint check for purposes of determining the Official Closing Price would also provide a closing price that more accurately reflects the most recent and reliable market information possible. As noted above, the Exchange already uses this methodology for determining whether an NBBO can be used as an Auction Reference Price for the Core Open Auction.

The Exchange further believes that the proposed TWAP calculation would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would provide for a more robust mechanism to determine the value of an affected security for purposes of determining an Official Closing Price. By calculating the midpoint of the NBBO and then multiplying the midpoint by ten percent (10%) and comparing this value to the spread of the NBBO, the Exchange believes that the proposed methodology

would result in the price of a security that is even more reflective of the true and current value of such security than the methodology in place today.

The Exchange believes the proposed non-substantive amendment to current Rule 1.1(II)(1)(D) is intended to provide additional clarity and detail and will eliminate confusion among market participants, which is in the interests of all investors and the general public.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange believes that the proposed rule change will not impose any burden on competition because the proposal would simply provide for a more efficient manner to determine the Official Closing Price for a Derivative Securities Product.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the Federal Register or up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

- (A) by order approve or disapprove the proposed rule change, or
- (B) institute proceedings to determine whether the proposed rule change should be disapproved.

#### IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change 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-NYSEArca-2018-63 on the subject line.

##### Paper comments:

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

All submissions should refer to File Number SR-NYSEArca-2018-63. 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 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. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment

submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-NYSEArca-2018-63 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>12</sup>

Eduardo A. Aleman  
Assistant Secretary

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

Additions: Underlined

Deletions: [Bracketed]

Rules of the NYSE Arca, Inc.

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**RULE 1 DEFINITIONS**

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**Official Closing Price**

(ll) With respect to equities traded on the Exchange, the term "Official Closing Price" means the reference price to determine the closing price in a security for purposes of Rule 7-E Equities Trading. The Official Closing Price is determined as follows:

(1) For Auction-Eligible Securities, as defined in Rule 7.35-E(a)(1),

(A) the Official Closing Price is the price established in a Closing Auction of one round lot or more on a trading day.

(B) If the Official Closing Price for an Exchange-listed security that is a Derivative Securities Product cannot be determined under paragraph (1)(A) of this Rule, the Official Closing Price for such security will be derived by adding a percentage of the time-weighted average price ("TWAP") of the NBBO midpoint measured over the last 5 minutes before the end of Core Trading Hours and a percentage of the last consolidated last-sale eligible trade before the end of Core Trading Hours on that trading day. The percentages assigned to each will depend on when the last consolidated last-sale eligible trade occurs. If the last consolidated last-sale eligible trade occurred:

(i) prior to 5 minutes before the end of Core Trading Hours, the TWAP will be given 100% weighting;

(ii) between 5 minutes and 4 minutes before the end of Core Trading Hours, the TWAP will be given 40% weighting and the consolidated last-sale eligible trade will be given 60% weighting;

(iii) between 4 minutes and 3 minutes before the end of Core Trading Hours, the TWAP will be given 30% weighting and the consolidated last-sale eligible trade will be given 70% weighting;

(iv) between 3 minutes and 2 minutes before the end of Core Trading Hours, the TWAP will be given 20% weighting and the consolidated last-sale eligible trade will be given 80% weighting;

(v) between 2 minutes and 1 minute before the end of Core Trading Hours[e], the TWAP will be given 10% weighting and the consolidated last-sale eligible trade will be given 90% weighting;

(vi) during the last 1 minute before the end of Core Trading Hours, the TWAP will be given 0% weighting and the consolidated last-sale eligible trade will be given 100% weighting.

For purposes of deriving the Official Closing Price pursuant to paragraph (1)(B) of this Rule, the Exchange will exclude a NBBO midpoint from the calculation if that midpoint, when multiplied by ten percent (10%), is less than the spread of that NBBO. A crossed NBBO would also be excluded from the calculation.

(C) If the Official Closing Price cannot be determined under paragraphs (1)(A) or (B) of this Rule, the most recent consolidated last-sale eligible trade during Core Trading Hours on that trading day will be the Official Closing Price.

(D) If the Official Closing Price cannot be determined under paragraphs (1)(A), (B) or (C) of this Rule and [I]if there were no consolidated last-sale eligible trades during Core Trading Hours on that trading day, the Official Closing Price will be the prior trading day's Official Closing Price.

(E) For a security that has transferred its listing to NYSE Arca and does not have any consolidated last-sale eligible trades on its first trading day, the Official Closing Price will be the prior day's closing price disseminated by the primary listing market that previously listed such security.

(F) For a security that is a new listing and does not have any consolidated last-sale eligible trades on its first trading day, the Official Closing Price will be based on a derived last sale associated with the price of such security before it begins trading on the Exchange.

(2) – (5) No Change.

An Official Closing Price may be adjusted to reflect corporate actions or a correction to a closing price, as disseminated by the primary listing market for the security.

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