2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with the objectives of Section 6 of the Exchange Act of 1934 (the ''Act''),[7] in general, and furthers the objectives of Section 6(b)(4),[8] in particular, as it is designed to provide for the equitable allocation of reasonable dues, fees and other charges among its Members, issuers and other persons using its facilities.

The Exchange believes the proposal to modify fee code X to explicitly provide that it is applicable to routed orders that add and remove liquidity on the destination exchange is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers. Specifically, the proposal is intended only to make a clarifying change to the Fee Schedule and involves no substantive change.

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 its proposal to clarify that fee code X is applicable to liquidity adding and removing orders will have no impact on competition as it involves no substantive change, but merely is a clarifying change to the existing Fee Schedule.

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

The Exchange neither solicited nor received comments on the proposed rule change.

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

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A) of the Act[9] and paragraph (f) of Rule 19b–4[10] thereunder. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission will institute proceedings to determine whether the proposed rule change should be approved or 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 email to *rule-comments@sec.gov.* Please include File Number SR–CboeEDGA–2022–020 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–CboeEDGA–2022–020. This file number should be included on the subject line if email 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–CboeEDGA–2022–020 and should be submitted on or before December 28, 2022.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[11]

Sherry R. Haywood,

Assistant Secretary.

[FR Doc. 2022–26538 Filed 12–6–22; 8:45 am]

BILLING CODE 8011–01–P

[7] 15 U.S.C. 78f.

[8] 15 U.S.C. 78f(b)(4).

[9] 15 U.S.C. 78s(b)(3)(A).

[10] 17 CFR 240.19b–4(f).

[11] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–96416; File No. SR–IEX–2022–06]

Self-Regulatory Organizations; Investors Exchange LLC; Order Granting Approval of a Proposed Rule Change To Amend Rule 11.190(g) To Provide an Alternative Calculation for Non-Displayed Pegged Order Types for Determining Whether a Quote Instability Condition Exists

December 1, 2022.

I. Introduction

On September 27, 2022, the Investors Exchange LLC (''IEX'' or the ''Exchange'') filed with the Securities and Exchange Commission (''Commission''), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Exchange Act'')[1] and Rule 19b-4 thereunder,[2] a proposed rule change to provide an alternative calculation for non-displayed pegged order types to determine whether a quote instability condition exists for purposes of determining when the Exchange's proprietary Crumbling Quote Indicator (''CQI'') is to be triggered. The proposed rule change was published for comment in the **Federal Register** on October 17, 2022.[3] The Commission received no comments on the proposed rule change. This order approves the proposed rule change.

II. Description of the Proposed Rule Change

Current CQI Operation

Pursuant to IEX Rule 11.190(g), the Exchange utilizes quoting activity of eight away exchanges' Protected Quotations[4] and a mathematical

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] *See* Securities Exchange Act Release No. 96014 (October 11, 2022), 87 FR 62903 (''Notice'').

[4] *See* IEX Rule 1.160(bb) (defining ''Protected Quotation'' as an automated quotation that is calculated by IEX to be the best bid or best offer of an exchange). Current IEX Rule 11.190(g) uses the following eight exchanges' Protected Quotations: New York Stock Exchange LLC, the Nasdaq Stock Market LLC, NYSE Arca, Inc., Nasdaq BX, Inc., Cboe BYX Exchange, Inc., Cboe Bats BZX Exchange, Inc., Cboe EDGA Exchange, Inc., and

Continued

calculation to assess the probability of an imminent change to the current Protected NBB [5] to a lower price or imminent change to the current Protected NBO [6] to a higher price for a particular security. When the quoting activity meets predetermined criteria, the System [7] treats the quote as not stable (''quote instability'' or a ''crumbling quote'') and the CQI is then ''on'' at that price level for two milliseconds. During all other times, the quote is considered stable and the CQI is ''off''. The System independently assesses the stability of the Protected NBB and Protected NBO for each security. IEX characterizes these order types and the CQI functionality as being designed to ''counter the costs of 'adverse selection' that participants supplying liquidity incur when their orders are executed at worse prices as a result of certain speed-based trading strategies.'' [8]

This proposal applies to the CQI formula that informs the exercise of ''discretion'' by Discretionary Peg (''D-Peg'') [9] orders, Primary Peg (''P-Peg'') [10] orders, and Corporate Discretionary Peg (''C-Peg'') orders.[11] Each of those resting peg order types, all of which are non-displayed, passively rest at prices slightly less aggressive than the near-side quote. When the quote is stable, those peg orders exercise price discretion by ''jumping'' to a more aggressive price to interact with an active incoming liquidity taking order when the quote is stable. However, when the CQI comes on, those orders do not exercise price discretion and instead continue to rest passively. Specifically, D-Peg, P-Peg, and C-Peg orders rest at a pegged price that is the less aggressive of one minimum price variant (''MPV'') [12] less aggressive than the primary quote (*i.e.,* one MPV below (above) the NBB [13] (NBO [14]) for buy (sell) orders) or the order's limit price, if any.[15] In addition, when the CQI is on at the NBB (in the case of a buy order) or NBO (in the case of a sell order), P-Peg orders are restricted by the System from exercising price discretion to trade at the quote instability determination price level (the ''CQI Price''), and D-Peg and C-Peg orders are restricted by the System from exercising price discretion to trade at the CQI Price or at more aggressive prices than the CQI Price.

Proposed Alternative CQI Calculation

As proposed, Users [16] of D-Peg, P-Peg and C-Peg orders will be able to designate whether the order's price will be adjusted using the existing quote instability calculation (hereinafter referred to as the ''Current CQI Calculation'') or the new proposed alternative quote instability calculation (hereinafter referred to as the ''Alternative CQI Calculation''). According to the Exchange, the Alternative CQI Calculation is ''designed to incrementally increase the coverage of the quote instability calculation in predicting whether a particular quote is unstable by adjusting the logic underlying the quote instability calculation and introducing enhanced functionality designed to increase the number of crumbling quotes identified, while maintaining the quote instability calculation's accuracy in predicting the direction and timing of the next price change in the NBB or NBO, as applicable.'' [17]

The Alternative CQI Calculation applies four separate rule categories of Protected Quotation changes, each encompassing one or more sub-rules (''quote instability rules''), to determine whether the System should trigger the CQI. When a quote instability rule is ''active,'' as described below, the CQI will trigger when the rule is ''true'' thus indicating a potential crumbling quote. These quote instability rules are grouped into the following four categories:

1. *Disappearing Bids/Offers:* Four separate rules look at when the Signal Exchanges [18] fall off the best prices.

2. *Quote Size:* Two separate rules look at size imbalances between buys and sells at the best price on the Signal Exchanges.

3. *Locked or Crossed Markets:* This single rule looks for locked and crossed conditions at a Signal Exchange.

4. *Quotation Price:* Two separate rules evaluate changes in the best prices on the Signal Exchanges.[19]

Overall, there are several notable differences between the Alternative CQI Calculation and the Current CQI Calculation. First, the Alternative CQI Calculation expands the number of exchange protected quotes (*i.e.,* Signal Exchanges) that are evaluated by the System from eight exchanges to eleven.[20] In addition, the Alternative CQI Calculation can activate crumbling quote protection for one or both sides of the market (*e.g.,* it can determine a crumbling quote to exist on the bid side and, while that crumbling quote protection is active, separately and concurrently determine a crumbling quote to exist on the offer side), whereas the Current CQI Calculation only activates the CQI for one side of the market at a time.[21] Further, under the Current CQI Calculation, the Exchange only analyzes the relevant prices at the Signal Exchanges, whereas the Alternative CQI Calculation will also take into account quotation *sizes* at the eleven away exchanges under the Quote Size rules.

In addition, the Alternative CQI Calculation increases the minimum time period between CQI determinations (*i.e.,* when a new CQI can trigger during the two millisecond ''on'' period). Currently, the System will keep the CQI in effect for two milliseconds, unless, after 200 microseconds, a new determination is made by the System that the quote continues to crumble, in which case the CQI will extend for another two milliseconds from that point. Under the Alternative CQI Calculation, the CQI will also remain in effect for two milliseconds, but a determination to extend the CQI cannot be made until at least 250 microseconds have passed. The Exchange states that

Cboe EDGX Exchange, Inc. (collectively, ''Signal Exchanges'').

[5] *See* IEX Rule 1.160(cc).

[6] *See* IEX Rule 1.160(cc).

[7] *See* IEX Rule 1.160(nn).

[8] Notice, *supra* note 3, at 62904.

[9] *See* IEX Rule 11.190(b)(10).

[10] *See* IEX Rule 11.190(b)(8).

[11] *See* IEX Rule 11.190(b)(16). Note that C-Peg orders can only be buy orders, so any discussion of D-Peg sell orders does not apply to C-Peg orders. This proposal does not apply to Discretionary Limit (''D-Limit'') orders, which can be displayed. *See* IEX Rule 11.190(b)(10).

[12] *See* IEX Rule 11.210.

[13] *See* IEX Rule 1.160(u).

[14] *See* IEX Rule 1.160(u).

[15] C-Peg orders are also constrained by the consolidated last sale price of the security, and therefore cannot trade, book, or exercise discretion at a price that is more aggressive than the consolidated last sale price. *See* IEX Rule 11.190(b)(16).

[16] *See* IEX Rule 1.160(qq).

[17] Notice, *supra* note 3, at 62904.

[18] *See infra* note 20 and accompanying text.

[19] *See* Notice, *supra* note 3, at 62905–07 for the Exchange's detailed discussion of the proposed quote instability rules.

[20] The additional Signal Exchanges are MIAX PEARL, LLC, MEMX LLC, and Nasdaq Phlx LLC.

[21] More specifically, the current rule text reads as follows: ''Only one determination may be in effect at any given time for a particular security. A new determination may be made after at least 200 microseconds has elapsed since a preceding determination, or a price change on either side of the Protected NBBO occurs, whichever is first.'' The new rule text for the Alternative CQI Calculation reads: ''Quote Instability Determinations are made separately for the Protected NBB and Protected NBO, so it is possible for zero, one or both of the Protected NBB and Protected NBO to be subject to a quote instability determination concurrently.'' Additionally, the revised rule text states that ''[a] determination that the Protected NBB for a particular security is unstable does not impact the System's ability to determine that the Protected NBO for that same security is also unstable, and vice versa.''

CQI triggers in extremely rapid succession are unnecessary to continuously restrict discretion across successive NBBO changes, and that increasing what it refers to as the CQI ''cooldown period'' from 200 microsecond to 250 microseconds before the System can make another quote instability determination will reduce the technical processing burden on the System.[22]

In general, the Exchange explains that the current quote instability calculation ''utilizes a logistic regression model with multiple coefficients and variables that must exceed a pre-defined threshold in order for the System to treat the quote as unstable.'' The Exchange characterizes the new Alternative CQI Calculation as a ''rules-based model'' that ''incorporates and expands on the existing approach.'' [23]

The Alternative CQI Calculation also uses the concept of an activation value (''Activation Value'') for each of the new quote instability rules. As explained in more detail in the Notice, the Activation Values and corresponding thresholds are ''intended to optimize the overall accuracy of the quote instability determinations by providing a mechanism to turn off a particular rule when market conditions are such that it is relatively less accurate in predicting a crumbling quote.'' [24]

Specifically, the Activation Value is a function generally of the number of times the quote moves to a less aggressive price within the two milliseconds ''on'' timeframe following the time the rule was ''True'' (*i.e.,* to assess whether the rule correctly predicted a crumbling quote) and the total number of times the rule was True. Whenever the Activation Value for a given quote instability rule exceeds a fixed predetermined activation threshold specific to that rule (the ''Activation Threshold''), the rule is active (*i.e.,* it is eligible to trigger a quote instability determination when True).

Finally, the proposal sets forth several conforming changes throughout IEX Rule 11.190(b) to establish that Users may utilize one of the two crumbling quote calculations for P-Peg, D-Peg, and C-Peg orders. The Exchange also proposes to amend IEX Rule 11.190(b)(7), which sets forth the Exchange's D-Limit order type, to make clear that a User may only use the Current CQI Calculation when entering a D-Limit order.[25]

III. Discussion and Commission Findings

After careful review, the Commission finds that the Exchange's proposal is consistent with the requirements of the Exchange Act and the rules and regulations thereunder applicable to a national securities exchange.[26] In particular, the Commission finds that the proposed rule change is consistent with Sections 6(b)(5) [27] and 6(b)(8) [28] of the Exchange Act. Section 6(b)(5) of the Exchange Act requires that the rules of a national securities exchange be designed, among other things, to promote just and equitable principles of trade, 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, and not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers. Section 6(b)(8) of the Exchange Act requires that the rules of a national securities exchange not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Exchange Act.

In its filing, the Exchange explains that adding three more Signal Exchanges and also using quotation size data in addition to quotation price data is designed to increase the predictive power and accuracy of the quote instability calculation.[29] Adding additional reference exchanges and considering quoted size in addition to quoted price appear reasonably designed to contribute to the functioning of the crumbling quote indicator consistent with its original design and purpose.

Further, the Exchange states that the use of Activation Thresholds for the Alternative CQI Calculation is designed to optimize the frequency and accuracy of the quote instability calculation by enabling IEX to utilize a broader array of rules that may be predictive of a crumbling quote in certain market conditions but not others.[30] Specifically, IEX states that the proposed activation values and thresholds are designed to ''enable broader coverage while controlling for overall accuracy of the quote instability determinations by providing a mechanism to turn off a particular rule when market conditions are such that it is relatively less accurate in predicting a crumbling quote'' where certain rules with a higher potential to be less accurate have a higher activation threshold before they become active.[31] The Exchange states that it expects the Current and Alternative CQI Calculations to continue to be ''on'' for only a small portion of the trading day.[32] The Exchange further explains that it designed the Alternative CQI Calculation in response to feedback from Users of P-Peg, D-Peg, and C-Peg orders, some of which expressed a desire for additional coverage.[33] If allowed to use the Alternative CQI Calculation, IEX expects that some Users may begin to enter more and larger sized pegged orders on the Exchange.[34]

While the Exchange acknowledges that the Alternative CQI Calculation may trigger more frequently than the current version, it has developed a reasonable method, through the Activation Values and Activation Thresholds, to cause the new rules to be used in those market conditions in which the Exchange expects them to be more accurate in predicting a crumbling quote. To the extent Users see their execution quality for non-displayed orders improve when they use the Alternative CQI Calculation, they may be incentivized to post more non-displayed pegged orders on the Exchange, which in turn will benefit liquidity seeking investors especially during most of the day when the quote is stable and those pegged orders are offering aggressive price improvement to those investors.

Based on the foregoing, the Commission believes that the proposal, including the Alternative CQI Calculation, is appropriately and narrowly tailored to provide a reasonable mechanism for Users of non-displayed peg orders on the Exchange to protect their orders from adverse selection during limited periods of time in specific market conditions. Further, the proposed Alternative CQI Calculation is transparent and fully-disclosed in the rules of the Exchange. While the Exchange uses the phrase ''price discretion'' to describe the operation of the crumbling quote functionality, the Exchange itself retains no discretion to deviate from the confines of the rule, as the rule contains the entirety of the parameters under which the Alternative CQI Calculation

[22] *See* Notice *supra* note 3, at 62907.

[23] *See id.* at 62905.

[24] *See id.* at 62907.

[25] Unlike the non-displayed P-Peg, D-Peg, and C-Peg order types, D-Limit orders can be displayed or non-displayed.

[26] 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).

[27] 15 U.S.C. 78f(b)(5).

[28] 15 U.S.C. 78f(b)(8).

[29] *See* Notice, *supra* note 3, at 62908.

[30] *See id.* at 62907.

[31] *See id.* at 62909.

[32] *See id.*

[33] *See id.* at 62908.

[34] *See id.* at 62909.

will operate. The Exchange's proposal does not otherwise amend any functionality of the affected peg order types.

In addition, because the Alternative CQI Calculation will activate without further action from the User, all Users will benefit equally regardless of their technological capabilities and ability to take action within a short prescribed period. To the extent the Alternative CQI Calculation is successful in incentivizing more firms to post non-displayed peg orders on the Exchange, it will contribute to liquidity that all market participants can access and increase opportunities for investors to receive improved prices on their liquidity taking orders. Accordingly, the proposal promotes just and equitable principles of trade, removes impediments to and perfects the mechanism of a free and open market and a national market, and, in general, protects investors and the public interest.

Finally, the Alternative CQI Calculation cannot be used to trigger the repricing of any displayed orders, specifically, the D-Limit Order type. As such, market participants seeking to execute against displayed liquidity on IEX, including protected quotes, will not be adversely affected by the addition of the Alternative CQI Calculation to the Exchange's rules because use of the Alternative CQI Calculation is limited to the P-Peg, D-Peg, and C-Peg order types.

For the reasons discussed above, the Commission finds that the proposal will not impair access to quotations and is narrowly tailored to not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Exchange Act, and is reasonably designed to remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, protect investors and the public interest. Accordingly, the Commission finds the proposed rule change to be consistent with the Act, including the requirements of Section 6(b)(5) and Section 6(b)(8) of the Act.

IV. Conclusion

It is therefore ordered, pursuant to Section 19(b)(2) of the Exchange Act,[35] that the proposed rule change (SR–IEX–2022–06), be, and it hereby is, approved.

[35] 15 U.S.C. 78s(b)(2).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[36]

Sherry R. Haywood,

Assistant Secretary.

[FR Doc. 2022–26533 Filed 12–6–22; 8:45 am]

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[36] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–96422; File No. SR–BX–2022–024]

Self-Regulatory Organizations; Nasdaq BX, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend the Definition of Short Term Option Series

December 1, 2022.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Act''),[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on November 22, 2022, Nasdaq BX, Inc. (''BX'' or ''Exchange'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. 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 certain rule text within General 2, Organization and Administration; Equity 2. Market Participants; Options 1, General Provisions; Options 4A, Options Index Rules; and Options 10, Doing Business with the Public.

The text of the proposed rule change is available on the Exchange's website at *https://listingcenter.nasdaq.com/rulebook/bx/rules,* 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 Exchange 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 these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

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

1. Purpose

The Exchange proposes to amend the description of the term ''Short Term Option Series'' within Options 1, Section 1, Definitions, to conform the term to Nasdaq ISE, LLC's (''ISE'') term of Short Term Option Series which was recently amended.[3] The Exchange also proposes to amend certain rule text within Options 4A, Section 12, Terms of Index Options Contracts, related to the Short Term Option Series Program. Finally, the Exchange propose certain other non-substantive amendments. Each change is described below.

Short Term Option Series

Options 1, Section 1(a)(58) describes the term ''Short Term Option Series'' as follows:

> The term ''Short Term Option Series'' means a series in an option class that is approved for listing and trading on the Exchange in which the series is opened for trading on any Monday, Tuesday, Wednesday, Thursday or Friday that is a business day and that expires on the Monday, Wednesday or Friday of the next business week, or, in the case of a series that is listed on a Friday and expires on a Monday, is listed one business week and one business day prior to that expiration. If a Tuesday, Wednesday, Thursday or Friday is not a business day, the series may be opened (or shall expire) on the first business day immediately prior to that Tuesday, Wednesday, Thursday or Friday, respectively. For a series listed pursuant to this Rule for Monday expiration, if a Monday is not a business day, the series shall expire on the first business day immediately following that Monday.

ISE's Options 4 rules were recently amended to expand the Short Term Option Series Program to permit the listing and trading of options series with Tuesday and Thursday expirations for options on SPY and QQQ listed pursuant to the Short Term Option Series Program.[4] In conjunction with

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] *See* Securities Exchange Act Release No. 96281 (November 9, 2022), 87 FR 68769 (November 16, 2022) (SR–ISE–2022–18) (Order Granting Approval of a Proposed Rule Change to Amend the Short Term Option Series Program). BX's Options 4 Rules are incorporated by reference to ISE's Options 4 Rules and therefore the approval of ISE's Options 4 rules permit the listing and trading of options series with Tuesday and Thursday expirations for options on SPY and QQQ on BX.

[4] *See* note 3 above. BX's Options 4 Rules are incorporated by reference to ISE's Options 4 Rules.