

# SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-103318; File No. SR-IEX-2025-11]

## Self-Regulatory Organizations; Investors Exchange LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend IEX Rule 11.190(g) to Add a Quote Imbalance Indicator

June 24, 2025.

Pursuant to Section 19(b)(1)<sup>1</sup> of the Securities Exchange Act of 1934 (“Act”)<sup>2</sup> and Rule 19b-4 thereunder,<sup>3</sup> notice is hereby given that, on June 12, 2025, the Investors Exchange LLC (“IEX” or the “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 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

Pursuant to the provisions of Section 19(b)(1) under the Act,<sup>4</sup> and Rule 19b-4 thereunder,<sup>5</sup> the Exchange is filing with the Commission a proposed rule change to amend IEX Rule 11.190(g) to introduce a new proprietary mathematical calculation designed to identify periods of quote imbalance in a particular security. As proposed, Users<sup>6</sup> seeking to employ a relatively passive trading strategy would be able to submit Discretionary Peg (“D-Peg”)<sup>7</sup> and

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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.

<sup>4</sup> 15 U.S.C. 78s(b)(1).

<sup>5</sup> 17 CFR 240.19b-4.

<sup>6</sup> See IEX Rule 1.160(qq).

<sup>7</sup> See Rule 11.190(b)(10).

primary peg (“P-Peg”)<sup>8</sup> orders with an instruction to not exercise price discretion during periods of quote imbalance. The Exchange has designated this proposal as non-controversial and provided the Commission with the notice required by Rule 19b-4(f)(6)(iii) under the Act.<sup>9</sup>

The text of the proposed rule change is available at the Exchange’s website at <https://www.iexexchange.io/resources/regulation/rule-filings>, 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 the 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 these statements may be examined at the places specified in Item IV below. The self-regulatory organization 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 the Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend IEX Rule 11.190(g) to introduce a new proprietary mathematical calculation (the “quote imbalance indicator” or “QII”) to make “quote imbalance” determinations for each security (i.e., to turn “on” when it assesses there is an imbalance in the supply and demand for that particular security).<sup>10</sup> As proposed, for D-Peg and P-Peg orders, which are non-displayed order types, the QII would be an alternative to IEX’s existing

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<sup>8</sup> See Rule 11.190(b)(8).

<sup>9</sup> 17 CFR 240.19b-4(f)(6)(iii).

<sup>10</sup> See proposed IEX Rule 11.190(g)(2).

“crumbling quote indicator” or “CQI”.<sup>11</sup>

The CQI is an IEX proprietary mathematical calculation, which is designed to assess the probability of an imminent change to the current Protected NBB<sup>12</sup> to a lower price or an imminent change to the current Protected NBO<sup>13</sup> to a higher price for a particular security (i.e., a “quote instability” determination). When the CQI makes a quote instability determination, it turns “on” for a period of two milliseconds; when the CQI is on, it restricts D-Peg and P-Peg orders resting on the Order Book from exercising discretion to meet the price of an active order.<sup>14</sup> As proposed, when the QII turns “on”, it would remain on until it determines there is no longer a quote imbalance for that particular security; as with the CQI, when it is “on”, the QII will restrict D-Peg and P-Peg orders from exercising quote discretion to meet the price of an active order.

The Exchange expects the QII to be “on” for greater portions of Regular Market Hours<sup>15</sup> than the CQI, and believes that Users<sup>16</sup> seeking to employ a comparatively more passive trading strategy may prefer to utilize the QII rather than the CQI for D-Peg and/or P-Peg orders. Accordingly, IEX proposes to amend IEX Rule 11.190(b)(10) and 11.190(b)(8) to allow Users to

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<sup>11</sup> See IEX Rule 11.190(g)(1).

<sup>12</sup> See IEX Rule 1.160(cc).

<sup>13</sup> See IEX Rule 1.160(cc).

<sup>14</sup> As described below, the CQI is used by two other order types: Discretionary Limit (“D-Limit”) and Corporate Discretionary Peg (“C-Peg”) orders. However, the proposed QII would not be used by D-Limit orders, which, as described below, use the CQI to determine whether to reprice a displayed or non-displayed D-Limit order. Additionally, the proposed QII would not be used by C-Peg orders, because C-Peg orders are essentially D-Peg orders with an additional price constraint (based on the last reported sale price), which IEX believes would not provide any benefits to Users who can already use D-Peg as part of their trading strategy.

<sup>15</sup> See IEX Rule 1.160(gg).

<sup>16</sup> Pursuant to IEX Rule 1.160(qq), a User means any Member or Sponsored Participant who is authorized to obtain access to the System pursuant to IEX Rule 11.130. Member is defined in IEX Rule 1.160(s), and Sponsored Participant is defined in IEX Rule 1.160(ll).

submit D-Peg and P-Peg orders with an instruction that the System<sup>17</sup> apply either the QII or the CQI, when determining whether to restrict the orders' exercise of price discretion.

Additionally, IEX proposes to make several conforming edits to IEX Rule 11.190(g), which is currently titled "Quote Stability." Because the proposed QII would assess quote imbalances, and not quote instability, IEX proposes to rename IEX Rule 11.190(g) with the title "Quote Dynamics" to reflect that it contains two different indicators of the state of quoting in any particular security.

### Background

IEX currently uses one proprietary mathematical calculation, the "CQI", to make quote instability determinations for all D-Peg, P-Peg, C-Peg<sup>18</sup>, and D-Limit<sup>19</sup> orders. The Exchange has made incremental changes to optimize and enhance the effectiveness of the CQI in determining whether a crumbling quote exists several times since Exchange launch.<sup>20</sup> In 2022, the Exchange introduced the current iteration of the CQI<sup>21</sup> and until recently offered Users the option of applying either the current or a prior iteration of the CQI to their D-Peg, P-Peg, and C-Peg orders.<sup>22</sup> In 2025, IEX retired the prior iteration of the CQI based upon the similarity between the two CQIs, as well as the higher usage and incrementally better performance of the

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<sup>17</sup> See IEX Rule 1.160(nn).

<sup>18</sup> See IEX Rule 11.190(b)(16).

<sup>19</sup> See IEX Rule 11.190(b)(7).

<sup>20</sup> See Securities Exchange Act Release 78510 (August 9, 2016), 81 FR 54166 (August 15, 2016) (SR-IEX-2016-11); Securities Exchange Act Release No. 80202 (March 10, 2017), 82 FR 14058 (March 16, 2017) (SR-IEX-2017-06); and Securities Exchange Act Release No. 83048 (April 13, 2018), 83 FR 17467 (April 19, 2018) (SR-IEX-2018-07).

<sup>21</sup> See Securities Exchange Act Release No. 96014 (October 11, 2022), 87 FR 62903 (October 17, 2022) ("CQI Proposal"); Securities Exchange Act Release No. 96416 (December 1, 2022), 87 FR 75099 (December 7, 2022) ("CQI Approval Order") (SR-IEX-2022-06).

<sup>22</sup> See Securities Exchange Act Release No. 102556 (March 10, 2025), 90 FR 12195 (March 14, 2025) (SR-IEX-2025-04) ("Prior CQI Retirement Filing").

current CQI.<sup>23</sup> The current CQI is comprised of nine separate rules (“quote instability rules”) – each with specific conditions based on either the price, size, or price and size of the Protected Quotations<sup>24</sup> of eleven exchanges (the “Signal Exchanges”).<sup>25</sup> Each of the nine quote instability rules can trigger a quote instability determination for either the Protected NBB or Protected NBO of a particular security.<sup>26</sup>

IEX periodically reviews the performance of the CQI in predicting whether the Protected NBB or Protected NBO is in the process of moving to a less aggressive price, and any potential alternative approaches that would help counter the costs of “adverse selection” that participants supplying liquidity incur when their orders are executed at less desirable prices during periods of quote instability. Based on that review, IEX developed the QII. Based on extensive testing, IEX believes that QII is rigorously sound, supported by market data analysis, and consistent with the Act as described below.

The QII is designed to determine whether there is an imbalance in the market for a particular security, thereby indicating that the market for the security may be in transition. Like the CQI, the QII is comprised of a set of rules that can turn it “on” or “off. These rules, when “on,” enable the QII to restrict discretion for D-Peg and P-Peg orders during periods of quote imbalance.

Based on informal feedback from Members<sup>27</sup>, IEX understands that different firms may

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<sup>23</sup> See Prior CQI Retirement Filing, supra note 22.

<sup>24</sup> See IEX Rule 1.160(bb).

<sup>25</sup> The Signal Exchanges are ARCX; BATY; BATS; EDGA; EDGX; EPRL; MEMX; XBOS; XNGS; XNYS; and XPHL. See IEX Rule 11.190(g).

<sup>26</sup> Quote instability rules must also be “active” to trigger a quote instability determination; the rules become active or inactive based upon a dynamic performance review designed to optimize the frequency and accuracy of each rule. See IEX Rule 11.190(g)(1)(D).

<sup>27</sup> See IEX Rule 1.160(s).

prefer different levels of coverage for non-displayed orders, i.e., how frequently a D-Peg or P-Peg order refrains from exercising price discretion to meet the price of an incoming order in response to either quote instability or a quote imbalance. In particular, IEX understands that certain market participants seek to avoid execution of orders at less optimal times to trade and thus deprioritize “fill rates” (i.e., measuring the frequency and speed with which orders are filled). In other words, in deploying such passive trading strategies, these market participants’ primary goal is to prevent executions during potentially unstable market conditions even if the passive trading strategies may prevent some trading opportunities. IEX believes that providing a more passive alternative to the CQI for D-Peg and P-Peg orders would be responsive to these objectives. IEX thus proposes to add the QII as an alternative indicator, in addition to the CQI, that Users may apply to D-Peg and P-Peg orders.

The Exchange is not proposing to make any changes to the use of C-Peg or D-Limit orders, both of which will continue to use only the CQI.

#### Proposal

The Exchange proposes to introduce a new proprietary mathematical calculation, the Quote Imbalance Indicator or QII, to make quote imbalance determinations for each security during Regular Market Hours (independently assessing whether the Protected NBB and Protected NBO are imbalanced). As explained below, the QII would turn “on” during periods when the QII identifies a quote imbalance for either the Protected NBB, the Protected NBO, or the Protected NBBO on a security-by-security basis; and would remain “on” until it identifies that a security’s quote is no longer imbalanced. As described below, the QII is expected, on average, to be “on” for approximately 400 milliseconds each time it turns on, compared to two milliseconds for the CQI. Since the QII remains “on” for the duration of a quote imbalance, its

duration per instance is longer than the CQI. As a result, the QII is expected to be “on” for, on average, two and one half hours of each trading day on either the bid or offer side.<sup>28</sup> Therefore, by design, the QII would restrict D-Peg and P-Peg orders from exercising discretion for a larger period of the trading day, which will be understood by the Users who submit D-Peg and P-Peg orders with a designation to apply the QII, because, as detailed below, applying the QII to a D-Peg or P-Peg order allows a User to seek executions in more stable market conditions, in exchange for not being eligible to exercise discretion to trade for as much of the day. When a User submits a D-Peg or P-Peg order to IEX, the User would be able to designate whether to apply the QII or CQI to the order.<sup>29</sup>

As proposed, the QII will be comprised of three quote imbalance rules, any of which can turn the QII “on” (i.e., the QII will be “off” only when none of the three quote imbalance rules’ conditions are satisfied for a particular security). Like the CQI, the QII will be a fixed formula specified transparently in IEX’s rules.

As described in detail below, the three quote imbalance rules independently assess: (1) whether the “Book Skew”<sup>30</sup> of a particular security exceeds a predefined threshold value set forth in the rule; (2) whether there is an “Order Flow Imbalance”<sup>31</sup> for a particular security in excess of a predefined threshold value set forth in the rule; and (3) whether there is a sufficient

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<sup>28</sup> As noted above, the QII can turn “on” for either the bid side, the offer side, or both sides. IEX expects the QII to be “on” for both sides for approximately 27 minutes per day.

<sup>29</sup> As noted, supra, in note 14, IEX is not proposing to allow Users to submit C-Peg orders with an instruction to apply the QII because C-Peg orders, by definition, are designed for a specific use case of assisting Users with compliance with specified aspects of the Rule 10b-18 safe harbor for stock buybacks. See Securities Exchange Act Release 87019 (September 19, 2019), 84 FR 50485 (September 25, 2019) (SR-IEX-2019-10) (Notice of Filing and Immediate Effectiveness of C-Peg order type).

<sup>30</sup> “Book Skew” is the ratio of the difference between the volume of shares that comprise the Protected NBB and the Protected NBO. See proposed Rule 11.190(g)(2)(B)(i).

<sup>31</sup> “Order Flow Imbalance” measures the difference between the volume of buy orders and sell orders at the Protected NBB and the Protected NBO. See proposed Rule 11.190(g)(2)(B)(ii).

amount of displayed interest in a particular security.<sup>32</sup>

As noted above, the QII is based upon the CQI. Specifically, the QII utilizes several of the same variables as the CQI, i.e., “Signal Best Bid”, “Signal Best Offer”, “Aggregate Best Bid Size”, “Aggregate Best Offer Size”, “Previous Aggregate Best Bid Size”, “Previous Aggregate Best Offer Size”, “Previous Signal Best Bid”, “Previous Signal Best Offer”, “Signal Spread”, and “Update”.<sup>33</sup> Thus, much of the functionality of the proposed quote instability rules discussed below has already been considered and approved by the Commission, and which has been refined by IEX several times since Exchange launch. As explained below, the QII takes these common variables, and the common approach of applying real-time market data to a set of rules that can turn the indicator “on” or “off” and employs them in an alternative, more passive, indicator.

The QII also introduces several new variables, which are derived from the same data used by the CQI. These variables are:

- “Signal Bid Delta”, which is determined based on the relationship between the Signal Best Bid and the Previous Signal Best Bid. Specifically: (i) if the Signal Best Bid is greater than the Previous Signal Best Bid, then the Signal Bid Delta is equal to the Aggregate Best Bid Size; (ii) if the Signal Best Bid is less than the Previous Signal Best Bid, then the Signal Bid Delta is equal to the Previous Aggregate Best Bid Size times negative one (1) (i.e., the negative value of the Previous Aggregate Best Bid Size); or (iii) if the Signal Best Bid is equal to the Previous Signal Best Bid, then the Signal Bid Delta is equal to the Aggregate Best Bid Size minus the Previous Aggregate Best Bid Size.
- “Signal Offer Delta”, which is determined based on the relationship between the Signal Best Offer and the Previous Signal Best Offer. Specifically: (i) if the Signal Best Offer is less than the Previous Signal Best Offer, then the Signal Offer Delta is equal to the Aggregate Best Offer Size; (ii) if the Signal Best Offer is greater than the Previous Signal Best Offer, then the Signal Offer Delta is equal to the Previous Aggregate Best Offer Size times negative one (1) (i.e., the

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<sup>32</sup> See proposed Rule 11.190(g)(2)(B)(iii).

<sup>33</sup> See proposed Rule 11.190(g)(2)(A)(i) (stating that these terms have the same meanings set forth in IEX Rule 11.190(g)(1)(B)).



negative value of the Previous Aggregate Best Offer Size); or (iii) if the Signal Best Offer is equal to the Previous Signal Best Offer, then the Signal Offer Delta is equal to the Aggregate Best Offer Size minus the Previous Aggregate Best Offer Size.

- “Lookback Window”<sup>34</sup> is equal to: (i) the preceding 10 milliseconds if the Signal Spread is less than or equal to one cent (\$0.01); or (ii) the preceding 100 milliseconds if the Signal Spread is greater than one cent (\$0.01).
- “Bid Imbalance” is equal to the Signal Offer Delta minus the Signal Bid Delta. Bid Imbalance is measured each time there is an Update to the Quote during the Lookback Window.
- “Signal Bid Delta Imbalance” is equal to the sum of the Bid Imbalance values calculated during the Lookback Window (considering only up to a maximum of the most recent 128 Updates during the Lookback Window).
- “Offer Imbalance” is equal to the Signal Bid Delta minus the Signal Offer Delta. Offer Imbalance is measured each time there is an Update to the Quote during the Lookback Window.
- “Signal Offer Delta Imbalance” is equal to the sum of the Offer Imbalance values calculated during the Lookback Window (considering only up to a maximum of the most recent 128 Updates during the Lookback Window).
- “Delta Imbalance Threshold” is equal to twenty (20) times round lot multiples if the Signal Spread is less than or equal to one cent (\$0.01) or is equal to zero (0) if the Signal Spread is greater than one cent (\$0.01).
- “Bid Book Skew” is equal to the logarithm of the Aggregate Best Offer Size minus the logarithm of the Aggregate Best Bid Size.
- “Offer Book Skew” is equal to the logarithm of the Aggregate Best Bid Size minus the logarithm of the Aggregate Best Offer Size.
- “Book Skew Imbalance Threshold” is equal to 0.4 if the Signal Spread is less than or equal to one cent (\$0.01) or is equal to 0.7 if the Signal Spread is greater than one cent (\$0.01).

Like the CQI, the QII would apply the variables specified above to the three quote imbalance rules, each of which can turn “on” the QII for a particular security for either the bid

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<sup>34</sup> The CQI also employs lookback windows, such as the “Lookback Average Signal Spread Bin Value”, which averages the Signal Spread Bin Value over the past twenty Updates. See IEX Rule 11.190(g)(1)(B)(xvi).

side, offer side, or both the bid and offer side. Typically, the QII would only turn “on” for one side of a security (the imbalanced side of the market) but there are circumstances when the QII will be “on” for both the bid and offer sides. Specifically, the QII will be on for both sides of a security either when there is very minimal volume of displayed interest in the security at the Protected NBB and Protected NBO, or when the Book Skew Rule and Order Flow Imbalance Rule each indicate an imbalance for opposite sides of the security.

- Book Skew Rule: Rule Bid (Offer) BS indicates a period of quote imbalance if the Bid (Offer) Book Skew is greater than the Book Skew Imbalance Threshold.<sup>35</sup>
- Order Flow Imbalance Rule: Rule Bid (Offer) OFI indicates a period of quote imbalance if the Signal Bid (Offer) Delta Imbalance is greater than the Delta Imbalance Threshold.<sup>36</sup>
- Minimum Size Rule: Rule Bid (Offer) MS indicates a period of quote imbalance if the product of the Signal Best Bid (Offer) and the Aggregate Best Bid (Offer) Size is less than one thousand dollars (\$1,000).<sup>37</sup>

On a security-by-security basis, if the specified conditions of any of the quote imbalance rules are met, then the System will turn “on” the QII for that security.

One difference between the CQI and the QII is that the QII uses different values for three variables when making quote imbalance determinations for securities with spreads of \$0.01 or less (“narrow spread symbols”) than it does for all other symbols. Specifically, the QII’s Lookback Window, which is used by the Order Flow Imbalance rules, is limited to 10 milliseconds for narrow spread symbols and 100 milliseconds for all other symbols.<sup>38</sup> Additionally, as proposed, the Book Skew Imbalance Threshold will be .4 for narrow spread

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<sup>35</sup> See proposed Rule 11.190(g)(2)(B)(i).

<sup>36</sup> See proposed Rule 11.190(g)(2)(B)(ii).

<sup>37</sup> See proposed Rule 11.190(g)(2)(B)(iii).

<sup>38</sup> As noted above, if there are more 128 Updates to the Quote during the Lookback Window, the QII will only consider the most recent 128 Updates. See proposed Rule 11.190(g)(2)(A)(vi) and (viii).

symbols and .7 for all other symbols, and the Delta Imbalance Threshold will be 20 times the round lot size for narrow spread symbols and zero for wider spread symbols.<sup>39</sup>

IEX selected different variables for narrow spread symbols versus all other symbols based upon extensive back-testing applying different parameters to historical market data. Based upon this extensive testing, the values resulting in the best model performance were chosen for the Book Skew and Order Flow Imbalance Thresholds and the Lookback Window.

For both D-Peg and P-Peg orders, when the QII determines that the bid and/or offer for a particular security is imbalanced (i.e., the QII is “on”), any D-Peg or P-Peg orders on the imbalanced side of the market would not exercise price discretion to meet the limit price of an active (i.e., taking) order, and remain pegged to a price that is the less aggressive of either (i) one (1) minimum price variant (“MPV”)<sup>40</sup> less aggressive than the primary quote (i.e., one MPV below (above) the Protected NBB (NBO) for buy (sell) orders); or (ii) the order’s limit price (if any).<sup>41</sup> Like it does with the CQI, the System will continually evaluate whether the QII should be “on” for any symbol. When the conditions for all three of the QII rules are no longer met, the QII will turn “off” (unless and until the System again determines that the quote is imbalanced).<sup>42</sup>

IEX assesses the efficacy of the CQI by measuring its “coverage”, which is the percentage of all “adverse” Protected NBBO changes per symbol (i.e. lower for bids, higher for offers) that were predicted by the CQI. Using market data from January 2, 2025, to March 21, 2025, IEX calculated that the CQI’s coverage was 47%, meaning it predicted (and therefore

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<sup>39</sup> See proposed Rule 11.190(g)(2)(A)(xii) and (ix).

<sup>40</sup> See Rule 11.210.

<sup>41</sup> See IEX Rule 11.190(b)(8) and (10).

<sup>42</sup> In this regard, the QII differs from the CQI which automatically turns off after two milliseconds (unless it made another quote instability determination before turning off). By design the QII remains on during times when it identifies that the quote is imbalanced.

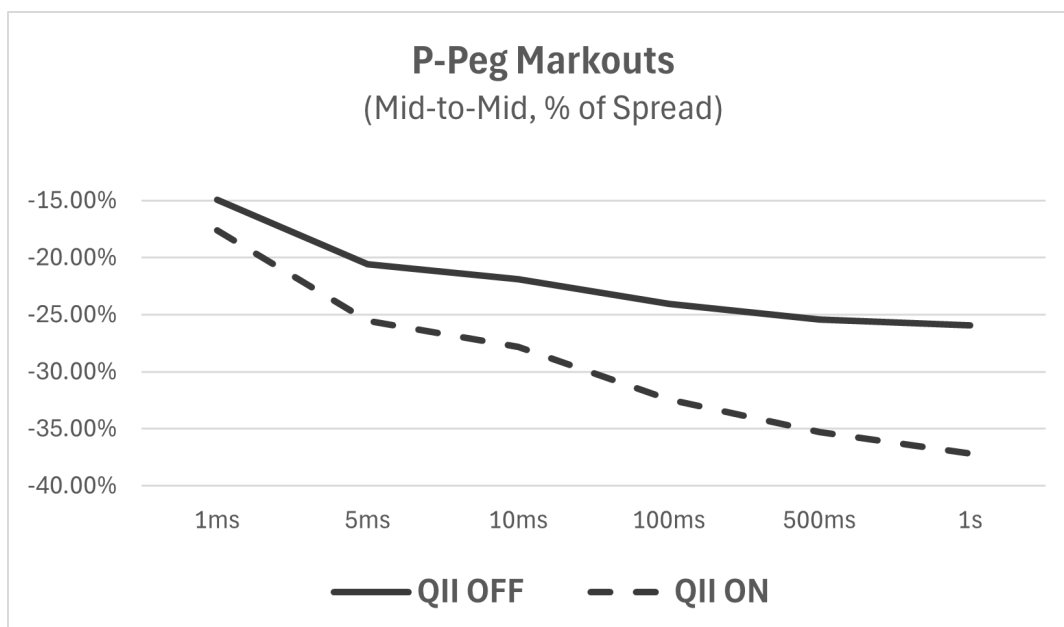
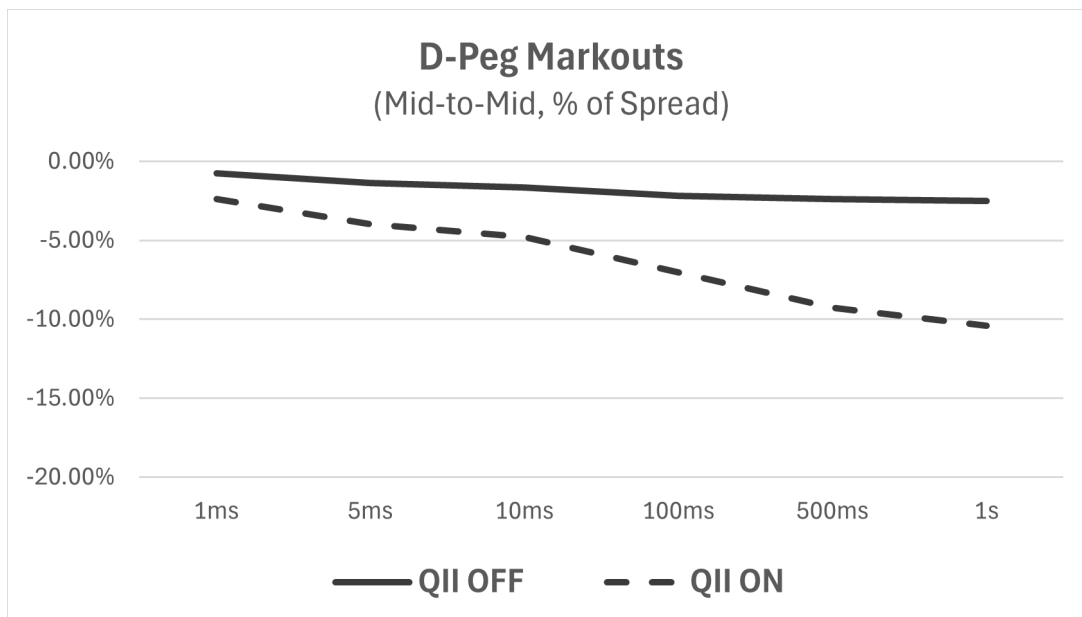
blocked discretion) with respect to almost half of all adverse price changes. Using the same market data used to assess the CQI's coverage, IEX calculated that the QII's coverage would have been approximately 58%, meaning the QII would have approximately 25% more coverage than the CQI.

Because the QII is designed to maximize the amount of trading volume taking place in stable market conditions, even at the expense of fill rates, IEX believes that markouts<sup>43</sup> are another relevant metric for QII's efficacy. Thus, IEX further assessed the efficacy of the QII by determining the percentage of D-Peg and P-Peg orders that would not exercise discretion because the QII was "on" and applied to those orders, as compared to the percentage that would exercise discretion if the QII was "off" and applied to those orders, and then analyzing markout data to determine whether the orders using the QII showed performance improvement. This analysis shows that the QII would have restricted additional D-Peg and P-Peg volume from trading, but in return, markouts of the orders that exercise discretion would have improved by 7.9% of spread and 11.2% of spread, respectively, as measured at one second.<sup>44</sup> The following graphs demonstrate the consistency of the QII's performance improvement across various time horizons:

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<sup>43</sup> Markouts are a standard metric used by market participants to assess execution quality. For purposes of this filing, "markouts" refer to a comparison of the midpoint price at the time of execution as compared to the midpoint price a certain amount of time following the execution. A smaller markout as measured at a certain time is indicative of a higher quality execution.

<sup>44</sup> The analysis was also conducted using market data from January 2, 2025, to March 21, 2025.



As depicted in the above two graphs, D-Peg and P-Peg orders that do not exercise discretion when the quote is imbalanced (i.e., the QII is “on”) have materially better markouts, which demonstrates that there is less market movement occurring after the trade, consistent with the QII’s design to avoid trading in unstable market conditions (i.e. during a quote imbalance).

As described above, the QII will remain “on” until the conditions establishing a period of quote imbalance are no longer present. Based on a notional value weighted average across all

symbols, the QII is expected to be “on” for approximately 2.5 hours during Regular Market Hours, turning “on” for an average of 396.6 milliseconds each time. Thus, the QII will be “on” for more of the day than the CQI. However, as discussed above, the QII is not designed to maximize fill rates, but rather to support passive trading strategies that seek to trade during the most stable market conditions. Thus, Users that choose to designate any of their D-Peg or P-Peg orders with the QII will do so expecting a lower execution rate than if they had designated the orders with the CQI, but also expecting more stable market executions.

Additionally, IEX notes that regardless of whether a User selects to use the CQI or QII, when multiple pegged orders exercise discretion at the same time, their relative priority is retained.<sup>45</sup>

#### Conforming Edits

IEX also proposes to make several conforming edits to IEX Rule 11.190(g) to reflect the adoption of the new QII. Specifically, IEX proposes to:

- Rename IEX Rule 11.190(g) from “Quote Stability” to “Quote Dynamics” to reflect that IEX will now have two distinct indicators, as opposed to one (or more) crumbling quote indicators.
- Revise the first sentence of the first paragraph of IEX Rule 11.190(g) to read: “The Exchange utilizes real time relative quoting activity of Protected Quotations from eleven exchanges (ARCX, BATY, BATS, EDGA, EDGX, EPRL, MEMX, XBOS, XNGS, XNYS, XPHL) referred to as “Signal Exchanges” to: (i) make quote instability determinations, as set forth in subparagraph (1) of Rule 11.190(g); or (ii) make quote imbalance determinations, as set forth in subparagraph (2) of IEX Rule 11.190(g).” Thereby deleting the remainder of the current paragraph.
- Rename IEX Rule 11.190(g)(1) from “Crumbling Quote” to “Quote Instability” to reflect that this is the only quote instability indicator rule.
- Revise the first paragraph of IEX Rule 11.190(g)(1) to include the text removed from the first paragraph of IEX Rule 11.190(g). The paragraph will now read:

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<sup>45</sup> See IEX Rule 11.190(b)(8) and (10).

- “The Exchange utilizes nine proprietary mathematical calculations (“the Quote Instability Rules”) to assess the probability of an imminent change to the current Protected NBB to a lower price or a Protected NBO to a higher price for a particular security. Each Quote Instability Rule independently assesses the probability of an imminent change to the current Protected NBB to a lower price or Protected NBO to a higher price for a particular security. When the quoting activity meets one or more Quote Instability Rule’s predefined criteria and that Quote Instability Rule’s current activation value pursuant to this IEX Rule 11.190(g) (“Activation Value”) is greater than the Exchange’s defined threshold (“Activation Threshold”) for that Quote Instability Rule, the System treats the quote as not stable (“quote instability” or a “crumbling quote”). For each Quote Instability Rule, the Activation Value is initialized at 0.5 at the start of the Regular Session and updated during regular market hours as described in this IEX Rule 11.190(g). During all other times, the quote is considered stable (“quote stability”).”
- Revise IEX Rule 11.190(g)(1)(B)(vii) to add a period that is missing from the end of the definition of “Update”.
- Add IEX Rule 11.190(g)(2), “Quote Imbalance”, which will include the changes detailed above.
- Renumber IEX Rule 11.190(g)(2) to now be IEX Rule 11.190(g)(3) and revise the rule to include a reference to the new quote imbalance functionality.

### Implementation

The Exchange will announce the implementation date of the proposed rule change by Trading Alert at least ten business days in advance of such implementation date and within 90 days of effectiveness of this proposed rule change.

## 2. Statutory Basis

IEX believes that the proposed rule change is consistent with Section 6(b)<sup>46</sup> of the Act in general, and furthers the objectives of Section 6(b)(5) of the Act,<sup>47</sup> in particular, in that it is designed 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

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<sup>46</sup> 15 U.S.C. 78f.

<sup>47</sup> 15 U.S.C. 78f(b)(5).

investors and the public interest. Specifically, and as discussed in the Purpose section, the proposal would provide a new alternative quote imbalance indicator for D-Peg and P-Peg orders that is designed to restrict those orders from exercising price discretion during periods of quote imbalance. As discussed in the Purpose section, IEX understands that some market participants utilize passive trading strategies that seek to avoid execution of orders at less optimal times to trade and thus deprioritize fill rates and place more emphasis on market stability. The QII is responsive to that feedback and would provide an optional tool for executing a passive trading strategy that seeks to avoid trading when the market for the security in question may be in transition, regardless of whether the strategy may prevent some trading opportunities.

The Exchange believes it is consistent with the protection of investors and the public interest to provide the QII as an alternative to its current CQI. As described in the Purpose section, the QII is designed to support Users (both Members and Sponsored Participants) and other market participants using passive trading strategies by protecting D-Peg and P-Peg orders from potential unfavorable executions during periods of quote imbalance. IEX believes that the QII, in the aggregate and with respect to the specific changes proposed, is rigorously sound, supported by market data analysis, and consistent with the Act as described below.

The Exchange believes that it is consistent with the Act to utilize a rules-based model for the QII, as it does with the CQI, to determine whether a quote is imbalanced. As discussed in the Purpose section, the Exchange believes that the proposed QII will potentially enhance the protection available to market participants using D-Peg and P-Peg orders that elect to use the QII, thereby removing impediments to a free and open market.

The Exchange also believes that it is consistent with the Act to apply different threshold variables to the Book Skew and Order Flow Imbalance instability rules based upon whether the



symbols have a one cent spread, or a wider-than-one cent spread. As described in the Purpose section, the different variables applied for narrower spread stocks are designed to better assess the instability of a quote based upon extensive back-testing and parameter tuning using historical market data. IEX believes that these transparent criteria for the different calculations conducted based upon the symbols' spread will improve the QII's performance, to the benefit of all market participants seeking a new means of employing a more passive, stability-focused trading strategy.

The Exchange further believes that the proposed rule change may result in more and larger sized D-Peg and P-Peg orders being entered on IEX as a result of the ability to select the QII as an alternative to the CQI which, as discussed above, is designed to support Users and other market participants using passive trading strategies. To the extent more orders are entered, the increased liquidity would benefit all IEX Users and their customers.

Regardless of whether a User selects to use the CQI or QII, when multiple pegged orders exercise discretion at the same time, their relative priority is retained.<sup>48</sup> Thus, the Exchange notes that the proposed rule change does not raise any new or novel issues in this regard.

Furthermore, the Exchange notes that all Users are eligible to use D-Peg and P-Peg orders, and therefore all Users are eligible to benefit from these order types' protections, and will also benefit if use of the QII brings more liquidity to the Exchange. In addition, IEX believes that the QII is consistent with findings in the Commission's delegated approval of IEX's rule filing to adopt the current iteration of the CQI. Specifically, the QII will activate without further action from the User, and thus all Users will benefit equally regardless of their technological

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<sup>48</sup> See IEX Rule 11.190(b)(8) and (10).

capabilities and ability to take action within a short prescribed period.<sup>49</sup> Additionally, only non-displayed order types would be able to utilize the QII and thus it would not affect displayed liquidity.<sup>50</sup> Accordingly, IEX believes that 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.

Further, the Exchange believes that the proposed conforming changes described in the Purpose section are consistent with the Act because the changes would promote clarity in IEX's rules.

Finally, the Exchange notes that, as proposed, the QII, like the CQI will be a fixed formula specified transparently in IEX's rules. The Exchange is not proposing to change the functionality of any of its order types, but rather seeks to provide the QII as an alternative for D-Peg and P-Peg orders.

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

IEX does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. To the contrary, as discussed in the Statutory Basis section, the proposal is designed to enhance competition by incentivizing additional liquidity.

With regard to intra-market competition, the proposed QII would apply equally to all Users on a fair, impartial and nondiscriminatory basis without imposing any new burdens on the Users because D-Peg and P-Peg are optional order types, and the QII (as proposed) would be one of two choices of indicators that Users may apply to their D-Peg and P-Peg orders. The

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<sup>49</sup> See CQI Approval Order, supra note 21 at 75102.

<sup>50</sup> Id.

Commission has already approved the CQI.<sup>51</sup> As discussed in the Purpose and Statutory Basis sections, the proposed rule change is designed to provide the QII as an alternative indicator for D-Peg and P-Peg orders, which is a variation of the SEC approved quote instability calculation, as an optional indicator for D-Peg and P-Peg orders; therefore, no new burdens are being proposed.

With regard to inter-market competition, other exchanges are free to adopt similar quote imbalance calculations subject to the SEC rule filing process. In this regard, the Exchange notes that NYSE American LLC until recently had a “discretionary pegged order type”, see former NYSE American LLC Rule 7.31E(h)(3)(D), which copied an earlier iteration of the Exchange’s quote instability calculation.<sup>52</sup>

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

Written comments were neither solicited nor received.

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

The Exchange has filed the proposed rule change pursuant to Section 19(b)(3)(A) of the Act<sup>53</sup> and Rule 19b-4(f)(6)<sup>54</sup> thereunder. Because the foregoing proposed rule change does not: (i) significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was

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<sup>51</sup> See supra note 21.

<sup>52</sup> See Securities Exchange Act Release 99827 (March 21, 2024), 89 FR 21302 (March 27, 2024) (SR-NYSEAMER-2024-21) (modifying NYSE American’s discretionary pegged order type to remove its quote instability calculation).

<sup>53</sup> 15 U.S.C. 78(b)(3)(A).

<sup>54</sup> 17 CFR 240.19b-4(f)(6).

filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A) of the Act<sup>55</sup> and Rule 19b-4(f)(6)<sup>56</sup> 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 (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include file number SR-IEX-2025-11 on the subject line.

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<sup>55</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>56</sup> 17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6)(iii) requires the Exchange to give the Commission written notice of the Exchange's intent to file the proposed rule change, along with a brief description and text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

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-IEX-2025-11. 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 (<https://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 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright

protection. All submissions should refer to file number SR-IEX-2025-11 and should be submitted on or before [INSERT DATE 21 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>57</sup>

**Sherry R. Haywood,**

*Assistant Secretary.*

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<sup>57</sup> 17 CFR 200.30-3(a)(12).