SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-78510; File No. SR-IEX-2016-11)

August 9, 2016

Self-Regulatory Organizations; Investors Exchange LLC; Notice of Filing and Immediate
Effectiveness of Proposed Rule Change to Amend Rule 11.190(g) Related to Discretionary Peg
Orders

Pursuant to Section 19(b)(1)[1] of the Securities Exchange Act of 1934 (the "Act")[2] and

Rule 19b-4 thereunder,[3] notice is hereby given that, on August 4, 2016, the Investors Exchange

LLC ("IEX" or the "Exchange") filed with the Securities and Exchange Commission (the

"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 Securities Exchange Act of 1934

("Act"),[4] and Rule 19b-4 thereunder,[5] Investors Exchange LLC ("IEX" or "Exchange") is filing

with the Securities and Exchange Commission ("Commission") a proposed rule change to amend

Rule 11.190(g) to optimize and enhance the effectiveness of the quote instability calculation in

determining whether a crumbling quote exists, to: (i) provide that the quote instability calculation

would not include IEX protected quotations; (ii) reduce the time period that a crumbling quote

condition remains in effect from ten to two milliseconds; (iii) add two new quote stability

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

[2]   15 U.S.C. 78a.

[3]   17 CFR 240.19b-4.

[4]   15 U.S.C. 78s(b)(1).

[5]   17 CFR 240.19b-4.

variables, together with their respective coefficients; and (iv) modify the quote instability coefficients and quote instability threshold included in the quote instability calculation, pursuant to subparagraph (1)(D)(iii) thereof. 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.[6]

The text of the proposed rule change is available at the Exchange's website at www.iextrading.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 these statement [sic] 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 Statutory Basis for, the Proposed Rule Change

1.   Purpose

Overview

The purpose of the proposed rule change is to amend Rule 11.190(g) to modify the quote instability coefficients and quote instability threshold included in the quote instability calculation specified in subparagraph (g)(1) for purposes of determining whether a crumbling quote exists. When the Exchange determines that a crumbling quote exists in a particular security for

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[6]   17 CFR 240.19b-4(f)(6)(iii).

Protected Quotations from the national best bid ("Protected NBB"), Discretionary Peg buy orders are restricted from exercising price discretion to trade against interest above the NBB. Similarly, when the Exchange determines that a crumbling quote exists in a particular security for Protected Quotations from the national best offer ("Protected NBO"), Discretionary Peg sell orders are restricted from exercising price discretion to trade against interest below the NBO.

Discretionary Peg Order

The manner in which Discretionary Peg orders operate is described in Rule 11.190(b)(10). Specifically, a Discretionary Peg order is a non-displayed, pegged order that upon entry into the System, the price of the order is automatically adjusted by the System to be equal to the less aggressive of the Midpoint Price or the order's limit price, if any. When unexecuted shares of such order are posted to the Order Book, the price of the order is automatically adjusted by the System to be equal to and ranked at the less aggressive of the primary quote or the order's limit price and is automatically adjusted by the System in response to changes in the NBB (NBO) for buy (sell) orders up (down) to the order's limit price, if any. In order to meet the limit price of active orders on the Order Book, a Discretionary Peg order will exercise the least amount of price discretion necessary from the Discretionary Peg order's resting price to its discretionary price (defined as the less aggressive of the Midpoint Price or the Discretionary Peg order's limit price, if any), except during periods of quote instability (i.e., when a crumbling quote exists) as defined in paragraph Rule 11.190(g).

In determining whether a crumbling quote exists, the Exchange utilizes real time relative quoting activity of Protected Quotations and a proprietary mathematical calculation (the "quote instability calculation") to assess 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 ("quote

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instability factor"). When the quoting activity meets predefined criteria and the quote instability factor calculated is greater than the Exchange's defined threshold ("quote instability threshold"), the System treats the quote as not stable ("quote instability" or a "crumbling quote"). During all other times, the quote is considered stable ("quote stability"). The System independently assesses the stability of the Protected NBB and Protected NBO for each security.

When the System determines that a quote, either the Protected NBB or the Protected NBO, is unstable, the determination remains in effect at that price level for ten (10) milliseconds. The System will only treat one side of the Protected NBBO as unstable in a particular security at any given time.[7] By not permitting resting Discretionary Peg orders to execute at a price that is more aggressive than the near-side protected NBB or NBO (as applicable) during periods of quote instability, the Exchange System is intended to attempt to protect such orders from unfavorable executions when the market is moving against them. Once the market has moved and the Exchange System deems the near-side Protected NBB or NBO (as applicable) to be stable (pursuant to a pre-determined, objective set of conditions as described below), Discretionary Peg orders are permitted to exercise discretion up to (for buy orders) or down to (for sell orders) the midpoint of the NBBO in order to meet the limit price of active orders on the order book and thereby potentially provide price improvement to such active orders.

Quote stability or instability (also referred to as a crumbling quote) is an assessment that the Exchange System makes on a real-time basis, based on a pre-determined, objective set of conditions specified in Rule 11.190(g)(1). Specifically, quote instability, or the presence of a crumbling quote, is determined by the System when the following factors occur:

    (A)   the Protected NBB and Protected NBO are the same as the Protected NBB and Protected NBO one (1) millisecond ago; and

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7   <u>See</u>, Rule 11.190(g).

(B)   the Protected NBBO spread is less than or equal to the thirty (30) day median Protected NBBO spread during the Regular Market Session; and

(C)   there are more Protected Quotations on the far side, i.e. more Protected Quotations on the Protected NBO than the Protected NBB for buy orders, or more Protected Quotations on the Protected NBB than the Protected NBO for sell orders; and

(D)   the quote instability factor result from the quote stability calculation is greater than the defined quote instability threshold.

(i)   Quote Instability Factor. The Exchange's proprietary quote stability calculation used to determine the current quote instability factor is defined by the following formula that utilizes the quote stability coefficients and quote stability variables defined below: $1/(1 + e \char`\^ -(C_0 + C_1 * N + C_2 * F + C_3 * N_{-1} + C_4 * F_{-1}))$

(a)   Quote Stability Coefficients. The Exchange utilizes the values below for the quote stability coefficients.

(1) $C_0 = -2.39515$

(2) $C_1 = -0.76504$

(3) $C_2 = 0.07599$

(4) $C_3 = 0.38374$

(5) $C_4 = 0.14466$

(b)   Quote Stability Variables. The Exchange utilizes the quote stability variables defined below to calculate the current quote instability factor.

1. N = the number of Protected Quotations on the near side of the market, i.e. Protected NBB for buy orders and Protected NBO for sell orders.

2. F = the number of Protected Quotations on the far side of the market, i.e. Protected NBO for buy orders and Protected NBB for sell orders.

3. N_{-1} = the number of Protected Quotations on the near side of the market one (1) millisecond ago.

4. F_{-1} = the number of Protected Quotations on the far side of the

market one (1) millisecond ago.

(ii) Quote Instability Threshold. The Exchange utilizes a quote instability threshold of 0.32.

Rule 11.190(g)(1)(D)(iii) provides that the Exchange reserves the right to modify the quote instability coefficients or quote instability threshold at any time, subject to a filing of a proposed rule change with the SEC. The Exchange is proposing such changes in this rule filing.

Changes to quote instability coefficients and quote instability threshold

The alternative trading system ("ATS") operated by the Exchange's affiliate, IEX Services LLC ("IEX ATS") offers a Discretionary Peg order type that is identical to the Exchange's Discretionary Peg order type, including the factors for determining when a crumbling quote (or quote instability) is present. IEX conducted an analysis of the effectiveness of the existing factors in predicting whether a crumbling quote would occur, by reviewing randomly selected market data from March through June 2016. The results of the analysis were verified by reviewing randomly selected market data from July 2016. Based on this analysis, the Exchange has determined that further optimization of the existing factors would incrementally increase the accuracy of the formula in predicting whether a crumbling quote will occur. The following describes the proposed changes:

1. Rule 11.190(g) states that the Exchange utilizes real time relative quoting activity of Protected Quotations in the quote instability calculation. As proposed, the quote instability calculation would not include IEX protected quotations. The quote instability calculation has been optimized, subject to further proposed enhancements, based on actual market data from trading on the IEX ATS prior to the launch of the Exchange with a protected quotation. Accordingly, IEX does not have data that includes IEX protected

quotations to consider in optimization of the quote instability calculation at this time.[8]

2. The Exchange also proposes to reduce the time period that a crumbling quote condition remains in effect from ten to two milliseconds. Based on the market data analysis, IEX found that generally in the instances in which the formula correctly predicted a crumbling quote, the crumbling quote occurred within two milliseconds. By reducing the time period that the crumbling quote condition remains on, IEX believes that it will ameliorate the potential impact of any false positives, because the condition will remain on for a shorter period of time.

3. The Exchange proposes to add two new quote stability variables, "E" and "D", and their coefficients to the quote instability factor calculation specified in subparagraph (g)(1)(D)(i) of Rule 11.190. Quote stability variable E is a Boolean indicator that equals 1 if and only if the last two received quotation updates received by IEX have been quotations of protected markets moving away from the near side of the market on the same side of the market (i.e., bids moving lower or offers moving higher). Based on the market data analysis, the Exchange believes that inclusion of quote stability variable E will help to make the quote instability calculation more accurate in predicting a crumbling quote. Quote stability variable D is a measure of whether the quotation updates received by IEX from the Nasdaq Stock Market, EDGX Exchange or BATS BZX Exchange have been quotations moving away from the near side of the market on the same side of the market (i.e., bids moving lower or offers moving higher) in the last one (1) millisecond. The value will be either 0, 1, 2 or 3 depending on how many of such exchanges (if any) meet the quote stability variable D measure. Based on the market data

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[8] IEX may consider further enhancements that include IEX's protected quotation, subject to IEX submitting a proposed rule change under Section 19(b) of the Act.

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analysis, the Exchange believes that when these three exchanges move away from the

near side of the market on the same side of the market, it is more likely that the quote will

crumble, and that inclusion of quote stability variable D will help to make the quote

instability calculation more accurate in predicting a crumbling quote.

4. The Quote Stability Coefficients specified in subparagraph (1)(D)(i) of Rule 11.190(g)

are proposed to be modified to take into account the recent market data analysis, as well

as to add new quote stability variables E and D. The Exchange believes that the

modifications, as proposed, will increase the accuracy of the quote instability calculation.

5. The Exchange proposes to modify and re-optimize the Quote Instability Threshold

specified in subparagraph (1)(D)(ii) of Rule 11.190(g) based on the recent market data

analysis and the two new quote stability variables. The Exchange believes that the

modifications, as proposed, will increase the accuracy of the quote instability calculation.

2. Statutory Basis

IEX believes that the proposed rule change is consistent with Section 6(b)[9] of the Act in

general, and furthers the objectives of Section 6(b)(5) of the Act,[10] 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 facilitating

transactions in securities, to remove impediments to and perfect the mechanism of a free and

open market and a national market system and, in general, to protect investors and the public

interest. Specifically, and as discussed above, the proposal is designed to optimize and enhance

the effectiveness of the quote instability calculation in determining whether a crumbling quote

exists. The Exchange believes that the proposed changes are designed to protect investors and

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[9]   15 U.S.C. 78f.

[10]   15 U.S.C. 78f(b)(5).

the public interest by enhancing the accuracy of the Exchange's quote instability calculation in determining whether a crumbling quote exists thereby preventing Discretionary Peg orders from trading at prices more aggressive than the near side of the market (NBB for buy orders, NBO for sell orders) to protect such orders from unfavorable executions when the market appears to be moving against them. The Exchange believes that not including IEX protected quotations in the quote instability calculation is consistent with the protection of investors and the public interest because the calculation is optimized based on actual market data, and IEX does not yet have actual market data that includes IEX protected quotations to consider in optimization of the quote instability calculation at this time. The Exchange also believes that it is consistent with the protection of investors and the public interest to reduce the time period that a crumbling quote condition remains in effect from ten to two milliseconds to ameliorate the potential impact of any false positives. Further, IEX believes that adding the two new quote stability variables, as well as the proposed additions to and modification of the quote instability coefficients and quote instability threshold, as contemplated by 11.190(g)(1)(D)(iii), is consistent with the public interest and the protection of investors because these changes are designed to increase the accuracy of the calculation.

As proposed, the new quote instability calculation will continue to be a fixed formula specified transparently in IEX's rules. The Exchange is not proposing to add any new functionality, but merely to revise the fixed formula based on market data analysis designed to increase the accuracy of the formula in predicting a crumbling quote, and as contemplated by the rule.

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. The proposed change will apply equally to all IEX Members. The Commission has already considered the Exchange's Discretionary Peg order type in connection with its grant of IEX's application for registration as a national securities exchange under Sections 6 and 19 of the Act.[11] The proposed rule change is designed to merely enhance the accuracy of the quote instability calculation specified in Rule 11.190(g) and ameliorate the impact of any false positives; therefore, no new burdens are being proposed.

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 designated this rule filing as non-controversial under Section 19(b)(3)(A)[12] of the Act and Rule 19b-4(f)(6)[13] thereunder. Because the 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 filed, or such shorter time as the Commission may designate if consistent with the protection of investors and the public interest, it has become effective pursuant to Section

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[11]   See Securities Exchange Act Release No. 34-78101 (June 17, 2016), 81 FR 41142 (June 23, 2016) (File No. 10-222).

[12]   15 U.S.C. 78s(b)(3)(A).

[13]   17 CFR 240.19b-4(f)(6).

19(b)(3)(A) of the Act and Rule 19b-4(f)(6) thereunder.[14]

A proposed rule change filed under Rule 19b-4(f)(6)[15] normally does not become operative prior to 30 days after the date of the filing. However, pursuant to Rule 19b-4(f)(6)(iii),[16] the Commission may designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has asked the Commission to waive the 30-day operative delay, and stated that the proposed rule change will merely revise the fixed formula specified in Rule 11.190(g) for predicting a crumbling quote, as contemplated by the rule. The Exchange noted that the proposed rule change is designed to enhance the accuracy of the quote instability calculation and protect Members that enter Discretionary Peg orders from unfavorable executions when the market is moving against such orders. Further, the Exchange stated that waiver of the operative delay will allow the Exchange to implement the proposed rule change to coincide with IEX's launch of exchange operations during a security-by-security phase-in period beginning on August 19, 2016, thus enabling the Exchange to provide the contemplated protections to Members entering Discretionary Peg orders from exchange launch. The Commission notes that the changes proposed by IEX are intended to optimize the quote instability equation contained in the discretionary peg order type rule, and are not intended to materially change the operation of the rule or introduce new functionality. Rather, the Exchange intends the proposed changes to increase the ability of the discretionary peg order type to meet its stated objectives as reflected in the Exchange's rule. Accordingly, the Commission believes

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[14]   17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6) requires a self-regulatory organization to give the Commission written notice of its intent to file 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.

[15]   17 CFR 240.19b-4(f)(6).

[16]   17 CFR 240.19b-4(f)(6)(iii).

that waiver of the operative delay is consistent with the protection of investors and the public interest. Therefore, the Commission hereby waives the operative delay and designates the proposed rule change operative upon filing.[17]

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 shall institute proceedings under Section 19(b)(2)(B)[18] of the Act 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 e-mail to rule-comments@sec.gov. Please include File Number SR-IEX-2016-11 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.

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[17]   For purposes only of waiving the 30-day operative delay, the Commission has also considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

[18]   15 U.S.C. 78s(b)(2)(B).

All submissions should refer to File Number SR-IEX-2016-11. 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; the

Commission does not edit personal identifying information from submissions. You should

submit only information that you wish to make available publicly. All submissions should refer

to File Number SR-IEX-2016-11 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.[19]

                         Robert W. Errett
                         Deputy Secretary

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[19]   17 CFR 200.30-3(a)(12).