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Page 1 of * 41

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
Form 19b-4

File No.* SR - 2020 - * 18
Amendment No. (req. for Amendments *)

Filing by Investors' Exchange LLC

Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934

Initial * ☑ Amendment * ☐ Withdrawal ☐

Section 19(b)(2) * ☑ Section 19(b)(3)(A) * ☐ Section 19(b)(3)(B) * ☐

Pilot ☐

Extension of Time Period for Commission Action * ☐

Date Expires *

Rule

- ☐ 19b-4(f)(1)
- ☐ 19b-4(f)(2)
- ☐ 19b-4(f)(3)
- ☐ 19b-4(f)(4)
- ☐ 19b-4(f)(5)
- ☐ 19b-4(f)(6)

Notice of proposed change pursuant to the Payment, Clearing, and Settlement Act of 2010

Section 806(e)(1) * ☐ Section 806(e)(2) * ☐

Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934

Section 3C(b)(2) * ☐

Exhibit 2 Sent As Paper Document ☐ Exhibit 3 Sent As Paper Document ☐

Description

Provide a brief description of the action (limit 250 characters, required when Initial is checked *).

Proposed rule change to amend IEX Rule 11.510 to reduce the outbound latency that presently applies to all trading messages sent from IEX back to users of the Exchange.

Contact Information

Provide the name, telephone number, and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the action.

First Name * Claudia Last Name * Crowley

Title * Chief Regulatory Officer

E-mail * claudia.crowley@iextrading.com

Telephone * (917) 509-9001 Fax

Signature

Pursuant to the requirements of the Securities Exchange Act of 1934,

has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.

Date 12/09/2020

By Claudia Crowley

(Name *)

(Title *)

Chief Regulatory Officer

NOTE: Clicking the button at right will digitally sign and lock this form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.

Claudia Crowley,

Required fields are shown with yellow backgrounds and asterisks.

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

For complete Form 19b-4 instructions please refer to the EFFS website.

Form 19b-4 Information *

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The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act.

Exhibit 1 - Notice of Proposed Rule Change *

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The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO] -xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

Exhibit 1A- Notice of Proposed Rule Change, Security-Based Swap Submission, or Advance Notice by Clearing Agencies *

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The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO] -xx-xx). A material failure to comply with these guidelines will result in the proposed rule change, security-based swap submission, or advance notice being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

Exhibit 2 - Notices, Written Comments, Transcripts, Other Communications

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Exhibit Sent As Paper Document

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Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G.

Exhibit 3 - Form, Report, or Questionnaire

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Exhibit Sent As Paper Document

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Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change.

Exhibit 4 - Marked Copies

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The full text shall be marked, in any convenient manner, to indicate additions to and deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit the staff to identify immediately the changes made from the text of the rule with which it has been working.

Exhibit 5 - Proposed Rule Text

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The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change.

Partial Amendment

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If the self-regulatory organization is amending only part of the text of a lengthy proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions.

1. Text of Proposed Rule Change

(a) Pursuant to the provisions of Section 19(b)(1) under the Securities Exchange Act of 1934 ("Act"),[1] and Rule 19b-4 thereunder,[2] Investors Exchange LLC ("IEX" or "Exchange") is filing with the Securities and Exchange Commission ("Commission") a proposed rule change to amend IEX Rule 11.510 to reduce the outbound latency that presently applies to all trading messages sent from IEX back to Users[3] of the Exchange to include only the actual geographic distance and related network connectivity, as well as to make conforming changes to the outbound latency that applies to all trading messages sent from the IEX System[4] to the System routing logic[5] with respect to routable orders.

A notice of the proposed rule change for publication in the Federal Register is attached hereto as Exhibit 1. The text of the proposed rule change is attached as Exhibit 5.

(b) The Exchange does not believe that the proposed rule change will have any direct effect, or any significant indirect effect, on any other Exchange rule in effect at the time of this filing.

(c) Not applicable.

2. Procedures of the Self-Regulatory Organization

Senior management has approved the proposed rule change pursuant to authority delegated to it by the Board of the Exchange. No further action is required under the

[1] 15 U.S.C. 78s(b)(1).
[2] 17 CFR 240.19b-4.
[3] See IEX Rule 1.160(qq).
[4] See IEX Rule 1.160(nn).
[5] See IEX Rule 2.220(a).

Exchange's governing documents. Therefore, the Exchange's internal procedures with respect to the proposed rule change are complete.

The persons on the Exchange staff prepared to respond to questions and comments on the proposed rule change are:

Claudia Crowley	Nathaniel Kolodny
Chief Regulatory Officer	Lead Regulation Counsel
Investors Exchange LLC	Investors Exchange LLC
646-343-2041	646-343-2034

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

a. Purpose

The Exchange proposes to amend IEX Rule 11.510 to reduce the outbound latency that presently applies to all trading messages sent from the IEX System at its primary data center back to Users of the Exchange to include only the actual geographic distance and related network connectivity, as well as to make conforming changes to the outbound latency that applies to all trading messages sent from the IEX System to the System routing logic with respect to routable orders.

The Exchange is not proposing to make any changes to the additional latency that applies in a symmetrical manner to all inbound order messages (i.e., orders, modifications or cancellations) regardless of whether such orders are to make or take liquidity. This additional latency on inbound order messages, commonly referred to as the "IEX Speedbump," continues to be a critical part of the IEX system and is designed to protect the interests of investors, brokers, and market makers that rest orders on IEX.

As described in more detail below, the additional latencies that are currently applied to both inbound and outbound messages between IEX and Users were put in place for completely different purposes. In contrast to the resting order protective design

of the additional inbound latency, the additional outbound latency was designed simply to avoid potential information leakage about an execution on IEX that could reduce a Member's[6] ability to access liquidity on other markets after trading on IEX. As discussed more fully below, since the IEX exchange launch in 2016 there have been significant improvements in routing technology as well as reductions in Securities Information Processor ("SIP") market data dissemination latencies, and as a result the Exchange believes that the additional outbound latency is no longer necessary.

The Exchange also notes that no other national securities exchanges currently provide for additional latency to outbound communications. Thus, IEX does not believe that the proposed changes raise any new or novel material issues that have not already been considered by the Commission in connection with the operations of other national securities exchanges, or that Members could not readily incorporate into their trading systems.

BACKGROUND

Connectivity Description

Currently, all Users, which include Members and Sponsored Participants,[7] access IEX through the Exchange-provided network interface at the IEX Point-of-Presence[8] or "POP," located in Secaucus, New Jersey.[9] After entering through the POP, a User's electronic message sent to the System traverses the IEX "coil" which is a box containing approximately 38 miles of compactly coiled optical fiber cable. After exiting the coil, the

[6] See IEX Rule 1.160(s).
[7] See IEX Rule 1.160(ll).
[8] A Point-of-Presence is the location at which customers of an exchange (or other technological system) can connect to the exchange.
[9] Please see discussion infra with respect to the connectivity infrastructure applicable to routable orders.

User's message travels an additional geographic or physical distance to the System, located at the Exchange's primary data center in Weehawken, New Jersey. The time required for a message to traverse the coil combined with the physical distance (and related networking) to the System equates to an equivalent 350 microseconds of latency, referred to herein as the "inbound latency."[10] All inbound messages (e.g., orders to buy or sell and any modification to a previously sent open order) from any User traverse this connectivity infrastructure, including the coil, in a symmetrical manner regardless of the type of message or whether the User is seeking to buy, sell, make or take liquidity.

Separately, all outbound messages from IEX back to a User (e.g., confirmations of an execution that occurred on IEX), as well as messages from IEX's TOPS, DEEP and DROP data products[11] (collectively "Data Products"), pass through the communication infrastructure in reverse, referred to herein as the "outbound latency."[12]

Other incoming and outgoing messages to and from IEX are not subject to either the inbound or outbound latency. Instead, they are sent and received directly to and from the System, subject only to the latencies inherent in the geographic distances that the messages travel. These other messages include (i) incoming proprietary market data from other national securities exchanges and market data from the SIPs and (ii) outgoing messages to the SIPs (to disseminate IEX's quotation and last sale/execution information), the National Securities Clearing Corporation (to transmit executed transactions) and other national securities exchanges (to route orders for potential

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[10] See IEX Rule 11.510(b)(1).
[11] See IEX Rule 11.330(a).
[12] See IEX Rule 11.510(b)(2). IEX's backup data center, in Chicago, Illinois, which only consumes market data from the SIPs, does not have any inbound or outbound POP/coil latency, see IEX Rule 11.510 Supplementary Material .01, and is therefore unaffected by this proposed rule change.

execution on such exchanges). In addition, all IEX Order Book[13] processing and order executions on the IEX Order Book occur within the System and are not subject to the inbound or outbound connectivity infrastructure.

IEX's affiliated broker-dealer, IEX Services LLC ("IEXS"), is a Member of the Exchange and is subject to the same inbound and outbound latency as other Members, as described in IEX Rules 2.220 and 11.510. If a User sends a routable order to the Exchange for potential execution on IEX, after traversing the inbound latency (including the coil) to reach the System, it is directed to the System routing logic rather than the IEX matching engine.[14] Upon receipt of a routable order, the System routing logic may route all or a portion of the order to the IEX Order Book or to another national securities exchange. Any such orders routed to the IEX Order Book by the System routing logic are subject to an additional 350 microsecond inbound latency between the IEX routing logic and the IEX Order Book. Similarly, the IEX routing logic may only receive IEX Data Products subject to the same 350 microsecond outbound latency as other data recipients. These additional inbound and outbound latency delays place IEXS in the same position as any Member that is a third-party routing broker in reaching the IEX Order Book, receiving outbound order messages, and receiving IEX Data Products, i.e., IEXS has no speed or informational advantage compared to other Members and data recipients.

See IEX Rule 11.510 for a complete description of the manner in which Participants[15] and Extranet Providers[16] may connect to, access, and interact with the

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[13] See IEX Rule 1.160(p).
[14] See IEX Rule 11.230(b).
[15] See IEX Rule 11.130(a).
[16] See IEX Rule 11.130(a).

System including the applicable latencies.

The Critical Function of the "Speedbump"

The IEX Speedbump, which applies additional latency to inbound order messages (including modifications and cancellations), is designed to enable IEX to more effectively manage and price orders resting on its book when the market moves. This is because (as described above) orders sent to IEX are delayed by 350 microseconds in reaching IEX's matching engine but IEX does not delay its own receipt of market data from other national securities exchanges and the SIPs. This approach is designed to enable IEX's matching engine to timely process price changes and to price or execute orders on the IEX Order Book at the most accurate prices possible. As the Commission noted in approval of IEX's application to operate as a national securities exchange in 2016:

> [T]he purpose of IEX's coil is to provide an intentional buffer that slows down incoming orders to allow IEX's matching engine to update the prices of resting "pegged" orders when away prices change to protect resting pegged orders from the possibility of adverse selection when the market moves to a new midpoint price. The allowable price of a "pegged" order will change whenever the best displayed price across all exchanges changes, but it takes time for IEX's system to receive other exchange data feeds and recalculate the price of each pegged order resting on its book. For various reasons, IEX's systems may not recalculate prices as fast as some of the fastest low-latency traders in the market are able to send orders accessing pegged orders resting on IEX at potentially "stale" prices. The Commission believes that the application of the POP/coil delay delays the ability of low-latency market participants to take a "stale"-priced resting pegged order on IEX (i.e., before IEX finishes its process of re-pricing the pegged order in response to changes in the NBBO) based on those market participants' ability to more effectively digest direct market data feeds and swiftly submit an order before IEX finishes its process of updating the prices of pegged orders resting on its book. (internal

citations omitted)[17]

In addition, with IEX's recent addition of its D-Limit order type, the IEX speed bump helps IEX re-price D-Limit orders in the few seconds of the day when IEX's Crumbling Quote Indicator[18] detects that the national best bid or offer is likely to move in a direction adverse to the User of the order within two milliseconds.[19]

This application of the IEX Speedbump, and the benefits therein, are distinct and different from the additional (and symmetrical) latency imposed on outbound trading messages which was designed to slightly delay news of an execution to the participants to the execution and to IEX's Data Products. The outbound latency thus enables a market participant using a serial routing technique[20] that executes a trade on IEX to avoid potential information leakage when subsequently seeking to access liquidity on other markets before news of the IEX execution could affect resting liquidity on those markets[21] (e.g., potentially resulting in cancellations or re-pricing of such liquidity). Since the time of IEX's exchange approval in 2016 there have been a myriad of technology advances, including improvements in smart-order routing techniques and a reduction in SIP latencies.[22] Consequently, and as discussed more fully below and in the

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[17] See Securities Exchange Act Release No. 34-78101 (June 17, 2016), 81 FR 41141, 41155 (June 23, 2016) ("Exchange Approval Order").
[18] See IEX Rule 11.190(g).
[19] See Securities Exchange Act Release No. 89686 (August 26, 2020), 85 FR 54438 (September 1, 2020) (approving SR-IEX-2019-15) ("D-Limit Approval Order").
[20] Serial routing entails routing an order first to one exchange, and then routing whatever shares remain in the order to other exchanges.
[21] See Exchange Approval Order, supra note 17.
[22] The SIPs are comprised of three plans: the CTA Plan (trade data on Tapes A&B), the CQ Plan (quote data on Tapes A&B), and the UTP Plan (trade and quote data on Tape C). Since IEX's exchange launch in September 2016, the average latencies for quote messages on the SIPs has dropped from 470 µs to 19.5 µs (CQ Plan) and from 762 µs to 13.2 µs (UTP Plan); and the average latencies for trade messages on the SIPs has dropped from 320 µs to 20 µs (CTA Plan)

Statutory Basis section, IEX does not believe that the considerations that existed in 2016 necessitate continuing to impose additional latency on outbound order messages or IEX Data Products.

Proposal

The Exchange proposes to amend IEX Rule 11.510 to reduce the outbound latency that presently applies to all trading messages sent from IEX back to Users to the actual geographic distance and related network connectivity[23] between the Exchange System and the IEX POP. As proposed, all outbound communications (including execution and other order report messages, as well as TOPS, DEEP and DROP messages) would be treated in the same manner. The Exchange estimates that removal of the coiled optical fiber would reduce the outbound latency to 37 microseconds.

IEX is not proposing any changes to the additional latency applied to inbound orders, cancellations or modifications from any User, regardless of making or taking liquidity or any other factors, which will maintain the symmetry of IEX's Speedbump design for all Users. Users would still be required to connect to IEX at the POP. IEXS would continue to be subject to the existing additional inbound latency when the IEX routing logic sends an order to the IEX Order Book (a total delay of 700 microseconds for inbound routable orders) but would be subject to the reduced outbound latency in receiving execution and order messages as well as IEX Data Products in the same manner

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and from 619.7 µs to 15.7 µs (UTP Plan). See "Key Operating Metrics of Tape A&B U.S. Equities Securities Information Processor (CTA SIP)," available at https://www.ctaplan.com/publicdocs/ctaplan/CTAPLAN_Processor_Metrics_3Q2020.pdf and "UTP Q3 2020 – September Tape C Quote Metrics" and "September Tape C Trade Metrics," available at https://www.utpplan.com/DOC/UTP_Website_Statistics_Q3-2020-September.pdf.

[23] Ordinary course network connectivity includes switches and cabling to connect the network access point at the POP to the System.

as those of other Members and data recipients. Therefore, reducing the outbound latency will have no impact on IEX's ability to provide the benefits of protection from certain trading strategies when using pegged or D-Limit orders.

In addition, based on informal feedback from Members, IEX understands that a reduction in the outbound latency would enhance Members' execution and risk management processes, including with respect to hedging and re-routing, by enabling them to receive reports of IEX executions sooner than is currently the case. Moreover, IEX believes that these benefits would apply to all Members, regardless of business model, by supporting overall execution and risk management. IEX further understands that receiving execution reports closer in time to when an execution occurred would enable Members and their clearing firms to incorporate the financial and other exposure of an execution into their risk management systems and thereby enable enhanced monitoring and control of applicable risks. IEX believes that these execution and risk management benefits outweigh the concerns that previously existed regarding the risk to serial routing techniques. As the Commission has noted, current and commonplace routing techniques seek to have orders arrive and execute simultaneously across multiple venues and are able to capture liquidity across multiple venues simultaneously without signaling those executions to the market in a way that would impact prices or available liquidity.[24] As a result, IEX believes that Members and other market participants can use such routing techniques instead of serial routing techniques to avoid potential information leakage when subsequently seeking to access liquidity on other markets after an IEX execution.

[24] See D-Limit Approval Order supra note 19 at 54441-42.

IEX also believes that its Data Products would be more useful if they were not subject to the additional outbound latency so that Members can more effectively use IEX market data in their execution and risk management decisions. Additionally, IEX notes that since its exchange launch in 2016 the SIPs have materially reduced their average latencies for dissemination of quote and trade messages, as discussed above.[25] Thus, IEX believes that these reduced latencies enable some market participants to receive IEX market data messages from the SIPs before they can receive such messages on TOPS and DEEP. In these circumstances delaying IEX's Data Products effectively renders them of limited utility. Consequently, as proposed, IEX Data Products will also be subject to the reduced outbound latency.

Accordingly, IEX proposes to amend IEX Rule 11.510 to reflect the changes described above as well as to streamline descriptions of the communications infrastructure for inbound and outbound latency. As proposed the changes are as follows:

- Add new language to paragraph (a) to add specificity to the reference to the POP, including that it is an abbreviation for the IEX point-of-presence and that its network address is specified in the Exchange's Connectivity Manual. In addition, clarifying language is added to specify and describe the latency for inbound and outbound communications between the System and the POP, including that outbound communications from the System to the POP do not traverse the distance provided by coiled optical fiber and are subject to an equivalent 37 microseconds of latency due to traversing the geographic distribution and network connectivity between the System at the primary data center and the network access point of the POP. Conforming changes would be made to existing rule text to refer to inbound communications separately from outbound communications and replace the word "with" with "to" to be descriptive of the one-way communications referenced. Conforming changes to subparagraph (a)(1) would reflect that the Connectivity Manual was referenced and abbreviated previously. Subparagraph (a)(2) would be revised

[25] See supra note 22.

to replace the phrase "traverse the POP" with more descriptive language "traverse the connectivity infrastructure between the System and the POP."

- Paragraph (b) would be amended to replace the current heading, "IEX POP Connectivity" with "IEX Connectivity Infrastructure" which is more descriptive of the content of the paragraph. In addition, references to "inbound POP latency" and "outbound POP latency" would each delete the word "POP" to align with the clarifying changes to paragraph (a). Further, new language would be added to reference that connectivity between the System routing logic and the Order Book and the manner in which the System routing logic may receive IEX's Data Products are described in paragraph (c).
- Subparagraphs (b)(1) and (b)(2) would each also be amended to refer to the Exchange's connectivity infrastructure rather than the POP in describing the design goals of the inbound and outbound latency. Subparagraph (b)(2) would also be amended to specify the outbound latency and to update references to the types of messages included in the parenthetical examples.
- Paragraph (c)(1) would be amended to make conforming terminology changes to those proposed for paragraph (b). In addition, new language would be added to clarify and describe how the changes to the outbound latency apply to the System routing logic.
- Paragraph (c)(2) would be amended to make conforming terminology changes to those proposed for paragraph (b). In addition, new language would be added to specify that the System routing logic may only receive IEX Data Products subject to 37 microseconds of outbound latency, equivalent to the outbound latency applicable to all other data recipients.
- Paragraph (c)(3) would be amended to make conforming terminology changes to those proposed for paragraph (b) and to delete an extra space in a cross-reference to IEX Rule 11.240(d).
- Supplementary Material .02 would be amended to make conforming terminology changes (including deleting the term "POP" from the heading) to those proposed for paragraph (b), to reference the latency for the outbound latency, and to include the inbound and outbound latencies for routable orders in the description of which latencies are impacted by force majeure events.
- Supplementary Material .03 would be amended to clarify when the outbound versus inbound latency applies to routable orders.

Implementation

The Exchange plans to implement the proposed rule change in two steps. In the

first step, the Exchange would reduce the outbound latency between the System and the POP from 350 to 37 microseconds, but would retain the existing outbound latency between the System and the System routing logic. In the second step, the Exchange would reduce the outbound latency between the System and the System routing logic from 350 to 37 microseconds. The purpose of the two-step implementation is to enable the IEX technology team to focus on each part separately, thereby mitigating potential risks, in a manner consistent with standard technology best practices. IEX is choosing to reduce the outbound latency to the System routing logic in the second step to avoid giving the System routing logic any preference over other Users. The Exchange expects that there will be several days between the two steps of the implementation and will provide at least ten (10) days' notice to Members and market participants of the implementation timeline.[26]

b. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,[27] in general, and furthers the objectives of Section 6(b)(5),[28] 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, and to remove impediments to and perfect the mechanism of a free and open market and a national market system, and,

[26] After step one and before step two, all outbound communications between the System and the System routing logic will continue to be subject to an equivalent 350 microseconds of latency. Outgoing messages (i.e., responses) from the System routing logic to Users (with respect to routable orders sent to IEX) would be subject to the proposed reduced outbound latency of 37 microseconds. Further, IEXS would be able to receive IEX Data Products subject to the same 37 microseconds of latency as other Members and data recipients.
[27] 15 U.S.C. 78f(b).
[28] 15 U.S.C. 78f(b)(5).

in general, to protect investors and the public interest. Specifically, the Exchange believes that the proposed rule change is consistent with the protection of investors and the public interest because it is designed to enhance IEX Members' execution and risk management efforts. As described in the Purpose section, IEX believes that a reduction in the outbound latency would enhance Members' execution and risk management processes, including with respect to hedging and re-routing, by enabling them to receive reports of IEX executions sooner than is currently the case. IEX further believes that this reduction in outbound latency will enable Members and their clearing firms to incorporate the financial and other exposure related to IEX executions into their risk management systems and thereby enable enhanced monitoring and control of applicable risks. Moreover, IEX believes that these benefits would apply to all Members, regardless of the details or nature of a Member's business, by supporting overall execution and risk management. Further, IEX believes that these execution and risk management benefits outweigh the concerns that previously existed regarding the risk to serial routing techniques. As discussed in the Purpose section, and as the Commission has noted, current and commonplace routing techniques seek to have orders arrive and execute simultaneously across multiple venues and are able to capture liquidity across multiple venues simultaneously without signaling those executions to the market in a way that would impact prices or available liquidity.[29] As a result, IEX believes that Members and other market participants can use such routing techniques instead of serial routing techniques to avoid potential information leakage when subsequently seeking to access liquidity on other markets after an IEX execution.

[29] See supra note 24.

Similarly, and as discussed in the Purpose section, IEX believes that its Data Products will be more useful for execution and risk management purposes if they are disseminated closer in time to the applicable execution or quote change. IEX believes that this is particularly true with the recent material reduction in SIP latencies, as detailed in the Purpose section.

Further, the Exchange believes that the proposed rule change is consistent with the protection of investors and the public interest because it will apply to all Members in the same manner. All outbound communications will be subject to the same reduction in latency on a fair and nondiscriminatory basis. Significantly, and as discussed in the Purpose section, execution and other order messages from the System to Users will be subject to the same latency as IEX's Data Products so that the parties to an execution do not receive information regarding the execution prior to other market participants. Although the existing delay in dissemination of its Data Products was designed to enable an order sender to avoid the potential for information leakage when accessing liquidity on other markets (as discussed in the Purpose section), the Exchange believes this purpose is clearly outweighed by the potential execution and risk management benefits to market participants in receiving market data and execution reports more quickly, and the concomitant benefit to efficient markets. Moreover, as discussed in the Purpose section, the Exchange believes that market participants routinely utilize routing strategies and techniques to avoid potential information leakage, by routing in a manner so that child orders arrive at multiple markets near-simultaneously and that the technology to do so is

well established and has evolved since IEX was approved as an exchange in 2016. [30]

Additionally, the Exchange notes that IEXS, its routing broker, will continue to be on a level playing field compared to all other Members, as it will be subject to the same outbound latency reduction, except for the few days between stages one and two of the proposed implementation. With respect to these few days, the Exchange notes that the Act generally does not prohibit an exchange from treating its affiliated routing broker in a manner that is less preferential than other Members. Moreover, use of IEXS by other Members is optional and any Member that does not want to use IEXS may use other routers to route orders to away trading centers. [31]

The Exchange also notes that no other national securities exchanges currently provide for additional latency to outbound communications. Thus, IEX does not believe that the proposed changes raise any new or novel material issues that have not already been considered by the Commission in connection with the operations of other national securities exchanges. Moreover, because the Exchange does not believe that the proposed rule change is novel, it believes that IEX Members will be readily able to accommodate the reduced outbound latency into their trading systems.

Finally, and for clarification purposes, IEX is not proposing any changes to the additional latency applied to inbound orders, cancelations, and modifications or to those communications and processes that are not subject to the inbound or outbound latency, which continue to be critical to the protection of pegged and D-Limit orders, as described above.

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[30] See supra note 19 at 54441.
[31] See IEX Rule 2.220(a)(3).

4. 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. To the contrary, the proposal is designed to enable enhancement of Members' execution and risk management processes, as described in the Purpose and Statutory Basis sections.

The Exchange does not believe that the proposed rule change will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because other exchanges offer similar functionality. Moreover, the proposed rule change would benefit other exchanges because it would enable them to receive IEX's Data Products sooner than is currently the case which could correspondingly enable them to update pegged orders more quickly. Similarly, as with other Exchange Members, their outbound routing brokers would receive order messages from IEX sooner than is currently the case and could more quickly incorporate such information into any further routing decisions.

The Exchange also does not believe that the proposed rule change will impose any burden on intramarket competition because it will apply to all Members in the same manner, except for the few days between stages one and two of the proposed implementation. With respect to these few days, as noted in the Statutory Basis section, the Exchange notes that the Act generally does not prohibit an exchange from treating its affiliated routing broker in a manner that is less preferential than other Members. Moreover, use of IEXS by other Members is optional and any Member that does not want to use IEXS may use other routers to route orders to away trading centers.

5. 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.

6. Extension of Time Period for Commission Action

Not applicable.

7. Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2)

Not applicable.

8. Proposed Rule Change Based on the Rules of Another Self-Regulatory Organization or of the Commission

Not applicable.

9. Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act

Not applicable.

10. Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing and Settlement Supervision Act

Not applicable.

11. Exhibits

Exhibit 1 – Form of Notice of the Proposed Rule Change for Publication in the Federal Register.

Exhibit 5 – Text of Proposed Rule Change.

EXHIBIT 1

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34 -); File No. SR-IEX-2020-18)

Self-Regulatory Organizations: Investors Exchange LLC; Notice of Filing of Proposed Rule Change to Amend IEX Rule 11.510 to Reduce the Outbound Latency that Presently Applies to All Trading Messages Sent from IEX Back to Users of the Exchange.

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 (date), 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, II and III below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

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

Pursuant to the provisions of Section 19(b)(1) under the Act,[4] and Rule 19b-4 thereunder,[5] IEX is filing with the Commission a proposed rule change to amend IEX Rule 11.510 to reduce the outbound latency that presently applies to all trading messages sent from IEX back to Users[6] of the Exchange to include only the actual geographic distance and related network connectivity, as well as to make conforming changes to the

[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.
[6] See IEX Rule 1.160(qq).

outbound latency that applies to all trading messages sent from the IEX System[7] to the System routing logic[8] with respect to routable orders. 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 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 Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend IEX Rule 11.510 to reduce the outbound latency that presently applies to all trading messages sent from the IEX System at its primary data center back to Users of the Exchange to include only the actual geographic distance and related network connectivity, as well as to make conforming changes to the outbound latency that applies to all trading messages sent from the IEX System to the System routing logic with respect to routable orders.

The Exchange is not proposing to make any changes to the additional latency that applies in a symmetrical manner to all inbound order messages (i.e., orders, modifications

[7] See IEX Rule 1.160(nn).
[8] See IEX Rule 2.220(a).

or cancellations) regardless of whether such orders are to make or take liquidity. This additional latency on inbound order messages, commonly referred to as the "IEX Speedbump," continues to be a critical part of the IEX system and is designed to protect the interests of investors, brokers, and market makers that rest orders on IEX.

As described in more detail below, the additional latencies that are currently applied to both inbound and outbound messages between IEX and Users were put in place for completely different purposes. In contrast to the resting order protective design of the additional inbound latency, the additional outbound latency was designed simply to avoid potential information leakage about an execution on IEX that could reduce a Member's[9] ability to access liquidity on other markets after trading on IEX. As discussed more fully below, since the IEX exchange launch in 2016 there have been significant improvements in routing technology as well as reductions in Securities Information Processor ("SIP") market data dissemination latencies, and as a result the Exchange believes that the additional outbound latency is no longer necessary.

The Exchange also notes that no other national securities exchanges currently provide for additional latency to outbound communications. Thus, IEX does not believe that the proposed changes raise any new or novel material issues that have not already been considered by the Commission in connection with the operations of other national securities exchanges, or that Members could not readily incorporate into their trading systems.

BACKGROUND

Connectivity Description

[9] See IEX Rule 1.160(s).

Currently, all Users, which include Members and Sponsored Participants,[10] access IEX through the Exchange-provided network interface at the IEX Point-of-Presence[11] or "POP," located in Secaucus, New Jersey.[12] After entering through the POP, a User's electronic message sent to the System traverses the IEX "coil" which is a box containing approximately 38 miles of compactly coiled optical fiber cable. After exiting the coil, the User's message travels an additional geographic or physical distance to the System, located at the Exchange's primary data center in Weehawken, New Jersey. The time required for a message to traverse the coil combined with the physical distance (and related networking) to the System equates to an equivalent 350 microseconds of latency, referred to herein as the "inbound latency."[13] All inbound messages (e.g., orders to buy or sell and any modification to a previously sent open order) from any User traverse this connectivity infrastructure, including the coil, in a symmetrical manner regardless of the type of message or whether the User is seeking to buy, sell, make or take liquidity.

Separately, all outbound messages from IEX back to a User (e.g., confirmations of an execution that occurred on IEX), as well as messages from IEX's TOPS, DEEP and DROP data products[14] (collectively "Data Products"), pass through the communication infrastructure in reverse, referred to herein as the "outbound latency."[15]

Other incoming and outgoing messages to and from IEX are not subject to either

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[10] See IEX Rule 1.160(ll).
[11] A Point-of-Presence is the location at which customers of an exchange (or other technological system) can connect to the exchange.
[12] Please see discussion infra with respect to the connectivity infrastructure applicable to routable orders.
[13] See IEX Rule 11.510(b)(1).
[14] See IEX Rule 11.330(a).
[15] See IEX Rule 11.510(b)(2). IEX's backup data center, in Chicago, Illinois, which only consumes market data from the SIPs, does not have any inbound or outbound POP/coil latency, see IEX Rule 11.510 Supplementary Material .01, and is therefore unaffected by this proposed rule change.

the inbound or outbound latency. Instead, they are sent and received directly to and from the System, subject only to the latencies inherent in the geographic distances that the messages travel. These other messages include (i) incoming proprietary market data from other national securities exchanges and market data from the SIPs and (ii) outgoing messages to the SIPs (to disseminate IEX's quotation and last sale/execution information), the National Securities Clearing Corporation (to transmit executed transactions) and other national securities exchanges (to route orders for potential execution on such exchanges). In addition, all IEX Order Book[16] processing and order executions on the IEX Order Book occur within the System and are not subject to the inbound or outbound connectivity infrastructure.

IEX's affiliated broker-dealer, IEX Services LLC ("IEXS"), is a Member of the Exchange and is subject to the same inbound and outbound latency as other Members, as described in IEX Rules 2.220 and 11.510. If a User sends a routable order to the Exchange for potential execution on IEX, after traversing the inbound latency (including the coil) to reach the System, it is directed to the System routing logic rather than the IEX matching engine.[17] Upon receipt of a routable order, the System routing logic may route all or a portion of the order to the IEX Order Book or to another national securities exchange. Any such orders routed to the IEX Order Book by the System routing logic are subject to an additional 350 microsecond inbound latency between the IEX routing logic and the IEX Order Book. Similarly, the IEX routing logic may only receive IEX Data Products subject to the same 350 microsecond outbound latency as other data recipients. These additional inbound and outbound latency delays place IEXS in the same position

[16] See IEX Rule 1.160(p).
[17] See IEX Rule 11.230(b).

as any Member that is a third-party routing broker in reaching the IEX Order Book, receiving outbound order messages, and receiving IEX Data Products, i.e., IEXS has no speed or informational advantage compared to other Members and data recipients.

See IEX Rule 11.510 for a complete description of the manner in which Participants[18] and Extranet Providers[19] may connect to, access, and interact with the System including the applicable latencies.

The Critical Function of the "Speedbump"

The IEX Speedbump, which applies additional latency to inbound order messages (including modifications and cancellations), is designed to enable IEX to more effectively manage and price orders resting on its book when the market moves. This is because (as described above) orders sent to IEX are delayed by 350 microseconds in reaching IEX's matching engine but IEX does not delay its own receipt of market data from other national securities exchanges and the SIPs. This approach is designed to enable IEX's matching engine to timely process price changes and to price or execute orders on the IEX Order Book at the most accurate prices possible. As the Commission noted in approval of IEX's application to operate as a national securities exchange in 2016:

> [T]he purpose of IEX's coil is to provide an intentional buffer that slows down incoming orders to allow IEX's matching engine to update the prices of resting "pegged" orders when away prices change to protect resting pegged orders from the possibility of adverse selection when the market moves to a new midpoint price. The allowable price of a "pegged" order will change whenever the best displayed price across all exchanges changes, but it takes time for IEX's system to receive other exchange data feeds and recalculate the price of each pegged order resting on its book. For various reasons, IEX's systems may not recalculate prices as fast as some of the fastest low-latency traders in the market are able to

[18] See IEX Rule 11.130(a).
[19] See IEX Rule 11.130(a).

> send orders accessing pegged orders resting on IEX at potentially "stale" prices. The Commission believes that the application of the POP/coil delay delays the ability of low-latency market participants to take a "stale"-priced resting pegged order on IEX (i.e., before IEX finishes its process of re-pricing the pegged order in response to changes in the NBBO) based on those market participants' ability to more effectively digest direct market data feeds and swiftly submit an order before IEX finishes its process of updating the prices of pegged orders resting on its book. (internal citations omitted)[20]

In addition, with IEX's recent addition of its D-Limit order type, the IEX speed bump helps IEX re-price D-Limit orders in the few seconds of the day when IEX's Crumbling Quote Indicator[21] detects that the national best bid or offer is likely to move in a direction adverse to the User of the order within two milliseconds.[22]

This application of the IEX Speedbump, and the benefits therein, are distinct and different from the additional (and symmetrical) latency imposed on outbound trading messages which was designed to slightly delay news of an execution to the participants to the execution and to IEX's Data Products. The outbound latency thus enables a market participant using a serial routing technique[23] that executes a trade on IEX to avoid potential information leakage when subsequently seeking to access liquidity on other markets before news of the IEX execution could affect resting liquidity on those markets[24] (e.g., potentially resulting in cancellations or re-pricing of such liquidity). Since the time of IEX's exchange approval in 2016 there have been a myriad of technology advances, including improvements in smart-order routing techniques and a

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[20] See Securities Exchange Act Release No. 34-78101 (June 17, 2016), 81 FR 41141, 41155 (June 23, 2016) ("Exchange Approval Order").
[21] See IEX Rule 11.190(g).
[22] See Securities Exchange Act Release No. 89686 (August 26, 2020), 85 FR 54438 (September 1, 2020) (approving SR-IEX-2019-15) ("D-Limit Approval Order").
[23] Serial routing entails routing an order first to one exchange, and then routing whatever shares remain in the order to other exchanges.
[24] See Exchange Approval Order, supra note 20.

reduction in SIP latencies.[25] Consequently, and as discussed more fully below and in the Statutory Basis section, IEX does not believe that the considerations that existed in 2016 necessitate continuing to impose additional latency on outbound order messages or IEX Data Products.

Proposal

The Exchange proposes to amend IEX Rule 11.510 to reduce the outbound latency that presently applies to all trading messages sent from IEX back to Users to the actual geographic distance and related network connectivity[26] between the Exchange System and the IEX POP. As proposed, all outbound communications (including execution and other order report messages, as well as TOPS, DEEP and DROP messages) would be treated in the same manner. The Exchange estimates that removal of the coiled optical fiber would reduce the outbound latency to 37 microseconds.

IEX is not proposing any changes to the additional latency applied to inbound orders, cancellations or modifications from any User, regardless of making or taking liquidity or any other factors, which will maintain the symmetry of IEX's Speedbump design for all Users. Users would still be required to connect to IEX at the POP. IEXS would continue to be subject to the existing additional inbound latency when the IEX

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[25] The SIPs are comprised of three plans: the CTA Plan (trade data on Tapes A&B), the CQ Plan (quote data on Tapes A&B), and the UTP Plan (trade and quote data on Tape C). Since IEX's exchange launch in September 2016, the average latencies for quote messages on the SIPs has dropped from 470 µs to 19.5 µs (CQ Plan) and from 762 µs to 13.2 µs (UTP Plan); and the average latencies for trade messages on the SIPs has dropped from 320 µs to 20 µs (CTA Plan) and from 619.7 µs to 15.7 µs (UTP Plan). See "Key Operating Metrics of Tape A&B U.S. Equities Securities Information Processor (CTA SIP)," available at https://www.ctaplan.com/publicdocs/ctaplan/CTAPLAN_Processor_Metrics_3Q2020.pdf and "UTP Q3 2020 – September Tape C Quote Metrics" and "September Tape C Trade Metrics," available at https://www.utpplan.com/DOC/UTP_Website_Statistics_Q3-2020-September.pdf.

[26] Ordinary course network connectivity includes switches and cabling to connect the network access point at the POP to the System.

routing logic sends an order to the IEX Order Book (a total delay of 700 microseconds for inbound routable orders) but would be subject to the reduced outbound latency in receiving execution and order messages as well as IEX Data Products in the same manner as those of other Members and data recipients. Therefore, reducing the outbound latency will have no impact on IEX's ability to provide the benefits of protection from certain trading strategies when using pegged or D-Limit orders.

In addition, based on informal feedback from Members, IEX understands that a reduction in the outbound latency would enhance Members' execution and risk management processes, including with respect to hedging and re-routing, by enabling them to receive reports of IEX executions sooner than is currently the case. Moreover, IEX believes that these benefits would apply to all Members, regardless of business model, by supporting overall execution and risk management. IEX further understands that receiving execution reports closer in time to when an execution occurred would enable Members and their clearing firms to incorporate the financial and other exposure of an execution into their risk management systems and thereby enable enhanced monitoring and control of applicable risks. IEX believes that these execution and risk management benefits outweigh the concerns that previously existed regarding the risk to serial routing techniques. As the Commission has noted, current and commonplace routing techniques seek to have orders arrive and execute simultaneously across multiple venues and are able to capture liquidity across multiple venues simultaneously without signaling those executions to the market in a way that would impact prices or available liquidity.[27] As a result, IEX believes that Members and other market participants can use

[27] See D-Limit Approval Order supra note 22 at 54441-42.

such routing techniques instead of serial routing techniques to avoid potential information leakage when subsequently seeking to access liquidity on other markets after an IEX execution.

IEX also believes that its Data Products would be more useful if they were not subject to the additional outbound latency so that Members can more effectively use IEX market data in their execution and risk management decisions. Additionally, IEX notes that since its exchange launch in 2016 the SIPs have materially reduced their average latencies for dissemination of quote and trade messages, as discussed above.[28] Thus, IEX believes that these reduced latencies enable some market participants to receive IEX market data messages from the SIPs before they can receive such messages on TOPS and DEEP. In these circumstances delaying IEX's Data Products effectively renders them of limited utility. Consequently, as proposed, IEX Data Products will also be subject to the reduced outbound latency.

Accordingly, IEX proposes to amend IEX Rule 11.510 to reflect the changes described above as well as to streamline descriptions of the communications infrastructure for inbound and outbound latency. As proposed the changes are as follows:

- Add new language to paragraph (a) to add specificity to the reference to the POP, including that it is an abbreviation for the IEX point-of-presence and that its network address is specified in the Exchange's Connectivity Manual. In addition, clarifying language is added to specify and describe the latency for inbound and outbound communications between the System and the POP, including that outbound communications from the System to the POP do not traverse the distance provided by coiled optical fiber and are subject to an equivalent 37 microseconds of latency due to traversing the geographic distribution and network connectivity between the System at the primary data center and the network access point of the POP. Conforming changes would be made to existing rule text to refer to inbound communications separately

[28] See supra note 25.

from outbound communications and replace the word "with" with "to" to be descriptive of the one-way communications referenced. Conforming changes to subparagraph (a)(1) would reflect that the Connectivity Manual was referenced and abbreviated previously. Subparagraph (a)(2) would be revised to replace the phrase "traverse the POP" with more descriptive language "traverse the connectivity infrastructure between the System and the POP."

- Paragraph (b) would be amended to replace the current heading, "IEX POP Connectivity" with "IEX Connectivity Infrastructure" which is more descriptive of the content of the paragraph. In addition, references to "inbound POP latency" and "outbound POP latency" would each delete the word "POP" to align with the clarifying changes to paragraph (a). Further, new language would be added to reference that connectivity between the System routing logic and the Order Book and the manner in which the System routing logic may receive IEX's Data Products are described in paragraph (c).
- Subparagraphs (b)(1) and (b)(2) would each also be amended to refer to the Exchange's connectivity infrastructure rather than the POP in describing the design goals of the inbound and outbound latency. Subparagraph (b)(2) would also be amended to specify the outbound latency and to update references to the types of messages included in the parenthetical examples.
- Paragraph (c)(1) would be amended to make conforming terminology changes to those proposed for paragraph (b). In addition, new language would be added to clarify and describe how the changes to the outbound latency apply to the System routing logic.
- Paragraph (c)(2) would be amended to make conforming terminology changes to those proposed for paragraph (b). In addition, new language would be added to specify that the System routing logic may only receive IEX Data Products subject to 37 microseconds of outbound latency, equivalent to the outbound latency applicable to all other data recipients.
- Paragraph (c)(3) would be amended to make conforming terminology changes to those proposed for paragraph (b) and to delete an extra space in a cross-reference to IEX Rule 11.240(d).
- Supplementary Material .02 would be amended to make conforming terminology changes (including deleting the term "POP" from the heading) to those proposed for paragraph (b), to reference the latency for the outbound latency, and to include the inbound and outbound latencies for routable orders in the description of which latencies are impacted by force majeure events.
- Supplementary Material .03 would be amended to clarify when the outbound

versus inbound latency applies to routable orders.

Implementation

The Exchange plans to implement the proposed rule change in two steps. In the first step, the Exchange would reduce the outbound latency between the System and the POP from 350 to 37 microseconds, but would retain the existing outbound latency between the System and the System routing logic. In the second step, the Exchange would reduce the outbound latency between the System and the System routing logic from 350 to 37 microseconds. The purpose of the two-step implementation is to enable the IEX technology team to focus on each part separately, thereby mitigating potential risks, in a manner consistent with standard technology best practices. IEX is choosing to reduce the outbound latency to the System routing logic in the second step to avoid giving the System routing logic any preference over other Users. The Exchange expects that there will be several days between the two steps of the implementation and will provide at least ten (10) days' notice to Members and market participants of the implementation timeline.[29]

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,[30] in general, and furthers the objectives of Section 6(b)(5),[31] 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

[29] After step one and before step two, all outbound communications between the System and the System routing logic will continue to be subject to an equivalent 350 microseconds of latency. Outgoing messages (i.e., responses) from the System routing logic to Users (with respect to routable orders sent to IEX) would be subject to the proposed reduced outbound latency of 37 microseconds. Further, IEXS would be able to receive IEX Data Products subject to the same 37 microseconds of latency as other Members and data recipients.

[30] 15 U.S.C. 78f(b).

[31] 15 U.S.C. 78f(b)(5).

persons engaged in facilitating transactions in securities, and 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, the Exchange believes that the proposed rule change is consistent with the protection of investors and the public interest because it is designed to enhance IEX Members' execution and risk management efforts. As described in the Purpose section, IEX believes that a reduction in the outbound latency would enhance Members' execution and risk management processes, including with respect to hedging and re-routing, by enabling them to receive reports of IEX executions sooner than is currently the case. IEX further believes that this reduction in outbound latency will enable Members and their clearing firms to incorporate the financial and other exposure related to IEX executions into their risk management systems and thereby enable enhanced monitoring and control of applicable risks. Moreover, IEX believes that these benefits would apply to all Members, regardless of the details or nature of a Member's business, by supporting overall execution and risk management. Further, IEX believes that these execution and risk management benefits outweigh the concerns that previously existed regarding the risk to serial routing techniques. As discussed in the Purpose section, and as the Commission has noted, current and commonplace routing techniques seek to have orders arrive and execute simultaneously across multiple venues and are able to capture liquidity across multiple venues simultaneously without signaling those executions to the market in a way that would impact prices or available liquidity.[32] As a result, IEX believes that Members and other market participants can use such routing techniques instead of serial routing

[32] See supra note 27.

techniques to avoid potential information leakage when subsequently seeking to access liquidity on other markets after an IEX execution.

Similarly, and as discussed in the Purpose section, IEX believes that its Data Products will be more useful for execution and risk management purposes if they are disseminated closer in time to the applicable execution or quote change. IEX believes that this is particularly true with the recent material reduction in SIP latencies, as detailed in the Purpose section.

Further, the Exchange believes that the proposed rule change is consistent with the protection of investors and the public interest because it will apply to all Members in the same manner. All outbound communications will be subject to the same reduction in latency on a fair and nondiscriminatory basis. Significantly, and as discussed in the Purpose section, execution and other order messages from the System to Users will be subject to the same latency as IEX's Data Products so that the parties to an execution do not receive information regarding the execution prior to other market participants. Although the existing delay in dissemination of its Data Products was designed to enable an order sender to avoid the potential for information leakage when accessing liquidity on other markets (as discussed in the Purpose section), the Exchange believes this purpose is clearly outweighed by the potential execution and risk management benefits to market participants in receiving market data and execution reports more quickly, and the concomitant benefit to efficient markets. Moreover, as discussed in the Purpose section, the Exchange believes that market participants routinely utilize routing strategies and techniques to avoid potential information leakage, by routing in a manner so that child orders arrive at multiple markets near-simultaneously and that the technology to do so is

well established and has evolved since IEX was approved as an exchange in 2016. [33]

Additionally, the Exchange notes that IEXS, its routing broker, will continue to be on a level playing field compared to all other Members, as it will be subject to the same outbound latency reduction, except for the few days between stages one and two of the proposed implementation. With respect to these few days, the Exchange notes that the Act generally does not prohibit an exchange from treating its affiliated routing broker in a manner that is less preferential than other Members. Moreover, use of IEXS by other Members is optional and any Member that does not want to use IEXS may use other routers to route orders to away trading centers.[34]

The Exchange also notes that no other national securities exchanges currently provide for additional latency to outbound communications. Thus, IEX does not believe that the proposed changes raise any new or novel material issues that have not already been considered by the Commission in connection with the operations of other national securities exchanges. Moreover, because the Exchange does not believe that the proposed rule change is novel, it believes that IEX Members will be readily able to accommodate the reduced outbound latency into their trading systems.

Finally, and for clarification purposes, IEX is not proposing any changes to the additional latency applied to inbound orders, cancelations, and modifications or to those communications and processes that are not subject to the inbound or outbound latency, which continue to be critical to the protection of pegged and D-Limit orders, as described above.

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

[33] See supra note 22 at 54441.
[34] See IEX Rule 2.220(a)(3).

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. To the contrary, the proposal is designed to enable enhancement of Members' execution and risk management processes, as described in the Purpose and Statutory Basis sections.

The Exchange does not believe that the proposed rule change will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because other exchanges offer similar functionality. Moreover, the proposed rule change would benefit other exchanges because it would enable them to receive IEX's Data Products sooner than is currently the case which could correspondingly enable them to update pegged orders more quickly. Similarly, as with other Exchange Members, their outbound routing brokers would receive order messages from IEX sooner than is currently the case and could more quickly incorporate such information into any further routing decisions.

The Exchange also does not believe that the proposed rule change will impose any burden on intramarket competition because it will apply to all Members in the same manner, except for the few days between stages one and two of the proposed implementation. With respect to these few days, as noted in the Statutory Basis section, the Exchange notes that the Act generally does not prohibit an exchange from treating its affiliated routing broker in a manner that is less preferential than other Members. Moreover, use of IEXS by other Members is optional and any Member that does not want to use IEXS may use other routers to route orders to away trading centers.

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

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the Exchange consents, the Commission shall: (a) by order approve or disapprove such proposed rule change, or (b) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments:

- Use the Commission's Internet comment form (http://www.sec.gov/rules/sro.shtml); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-IEX-2020-18 on the subject line.

Paper Comments:

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

All submissions should refer to File Number SR-IEX-2020-18. This file number should be included in 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 Section, 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 will also be available for inspection and copying at the IEX's principal office and on its Internet website at www.iextrading.com. 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-IEX-2020-18 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.[35]

[35] 17 CFR 200.30-3(a)(12).

Exhibit 5 – Text of Proposed Rule Change

Proposed new language is underlined; proposed deletions are in brackets.

CHAPTER 11. TRADING RULES

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Rule 11.510. Connectivity

(a) General. All Participants and Extranet Providers, each as defined in IEX Rule 11.130(a), may only connect to, access, and interact with the System at a network address maintained by the Exchange at the IEX [POP]point-of-presence (the "POP") as specified in the Exchange's Connectivity Manual ("Connectivity Manual"). Inbound [C]communications [with] to the System from the POP are subject to an equivalent 350 microseconds of latency between the network access point of the POP and the System at the primary data center (due to traversing the physical distance provided by coiled optical fiber, the[and] geographic distribution and network connectivity). Outbound communications from the System to the POP do not traverse the physical distance provided by coiled optical fiber and are subject to an equivalent 37 microseconds of latency due to traversing the geographic distribution and network connectivity between the System at the primary data center and the network access point of the POP.

(1) The Exchange offers a variety of connectivity options outlined in the [Exchange's] Connectivity Manual [("Connectivity Manual")]. IEX does not offer co-location services.

(2) Participants and Extranet Providers may connect to, access, and interact with the backup System when the System at the primary data center is unavailable and the Exchange declares it will operate from the backup data center. Certain Members are required to connect to the Exchange's backup System and participate in functional and performance testing as specified in IEX Rule 2.250. Neither inbound nor outbound communications with the backup System traverse the connectivity infrastructure between the System and the POP as connectivity to the backup System occurs directly at the backup data center.

(b) IEX [POP]Connectivity Infrastructure. The System is available for entry and execution of orders only via connectivity at the POP by each Participant. Exchange data products are available for receipt only via connectivity at the POP by all Data Recipients. Inbound messages from Participants to the Exchange are subject to the inbound [POP]latency, as defined in paragraph (1) below. Outbound messages from the Exchange to Participants are subject to the outbound [POP]latency, as defined in paragraph (2) below. Notwithstanding the foregoing, connectivity between the System routing logic and the Order Book and the

manner in which the System routing logic may receive Exchange data products are described in paragraph (c) below.

(1) Inbound [POP]Latency. For inbound communication (including, without limitation, order messages and cancel messages found in the Exchange's FIX Specification), the [POP]Exchange's connectivity infrastructure is designed to provide all Participants with an equivalent 350 microseconds of latency from the Exchange-provided network interface at the IEX POP to the System at the primary data center ("inbound[POP] latency").

(2) Outbound [POP]Latency. For outbound communication (including, without limitation, execution report messages found in the Exchange's FIX Specification, [and] quote and trade update messages found in the Exchange's TOPS and DEEP Specifications, and DROP messages), the [POP]Exchange's connectivity infrastructure is designed to provide all Participants and Data Recipients with an equivalent [350] 37 microseconds of latency from the System at the primary data center to the Exchange-provided network interface at the IEX POP ("outbound[POP] latency").

(c) System Connectivity.

(1) Order Book Processes and Order Execution. Order Book processing and order execution on the Order Book occur within the System and do not traverse the connectivity infrastructure between the System and the POP. Notwithstanding the foregoing, in the case of a routable order the order is initially delivered to the System routing logic within[when] the System, which will then route[s] all or a portion of [a routable]the order to the Order Book, in accordance with the System routing logic.[,] A[a]ll inbound [and outbound]communications (including, without limitation, order messages[,] and cancel messages from the System routing logic to the Order Book[, and execution report messages found in the Exchange's FIX Specification]) [traverse] are subject to 350 microseconds of [an additional POP]latency between the System routing logic and the Order Book (which is in addition to the inbound latency described in paragraph (b)(1) of this IEX Rule 11.510)[, pursuant to paragraph (b) of this IEX Rule 11.510.]; all outbound communications (including, without limitation, execution report messages found in the Exchange's FIX Specification) from the Order Book to the System routing logic are subject to 37 microseconds of latency between the Order book and the System routing logic (which is in addition to the outbound latency described in paragraph (b)(2) of this IEX Rule 11.510).

(2) System Receipt of Market Data.

(A) Proprietary Market Data Feeds. Pursuant to IEX Rule 11.410(a)(2), the System connects to each away trading center's primary data center for the receipt of proprietary market data feeds. Communications with away trading centers do not traverse the connectivity infrastructure between the System and the POP. The System routing logic may only receive[s] Exchange data products [after traversing

the POP]subject to 37 microseconds of outbound latency, equivalent to the outbound latency applicable to all other data recipents as described in [pursuant to]paragraph (b)(2) of this IEX Rule 11.510.

(i) The backup System shall not have connectivity to each away trading center's primary data center for the receipt of proprietary market data.

(B) SIP Feeds. Pursuant to IEX Rule 11.410(a)(3), the System connects to the SIPs for the receipt of SIP feeds. Communications with the SIPs do not traverse the connectivity infrastructure between the System and the POP.

(3) Outbound Communication from the System to Facilities and Away Trading Centers.

(A) Outbound Router. Pursuant to IEX Rule 11.230(b), the System connects to the Outbound Router for order entry and execution on away trading centers; the Outbound Router subsequently connects to each away trading center for order entry and execution on such away trading centers. In addition to the connectivity described in paragraph (b)(2) of this IEX Rule 11.510, [C]communications between the Outbound Router and away trading centers do not traverse the connectivity infrastructure between the System and the POP.

(B) Securities Information Processors. Pursuant to IEX Rule 11.240(c) and IEX Rule 11.240[ ](d), the System connects to the SIPs to disseminate quotation and last sale (i.e. execution) information. Communications with the SIPs do not traverse the connectivity infrastructure between the System and the POP.

(C) National Securities Clearing Corporation. Pursuant to IEX Rule 11.250(a), the System connects to the NSCC to transmit executed transactions. Communications with the NSCC do not traverse the connectivity infrastructure between the System and the POP.

• • • Supplementary Material • • •

.01 Backup System Connectivity.

The Exchange does not offer connectivity from the IEX POP to the Exchange's backup System. The backup System consumes SIP feeds as the sole market data source, therefore the POP is not required in the backup System. Thus, the Exchange offers connectivity directly at the backup data center.

.02 [POP]Latency.

Due to force majeure events and acts of third parties, the Exchange does not guarantee that [the POP]its connectivity infrastructure will always provide 350 microseconds of inbound latency [for the inbound POP latency]and 37 microseconds of outbound latency[the outbound POP latency],including the additional latencies for routable orders as described in Supplementary Material .03 below. The Exchange will periodically monitor such latency,

and will make adjustments to the latency as reasonably necessary to achieve consistency with the [350 microsecond] latency target<u>s</u> as soon as commercially practicable. If the Exchange determines to increase or decrease either the inbound [POP]latency or the outbound [POP]latency it will submit a rule filing pursuant to Section 19 of the Act.

.03 Latency Experience for Users Sending Routable Orders.

All routable orders sent to the Exchange by Users traverse the 350 microseconds of latency from the POP to the System. Once the System routing logic determines the destinations to route such order, including the Order Book, the routed child orders are subject to the applicable latency to each venue. In the case of routing to the Order Book, the child order is subject <u>to</u> an additional 350 microseconds of latency [when traversing the POP] from the System routing logic to the Order Book. In the case of routing to away trading centers, the child order is subject to the applicable latency from the System to each away trading center without traversing the <u>infrastructure between the System and the</u> POP. All responses from the Order Book to the System routing logic [traverse the POP]<u>are subject to 37 microseconds of latency and all messages from the System routing logic to Users are subject to an additional 37 microseconds of outbound latency</u>. All responses from away trading centers to the System routing logic do not traverse the <u>connectivity infrastructure between the System and the</u> POP. [All responses to Users from the System routing logic traverses the POP.]

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