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October 9, 2019

Ms. Vanessa Countryman
Secretary
U.S. Securities and Exchange Commission
100 F Street, N.E. 20549-1090

Re: Release No. 34-87014, File No. SR-BOX-2019-27; Release No. 34-86836, File No. SR-MIAX-2019-40; Release No. 34-86837, File No. SR-PEARL-2019-25; Release No. 34-86839, File No. SR-EMERALD-2019-31.

Dear Ms. Countryman:

Investors Exchange LLC ("IEX") is writing to comment on the latest filings by BOX Exchange LLC ("BOX") and Miami International Securities Exchange LLC ("MIAX Exchange") and its two affiliated exchanges MIAX PEARL ("Pearl") and MIAX Emerald (collectively, "MIAX") to charge for the first time (in the case of BOX) or increase (in the case of MIAX) fees for direct physical connections to these exchanges' systems.[1] We are writing because we believe these filings:

- Demonstrate how the ability of exchanges to charge new fees or increase fees on an "immediately effective" basis wastes regulatory resources and deprives market participants of a fair opportunity to comment on fee increases that impact them; and
- Raise important questions about how exchanges should meet their burden of showing that their fee increases for data and connectivity meet the standards established by the Securities Exchange Act of 1934 ("Exchange Act").

We are addressing these filings jointly because they are highly similar in their design and the amount of the fees and, in their latest iteration, rely on substantially the same arguments about competition for exchange services and the costs of providing connectivity.

BOX has filed a number of successive filings on an "immediately effective" basis, covering the same connectivity fees, beginning more than a year ago. In each case, the Commission suspended the fees and instituted proceedings to determine whether to disapprove the filings, based on a determination that the exchange had not provided adequate data and analysis to determine that the fees are fair and reasonable, equitably allocated, non-discriminatory, and that they do not create an undue burden on competition. Following each of the first two suspensions, BOX refiled the same proposal on an immediately effective basis, allowing it to continue to collect the fees. Further, BOX was able to continue charging the fees even while they were

[1] Securities Exchange Act Release No. 87014 (September 19, 2019), 84 FR 50534 (September 25, 2019) ("BOX Filing"); Securities Exchange Act Release No. 86836 (August 30, 2019), 84 FR 46997 (September 6, 2019) ("MIAX Filing").

suspended by filing a "notice of intention to petition for review" each of the SEC's orders.[2] Finally, the Commission issued an order disapproving the first three filings.[3] The MIAX filings also extend back more than one year, each one being followed by a suspension by the Commission and/or withdrawal of the filing by MIAX, and then a new filing for the same fees on an immediately effective basis.

The latest filings (the fifth by BOX and sixth by MIAX) were made after the issuance by the staff of the Commission of guidance relevant to exchange fee filings,[4] and they include additional detail beyond that provided in earlier filings, primarily directed to their costs of offering connectivity products.

Changes are Needed in the Ability of Exchanges to Implement Fee Changes Immediately

IEX believes that the history of these filings vividly demonstrates the unmanageable and unfair consequences that flow from allowing exchanges to implement fee changes at will, and without input from the members that are directly affected, and the investors and other participants that are affected indirectly. The provision that allows exchanges to begin charging fees immediately on filing was inserted as a late and little-scrutinized addition to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010.[5] Under the existing statutory scheme, there is no limit on an exchange's ability to keep going back to the well, even where a preceding filing has been found deficient. At the same time, each new filing, even if it contains no or few material differences from previous versions, needlessly wastes and diverts government resources. The result is especially untenable in the context of fees for proprietary market data and connectivity charges – fees that brokers and institutional investors widely view as unconstrained by normal competitive forces and that are particularly in need of scrutiny, including through the process of public notice and comment before they become effective.

We strongly endorse the Commission's recent proposal to eliminate immediate effectiveness of fee filings by self-regulatory organizations acting jointly under the national market system plans, including those that manage the consolidated data produced by securities information processors and the plan for the consolidated audit trail.[6] Compared to fees charged by those plans, the governance of which is subject to continuous and close monitoring by Commission staff, we

[2] Because Rule 431(e) of the Commission's Rules of Practice results in a stay of an action made by delegated authority if a party files notice of intention to petition the Commission for review of the action, an exchange can continue to collect a fee that has been suspended merely by filing such a notice. *See* 17 CFR § 431(e).
[3] *See* Securities Exchange Act Release No. 85459 (March 29, 2019), 84 FR 13363 (April 4, 2019) (the "BOX Order").
[4] *See* Staff Guidance on SRO Rule Filings Relating to Fees (May 21, 2019), at https://www.sec.gov/tm/staff-guidance-sro-rule-filings-fees.
[5] Pub. L. No. 111-203, 124 Stat. 1833 (July 21, 2010). *See* 15 U.S.C. 78s(b)(3)(A).
[6] *See* Securities Exchange Act Release No. 87193 (October 1, 2019).

believe there is an even stronger rationale not to allow immediate effectiveness of individual exchange fees.

IEX therefore supports a change to the Exchange Act to prevent exchange fees from being allowed to take effect until the Commission has had an opportunity to review the exchange's filing and decide whether to institute disapproval proceedings. Further, if the Commission does institute disapproval proceedings, the exchange should not be allowed to refile for and collect the same fee unless and until the Commission has issued an order affirmatively approving it.

The remainder of this letter responds to specifics of the BOX and MIAX fee flings.

Competition Arguments

Both exchanges advance similar arguments, sometimes using *verbatim* language, in support of their premise that their connectivity fees are constrained by competition. In general, these arguments boil down to the following:

- Each exchange has fewer members than other options exchanges, no member is legally obligated to connect directly, not every member connects directly, and therefore members that do connect directly do so as a matter of choice based on their business needs.
- Members that are connected directly could choose to cease doing so if they deemed fee increases to be unreasonable.

In addition, BOX relies on an argument about "platform theory" to advance its view that competition for order flow among exchanges acts to limit price increases for market data and connectivity.

IEX does not believe that the arguments about member choice are persuasive, most importantly, because they unrealistically assume that all members are similarly situated in terms of their need to be connected to all options exchanges. The question is not whether some members can choose not to connect but whether members that are responsible for the bulk of trading activity on these exchanges and in the markets generally can make this choice. In particular, the exchanges provide no data or analysis supporting the premise that electronic market makers or active agency brokers can realistically choose not to connect directly, and both acknowledge that no market makers connect indirectly.[7]

For example, MIAX discloses that purchasers of the lowest-latency "10Gb ULL" connectivity account for 74% of its volume. What data or analysis supports the premise that this class of

[7] BOX Filing, 84 FR at 50537; MIAX Filing, 84 FR at 47001. Each exchange asserts that "smaller sized market makers" are able to take advantage of lower-latency direct connections but neither provides information about how many, if any, do or how using such an alternative would affect a firm's ability to be competitive as a market maker. 84 FR at 50538; 84 FR at 47002. MIAX acknowledges that its 1Gb connection will not support data feeds that are needed by market makers. 84 FR at 47001.

participants could choose to disconnect or purchase a lower-latency connection? As the D.C. Circuit Court of Appeals said in the context of exchange proprietary market data, "evidence that few people buy the data tells us little about whether the data is 'critically important' to those traders who do."[8] Similarly, the fact that 13 of 51 members (according to BOX) and 19 of 41 members (according to MIAX) buy low-latency connections tells us nothing about the nature of the business conducted by those members or whether they can practically conduct that business without this type of access. Nor does the mere assertion that members with direct connections can choose to respond to increases by disconnecting help to advance their argument.[9]

In considering this question, it would be useful to know, for example, how many of the firms with low-latency connections at BOX and MIAX buy similar connections at all the other exchanges, or how many electronic market makers in options buy direct connections from some exchanges but not others. It would also be useful to know how many market makers, if any, have over time ceased purchasing direct connections or bought lower-latency connections, and, if so, whether any such firms continued to operate a market making business on other exchanges after making this decision.

BOX's arguments about "platform theory" are essentially rehashed theoretical arguments advanced by Nasdaq to the effect that it is not possible to separately evaluate the market data or connectivity services from other services on the ground that participants base their decisions on where to send orders on the aggregate costs of all exchange services.[10] But neither BOX or Nasdaq, or any other exchange, has provided evidence that the theory works in practice to limit price hikes for subscription services. The Commission has made clear that theoretical arguments that may apply outside the context of regulated exchanges do not suffice to show that competitive forces are working in fact to constrain exchange data and connectivity price increases.[11]

Cost Arguments

The exchanges rely on their own costs as an alternative basis to let their fees stand. According to BOX, its annual expense associated with providing connectivity in 2018 was approximately $8.9 million, composed of "direct expense" of $6.4 million, including expenses for "network infrastructure, associated data center processing equipment, network monitoring systems and associated software required to support the various forms of connectivity." BOX also includes what it calls "indirect expense" of $2.5 million, representing expenses for "such areas as trading operations, software development, business development, information technology, marketing, human resources, legal and regulatory, finance and accounting." According to BOX, its indirect

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[8] *NetCoalition v. SEC*, 615 F.3d 525, 543 (2010).
[9] IEX has raised these questions in response to previous MIAX filings. *See* Letter from John Ramsay, Chief Market Policy Officer, IEX, to Vanessa Countryman, Acting Secretary, SEC, dated June 5, 2019.
[10] BOX Filing, 84 FR at 50538-9.
[11] In the Matter of the Application of SIFMA, Securities Exchange Act Release No. 84432 (October 16, 2018), avail. at https://sec.gov/litigation/opinions/2018/34-84432.pdf; Box Order, 84 FR at 13369-70.

expense for connectivity is about 10% of total annual expense of both BOX and its affiliate BOX Options Market LLC, implying that its total operating expense is about $25 million.[12]

MIAX estimates its total costs to provide connectivity for its MIAX Exchange and MIAX Pearl were $19,324,216 in 2018, including third-party expenses of $5,052,346, and "internal costs" of $14,271,870. According to MIAX, internal costs include employee compensation and benefits, including staff in network operations, trading operations, development system operations and staff in general corporate departments, depreciation and amortization of certain equipment, and occupancy costs for leased office space for staff that support connectivity services. Although MIAX does not provide a total for operational expenses, the financial statements filed as an amendment to its Form 1 disclose total expenses for Pearl of about $26.2 million and MIAX Exchange of about $34.8 million, for a total of $61 million.

IEX believes that showing a reasonable relationship to the cost of providing market data or connectivity is an appropriate basis for justifying related fees, and BOX and MIAX have provided more information on their operating costs than the major equities listing exchanges have sought to do for their own fee filings. At the same time, the BOX and MIAX filings leave open questions about the nature and closeness of the relationship between the identified costs and the connectivity products at issue. IEX, in its own Cost Study published in January 2019, provided a detailed methodology for estimating our direct costs of providing market data, physical connectivity, and logical connectivity, along with detailed disclosure of IEX's annual costs to provide each category of services. With regard to physical connectivity, we estimated our direct annual costs at about $800,000.[13]

Based on the expense numbers provided in their filings, compared to exchange financial statements, BOX and MIAX each imply that they devote about 35% and 32%, respectively, of their total operational costs solely to providing connectivity. Although it is difficult from the general category descriptions to know precisely what was included, both exchanges appear to include general technology expenses associated with operating an exchange platform. For example, MIAX includes in its estimate costs for "network operations, trading operations, development, system operations, business, etc., as well as staff in general corporate departments". This appears to include general costs of operating matching systems and other trading technology, as opposed to the function of providing and maintaining physical connections in its data center, which is what MIAX is charging for. Costs to maintain an exchange's matching engine for example, relate to the extent to which orders are efficiently matched according to their terms and the exchange's rules, not whether the orders are received and accepted by the system in accordance with the specifications for the various connectivity options.

[12] This comports with 2018 financial statements for BOX Holdings Group LLC showing total consolidated expenses of $25.2 million.
[13] "The Cost of Exchange Services – Disclosing the Cost of Offering Market Data and Connectivity as a National Securities Exchange" (January 2019), avail. at https://iextrading.com/docs/The%20Cost%20of%20Exchange%20Services.pdf.

We also note there is an apparent contradiction between BOX's platform theory arguments, which include the assertion that "it is not possible to appropriately evaluate the pricing of connectivity services in isolation from the pricing of trading and other 'joint' services", and its allocation of certain costs to providing direct connectivity, which purports to do just that. If BOX is asking the Commission to credit its cost justifications, it cannot simultaneously argue that no allocation of costs is credible.

Equitable Allocation and Intra-Market Competition

In the BOX Order, the Commission noted that BOX did not explain or justify why the fee for 10Gb connections is five times more than that for lower-latency connections. In response, the latest filings both seek to justify price differences based on differences in costs to administer the different options. In fact, BOX goes so far as to assert that "[a] 10Gb connection uses at least ten times the network infrastructure as the non-10Gb connections."

Neither exchange provides any basis for these assertions, and based on IEX's experience as an exchange, we do not believe there is any basis. The hardware components (optical fiber, switch, server) to support a 10Gb connection are essentially the same as those for a non-10Gb connection, and the cost of employee time to install and maintain the two is identical. There may be marginally higher maintenance costs in the way of replacements or upgrades for a 10Gb option, but IEX believes the difference in exchange cost for a 10Gb connection will certainly be less than twice that of a higher-latency connection. At a minimum, the exchanges should explain their basis for concluding that exchanges incur substantially higher costs to provide lower-latency connections.

Both exchanges assert that the fee increases do not impact competition by smaller firms or constitute a barrier to entry but provide no data or analysis to support the argument. This concern is particularly pressing considering cost pressures and consolidation affecting market making firms in general in recent years. It may be true, as BOX and MIAX state, that none of their members are "compelled" to buy connectivity from them in the sense that no firm is compelled to conduct a market making business. But the specific question is whether the additional fees materially affect the overall incentives of smaller firms to provide liquidity by acting as market makers. In this regard, assuming that a market maker would need to maintain at least two physical connections (a primary and backup), it would be relevant to know how the annual connectivity fee burden compares to capitalization of smaller market maker firms, or their overall costs of doing business.[14]

[14] *See* Letter from Chester Spatt, Pamela R. and Kenneth B. Dunn Professor of Finance, Tepper School of Business, Carnegie Mellon University, to Brent JJ. Fields, Secretary, SEC, dated January 2, 2019.

Conclusion

IEX believes that exchanges should not be able to impose new fees or fee increases without the ability for the SEC and members of the public to first evaluate the impact of these fees, and that the provision allowing fee changes to be made immediately effective should be amended accordingly. In evaluating the reasonableness and fairness of exchange fees for market data and connectivity, an exchange's cost of operation is a relevant factor, but exchanges relying on this factor should be clear about the connection between the cost elements they identify and the products for which they are seeking to set new or higher fees. They also should address in a straightforward way the impact of their fees on market makers in particular and the potential the fees could limit who can compete in the type of business that in practice requires proprietary market data and direct connectivity.

Sincerely,

John Ramsay
Chief Market Policy Officer

cc: Mr. Brett Redfearn, Director, Division of Trading and Markets
Mr. Christian Sabella, Deputy Director, Division of Trading and Markets
Mr. David S. Shillman, Associate Director, Division of Trading and Markets
Mr. John Roeser, Associate Director, Division of Trading and Markets
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