

September 4, 2018

Via Electronic Mail (rule-comments@sec.gov)

Mr. Brent J. Fields, Secretary Securities and Exchange Commission 100 F Street, NE Washington, DC 20549

Re: Release No. 34-83786; File No. SR-MIAX-2018-19 Release No. 34-83785; File No. SR-PEARL-2018-16

Dear Mr. Fields:

The Healthy Markets Association appreciates the opportunity to comment on the above-referenced immediately effective exchange filings¹ which seek to

- Increase the connectivity fees for the 1 gigabit connection from \$1,100 to \$1,400 per month.
- Increase the connectivity fees for the 10 gigabit connection from \$5,500 to \$6,100 per month,
- Increase the connectivity fees from \$8,500 to \$9,300 for the 10 gigabit ultra-low latency ("ULL") connection per month, and
- Increase the the fees for the exchanges disaster recovery facility from \$500 to \$550 for the 1 gigabit connection and from \$2,500 to \$2,750 for the 10 gigabit connection.

¹ Miami International Securities Exchange LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend Its Fee Schedule, SEC, Exch. Act Rel. No. 34-83786, August 7, 2018, available at https://www.sec.gov/rules/sro/miax/2018/34-83786.pdf ("MIAX Exchange Filing") and MIAX PEARL LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend Its Fee Schedule, SEC, Exch. Act Rel. No. 34-83785, August 7, 2018, available at https://www.sec.gov/rules/sro/pearl/2018/34-83785.pdf ("PEARL Filing"). Collectively, we refer to these as the "MIAX Filings".



The MIAX Filings do not provide sufficient information to support a finding by the Commission that the filings:

- are an equitable allocation of reasonable dues, fees, and other charges;
- do not unfairly discriminate between different exchange participants;
- do not impose burdens on competition that are not necessary or appropriate; and
- do not impose impediments to the free and open market system.

As a result, and despite contrary conclusory assertions made in the MIAX Filings, the proposed fees are inconsistent with the exchange's obligations under the Exchange Act. ² Accordingly, we request that the Commission suspend the MIAX Filings and institute proceedings to disapprove them.

Further, the MIAX Filings appear to be part of a round of dramatic increases in connectivity fees across multiple securities exchanges³--each of which appears to rely upon the others as its primary justification. Rather than evidence of a competitive market, this collection of recent unilateral connectivity fee increases appears to reflect each exchange's attempts to press the Commission and the Exchange Act as far as possible to exploit their customers. We urge the Commission to immediately take action against all such filings, and cautiously evaluate each filing's compliance with the Exchange Act.

About Healthy Markets and Our Interest Market Data and Connectivity

The Healthy Markets Association is an investor-focused not-for-profit coalition working to educate market participants and promote data-driven reforms to market structure

² 5 U.S.C. § 78f.

³ BOX Options Exchange LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Related to Physical Port Fees for BOX, SEC, Exch. Act Rel. No. 34-83728, July 27, 2018, available at https://www.sec.gov/rules/sro/box/2018/34-83728.pdf; BZX Options Notice of filing and Immediate Effectiveness of a Proposed Rule Change Related to Physical Port Fees for BZX Options, SEC, Exch. No.34-83429. June 14. 2018. available https://www.sec.gov/rules/sro/cboebzx/2018/34-83429.pdf; NYSE Mkt LLC Notice of Filing of Proposed Change Amending the Co-location Services Offered by the Exchange to Add Certain Access and Connectivity Fees SEC, Exch. Act Rel. No. 34-78629, August 22, 2016 available at https://www.sec.gov/rules/sro/nysemkt/2016/34-78629.pdf; The NASDAQ Stock Market LLC Notice of filing and Immediate Effectiveness of Proposed Rule Change to Modify Nasdag Rule 7051 Fees Relating to Pricing for Direct Circuit Connections, SEC, Exch. Act Rel. No. 34-74680, April 8, 2015 available at https://www.sec.gov/rules/sro/nasdag/2015/34-74680.pdf.



challenges. Our members, who range from a few billion to hundreds of billions of dollars in assets under management, have come together behind one basic principle: Informed investors and policymakers are essential for healthy capital markets.⁴

The conflicts of interest and costs associated with market data, including connectivity to venues, have been a particular concern for Healthy Markets. In November 2017, we released *US Equity Market Data: How Conflicts of Interest Overwhelm an Outdated Regulatory Model and Market Participants*, an 80-page report that outlines issues related to, and conflicts regarding, market data.⁵ As we explained in that report, the relationships between the public market data framework and the private market data framework are inextricably linked. Both serve as profit centers for the dominant exchanges, and both are largely under the control of the exchanges.

In January 2018, we filed a petition for a rulemaking to the Commission to address many of these concerns, including recommending more than a dozen specific improvements.⁶ In April 2018, we filed a 191-page comment letter objecting to a CTA/CQ proposal to amend the fees.⁷ In July 2018, we filed an objection to a set of filings across the Cboe family of exchanges regarding exchange connectivity.⁸ And in August 2018, we objected to a connectivity filing by the BOX Options exchange.⁹

Background

Market data and other associated costs (including connectivity fees) are significant, and rising quickly. Much of these costs have come from connectivity features such as those that are the subject of the MIAX Filings.

⁴ To learn more about Healthy Markets, please see our website at http://www.healthymarkets.org.

⁵ See Healthy Markets Association, *US Equity Market Data: How Conflicts of Interest Overwhelm an Outdated Regulatory Model and Market Participants*, 4, Nov. 16, 2017 (Market Data Report).

⁶ Letter from Tyler Gellasch, Healthy Markets Association, to Hon. Jay Clayton, SEC, Jan. 17, 2018, available at https://www.sec.gov/rules/petitions/2018/petn4-717.pdf.

⁷ Letter from Tyler Gellasch, Healthy Markets Association, to Brent J. Fields, SEC, Apr. 11, 2018, available at https://www.sec.gov/comments/sr-ctacq-2017-04/ctacq201704-3420092-162185.pdf. This letter objected to two market data-related filings, one of which was later abrogated. Healthy Markets later filed a similar objection to the analogous filing in the UTP Plan.

⁸ Letter from Tyler Gellasch, Healthy Markets Association, to Brent J. Fields, SEC, Jul. 26, 2018, available at https://www.sec.gov/comments/sr-cboebyx-2018-006/cboebyx2018006-4127982-171758.pdf (Healthy Markets July 2018 Letter).

⁹ Letter from Tyler Gellasch, Healthy Markets Association, to Brent J. Fields, SEC, August 23, 2018, available at https://www.sec.gov/comments/sr-box-2018-24/srbox201824-4258035-173056.pdf (Healthy Markets August 2018 Letter).



The MIAX Filings reflect that the exchanges offer three levels of connectivity: 1 gigabit, 10 gigabit and 10 gigabit ULL. 10 The MIAX Filings also reflect that the exchanges offer disaster recovery connectivity via 1 and 10 gigabit connections. 11 For the primary 1 gigabit connectivity, the MIAX Filings propose to increase the monthly cost from \$1,100 per connection to \$1,400.00 per connection. 12 For the primary 10 gigabit connectivity level, the MIAX Filings propose to increase the monthly cost from \$5,500 per connection to \$6,100.00 per connection. 13 For the primary 10 gigabit ULL connection, the MIAX Filings propose to increase the monthly cost from \$8,500 to \$9,300. Lastly, for the disaster recovery facility, the MIAX Filings propose to increase fees from \$500 to \$550 for the 1 gigabit and from \$2,500 to \$2,750 for the 10 gigabit connections. 14 Notably, while not discussed in the MIAX Filings, many market participants are compelled to maintain multiple connections to the data center so as to minimize the risks of connectivity failures, meaning that the actual costs for market participants are often double the single port costs described above.

Because the exchanges filed the changes under Section 19(b)(3)(A)(ii) of the Exchange Act and Rule 19b-4(f)(2) thereunder, the proposed rule changes became effective upon filing with the Commission.¹⁵ The fee changes were filed with the Commission on August 7, 2018, although it appears the new rates commenced on August 1, 2018.¹⁶

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¹⁰ MIAX Exchange Filing, at 2. PEARL Filing, at 2.

¹¹ MIAX Exchange Filing, at 2-3; PEARL Filing, at 2-3.

¹² MIAX Exchange Filing, at 3: PEARL Filing, at 3.

¹³ MIAX Exchange Filing, at 3; PEARL Filing, at 3.

¹⁴ MIAX Exchange Filing, at 3; PEARL Filing, at 3.

¹⁵ See, e.g., MIAX Exchange Filing, at 1; PEARL Filing, at 1. This truncated process, wherein rules are immediately effective, was enacted by the Dodd-Frank Wall Street Reform and Consumer Protection Act. As one of a very small number of organizations that reads every filing of every exchange each month, we believe that this process has enabled the proliferation of fees and complexity with little SEC oversight. With upwards of 200 SRO filings each month, and remarkably limited SEC staff resources, we have significant questions regarding the staff's ability to review the filings, identify concerns, and take appropriate action to protect investors and promote fair and efficient markets on a consistent basis.

¹⁶ See, e.g., MIAX Exchange Filing, at 4 (declaring the fee will be "effective as of August 1, 2018"). As we have written before, we might think of this as a television cable company telling you in the middle of the month that your cable rate just went up 25% for that whole month. Setting aside the planning difficulties, it's simply offensive to consumers, and is not the type of behavior that one would typically expect from competitive markets.



The MIAX Filings Are Inconsistent With the Exchange Act

The MIAX Filings state that the proposed changes are consistent with the objectives of the Exchange Act because

- they "provide[] for the equitable allocation of reasonable dues, fees and other charges among Exchange Members and issuers and other persons using any facility or system which the Exchange operates or controls;"17
- they are "designed to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general to protect investors and the public interest and is not designed to permit unfair discrimination between customer, issuers, brokers and dealers;"18
- "the increased fees are assessed equally among all users of the applicable connections", 19 and
- the connectivity offerings are "similar" to, and fees are less than those charged by other exchanges.²⁰

None of these assertions are sufficiently established so as to permit the Commission to find that the exchanges have met their burdens under the Exchange Act.

The MIAX Filings Do Not Establish That The Proposed Fees Constitute An Equitable Allocation of Reasonable Dues, Fees, and Other Charges

By law, the proposed fees must be both (1) reasonable and (2) equitably allocated.²¹ The MIAX Filings make little attempt to demonstrate compliance with either mandate.

¹⁷ MIAX Exchange Filing, at 5., PEARL Filing, at 5.

¹⁸ MIAX Exchange Filing, at 5., PEARL Filing, at 5.

¹⁹ MIAX Exchange Filing, at 5., PEARL Filing, at 5.

²⁰ MIAX Exchange Filing, at 5 (referring to connectivity fees charged by PHLX, ISE, Arca and NYSE American); see also, PEARL Filing, at 5.

²¹ 5 U.S.C. § 78f.



The MIAX Filings Do Not Establish That the Fee Changes are Reasonable

The MIAX Filings do not offer any suggestion that these services, which are provided now, are becoming more costly to produce. They simply explain that the fees

offset increasing costs associated with providing and maintaining the necessary hardware and other infrastructure to support this technology and to also more closely align its fees with the rates charged by competing options exchanges.²²

We have no idea what that means, and the MIAX Filings offers no details.²³ Nor do the filings offer any discussion regarding the relative benefits to users of the various potential exchange connectivity offerings, such as subscribing to the 10 gigabit connection, 1 gigabit connection, or the 10 gigabit ULL connection.²⁴

At root, the justification seems to be essentially that the proposed fees are allegedly in-line with those of other exchanges. But even that analogy if off-base. The exchanges appear to have very significant price differences. The MIAX Filings cites PHLX²⁵, ISE²⁶, ARCA and NYSE American,²⁷ noting that each charge higher rates for such similar connectivity to primary and secondary facilities. The MIAX Filings however, fail to cite to other exchanges, such as the CBOE family of exchange (which charges less than the proposals here).²⁸ As of June 2018, the fees for these types of connectivity offerings have ranged from free to \$14,000 per month. We strain to decipher any pattern out of it.

²³ We do note, however, that even this vacuous statement offers far more details than those offered by the even more egregious recent filings by the Cboe family of exchanges, to which we have previously objected. See, e.g., Healthy Markets July 2018 Letter, at 6-7.

²² MIAX Exchange Filing, at 4: PEARL Filing, at 4.

²⁴ Notably, it is likely impossible for a market participant that subscribes to these services today to meet its basic legal and business obligations without some connectivity to the exchange.

Nasdaq Phlx LLC Pricing Schedule, SEC, Exch. Act Rel. No. 34-83465, *available at* https://www.sec.gov/rules/sro/phlx/2018/34-83465-ex5.pdf.

²⁶ See Nasdaq ISE Official Fee Schedule August 29, 2018 *available at* http://ise.cchwallstreet.com/tools/PlatformViewer.asp?selectednode=chp_1_1_3&manual=%2Fcontents% 2Fise%2Fise-fee%2F

²⁷See NYSE American Fees and Charges, NYSE American August 29, 2018, *available at* https://www.nyse.com/publicdocs/nyse/markets/nyse-american/NYSE_America_Equities_Price_List.pdf.

²⁸ See CBOE Exchange Fees and Charges, August 22, 2018 *available at* http://www.cboe.com/publish/feeschedule/cboefeeschedule.pdf



The revised fees appear to be completely arbitrary, and based largely on what the exchange believes it can sneak by its regulator without major objection--based upon its observation of other exchanges' recent efforts to raise their fees in a similar manner.²⁹

Even if the proposed fees were somehow viewed as "similar" to those charged by other monopoly exchanges, that does not mean that they are reasonable. Outside of the exchange world, where consumers have choice and corporations are subject to real competition, the costs for this level of connectivity is significantly lower. For example, a consumer can purchase a dedicated 1 gigabit line in the outside world for as little as \$850 per month.³⁰

Granted, the exchange could be offering more services that might account for the massive upcharges, but the MIAX Filings also fail to address the overall service specifications offered through the connectivity options. The details of the connectivity offerings are not provided in the filings, nor are any potential changes discussed. Again, in the outside world, key information would be provided such as Service Level Agreements, packet loss or network availability performance, or even if the connection is dedicated. This vital information is absent from the MIAX Filings, and we were unable to readily locate any information about performance from the MIAX website.

Outside of the exchange connectivity context, pricing for data transmission is generally competitive and one finds little variation from one vendor to the next. Further, rather than double and triple digit fee hikes, actual costs in the sector have been falling for data delivery.

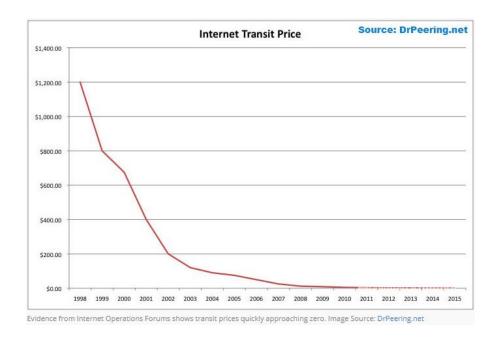
While prices for connectivity for all areas outside of the exchange server room have fallen, they have been quite the opposite for the monopoly exchanges. Cost projections for the public "internet backbone" have fallen substantially since 1998 as depicted in the below chart:

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²⁹ See, e.g., Supra, note 3.

³⁰ See e.g., Stealth Communications Price Schedule, Stealth Communications, *available at* https://stealth.net/services/fiber/nyc/gigabit/dedicated.





The assertion that these increases are justified because they are essential for "providing and maintaining" services is illusory. For example, on December 22, 2016, MIAX filed to increase connectivity charges on its 1, 10 and 10 gigabit ULL connectivity options.³¹ The MIAX Filings do not say what improvements were made to improve its market technology and services then, nor do they offer any hints as to what would now warrant yet another fee hike. In fact, it's difficult to understand how charges could increase so dramatically in less than two years for connectivity while the overall cost of data transmission and connectivity everywhere else has gone down.

The MIAX Filings offer nothing to establish how its proposed fees are reasonable, and so they should be disapproved.

The MIAX Filings Does Not Establish That The Fees Are Equitably Allocated

The MIAX Filings make absolutely no attempt at all to explore how the burdens of the fees will be applied across its customer base. There is no discussion of the equitability of the fees at all.

³¹ Miami International Securities Exchange LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Related to Amend Its Fee Schedule to Modify the Exchange's Connectivity Fees, SEC, Exch. Act Rel. No. 34-79666, December 22, 2016, available at https://www.sec.gov/rules/sro/miax/2016/34-79666.pdf.



While the fee schedule may apply to all members, the actual impact of those fees is extremely inequitable.

The MIAX Filings offer no discussion, information or logic on how they arrived at the disparate connectivity fee increases or why the disaster recovery connectivity options are 55% lower. But even more importantly, why are the costs so different across the different products? Who uses those products and why? What is the difference in utility between the different products?

Under the exchanges' logic, it would be "equitable and non-discriminatory" for the exchanges to implement a fee of \$100,000 per month, if it was adopted for all members. Of course, smaller firms would be effectively prohibited from paying for the service, while larger firms would not. This would effectively exclude smaller firms from the opportunity to participate in the markets and compete, leading to greater market consolidation and weaker markets. Such a fee would be facially inequitable, discriminatory, an unnecessary barrier to competition, and contrary to fair and open markets. It would be -- put simply -- unquestionably contrary to the Exchange Act.

The question is whether we have already reached that point with the proposed fee levels. We posit that market data and connectivity fee levels and market reactions -- including consolidation by broker-dealers and other market participants -- suggest that they have already passed that point.

It is not entirely clear what constitutes the "equitable allocation of reasonable dues, fees, and other charges" under the Exchange Act. We understand that this should mean, at a minimum, that the collection of "dues, fees, and other charges" should be both: (1) equitably allocated across different types services; and (2) equitably allocated across different types of customers of the exchange.

The MIAX Filings offer no discussion as to either.

Whether for the 1 gigabit, the 10 gigabit connection or the 10 gigabit ULL, the connection is just that. It is a barrier to entry to the exchange itself. Thereafter, within each connectivity level, the amount of the fee assessed does not vary based upon usage. Of course, larger firms with more complex systems and usage are likely to subscribe to the 10 gigabit or 10 gigabit ULL connection, while those with less demand may be more likely to subscribe to the 1 gigabit connection.



We might think of this as just the rental of the cable box. That gives the user access to data, but that does not yet include content. Market participants must then purchase the data as well. They need to figure out what cable package they want. And each of those data options comes with its own significant costs.

We have no understanding as to whether the mix of fees spread between access (connectivity) and content (market data) is equitable. And that also doesn't account for actual trading costs. While all of these fees may be barriers to entry for market participants--they act in different ways. And the different impacts of different fee levels may have significantly different impacts on different firms. For example, if the connectivity fees were low, but trading fees high, then a smaller firm with infrequent trading could still access the exchange as necessitated by its best execution obligations and business competitiveness. However, if the connectivity fees are high, and trading fees low, then a smaller firm may be unable to clear the initial cost burden. Unfortunately, the exchanges fail to even offer any recognition of these impacts.

Additionally, we have significant questions about the nature of the distributive impact of the fees on different customers of the exchanges. The MIAX Filings do not provide information about how many subscribers currently purchase the differing levels of connectivity. The MIAX Filings do not provide details of how much revenues will be generated from the changes to each. Nor do the MIAX Filings offer any specific details for how those revenues would be spent (and to whose benefit).

This may best be shown through hypothetical examples. Suppose the exchanges have a total of fifty subscribers to its 10 gigabit ULL connection, but one thousand subscribers to its 1 gigabit connection. Further assume none of the subscribers change plans as a result of the fee increases. In this scenario, nearly 90% of the revenues generated would come from the 1 gigabit subscribers. It would be difficult to find that this was that an "equitable allocation of reasonable fees." That could be the case here. We simply don't know because the MIAX Filings offer no details upon which this could be determined.

Similarly, we don't know about how the revenues are allocated. Suppose further that none of the new revenues are spent on maintaining or upgrading features for the 1 gigabit subscribers. We would again struggle to to see how anyone could find this be an equitable allocation of reasonable fees. And yet, again, we don't know if that is the very scenario in which we are operating. The MIAX Filings simply do not explain or provide any relevant details as to why any of these changes are equitable across different



subscribers. Because the MIAX Filings offer nothing to establish how their proposed fees are equitable, they should be disapproved.

The Fees Impose a Burden on Competition That is Not Necessary or Appropriate, Unfairly Discriminate Between Different Exchange Participants, and Impose Impediments to the Free and Open Market System

In the MIAX Filings, the exchanges offer a statement on the burden on competition.

The Exchange does not believe that the proposed rule changes will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. On the contrary, the Exchange believes that the proposed changes should increase both intermarket and intramarket competition. Specifically, the Exchange believes that the changes will promote competition by increasing the connectivity fees to become more within the range of comparable fees assessed by other competing exchanges.³²

This statement is little more than an unsupported assertion that they don't "believe" the filings will impose any burden on competition followed by an even more absurd assertion that raising rates will increase competition.³³

We are aware of no evidence to suggest that connectivity to these exchanges is somehow immune to the principles of basic economics--where competition between service providers is waged by raising costs for customers, as opposed to reducing them. Typically, service providers in competitive markets will lower costs until they are relatively close to the cost of production. Raising rates unilaterally, without a commensurate decrease in demand, by contrast, is strong evidence of a non-competitive market. Unfortunately, the MIAX Filings offer no evidence as to what, if any, impact their rate changes are anticipated to have on demand for its varied

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³² MIAX Exchange Filing, at 6; PEARL Filing, at 6.

³³ increasing fees for customers is unlikely to improve competition, but rather add to the fees and burdens that make smaller players less able to compete--as has been occurring for years.



products. That information is essential to understanding whether the proposed changes are discriminatory, unduly burdensome, or impediments to free and open markets.

While there may be competition for options trading,³⁴ that is irrelevant to the issue of whether there is competition for connectivity to each of the exchanges. In the latter instance, there is no competition.

Connectivity to each of the exchanges is exclusively under the purview of that exchange. Market participants are effectively forced to access it.³⁵ So while market participants may freely chose to where they may send their orders in the abstract, they cannot realistically choose to not connect to an exchange.³⁶

Lastly, the MIAX Filings make no effort to explain the various benefits and full costs (such as lost opportunity costs and third party fees) that are inherent in each of the different connectivity options for the relevant market participants. For example, those with faster connections may be able to act more quickly, providing them with both information and the ability to act upon it more quickly. This will likely impact their overall execution costs, and potentially even the decisions of whether to trade at all. These impacts may be increased yet again for participants who trade through third parties. And while these concerns would shed significant light on the impacts of this disparity between market participants, there is no discussion in any of the MIAX Filings of these impacts.

Because the MIAX Filings impose fees and limits that impose a burden on competition that is not necessary or appropriate and unfairly discriminates between different exchange participants, and impose impediments to the free and open market system, they should be disapproved.

³⁵ For example, if the venue has the best price, brokers may be obligated to not only evaluate a venue, but also connect and use it. See, e.g., *Best Execution Guidance on Best Execution Obligations in Equity, Options and Fixed Income Markets*, FINRA, Reg. Notice 15-46 (Nov. 2015), *available at* http://www.finra.org/sites/default/files/notice doc file ref/Notice Regulatory 15-46.pdf.

³⁴ As we have repeatedly noted, we are concerned with how the competition for order flow is also being waged, and that despite the requirements of the Exchange Act, market participants are nevertheless subjected to discriminatory and non-transparent pricing structures which often preference some market venue participants over others.

³⁶ Notably, in its December 22, 2016 filing, the MIAX Filing suggests that a market participant could readily favor competing venues if they deem fee levels at a particular venue to be excessive.



Conclusion

In sum, the MIAX Filings are yet another example of a conflicted process wherein an exchange family has used its monopoly position to further its own benefit at the expense of other market participants and the markets overall. The MIAX Filings are inconsistent with the exchanges' obligations under the Exchange Act, and should be disapproved.

Further, the MIAX Filings are but two of several recent connectivity fee filings--all of which have been to increase costs. While the exchanges selectively cite to each other in support of their increases, none of them provide sufficient details to permit the Commission to find that the proposals are consistent with the Exchange Act. Accordingly, we urge the Commission to, for this and all similar filings, take any appropriate actions to pause and carefully review the filings for their compliance with the law.

Thank you for the opportunity to highlight our concerns contained within the BOX Filing. Should you have any questions or seek further information please contact Chris Nagy at

Sincerely,

Tyler Gellasch
Executive Director

Cc: Hon. Jay Clayton, Chairman

Ty Jallosel

Hon. Kara M. Stein, Commissioner Hon. Hester Peirce, Commissioner

Hon. Robert J. Jackson, Jr., Commissioner

Brett Redfearn, Director of the Division of Trading and Markets John Roeser, Associate Director, Division of Trading and Markets