VIRTU FINANCIAL

November 8, 2023

VIA ELECTRONIC DELIVERY

Ms. Vanessa A. Countryman
Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-1090

RE: Self-Regulatory Organizations; Miami International Securities Exchange, LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Amend Its Fee Schedule to Modify Certain Connectivity and Port Fees, Release No. 34-98752; File No. SR-MIAX-2023-39 (Oct. 13, 2023)

Self-Regulatory Organizations; MIAX PEARL, LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Amend the MIAX Pearl Options Exchange Fee Schedule to Modify Certain Connectivity and Port Fees, Release No. 34-98753; File No. SR-PEARL-2023-55 (Oct. 13, 2023)

Self-Regulatory Organizations; MIAX Emerald, LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Amend Its Fee Schedule to Modify Certain Connectivity and Port Fees, Release No. 34-98751; File No. SR-EMERALD-2023-27 (Oct. 13, 2023)

Self-Regulatory Organizations; Miami International Securities Exchange, LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend Fee Schedule for Purge Ports, Release No. 34-98732; File No. SR-MIAX-2023-37 (Oct. 12, 2023)

Self-Regulatory Organizations; MIAX PEARL, LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend the MIAX Pearl Options Fee Schedule for Purge Ports, Release No. 34-98733; File No. SR-PEARL-2023-52 (Oct. 12, 2023)

Self-Regulatory Organizations; MIAX Emerald, LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend the Fee Schedule for Purge Ports, Release No. 34-98734; File No. SR-EMERALD-2023-26 (Oct. 12, 2023)

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Dear Ms. Countryman:

Virtu Financial, Inc. ("Virtu")[1] respectfully submits this letter in response to the above-referenced proposed rule changes filed with the Securities and Exchange Commission (the "SEC" or "Commission") by Miami International Securities Exchange, LLC ("MIAX"), MIAX Emerald ("MIAX Emerald"), LLC, and MIAX PEARL, LLC ("MIAX Pearl")(each an Exchange, and together, the "Exchanges") seeking to amend their fee schedules for certain connectivity fees, port fees, and purge port fees (the "Proposals").

Virtu is strongly opposed to the imposition of these fee increases and urges the Commission to disapprove them. Virtu's objection to the Proposals is simple and straightforward: the Proposals' contemplated fee increases are anti-competitive and inconsistent with the Securities Exchange Act of 1934 (the "Exchange Act"), which mandates that fees for market data and market access be "fair and reasonable" and not "unfairly discriminatory".

As the Exchanges acknowledge in the Proposals, beginning in 2017 following the United States Court of Appeals for the District of Columbia's Susquehanna Decision,[2] the Commission began applying a heightened review process for exchange fee filings. Under this heightened review process, which was further documented in staff guidance issued in 2019,[3] in addition to offering persuasive evidence that the proposed fee is constrained by significant competitive forces, SROs also may be required to provide detailed cost-based analysis demonstrating that the fee is fair and reasonable.

The heightened review process that is now mandated by the Commission appropriately sets a higher bar for exchanges to justify increases in fees for exchange connectivity and market data. To meet this higher bar, exchanges need to be substantially more transparent about their underlying costs, which is entirely appropriate for market centers like the Exchanges that enjoy the benefits of order protection.

Like other flawed attempts by exchanges to justify fee increases for connectivity, the Proposals fail to meet the statutory standard, as well as the Commission's own standards for heightened review of fee filings, and should therefore be disapproved.

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[1] Virtu is a leading financial firm that leverages cutting edge technology to deliver liquidity to the global markets and innovative, transparent trading solutions to its clients. Virtu operates as a market maker across numerous exchanges in the U.S. and is a member of all U.S. registered stock exchanges. Virtu's market structure expertise, broad diversification, and execution technology enables it to provide competitive bids and offers in over 25,000 securities, at over 235 venues, in 36 countries worldwide.

[2] *See* Susquehanna International Group, LLP v. Securities & Exchange Commission, 866 F.3d 442 (D.C. Circuit 2017).

[3] *See* Staff Guidance on SRO Rule Filings Relating to Fees (May 21, 2019), available at https://www.sec.gov/tm/staff-guidance-sro-rule-filings-fees (the "Staff Guidance").

The Proposals Fail To Provide An Adequate Analysis Of Costs

The Proposals fail to offer adequate quantitative information concerning costs for the Commission or market participants to assess whether the proposed fee increases are fair and reasonable.

For example, under the existing fee schedules, market participants are able to connect to both the MIAX and MIAX Pearl through a single 10 gigabit ("Gb") ultra-low latency ("ULL") fiber connection at a cost of $10,000 per month. Under the Proposals for connectivity and port fees,[4] the Exchanges contemplate bifurcating access to MIAX and MIAX Pearl and charging market participants a fee of $13,500 for connectivity to each of the Exchanges. Despite the magnitude of the resulting fee increase – from $10,000 a month to $27,000 a month – the Proposals fail to include adequate information regarding the Exchanges costs underlying bifurcation of the 10Gb ULL networks, despite their assertion that the recouping these costs was a justification for the fee increases. In support of their decision to bifurcate access, the Exchanges point to "ever-increasing capacity constraints" an interest in "continu[ing] to satisfy the anticipated access needs for Members," but fail to include detailed cost analysis justifying the need for bifurcation. Accordingly, it is impossible for the Commission or market participants to gauge whether the Exchanges' decision to bifurcate access and charge exorbitant and duplicative new fees meets the standards of the Exchange Act or the Staff Guidance.

What's more, the Exchanges' purported "cost analysis" justifying the fee increases lacks sufficient data for third parties to assess the reliability of the cost estimates. The Exchanges point to a variety of categories of costs associated with providing connectivity, such as human resources, technology fees for providing connectivity, internet services, and data services costs, among others, and assign a cost figure to each. However, the Exchanges neglect to provide an adequate explanation for how they calculated the cost estimates for each category, or quantitative data supporting those estimates. Simply offering a narrative of the Exchanges' various cost centers and assigning a number to each falls far short of the heightened review process that exchanges must satisfy.

Take, for example, the Exchanges' purported substantiation of the following annual costs for human resources to offer physical dedicated 10Gb ULL connectivity via an unshared network:

- MIAX Emerald $3,520,856[5]
- MIAX $3,867,297[6]
- MIAX Pearl $3,675,098[7]

[4] *See* Release No. 34-98751; Release No. 34-98752; and Release No. 34-98753.
[5] *See* Release No. 34-98751 at p. 38.
[6] *See* Release No. 34-98752 at p. 43.
[7] *See* Release No. 34-98753 at p. 53.

By any standard, these are staggering sums for human resources costs to offer an electronic connection to an exchange. While we appreciate that there will be personnel costs associated with building out the technology and monitoring its operations, we question how the Exchanges' aggregate ongoing human resources costs could possibly reach $11 million annually. Additionally, one wonders how the Exchanges' cost estimates vary between its costs to provide its 1 Gigabit and 10Gb ULL connections.

These large sums demand a very high degree of transparency for the Commission and market participants to gauge their accuracy and need for the service. However, each Proposal offers a mere four to five paragraphs of qualitative narrative (virtually identical in each Proposal) vaguely describing the process the Exchanges undertook to interview management in various operational divisions to come up with a subjective estimate of human resources costs. Ultimately, the only insight that market participants and the Commission can glean from the Exchanges' narrative is (i) that there are 184 employees across the Exchanges (yet no detail of how many of these employees are dedicated to the provision of connectivity services); (ii) that the Exchanges applied a weighted average of between 42% and 43% of certain employees' time to personnel costs to each of the Exchange offerings covered in the Proposals; and (iii) that there purportedly was no double counting of employees' time allocated to the three Exchange offerings.

The Exchange Act and the 2019 Staff Guidance demand a much greater level of granularity than a few paragraphs of prose generally describing a subjective process used to estimate costs. How many of the 184 employees are actually tasked with responsibilities related to port connectivity? What other functions do they perform, what is their total compensation, and is the 42% to 43% allocation of their time an accurate measure? Do some employees included in the human resources estimates allocate time to connectivity services for each of the three Exchanges? And if so, what steps have the Exchanges taken to truly ensure there is no double counting? Because the connectivity offerings are highly technological in nature, what is the justification for such a staggering level of manual, human resource involvement in their operations?

The Proposals each include equally deficient substantiation of other cost estimates, with vague, high level narrative descriptions of the process the Exchanges followed to estimate costs for broad categories such as connectivity, internet services and external market data, data center, hardware and software maintenance and licenses, depreciation, and allocated shared expenses. In sum, the information provided by the Exchanges is inadequate to allow the Commission or market participants, like Virtu, to gauge whether they are fair, reasonable, and not unduly anticompetitive under the Exchange Act and the 2019 Staff Guidance, and therefore the Proposals should be disapproved.

The Proposals' Contention That There Is An Unlevel Playing Field For Review Of Fees Between Legacy and Non-Legacy Exchanges Is Irrelevant To The Commission's Analysis

In the Proposals, the Exchanges assert that there is an unlevel playing field when it comes to the SEC's standard of review for exchange fee filings approved before the Commission adopted its heighted standard of review vs. filings approved after that time. They contend that filings made

by "legacy" exchanges (i.e., prior to the 2019 Staff Guidance) were subjected to a lesser degree of scrutiny, and that therefore those exchanges enjoy a competitive advantage over "non-legacy" exchanges that filed fee filings more recently subject to a heightened standard of review.

In making this argument, the Exchanges seem to suggest that this "unfairness" justifies their fee increase request. However, these assertions are irrelevant to the Commission's analysis of the present fee filings. If the Exchanges believe that they are being treated unfairly, they should be engaging in a much broader policy dialogue with the Commission about its standard of review for fee filings generally. The forum for such a discussion is not in a 19b-4 filing, and their fairness arguments should not factor into the Commission's decision-making process with respect to whether it should approve the present filings. **The review process established by the Staff Guidance dictates the standard of review currently in effect – it would be a gross violation of administrative procedure for the Commission to abandon that standard of review in the present instance as a basis to approve the Proposals.**

The Proposals' Comparison Of Fees Charged By Other Exchanges Is Also Irrelevant, As Well As Unpersuasive

In the Proposals, the Exchanges assert that the contemplated fees are lower than fees charged by other exchanges for similar services. However, these assertions are irrelevant to the Staff's consideration of the fairness and reasonableness of the proposed fees because the inputs to connectivity vary so differently from exchange to exchange. The Exchanges fail to acknowledge that, in order to get access to similar services at other exchanges, a market participant may be required to subscribe to a substantially lower number of ports, or a substantially higher number of ports. The Exchanges also fail to acknowledge that the connectivity features of ports at other exchanges may differ substantially from the features offered by the Exchanges' ports. Accordingly, comparing fees with other exchanges on a per-port unit is like comparing apples to oranges, and should be irrelevant to the Commission's analysis of the appropriateness of the fees.

In addition to being irrelevant, the Exchanges' assertions are also unpersuasive. For example, in the Proposals for purge port fees,[8] the Exchanges assert that:

> Unlike other options exchanges that charge fees for Purge Ports on a per port basis, the Exchange assesses a flat fee of $750 per month, regardless of the number of Purge Ports. Today, a Market Maker may request and be allocated two (2) Purge Ports per Matching Engine to which it connects and not all Members connect to all Matching Engines. The Exchange now proposes to amend the fee for Purge Ports to align more with other exchanges who charge on a per port basis by providing two (2) Purge Ports per Matching Engine for a monthly flat fee of $600 per month per Matching Engine. The only difference with a per port structure being is that Members receive two (2) Purge Ports per Matching Engine for the same proposed monthly fee, rather than be charged separate fee for each Purge Port. The Exchange

[8] *See* Release No. 34-98732; Release No. 34-98733; and Release No. 34-98734.

> proposes to charge the proposed fee for Purge Ports per Matching Engine, instead on a per Purge Port basis, due to its system architecture which provides two (2) Purge Ports per Matching Engine for redundancy purposes. **In addition, the proposed fee would be lower than what other exchanges charge on a per port basis, notwithstanding that the Exchange is providing up to two (2) Purge Ports for that same low fee.**[9] (emphasis added)

Virtu completely disagrees with this statement. Other exchanges offer purge ports that function across all symbols and all matching engines for a cost of $650 to $850 per month, which is similar to the Exchanges' current rate of $750 per month. Under the Proposals, the cost to obtain the equivalent functionality from the Exchanges would be $7,200 per month, per exchange – an increase of 860%.[10]

The Proposals Are Anti-Competitive Because They Would Unfairly Foist The Lion's Share Of Fees On Market Makers Like Virtu

The Proposals for the connectivity and port fees also assert that the fee increases are fair, reasonable, and not anti-competitive because "broker-dealers choose if and how to access a particular exchange and because it is a choice, the Exchange must set reasonable pricing, otherwise prospective members would not connect and existing members would disconnect from the Exchange."[11]

This assertion is incorrect. In today's high-speed electronic markets, many broker-dealers, market makers, hedge funds, data distributors, and a wide array of other market participants have concluded that they must purchase proprietary data feeds and connect to all exchanges in order to remain commercially competitive. In particular, market makers have no choice but to connect to all exchanges, and therefore the Exchanges' suggestion that competitive forces constrain the Exchanges' pricing for connectivity fees is flawed.

Because of the critical role they play in providing trading and execution services to the broader marketplace, market makers would be disproportionately responsible for the lion's share of Exchanges' proposed fees. Like so many other connectivity and market data fees proposed by other exchanges in recent years, the Proposals are "unfairly discriminatory" in their impact on market making firms and represent yet another example of exchanges using their dominant position and protected status to impose unjustified and inappropriate fees for market participants to access the exchanges.

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[9] *See, e.g.*, Release No. 34-98732 at pp. 2-3.
[10] $600 per purge port per month for each of their 12 matching engines.
[11] *See, e.g.*, Release No. 34-98751 at p. 29.

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Virtu appreciates the opportunity to register its objections to the Proposals. Virtu recognizes that the Exchanges are for-profit enterprises that cannot give away their services for free. However, given their unique status as SROs that enjoy many benefits over other market centers, including order protection, the Exchanges must be held to a high standard in justifying their fees for market connectivity and market data. Here, the Exchanges have fallen short of their obligation under the Exchange Act to substantiate that the proposed fee increases are fair, reasonable, and not unduly discriminatory, and the Proposals should therefore be disapproved.

Respectfully submitted,

Thomas M. Merritt
Deputy General Counsel

cc: The Honorable Gary Gensler, Chair
The Honorable Hester M. Peirce, Commissioner
The Honorable Caroline A. Crenshaw, Commissioner
The Honorable Mark T. Uyeda, Commissioner
The Honorable Jaime E. Lizarraga, Commissioner
Dr. Haoxiang Zhu, Director, Division of Trading and Markets