SECURITIES AND EXCHANGE COMMISSION

Self-Regulatory Organizations: MIAX Emerald, LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Its Fee Schedule To Adopt Port Fees and Increase Certain Network Connectivity Fees

October 14, 2020.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),1 and Rule 19b–4 thereunder,2 notice is hereby given that on October 1, 2020, MIAX Emerald, LLC ("MIAX Emerald" or "Exchange"), filed with the Securities and Exchange Commission ("Commission") a proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. 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

The Exchange is filing a proposal to amend the MIAX Emerald Fee Schedule (the "Fee Schedule"). The text of the proposed rule change is available on the Exchange’s website at http://www.miaxoptions.com/rule-filings/emerald, at MIAX’s principal office, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange 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 Exchange 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 the Fee Schedule to: (1) Adopt Port fees; and (2) increase the Exchange’s network connectivity fees for its 10 gigabit (“Gb”) ultra-low latency (“ULL”) fiber connection for Members3 and non-Members (collectively, the “Proposed Access Fees”). On September 15, 2020, the Exchange issued a Regulatory Circular which announced, among other things, that the Exchange would adopt Port fees, thereby terminating the Waiver Period4 for such fees, and increase the fees for its 10Gb ULL connection for Members and non-Members, beginning October 1, 2020.5

Port Fees

The Exchange proposes to adopt fees for “Ports”, which are used by Members and non-Members to access the Exchange. MIAX Emerald provides four Port types: (i) the FIX Port, which allows Members to electronically send orders in all products traded on the Exchange; (ii) the MEI Port, which allows Market Makers to submit electronic orders and quotes to the Exchange; (iii) the Clearing Trade Drop Port ("CTD Port"),6 which provides real-time trade clearing information to the participants to a trade on MIAX Emerald and to the participants’ respective clearing firms; and (iv) the FIX Drop Copy (“FXD Port”),7 which provides a copy of real-time trade execution, correction and cancellation information through a FIX Port to any number of FIX Ports designated by an EEM to receive such messages. The Exchange also proposes to increase the monthly fee for each additional Limited Service MEI Port per matching engine for Market Makers over and above the two (2) Limited Service MEI Ports per matching engine that are allocated with the Full Service MEI Ports, as described below.

Since the launch of the Exchange, all Port fees have been waived to Exchange in order to incentivize market participants to connect to the Exchange, except for additional Limited Service MEI Ports. However, also at the launch, the Exchange introduced the structure of Port fees on its Fee Schedule (without proposing the actual fee amounts), in order to indicate to market participants that Port fees would ultimately apply upon expiration of the Waiver Period. The Exchange now proposes to assess monthly Port fees for Members and non-Members in each month the market participant is credited and to use a Port in the production environment and based upon the number of credited Ports that a user is entitled to use. MIAX Emerald has Primary and Secondary Facilities and a Disaster Recovery Facility. Each type of Port provides access to all Exchange facilities for a single fee. The Exchange notes that, unless otherwise specifically set forth in the Fee Schedule, the Port fees include the information communicated through the Port. That is, unless otherwise specifically set forth in the Fee Schedule, there is no additional charge for the information that is communicated through the Port apart from what the user is assessed for each Port.

FIX Port Fees

Since the launch of the Exchange, fees for FIX Ports have been waived for the Waiver Period. The Exchange now proposes to assess a monthly FIX Port fee to Members in each month the Member is credited to use a FIX Port in the production environment and based upon the number of credited FIX Ports, as follows: $550 for the first FIX Port; $350 for FIX Ports two through five; and $150 for each FIX Port over five.

Below is the proposed table showing the FIX Port fees:

<table>
<thead>
<tr>
<th>Port Type</th>
<th>Monthly Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIX Port</td>
<td>$550</td>
</tr>
<tr>
<td>Additional FIX Port</td>
<td>$350</td>
</tr>
</tbody>
</table>
MEI Port Fees

MIAX Emerald offers different options of MEI Ports depending on the services required by Market Makers. Since the launch of the Exchange, fees for MEI Ports have been waived for the Waiver Period. The Exchange now proposes to assess monthly MEI Port Fees to Market Makers based upon the number of classes or class volume accessed by the Market Maker. Market Makers are allocated two (2) Full Service MEI Ports a and two (2) Limited Service MEI Ports b per Matching Engine c to which they connect. The Full Service MEI Ports, Limited Service MEI Ports and the additional Limited Service MEI Ports all include access to the Exchange’s Primary and Secondary data centers and its Disaster Recovery center.

Specifically, the Exchange proposes to adopt MEI Port fees assessable to Market Makers based upon the number of classes or class volume accessed by the Market Maker. The Exchange proposes to adopt the following MEI Port fees: (i) $5,000 for Market Maker Assignments in up to 5 option classes or up to 10% of option classes by volume; (ii) $10,000 for Market Maker Assignments in up to 10 option classes or up to 20% of option classes by volume; (iii) $14,000 for Market Maker Assignments in up to 40 option classes or up to 35% of option classes by volume; (iv) $17,500 for Market Maker Assignments in up to 100 option classes or up to 50% of option classes by volume; and (v) $20,500 for Market Maker Assignments in over 100 option classes or over 50% of option classes by volume up to all option classes listed on MIAX Emerald.

The Exchange also proposes to adopt new footnote “a” for its MEI Port fees that will apply to the Market Makers who fall within the following MEI Port fee levels, which represent the 4th and 5th levels of the fee table: Market Makers who have (i) Assignments in up to 100 option classes or up to 50% of option classes by volume and (ii) Assignments in over 100 option classes or over 50% of option classes by volume up to all option classes listed on MIAX Emerald. Specifically, the Exchange proposes for these monthly MEI Port tier levels, if the Market Maker’s total monthly executed volume during the relevant month is less than 0.025% of the total monthly executed volume reported by OCC in the customer account type for MIAX Emerald–listed option classes for that month, then the fee will be $14,500 instead of the fee otherwise applicable to such level.

The purpose of this proposed lower monthly MEI Port fee is to provide a lower fixed cost to those Market Makers who are willing to quote the entire Exchange market (or substantial amount of the Exchange market), as objectively measured by either number of classes assigned or national ADV, but who do not otherwise execute a significant amount of volume on the Exchange. The Exchange believes that, by offering lower fixed costs to Market Makers that execute less volume, the Exchange will retain and attract smaller-scale Market Makers, which are an integral component of the option industry marketplace, but have been decreasing in number in recent years, due to industry consolidation and lower market maker profitability. Since these smaller-scale Market Makers utilize less Exchange capacity due to lower overall volume executed, the Exchange believes it is reasonable and appropriate to offer such Market Makers a lower fixed cost. The Exchange notes that other options exchanges assess certain of their fees at different rates, based upon a member’s participation on that exchange, and, as such, this concept is not novel. The proposed changes to the MEI Port fees for Market Makers who fall within the 4th and 5th levels of the fee table are based upon a business determination of current Market Maker assignments and trading volume.

For the calculation of the monthly MEI Port Fees that apply to Market Makers, the number of classes is defined as the greatest number of classes the Market Maker was assigned to quote in on any given day within the calendar month and the class volume percentage is based on the total national average daily volume in classes listed on MIAX Emerald in the prior calendar quarter. Newly listed option classes are excluded from the calculation of the monthly MEI Port Fee until the calendar quarter following their listing, at which time the newly listed option classes will be included in both the per class count and the percentage of total national average daily volume. The Exchange proposes to assess Market Makers the monthly MEI Port Fees based on the greatest number of classes listed on MIAX Emerald that the Market Maker was assigned to quote in on any given day within a calendar month and the applicable fee rate that is the lesser of either the per class basis or percentage of total national average daily volume measurement.

12 The Exchange will use the following formula to calculate the percentage of total national average daily volume that the Market Maker assignment is for purposes of the MEI Port Fee for a given month: Market Maker assignment percentage of national average daily volume = [total volume during the prior calendar quarter in a class in which the Market Maker was assigned] / [total national volume in classes listed on MIAX in the prior calendar quarter].
The Exchange currently charges $50 per month for each additional Limited Service MEI Port per matching engine for Market Makers over and above the two (2) Limited Service MEI Ports per matching engine that are allocated with the Full Service MEI Ports. The Full Service MEI Ports, Limited Service MEI Ports and the additional Limited Service MEI Ports all include access to the Exchange’s Primary and Secondary data centers and its Disaster Recovery center. Currently, footnote “*” in the MEI Port Fee table provides that the fees for Additional Limited Service MEI Ports are not subject to the Waiver Period. Accordingly, in connection with this proposal, the Exchange proposes to delete footnote “*” since the Exchange proposes to begin assessing MEI Port fees, which will no longer be subject to the Waiver Period. The Exchange also proposes to increase the monthly fee from $50 to $100 for each additional Limited Service MEI Port per matching engine for Market Makers over and above the two (2) Limited Service MEI Ports per matching engine that are allocated with the Full Service MEI Ports.

Below is the proposed table showing the MEI Port fees:

<table>
<thead>
<tr>
<th>Monthly MIAX Emerald MEI fees</th>
<th>Market Maker Assignments (the lesser of the applicable measurements below)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5,000.00</td>
<td>Up to 5 Classes</td>
</tr>
<tr>
<td>$10,000.00</td>
<td>Up to 10 Classes</td>
</tr>
<tr>
<td>$14,000.00</td>
<td>Up to 40 Classes</td>
</tr>
<tr>
<td>$17,500.00</td>
<td>Up to 100 Classes</td>
</tr>
<tr>
<td>$20,500.00</td>
<td>Over 100 Classes</td>
</tr>
</tbody>
</table>

For these Monthly MIAX Emerald MEI Port tier levels, if the Market Maker’s total monthly executed volume during the relevant month is less than 0.025% of the total monthly executed volume reported by OCC in the customer account type for MIAX Emerald-listed option classes for that month, then the fee will be $14,500 instead of the fee otherwise applicable to such level.

Purge Port Fees

The Exchange also offers Market Makers the ability to request and be allocated two (2) Purge Ports per Matching Engine to which it connects. Purge Ports provide Market Makers with the ability to send quote purge messages to the MIAX Emerald System. Purge Ports are not capable of sending or receiving any other type of messages or information. Since the launch of the Exchange, fees for Purge Ports have been waived for the Waiver Period. The Exchange now proposes to amend its Fee Schedule to adopt fees for Purge Ports. For each month in which the MIAX Emerald Market Maker has been credentialed to use Purge Ports in the production environment and has been assigned to quote in at least one class, the Exchange proposes to assess the MIAX Emerald Market Maker a flat fee of $1,500, regardless of the number of Purge Ports allocated to the MIAX Emerald Market Maker.

CTD Port Fees

The Exchange proposes to assess a CTD Port fee as a monthly fixed amount, not tied to transacted volume of the Member. This fixed fee structure is the same structure in place at Nasdaq PHLX with respect to the proposed CTD Port Fees. Since the launch of the Exchange, CTD Port Fees have been waived for the Waiver Period. CTD provides Exchange members with real-time clearing trade updates. The updates include the Member’s clearing trade messages on a low latency, real-time basis. The trade messages are routed to a Member’s connection containing certain information. The information includes, among other things, the following: (i) Trade date and time; (ii) symbol information; (iii) trade price/size information; (iv) Member type (for example, and without limitation, Market Maker, Electronic Exchange Member, Broker-Dealer); (v) Exchange Member Participant Identifier (“MPID”) for each side of the transaction, including Clearing Member MPID; and (vi) strategy specific information for complex transactions. CTD Port fees will be assessed in any month the Member is credentialed to use the CTD Port in the production environment. The Exchange proposes to assess a CTD Port fee of $450 per month. Below is the proposed table for the CTD Port fees:

<table>
<thead>
<tr>
<th>Description</th>
<th>Monthly fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real-Time CTD Information</td>
<td>$450.00</td>
</tr>
</tbody>
</table>

FXD Port Fee

The Exchange proposes to assess an FXD Port Fee as a monthly fixed amount, not tied to transacted volume of the Member. This fixed fee structure is the same structure in place at Nasdaq PHLX with respect to FXD Port Fees. Since the launch of the Exchange, FXD Port Fees have been waived for the Waiver Period. FXD is a messaging interface that will provide a copy of real-time trade execution, trade correction and trade cancellation information to FXD Port users who subscribe to the service. FXD Port users are those users who are designated by an EEM to receive the information and the information is restricted for use by the EEM. FXD Port fees will be assessed in any month the Member is credentialed to use the FXD Port in the production environment. The Exchange proposes to assess an FXD Port fee of $500 per month. Below is the proposed table for the FXD Port fees:

---

13 See Nasdaq PHLX Pricing Schedule, Options 7, Section 9, Other Member Fees, B. Port Fees.
14 Id.
10Gb ULL Connectivity Fee

The Exchange proposes to amend Sections 5a) and b) of the Fee Schedule to increase the monthly network connectivity fees for the 10Gb ULL fiber connection, which is charged to both Members and non-Members of the Exchange for connectivity to the Exchange’s primary/secondary facility. The Exchange offers to both Members and non-Members two bandwidth alternatives for connectivity to the Exchange, to its primary and secondary facilities, consisting of a 1Gb fiber connection and a 10Gb ULL fiber connection. The 10Gb ULL offering uses an ultra-low latency switch, which provides faster processing of messages sent to it in comparison to the switch used for the other types of connectivity. The Exchange now proposes to increase its monthly network connectivity fee for its 10Gb ULL connection to $10,000 for Members and non-Members.

MIAX Emerald believes that exchanges, in setting fees of all types, should meet very high standards of transparency to demonstrate why each new fee or fee increase meets the requirements of the Act that fees be reasonable, equitably allocated, not unfairly discriminatory, and not create an undue burden on competition among members and markets. MIAX Emerald believes this high standard is especially important when an exchange imposes various access fees for market participants to access an exchange’s marketplace. MIAX Emerald deems Port fees and Connectivity Fees to be access fees. The Exchange believes that it is important to demonstrate that these fees are based on its costs and reasonable business needs. Accordingly, the Exchange believes the Proposed Access Fees will allow the Exchange to offset expense the Exchange has and will incur, and that the Exchange is providing sufficient transparency (as described below) into how the Exchange determined to charge such fees.

Accordingly, the Exchange is providing an analysis of its revenues, costs, and profitability (following the proposed changes) for the Proposed Access Fees. This analysis includes information regarding its methodology for determining the costs and revenues associated with the Proposed Access Fees.

In order to determine the Exchange’s costs associated with providing the Proposed Access Fees, the Exchange conducted an extensive cost review in which the Exchange analyzed every expense item in the Exchange’s general expense ledger to determine whether each such expense relates to the Proposed Access Fees, and, if such expense did so relate, what portion (or percentage) of such expense actually supports the services included in the Proposed Access Fees. The sum of all such portions of expenses represents the total cost of the Exchange to provide the Proposed Access Fees. For the avoidance of doubt, no expense amount was allocated twice. The Exchange is also providing detailed information regarding the Exchange’s cost allocation methodology—namely, information that explains the Exchange’s rationale for determining that it was reasonable to allocate certain expenses described in this filing towards the total cost to the Exchange to provide the Proposed Access Fees.

In order to determine the Exchange’s projected revenues associated with providing the Proposed Access Fees, the Exchange analyzed the number of Members and non-Members currently utilizing the Exchange’s services associated with the Proposed Access Fees during 2020, and, utilizing a recently completed monthly billing cycle, extrapolated annualized revenue on a going-forward basis.

The Exchange is presenting its revenue and expense associated with the Proposed Access Fees in this filing in a manner that is consistent with how the Exchange presents its revenue and expense in its Audited Unconsolidated Financial Statements. The Exchange’s most recent Audited Unconsolidated Financial Statement is for 2019. However, since the revenue and expense associated with the Proposed Access Fees were not in place in 2019 or for the first three quarters of 2020, the Exchange believes its 2019 Audited Unconsolidated Financial Statement is not useful for analyzing the reasonableness of the total annual revenue and costs associated with the Proposed Access Fees. Accordingly, the Exchange believes it is more appropriate to analyze the Proposed Access Fees utilizing its 2020 actual (9 months to date) and projected (3 months remaining) revenue and costs, as described herein, which utilize the same presentation methodology as set forth in the Exchange’s previously-issued Audited Unconsolidated Financial Statements. Based on this analysis, the Exchange believes that the Proposed Access Fees are fair and reasonable because they will not result in excessive pricing or supra-competitive profit when comparing the Exchange’s total annual expense associated with providing the services associated with the Proposed Access Fees versus the total projected annual revenue the Exchange will collect for providing those services.

On March 29, 2019, the Commission issued its Order Disapproving Proposed Rule Changes to Amend the Fee Schedule on the BOX Market LLC Options Facility to Establish BOX Connectivity Fees for Participants and Non-Participants Who Connect to the BOX Network (the “BOX Order”).15 On May 21, 2019, the Commission issued the Staff Guidance on SRO Rule Filings Relating to Fees.16 On December 20, 2019, the Exchange adopted Connectivity Fees in a filing utilizing a cost-based justification framework that is substantially similar to the cost-based justification framework utilized for the instant Proposed Access Fees.17 Accordingly, the Exchange believes that the Proposed Access Fees are consistent with the Act because they (i) are reasonable, equitably allocated, not unfairly discriminatory, and not an undue burden on competition; (ii) comply with the BOX Order and the Guidance; (iii) are supported by evidence (including comprehensive

---


of the Act in that it is designed to furthers the objectives of Section 6(b)(5) Exchange also believes the proposal Exchange operates or controls. The Members and issuers and other persons using any facility or system which the equitable allocation of reasonable dues, specifically, in that it provides 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. The Exchange also believes the proposal furthers the objectives of Section 6(b)(5) of the Act in that it is 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. The Commission has repeatedly expressed its preference for competition over regulatory intervention in determining prices, products, and services in the securities markets. In Regulation NMS, the Commission highlighted the importance of market forces in determining prices and SRO revenues and, also, recognized that current regulation of the market system “has been remarkably successful in promoting market competition in its broader forms that are most important to investors and listed companies.”

Numerous indicia demonstrate the competitive nature of this market. For example, clear substitutes to the Exchange exist in the market for options transaction services. The Exchange is one of several options venues to which market participants may direct their order flow, and it represents a small percentage of the overall market. Within this environment, market participants can freely and often do shift their order flow among the Exchange and competing venues in response to changes in their respective pricing schedules. There are currently 16 registered options exchanges competing for order flow. Based on publicly-available information, and excluding index-based options, no single exchange has more than approximately 16% of the market share of executed volume of multiply-listed equity and exchange-traded fund (“ETF”) options. Therefore, no exchange possesses significant pricing power. More specifically, for the month of August 2020, the Exchange had a market share of approximately 3.24% of executed multiply-listed equity options.

The Exchange also believes that the ever-shifting market share among the exchanges from month to month demonstrates that market participants can discontinue or reduce use of certain categories of products, or shift order flow, in response to non-transaction and exchange fee changes. For example, on February 28, 2019, the Exchange’s affiliate, MIAX PEARL, LLC (“MIAX PEARL”) filed with the Commission a proposal to increase Taker fees in certain Tiers for options transactions in penny classes for Priority Customers and decrease Maker rebates in certain Tiers for options transactions in penny classes for Priority Customers (which fee was to be effective March 1, 2019). MIAX PEARL experienced a decrease in total market share for the month of March 2019, after the proposal went into effect. Accordingly, the Exchange believes that the MIAX PEARL March 1, 2019 fee change, to increase certain transaction fees and decrease certain transaction rebates, may have contributed to the decrease in MIAX PEARL’s market share and, as such, the Exchange believes competitive forces constrain the Exchange’s, and other options exchanges, ability to set transaction fees and non-transaction fees and market participants can shift order flow based on fee changes instituted by the exchanges.

The Exchange launched trading on March 1, 2019. The Exchange has only a 3.24% market share of the U.S. options industry in August 2020 in equity option classes according to the OCC. The Exchange is not aware of any evidence that a market share of approximately 3% provides the Exchange with anti-competitive pricing power. If the Exchange were to attempt to establish unreasonable pricing, then no market participant would join or connect, and existing market participants would disconnect.

Separately, the Exchange is not aware of any reason why market participants could not simply drop their connections to an exchange (or not connect to an exchange) if an exchange were to establish prices for its non-transaction fees that, in the determination of such market participant, did not make business or economic sense for such market participant to connect to such exchange. No options market participant is required by rule, regulation, or competitive forces to be a Member of the Exchange. As evidence of the fact that market participants can and do disconnect from exchanges based on non-transaction fee pricing, R2G Services LLC (“R2G”) filed a comment letter after BOX’s proposed rule changes to increase its connectivity fees (SR–BOX–2018–24, SR–BOX–2018–37, and SR–BOX–2019–04). The R2G Letter stated, “[w]hen BOX instituted a $10,000/month price increase for connectivity, we had no choice but to terminate connectivity into them as well as terminate our market data relationship. The cost benefit analysis just didn’t make any sense for us at those new levels.” Accordingly, this example shows that an exchange sets too high of a fee for connectivity and/ or other non-transaction fees for its relevant marketplace, market participants can choose to disconnect from such exchange.

The Exchange believes that its proposal is consistent with Section 6(b)(4) of the Act because the Proposed Access Fees will not result in excessive or supra-competitive profit. The costs associated with providing access to Exchange Members and non-Members, as well as the general expansion of a state-of-the-art infrastructure, are extensive, have increased year-over-year, and are projected to increase year-over-year in the future. In particular, the Exchange has experienced a material increase in its costs in 2020, in connection with a project to make its network environment more transparent and deterministic, based on customer

22 The Options Clearing Corporation (“OCC”) publishes options and futures volume in a variety of formats, including daily and monthly volume by exchange, available here: https://www.theocc.com/market-data/volume/default.jsp.
23 See id.
25 See supra note 22.
26 See Letter from Stefano Durdic, R2G, to Vanessa Countryman, Acting Secretary, Commission, dated March 27, 2019 (the “R2G Letter”).
27 See id.
mandated processes, associated with its network monitoring and customer related to establishing and maintaining Exchange incurs technology expense support access to the Exchange. The costs associated with providing the proposed by the Exchange.

increase in network connectivity fees material increase in expense of the which expense is captured in the CapEx associated with phase 1 of this performance of their systems. Just the CapEx associated with phase 1 of this project in 2020 was approximately $1.85 million. This expense does not include the significant increase in employee time and other resources necessary to maintain and service this network, which expense is captured in the operating expense (“OpEx”) discussed below. This project, which results in a material increase in expense of the Exchange, is a primary driver for the increase in network connectivity fees proposed by the Exchange.

However, in order to provide more detail and to quantify the Exchange’s costs associated with providing access to the Exchange in general, the Exchange notes that there are material costs associated with providing the infrastructure and headcount to fully-support access to the Exchange. The Exchange incurs technology expense related to establishing and maintaining Information Security services, enhanced network monitoring and customer reporting, as well as Regulation SCI mandated processes, associated with its network technology. While some of the expense is fixed, much of the expense is not fixed, and thus increases as the services associated with the Proposed Access Fees increase. For example, new 10Gb ULL connections and Ports require the purchase of additional hardware to support those connections as well as enhanced monitoring and reporting of customer performance that MIAX Emerald and its affiliates provide. Further, as the total number of all connections and Ports increase, MIAX Emerald and its affiliates need to increase their data center footprint and consume more power, resulting in increased costs charged by their third-party data center provider. Accordingly, the cost to MIAX Emerald and its affiliates is not fixed. The Exchange believes the Proposed Access Fees are reasonable in order to offset the costs to the Exchange associated with providing access to its network infrastructure.

Further, because the costs of operating its own data center are significant and not economically feasible for the Exchange at this time, the Exchange does not operate its own data centers, and instead contracts with a third-party data center provider. The Exchange notes that other competing exchange operators own/operate their data centers, which offers them greater control over their data center costs. Because those exchanges own and operate their data centers as profit centers, the Exchange is subject to additional costs. The Proposed Access Fees, which are charged for accessing the Exchange’s network infrastructure, are directly related to the network and offset such costs.

The Exchange invests significant resources in network R&D to improve the overall performance and stability of its network. For example, the Exchange has a number of network monitoring tools (some of which were developed in-house, and some of which are licensed from third-parties), that continuously monitor, detect, and report network performance, many of which serve as significant value-adds to the Exchange’s Members and enable the Exchange to provide a high level of customer service. These tools detect and report performance issues, and thus enable the Exchange to proactively notify a Member (and the SIPs) when the Exchange detects a problem with a Member’s connectivity. In fact, the Exchange often receives inquiries from other industry participants regarding the status of networking issues outside of the Exchange’s own network environment, as they are impacting the industry as a whole via the SIPs, including inquiries from regulators, because the Exchange has a superior, state-of-the-art network that, through its enhanced monitoring and reporting solutions, often detects and identifies industry-wide networking issues ahead of the SIPs. The Exchange also incurs costs associated with the maintenance and improvement of existing tools and the development of new tools.

Additionally, certain Exchange-developed network aggregation and monitoring tools provide the Exchange with the ability to measure network traffic with a much more granular level of variability. This is important as Exchange Members demand a higher level of network determinism and the ability to measure variability in terms of single digit nanoseconds. Also, routine R&D projects to improve the performance of the network’s hardware infrastructure result in additional cost. In sum, the costs associated with maintaining and enhancing a state-of-the-art exchange network in the U.S. options industry is a significant expense for the Exchange that also increases year-over-year, and thus the Exchange believes that it is reasonable to offset those costs through the Proposed Access Fees. The Exchange invests in and offers a superior network infrastructure as part of its overall options exchange services offering, resulting in significant costs associated with maintaining this network infrastructure, which are directly tied to the amount of the Proposed Access Fees that must be charged to access it, in order to recover those costs. The Exchange only has four primary sources of revenue: Transaction fees, access fees (of which the Proposed Access Fees constitute the majority), regulatory fees, and market data fees. Accordingly, the Exchange must cover all of its expenses from these four primary sources of revenue.

The Proposed Access Fees are fair and reasonable because they will not result in excessive pricing or supra-competitive profit, when comparing the total annual expense of MIAX Emerald associated with providing these services versus the total projected annual revenue that the Exchange projects to collect. For 2020, the total annual expense for providing the services associated with the Proposed Access Fees for MIAX Emerald is projected to be approximately $9.3 million. The $9.3 million in projected total annual expense is comprised of the following, all of which are directly related to the services associated with the Proposed Access Fees: (1) Third-party expense, relating to fees paid by MIAX Emerald to third-parties for certain products and services; and (2) internal expense.
relating to the internal costs of MIAX Emerald to provide the services associated with the Proposed Access Fees. The $9.3 million in projected total annual expense is directly related to the services associated with the Proposed Access Fees, and not any other product or service offered by the Exchange. It does not include general costs of operating matching systems and other trading technology, and no expense amount was allocated twice.

As discussed, the Exchange conducted an extensive cost review in which the Exchange analyzed every expense item in the Exchange’s general expense ledger (this includes over 150 separate and distinct expense items) to determine whether each such expense relates to the services associated with the Proposed Access Fees, and, if such expense did so relate, what portion (or percentage) of such expense actually supports those services, and thus bears a relationship that is, “in nature and closeness,” directly related to those services. The sum of all such portions of expenses represents the total cost of the Exchange to provide services associated with the Proposed Access Fees.

For 2020, total third-party expense, relating to fees paid by MIAX Emerald to third-parties for certain products and services for the Exchange to be able to provide the services associated with the Proposed Access Fees, is projected to be $1,932,519. This includes, but is not limited to, a portion of the fees paid to: (1) Equinix, for data center services, for the primary, secondary, and disaster recovery locations in the MIAX Emerald trading system infrastructure; (2) Zayo Group Holdings, Inc. (“Zayo”) for network services (fiber and bandwidth products and services) linking MIAX Emerald’s office locations in Princeton, NJ and Miami, FL to all data center locations; (3) Secure Financial Transaction Infrastructure (“SFTI”), which supports connectivity and feeds for the entire U.S. options industry; (4) various other service providers (including Thompson Reuters, NYSE, Nasdaq, and Internap) which provide content, connectivity services, and infrastructure services for critical components of options connectivity and network services; and (5) various other hardware and software providers (including Dell and Cisco, which support the production environment in which Members and non-Members connect to the network to trade, receive market data, etc.). For clarity, only a portion of all fees paid to such third-parties is included in the third-party expense herein, and no expense amount is allocated twice.

Accordingly, MIAX Emerald does not allocate its entire information technology and communication costs to the services associated with the Proposed Access Fees.

The Exchange believes it is reasonable to allocate such third-party expense described above towards the total cost to the Exchange to provide the services associated with the Proposed Access Fees. In particular, the Exchange believes it is reasonable to allocate the identified portion of the Equinix expense because Equinix operates the data centers (primary, secondary, and disaster recovery) that host the Exchange’s network infrastructure. This includes, among other things, the necessary storage space, which continues to expand and increase in cost, power to operate the network infrastructure, and cooling apparatuses to ensure the Exchange’s network infrastructure maintains stability. Without these services from Equinix, the Exchange would not be able to operate and support the network and provide the services associated with the Proposed Access Fees, to its Members and non-Members and their customers.

The Exchange did not allocate all of the Equinix expense toward the cost of providing the services associated with the Proposed Access Fees, only that portion which the Exchange identified as being specifically mapped to providing the services associated with the Proposed Access Fees, approximately 73% of the total Equinix expense. The Exchange believes this allocation is reasonable because it represents the Exchange’s actual cost to provide the services associated with the Proposed Access Fees, and not any other service, as supported by its cost review.

The Exchange believes it is reasonable to allocate the identified portion of the Zayo expense because Zayo provides the internet, fiber and bandwidth connections with respect to the network, linking MIAX Emerald with its affiliates, MIAX and MIAX PEARL, as well as the data center and disaster recovery locations. As such, all of the trade data, including the billions of messages each day per exchange, flow through Zayo’s infrastructure over the Exchange’s network. Without these services from Zayo, the Exchange would not be able to operate and support the network and provide the services associated with the Proposed Access Fees. The Exchange did not allocate all of the Zayo expense toward the cost of providing the services associated with the Proposed Access Fees, only the portion which the Exchange identified as being specifically mapped to providing the Proposed Access Fees, approximately 66% of the total Zayo expense. The Exchange believes this allocation is reasonable because it represents the Exchange’s actual cost to provide the services associated with the Proposed Access Fees, and not any other service, as supported by its cost review.

The Exchange believes it is reasonable to allocate the identified portions of the SFTI expense and various other service providers’ expense (including Thompson Reuters, NYSE, Nasdaq, and Internap) expense because those entities provide connectivity and feeds for the entire U.S. options industry, as well as the content, connectivity services, and infrastructure services for critical components of the network. Without these services from SFTI and various other service providers, the Exchange would not be able to operate and support the network and provide access to its Members and non-Members and their customers. The Exchange did not allocate all of the SFTI and other service providers’ expense toward the cost of providing the services associated with the Proposed Access Fees, only the portions which the Exchange identified as being specifically mapped to providing the services associated with the Proposed Access Fees, approximately 94% of the total SFTI and other service providers’ expense. The Exchange believes this allocation is reasonable because it represents the Exchange’s actual cost to provide the services associated with the Proposed Access Fees.

The Exchange believes it is reasonable to allocate the identified portion of the other hardware and software provider expense because this includes costs for dedicated hardware licenses for switches and servers, as well as dedicated software licenses for security monitoring and reporting across the network. Without this hardware and software, the Exchange would not be able to operate and support the network and provide access to its Members and non-Members and their customers. The Exchange did not allocate all of the hardware and software provider expense toward the cost of providing

---

28 In fact, on October 22, 2019, the Exchange was notified by SFTI that it is again raising its fees charged to the Exchange by approximately 11%, without having to show that such fee change complies with the Act by being reasonable, equitably allocated, and not unfairly discriminatory. It is unfathomable to the Exchange that, given the critical nature of the infrastructure services provided by SFTI, that its fees are not required to be rule-filed with the Commission pursuant to Section 19(b)(1) of the Act and Rule 19b–4 thereunder. See 15 U.S.C. 78s(b)(1) and 17 CFR 240.19b–4, respectively.
the services associated with the Proposed Access Fees, only the portions which the Exchange identified as being specifically mapped to providing the services associated with the Proposed Access Fees, approximately 57% of the total hardware and software provider expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the services associated with the Proposed Access Fees.

For 2020, total projected internal expense, relating to the internal costs of MIAX Emerald to provide the services associated with the Proposed Access Fees, is projected to be $7,367,259. This includes, but is not limited to, costs associated with: (1) Employee compensation and benefits for full-time employees that support the services associated with the Proposed Access Fees, including staff in network operations, trading operations, development, system operations, business, as well as staff in general corporate departments (such as legal, regulatory, and finance) that support those employees and functions (including an increase as a result of the higher determinism project); (2) depreciation and amortization of hardware and software used to provide the services associated with the Proposed Access Fees, including equipment, servers, cabling, purchased software and internally developed software used in the production environment to support the network for trading; and (3) occupancy costs for leased office space for staff that provide the services associated with the Proposed Access Fees. The breakdown of these costs is more fully-described below. For clarity, only a portion of all such internal expenses are included in the internal expense herein, and no expense amount is allocated twice. Accordingly, MIAX Emerald does not allocate its entire costs contained in those items to the services associated with the Proposed Access Fees.

The Exchange believes it is reasonable to allocate such internal expense described above towards the total cost to the Exchange to provide the services associated with the Proposed Access Fees. In particular, MIAX Emerald’s employee compensation and benefits expense relating to providing the services associated with the Proposed Access Fees is projected to be $4,489,924, which is only a portion of the $9,354,009 total projected expense for employee compensation and benefits. The Exchange believes it is reasonable to allocate the identified portion of such expense because this includes the time spent by employees of several departments, including Technology, Back Office, Systems Operations, Networking, Business Strategy Development (who create the business requirement documents that the Technology staff use to develop network features and enhancements), Trade Operations, Finance (who provide billing and accounting services relating to the network), and Legal (who provide legal services relating to the network, such as rule filings and various license agreements and other contracts). As part of the extensive cost review conducted by the Exchange, the Exchange reviewed the amount of time spent by each employee on matters relating to the provision of services associated with the Proposed Access Fees. Without these employees, the Exchange would not be able to provide the services associated with the Proposed Access Fees to its Members and non-Members and their customers. The Exchange did not allocate all of the employee compensation and benefits expense toward the cost of the services associated with the Proposed Access Fees, only the portions which the Exchange identified as being specifically mapped to providing the services associated with the Proposed Access Fees, approximately 48% of the total employee compensation and benefits expense. The Exchange believes this allocation is reasonable because it represents the Exchange’s actual cost to provide the services associated with the Proposed Access Fees, and not any other service, as supported by its cost review.

MIAX Emerald’s depreciation and amortization expense relating to providing the services associated with the Proposed Access Fees is projected to be $246,648, which is only a portion of the $474,323 total projected expense for occupancy. The Exchange believes it is reasonable to allocate the identified portion of such expense because such expense represents the portion of the Exchange’s cost to rent and maintain a physical location for the Exchange’s staff who operate and support the network, including providing the services associated with the Proposed Access Fees. This amount consists primarily of rent for the Exchange’s Princeton, NJ office, as well as various related costs, such as physical security, property management fees, property taxes, and utilities. The Exchange operates its Network Operations Center (“NOC”) and Security Operations Center (“SOC”) from its Princeton, New Jersey office location. A centralized office space is required to house the staff that operates and supports the network. The Exchange currently has approximately 150 employees. Approximately two-thirds of the Exchange’s staff are in the Technology department, and the majority of those staff have some role in the operation and performance of the services associated with the Proposed Access Fees. Without this office space, the Exchange would not be able to operate and support the network and provide the services associated with the Proposed Access Fees to its Members and non-Members and their customers. Accordingly, the Exchange believes it is reasonable to allocate the identified portion of its occupancy expense because such amount represents the Exchange’s actual cost to house the equipment and personnel who operate and support the Exchange’s network infrastructure and the services associated with the Proposed Access Fees. The Exchange did not allocate all of the occupancy expense toward the cost of providing the services associated with the Proposed Access Fees, only the portion which the Exchange identified as being specifically mapped to providing the services associated with the Proposed Access Fees, approximately 69% of the total depreciation and amortization expense, as these services would not be possible without relying on such equipment. The Exchange believes this allocation is reasonable because it represents the Exchange’s actual cost to provide the services associated with the Proposed Access Fees, and not any other service, as supported by its cost review.
The Exchange operates in a highly competitive market in which market participants can readily favor one of the 16 competing options venues if they deem fee levels at a particular venue to be excessive. Based on publicly-available information and excluding index-based options, no single exchange has more than 16% market share. Therefore, no exchange possesses significant pricing power in the execution of multiply-listed equity and ETF options order flow. For the month of August 2020, the Exchange had a market share of approximately 3.24% of executed multiply-listed equity options and the Exchange believes that the ever-shifting market share among exchanges from month to month

---

23 See supra note 22.
24 Id.
demonstrates that market participants can discontinue or reduce use of certain categories of products, or shift order flow, in response to fee changes. In such an environment, the Exchange must continually adjust its fees and fee waivers to remain competitive with other exchanges and to attract order flow to the Exchange.

G. Self-Regulatory Organization’s Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

Written comments were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)(ii) of the Act,31 and Rule 19b–4(f)(2)32 thereunder. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

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

Electronic Comments

• Use the Commission’s internet comment form (http://www.sec.gov/rules/sro.shtml); or
• Send an email to rule-comments@sec.gov. Please include File Number SR–EMERALD–2020–12 on the subject line.

Paper Comments

• Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549–1090. All submissions should refer to File Number SR–EMERALD–2020–12. This file number should be included on 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 Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. 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–EMERALD–2020–12 and should be submitted on or before November 10, 2020.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.33

J. Matthew DeLesDernier,
Assistant Secretary.

SECURITIES AND EXCHANGE COMMISSION


Self-Regulatory Organizations; NYSE American LLC; Notice of Designation of a Longer Period for Commission Action on a Proposed Rule Change To Modify Rules 971.1NY and 971.2NY Regarding CUBE Auctions

October 14, 2020.

On August 19, 2020, NYSE American LLC (“NYSE American”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)1 and Rule 19b–4 thereunder,2 a proposed rule change to modify Rules 971.1NY and 971.2NY regarding its Customer Best Execution (“CUBE”) auction to provide optional all-or-none functionality for larger-sized orders in both the Single-Leg and Complex CUBE Auctions. The proposed rule change was published for comment in the Federal Register on September 8, 2020.3 The Commission has received no comment letters on the proposed rule change.

Section 19(b)(2) of the Act4 provides that within 45 days of the publication of notice of the filing of a proposed rule change, or within such longer period up to 90 days as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding, or as to which the self-regulatory organization consents, the Commission shall either approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether the proposed rule change should be disapproved. The 45th day after publication of the notice for this proposed rule change is October 23, 2020. The Commission is extending this 45-day time period.

The Commission finds it appropriate to designate a longer period within which to take action on the proposed rule change so that it has sufficient time to consider the proposed rule change. Accordingly, the Commission, pursuant to Section 19(b)(2) of the Act,5 designates December 7, 2020, as the date by which the Commission shall either approve or disapprove, or institute proceedings to determine whether to disapprove, the proposed rule change (File No. SR–NYSEAMER–2020–64).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.6

J. Matthew DeLesDernier,
Assistant Secretary.

FR Doc. 2020–23139 Filed 10–19–20; 8:45 am
BILLING CODE 8011–01–P