SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-94715; File No. SR-EMERALD-2022-14)  

April 14, 2022  

Self-Regulatory Organizations; MIAX Emerald, LLC; Notice of Filing of a Proposed Rule Change to Establish Fees for the Exchange’s cToM Market Data Product; Suspension of and Order Instituting Proceedings to Determine Whether to Approve or Disapprove the Proposed Rule Change  

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 April 1, 2022, MIAX Emerald, LLC (“MIAX Emerald” or “Exchange”) filed with the Securities and Exchange Commission (“Commission”) a proposed rule change as described in Item II below, which Item has been prepared by the Exchange. The Exchange filed the proposed rule change pursuant to Section 19(b)(3)(A)(ii) of the Act,³ and Rule 19b-4(f)(2) thereunder.⁴ The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons and is, pursuant to Section 19(b)(3)(C) of the Act, hereby: (i) temporarily suspending the proposed rule change; and (ii) instituting proceedings to determine whether to approve or disapprove the proposed rule change.  

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 Exchange’s Fee Schedule (“Fee Schedule”) to establish fees for the market data product known as MIAX Emerald Complex Top of Market (“cToM”). The fees became operative on April 1, 2022. The text of the proposed rule

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II. Self-Regulatory Organization’s Description of 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 [sic] 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 Section 6(a) of the Fee Schedule to establish fees for the cToM data product. The Exchange initially filed this proposal on June 30, 2021 with the proposed fees to be effective beginning July 1, 2021 (“First Proposed Rule Change”). The First Proposed Rule Change was published for comment in the Federal Register on July 15, 2021. Although no comment letters were submitted, the Commission suspended the First Proposed Rule Change on August 27, 2021. The Exchange withdrew the First Proposed Rule Change on September 30, 2021 and re-submitted the proposal, with the proposed fee changes being

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6 Id.
immediately effective (“Second Proposed Rule Change”). The Second Proposed Rule Change provided additional justification for the proposed fee changes and addressed comments provided by the Commission Staff. On October 14, 2021, the Exchange withdrew the Second Proposed Rule Change and submitted a revised proposal to again provide additional justification for the proposed fee changes and address additional comments provided by the Commission Staff (“Third Proposed Rule Change”). The Third Proposed Rule Change was published for comment in the Federal Register on November 1, 2021. Although the Commission did not again receive any comment letters on the Third Proposed Rule Change, the Exchange withdrew the Third Proposed Rule Change on December 10, 2021 and submitted a revised proposal for immediate effectiveness (“Fourth Proposed Rule Change”). The Fourth Proposed Rule Change was published for comment in the Federal Register on December 23, 2021. Although the Commission did not again receive any comment letters on the Fourth Proposed Rule Change, the Exchange withdrew the Fourth Proposed Rule Change on February 7, 2022 and submitted a revised proposal for immediate effectiveness, which was noticed and immediately suspended by the Commission on February 15, 2022 (“Fifth Proposed Rule Change”).

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9 See SR-EMERALD-2021-32.
11 Id.
13 Id.
Commission did not again receive any comment letters on the Fifth Proposed Rule Change, the Exchange withdrew the Fifth Proposed Rule Change on March 30, 2022 and submits this revised proposal to be effective April 1, 2022 (“Sixth Proposed Rule Change”).

**Background**

The Exchange previously adopted rules governing the trading of Complex Orders\(^{15}\) on the MIAX Emerald System\(^{16}\) in 2018,\(^{17}\) ahead of the Exchange’s planned launch, which took place on March 1, 2019. Shortly thereafter, the Exchange adopted the market data product, cToM, and provided cToM free of charge to incentivize market participants to subscribe.\(^{18}\) The Exchange provided cToM free of charge for nearly three years and absorbed all costs associated with producing the cToM data product.

In summary, cToM provides subscribers with the same information as the MIAX Emerald Top of Market (“ToM”) data product as it relates to the Strategy Book,\(^{19}\) i.e., the Exchange’s best bid and offer for a complex strategy, with aggregate size, based on displayable order and quoting interest in the complex strategy on the Exchange. However, cToM provides

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\(^{15}\) See Exchange Rule 518(a)(5) for the definition of Complex Orders.

\(^{16}\) The term “System” means the automated trading system used by the Exchange for the trading of securities. See Exchange Rule 100.


subscribers with the following additional information that is not included in ToM: (i) the identification of the complex strategies currently trading on the Exchange; (ii) complex strategy last sale information; and (iii) the status of securities underlying the complex strategy (e.g., halted, open, or resumed). cToM is therefore a distinct market data product from ToM in that it includes additional information that is not available to subscribers that receive only the ToM data feed. ToM subscribers are not required to subscribe to cToM, and cToM subscribers are not required to subscribe to ToM.  

Proposal

The Exchange now proposes to amend Section 6)a) of the Fee Schedule to charge monthly fees to Distributors of cToM. Specifically, the Exchange proposes to assess Internal Distributors $1,250 per month and External Distributors $1,750 per month for the cToM data feed. The Exchange notes that the proposed monthly cToM fees for Internal and External Distributors are identical to the prices the Exchange currently charges for its ToM data product and the prices the Exchange’s affiliate, MIAx, charges for its ToM product, both of which were previously published by the Commission and remain in effect today.

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20 See supra note 18.

21 A “Distributor” of MIAx Emerald data is any entity that receives a feed or file of data either directly from MIAx Emerald or indirectly through another entity and then distributes it either internally (within that entity) or externally (outside that entity). All Distributors are required to execute a MIAx Emerald Distributor Agreement. See Section 6)a) of the Fee Schedule.

22 The Exchange also proposes to make a minor related change to remove “(as applicable)” from the explanatory paragraph in Section 6)a) as it will not change fees for both the ToM and cToM data feeds.

As it does today for ToM, the Exchange proposes to assess cToM fees on Internal and External Distributors in each month the Distributor is credentialed to use cToM in the production environment. Also, as the Exchange does today for ToM, market data fees for cToM will be reduced for new Distributors for the first month during which they subscribe to cToM, based on the number of trading days that have been held during the month prior to the date on which that subscriber has been credentialed to use cToM in the production environment. Such new Distributors will be assessed a pro-rata percentage of the fees in the table in Section 6(a) of the Fee Schedule, which is the percentage of the number of trading days remaining in the affected calendar month as of the date on which they have been credentialed to use cToM in the production environment, divided by the total number of trading days in the affected calendar month.

The Exchange believes that other exchanges’ fees for complex market data are useful examples and provides the below table for comparison purposes only to show how the Exchange’s proposed fees compare to fees currently charged by other options exchanges for similar complex market data. As shown by the below table, the Exchange’s proposed fees for cToM are similar to or less than fees charged for similar data products provided by other options exchanges.

<table>
<thead>
<tr>
<th>Exchange</th>
<th>Monthly Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIAX Emerald (as proposed)</td>
<td>$1,250 – Internal Distributor</td>
</tr>
<tr>
<td></td>
<td>$1,750 – External Distributor</td>
</tr>
<tr>
<td>NYSE American, LLC (“Amex”)(^{24})</td>
<td>$1,500 Access Fee</td>
</tr>
</tbody>
</table>

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$1,000 Redistribution Fee (this fee is in addition to the Access Fee resulting in a $2,500 monthly fee for external distribution)

NYSE Arca, Inc. (“Arca”)  
$1,500 Access Fee  
$1,000 Redistribution Fee (this fee is in addition to the Access Fee resulting in a $2,500 monthly fee for external distribution)

NASDAQ PHLX LLC (“PHLX”)  
$3,000 – Internal Distributor  
$3,500 – External Distributor

The Exchange also proposes to amend the paragraph below the table of fees for ToM and cToM in Section 6)a) of the Fee Schedule to make a minor, non-substantive correction by deleting the phrase “(as applicable)” in the first sentence following the table of fees for ToM and cToM. The purpose of this proposed change is to remove unnecessary text from the Fee Schedule.

**cToM Content is Available from Alternative Sources**

cToM is also not the exclusive source for Complex Order information from the Exchange and market participants may choose to subscribe to the Exchange’s other data products to receive such information. It is a business decision of market participants whether to subscribe to the cToM data product or not. Market participants that choose not to subscribe to cToM can derive much, if not all, of the same information provided in the cToM feed from other Exchange sources, including, for example, the MIAX Emerald Order Feed (“MOR”).


27 See MIAX website, Market Data & Offerings, at https://www.miaxoptions.com/market-data-offerings (last visited April 1, 2022). In general, MOR provides real-time ultra-low latency updates on the following information: new Simple Orders added to the MIAX Emerald Order Book; updates to Simple Orders resting on the MIAX Emerald Order
cToM information is provided to subscribers of MOR: the Exchange’s best bid and offer for a complex strategy, with aggregate size, based on displayable order and quoting interest in the complex strategy on the Exchange; the identification of the complex strategies currently trading on the Exchange; and the status of securities underlying the complex strategy (e.g., halted, open, or resumed). In addition to the cToM information contained in MOR, complex strategy last sale information can be derived from the Exchange’s ToM data feed. Specifically, market participants may deduce that last sale information for multiple trades in related options series that are disseminated via the ToM data feed with the same timestamp are likely part of a Complex Order transaction and last sale.

**Implementation**

The proposed rule change will be effective April 1, 2022.

2. **Statutory Basis**

The Exchange believes that the proposed fees are consistent with Section 6(b) of the Act in general, and furthers the objectives of Section 6(b)(4) of the Act in particular, in that it provides for the equitable allocation of reasonable dues, fees and other charges among Members and other persons using any facility or system which the Exchange operates or controls. The Exchange also believes the proposed fees further the objectives of Section 6(b)(5) of the Act in that they are designed to promote just and equitable principles of trade, remove impediments to

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Book; new Complex Orders added to the Strategy Book (i.e., the book of Complex Orders); updates to Complex Orders resting on the Strategy Book; MIAX Emerald listed series updates; MIAX Emerald Complex Strategy definitions; the state of the MIAX Emerald System; and MIAX Emerald’s underlying trading state.

and perfect the mechanism of a free and open market and a national market system, and, in
general protect investors and the public interest and are not designed to permit unfair
discrimination between customers, issuers, brokers and dealers.

The Exchange believes that the information provided to justify the proposed fees meets
or exceeds the amount of detail required in respect of proposed fee changes as set forth in recent
Commission and Commission Staff guidance. On March 29, 2019, the Commission issued an
Order disapproving a proposed fee change by the BOX Market LLC Options Facility to establish
connectivity fees for its BOX Network (the “BOX Order”).31 On May 21, 2019, the Commission
Staff issued guidance “to assist the national securities exchanges and FINRA … in preparing Fee
Filings that meet their burden to demonstrate that proposed fees are consistent with the
requirements of the Securities Exchange Act.”32 Based on both the BOX Order and the
Guidance, the Exchange believes that the proposed fees are consistent with the Act because they
are: (i) reasonable, equitably allocated, not unfairly discriminatory, and not an undue burden on
competition; (ii) comply with the BOX Order and the Guidance; (iii) supported by evidence
(including comprehensive revenue and cost data and analysis) that they are fair and reasonable
and will not result in excessive pricing or supra-competitive profit; and (iv) identical to the prices
the Exchange currently charges for its ToM data product and the prices the Exchange’s affiliate,

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).

32 See Staff Guidance on SRO Rule Filings Relating to Fees (May 21, 2019), at
https://www.sec.gov/tm/staff-guidance-sro-rule-filings-fees (the “Guidance”).
MIAX, charges for its ToM product, both of which were previously published by the Commission and remain in effect today.\textsuperscript{33}

In adopting Regulation NMS, the Commission granted self-regulatory organizations (“SROs”) and broker-dealers increased authority and flexibility to offer new and unique market data to the public. It was believed that this authority would expand the amount of data available to consumers, and also spur innovation and competition for the provision of market data. Particularly, cToM further broadens the availability of U.S. option market data to investors consistent with the principles of Regulation NMS. The data product also promotes increased transparency through the dissemination of cToM. Particularly, cToM provides subscribers with the same information as ToM, but includes the following additional information: (i) the identification of the complex strategies currently trading on the Exchange; (ii) complex strategy last sale information; and (iii) the status of securities underlying the complex strategy (e.g., halted, open, or resumed). The Exchange believes cToM provides a valuable tool that subscribers can use to gain substantial insight into the trading activity in Complex Orders, but also emphasizes such data is not necessary for trading. Moreover, other exchanges offer similar data products.\textsuperscript{34}

**The Proposed Fees will not Result in a Supra-Competitive Profit**

The Exchange believes that exchanges, in setting fees of all types, should meet very high standards of transparency to demonstrate why each new fee or fee amendment meets the requirements of the Act that fees be reasonable, equitably allocated, not unfairly discriminatory, and not create an undue burden on competition among market participants. The Exchange

\textsuperscript{33} See supra note 23.

\textsuperscript{34} See supra notes 24 through 26.
believes this high standard is especially important when an exchange imposes various fees for market participants to access an exchange’s marketplace.

In the Guidance, the Commission Staff states that, “[a]s an initial step in assessing the reasonableness of a fee, staff considers whether the fee is constrained by significant competitive forces.”\textsuperscript{35} The Guidance further states that, “… even where an SRO cannot demonstrate, or does not assert, that significant competitive forces constrain the fee at issue, a cost-based discussion may be an alternative basis upon which to show consistency with the Exchange Act.”\textsuperscript{36} In the Guidance, the Commission Staff further states that, “[i]f an SRO seeks to support its claims that a proposed fee is fair and reasonable because it will permit recovery of the SRO’s costs, or will not result in excessive pricing or supra-competitive profit, specific information, including quantitative information, should be provided to support that argument.”\textsuperscript{37} The Exchange does not assert that the proposed fees are constrained by competitive forces. Rather, the Exchange asserts that the proposed fees are reasonable because they will permit recovery of the Exchange’s costs in providing cToM data and will not result in the Exchange generating a supra-competitive profit.

The Guidance defines “supra-competitive profit” as “profits that exceed the profits that can be obtained in a competitive market.”\textsuperscript{38} The Commission Staff further states in the Guidance that “the SRO should provide an analysis of the SRO’s baseline revenues, costs, and profitability (before the proposed fee change) and the SRO’s expected revenues, costs, and profitability

\textsuperscript{35} See Guidance, supra note 32.
\textsuperscript{36} Id.
\textsuperscript{37} Id.
\textsuperscript{38} Id.
(following the proposed fee change) for the product or service in question.” The Exchange provides this analysis below.

The proposed fees are based on a cost-plus model. The Exchange believes that it is important to demonstrate that the proposed fees are based on its costs and reasonable business needs and believes the proposed fees will allow the Exchange to begin to offset expenses. However, as discussed more fully below, such fees may also result in the Exchange recouping less than all of its costs of providing the cToM data feed because of the uncertainty of forecasting subscriber decision making with respect to firms’ market data needs. The Exchange believes that the proposed fees will not result in excessive pricing or supra-competitive profit based on the total expenses the Exchange incurs versus the total revenue the Exchange projects to collect, and therefore meets the standards in the Act as interpreted by the Commission and the Commission Staff in the BOX Order and the Guidance.

The Exchange conducted an extensive cost review in which the Exchange analyzed nearly every expense item in the Exchange’s general expense ledger to determine whether each such expense relates to the cToM data feed, and, if such expense did so relate, what portion (or percentage) of such expense actually supports providing the cToM data feed. In determining what portion (or percentage) to allocate to access services, each Exchange department head, in coordination with other Exchange personnel, determined the expenses that support access services and System Networks associated with the cToM data feed. This included numerous meetings between the Exchange’s Chief Information Officer, Chief Financial Officer, Head of Strategic Planning and Operations, Chief Technology Officer, various members of the Legal Department, and other group leaders. The analysis also included each department head

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39 Id.
meeting with the divisions of teams within each department to determine the amount of time and resources allocated by employees within each division towards the access services and System Networks associated with the cToM data feed. The Exchange reviewed each individual expense to determine if such expense was related to the cToM data feed. Once the expenses were identified, the Exchange department heads, with the assistance of our internal finance department, reviewed such expenses holistically on an Exchange-wide level to determine what portion of that expense supports providing access services and the System Networks. The sum of all such portions of expenses represents the total cost to the Exchange to provide access services associated with the cToM market data feed. For the avoidance of doubt, no expense amount is allocated twice. In the Suspension Order, the Commission questioned whether further explanation of the Exchange’s cost analysis was necessary. The Exchange provides further details concerning its cost analysis in response to this question.

The analysis conducted by the Exchange is a proprietary process that is designed to make a fair and reasonable assessment of costs and resources allocated to support the provision of access services associated with the cToM data feed. The Exchange acknowledges that this assessment can only capture a moment in time and that costs and resource allocations may change. That is why the Exchange historically, and on an ongoing annual basis, will continue to review its costs and resource allocations to ensure it appropriately allocates resources to properly provide services to the Exchange’s constituents.

The Exchange believes exchanges, like all businesses, should be provided flexibility when developing and applying a methodology to allocate costs and resources they deem necessary to operate their business, including providing market data and access services. The Exchange notes that costs and resource allocations may vary from business to business and,
likewise, costs and resource allocations may differ from exchange to exchange when it comes to providing market data and access services. It is a business decision that must be evaluated by each exchange as to how to allocate internal resources and what costs to incur internally or via third parties that it may deem necessary to support its business and its provision of market data and access services to market participants.

The Exchange notes that there are material costs associated with providing the infrastructure and headcount to fully support access to the cToM data feed. 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. Both fixed and variable expenses have significant impact on the Exchange’s overall costs to provide the cToM data feed. For example, to accommodate new Members, the Exchange may need to purchase additional hardware to support those Members and provide the cToM data feed. Further, as the total number of Members increases, the Exchange and its affiliates may 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 the Exchange and its affiliates to provide access to its Members is not fixed. The Exchange believes the cToM market data feed is a reasonable attempt to offset a portion of those costs associated with providing access to and maintaining its System Networks’ infrastructure.

The Exchange estimated its total annual expense to provide the cToM data feed based on the following general expense categories: (1) external expenses, which include fees paid to third parties for certain products and services; (2) internal expenses relating to the internal costs to
provide the services associated with the cToM data feed; and (3) general shared expenses. The Guidance does not include any information regarding the methodology that an exchange should use to determine its cost associated with a proposed fee change. The Exchange utilized a methodology in this proposed fee change that it believes is reasonable because the Exchange analyzed its entire cost structure, allocated a percentage of each cost attributable to providing the cToM data feed, then divided those costs according to the cost methodology outlined below.

For 2022, the total annual expense for providing the access services associated with providing the cToM data feed is estimated to be $236,284, or $19,690 per month. The Exchange believes it is more appropriate to analyze the cToM market data feed utilizing its estimated 2022 revenue and costs, which utilize the same presentation methodology as set forth in the Exchange’s previously-issued Audited Unconsolidated Financial Statements. The $236,284 estimated total annual expense is directly related to the access to the cToM data feed, and not any other product or service offered by the Exchange. For example, it does not include general costs of operating matching engines and other trading technology. No expense amount

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40 The percentage allocations used in this proposed rule change may differ from past filings from the Exchange or its affiliates due to, among other things, changes in expenses charged by third parties, adjustments to internal resource allocations, and different system architecture of the Exchange as compared to its affiliates.

41 For example, the Exchange previously noted that all third-party expense described in its prior fee filing was contained in the information technology and communication costs line item under the section titled “Operating Expenses Incurred Directly or Allocated From Parent,” in the Exchange’s 2019 Form 1 Amendment containing its financial statements for 2018. See Securities Exchange Act Release No. 87877 (December 31, 2019), 85 FR 738 (January 7, 2020) (SR-EMERALD-2019-39). Accordingly, the third-party expense described in this filing is attributed to the same line item for the Exchange’s 2022 Form 1 Amendment, which will be filed in 2023. In its Suspension Order, the Commission also asked should the Exchange to use cost projections or actual costs estimated for 2021 in a filing made in 2022, or make cost projections for 2022. The Exchange utilized expenses from its most recent audited financial statement as those numbers are more reliable than more recent unaudited numbers, which may be subject to change.
was allocated twice. Each of the categories of expenses are set forth in the following table and details of the individual line-item costs considered by the Exchange for each category are described further below.

<table>
<thead>
<tr>
<th>External Expenses</th>
<th>Percentage of Total Expense Amount Allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>Data Center Provider</td>
<td>0.20%</td>
</tr>
<tr>
<td>Fiber Connectivity Provider</td>
<td>0.20%</td>
</tr>
<tr>
<td>Security Financial Transaction Infrastructure (“SFTI”), and Other Connectivity and Content Service Providers</td>
<td>0%</td>
</tr>
<tr>
<td>Hardware and Software Providers</td>
<td>0.20%</td>
</tr>
<tr>
<td>Total of External Expenses</td>
<td>$5,434&lt;sup&gt;42&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internal Expenses</th>
<th>Expense Amount Allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>Employee Compensation</td>
<td>$209,610</td>
</tr>
<tr>
<td>Depreciation and Amortization</td>
<td>$4,055</td>
</tr>
<tr>
<td>Occupancy</td>
<td>$11,410</td>
</tr>
<tr>
<td>Total of Internal Expenses</td>
<td>$225,075</td>
</tr>
<tr>
<td>Allocated Shared Expenses</td>
<td>$5,775</td>
</tr>
</tbody>
</table>

<sup>42</sup> The Exchange does not believe it is appropriate to disclose the actual amount it pays to each individual third party provider as those fee arrangements are competitive or the Exchange is contractually prohibited from disclosing that number.
In its Suspension Order, the Commission solicited commenters’ views on whether the Exchange has provided sufficient detail on the identity and nature of services provided by third parties. The Commission further solicited commenters’ views on whether the Exchange has provided sufficient detail on the elements that go into connectivity costs, including how shared costs are allocated and attributed to connectivity expenses, to permit an independent review and assessment of the reasonableness of purported cost-based fees and the corresponding profit margin thereon. Based on the below analysis, the Exchange believes that the cToM market data fees are fair and reasonable and that the Exchange has provided sufficient detail surrounding the Commission’s questions. In accordance with the Guidance, the Exchange has provided sufficient detail to support a finding that the proposed fees are consistent with the Exchange Act. The proposal includes a detailed description of the Exchange’s costs and how the Exchange determined to allocate those costs related to the proposed fees. The Exchange notes that its only has a single source of revenue, distribution fees, to recover those costs associated with providing the cToM data feed. The Exchange notes that, without the specific third party and internal expense items, the Exchange would not be able to provide and maintain the System Networks and access to the System Networks. Each of these expense items, including physical hardware, software, employee compensation and benefits, occupancy costs, and the depreciation and amortization of equipment, has been identified through a line-by-line item analysis to be integral to providing the cToM data feed.

For clarity, the Exchange took a conservative approach in determining the expense and the percentage of that expense to be allocated to providing the cToM data feed. The Exchange describes the analysis conducted for each expense and the resources or determinations that were considered when determining the amount necessary to allocate to each expense. Only a portion
of all fees paid to such third parties is included in the third-party expenses described herein, and no expense amount is allocated twice. Accordingly, the Exchange does not allocate its entire information technology and communication costs to providing the cToM data feed. This may result in the Exchange under allocating an expense to provide the cToM data feed, and such expenses may actually be higher than what the Exchange allocated as part of this proposal. The Exchange notes that expenses associated with its affiliates, MIAX and MIAX Pearl (the options and equities markets), are accounted for separately and are not included within the scope of this filing.

Further, as part its ongoing assessment of costs and expenses, the Exchange recently conducted a periodic thorough review of its expenses and resource allocations, which resulted in revised percentage allocations in this filing. The revised percentages are, among other things, the result of the shuffling of internal resources in response to business objectives and changes to fees charged and services provided by third parties. Therefore, the percentage allocations used in this proposed rule change may differ from past filings from the Exchange or its affiliates due to, among other things, changes in expenses charged by third parties, adjustments to internal resource allocations, and different system architecture of the Exchange as compared to its affiliates.43

*External Expense Allocations*

43 The Exchange notes that the expense allocations differ from the Exchange’s filing earlier in 2021, SR-EMERALD-2021-11, because that prior filing pertained to several different access fees, which the Exchange had not been charging for since the Exchange launched operations in March 2019. See Securities Exchange Act Release No. 91460 (April 2, 2021), 86 FR 18349 (April 8, 2021) (SR-EMERALD-2021-11). In SR-EMERALD-2021-11, the Exchange sought to adopt fees for FIX Ports, MEI Ports, Purge Ports, Clearing Trade Drop Ports, and FIX Drop Copy Ports, all of which had been free for market participants for over two years since inception.
For 2022, expenses relating to fees paid by the Exchange to third parties for products and services necessary to provide the cToM market data feed are estimated to be $5,434. This includes, but is not limited to, a portion of the fees paid to: (1) a third party data center provider, including for the primary, secondary, and disaster recovery locations of the Exchange’s trading system infrastructure; (2) a fiber connectivity provider for network services (fiber and bandwidth products and services) linking the Exchange’s and its affiliates’ office locations in Princeton, New Jersey and Miami, Florida, to all data center locations; (3) various other content and connectivity service providers, which provide content, connectivity services, and infrastructure services for critical components of options connectivity and network services; and (4) various other hardware and software providers which support the production environment in which Members and non-Members connect to the network to trade and receive market data.

**Data Center Space and Operations Provider**

The Exchange does not own the primary data center or the secondary data center, but instead leases space in data centers operated by third parties where the Exchange houses servers, switches and related equipment. Data center costs include an allocation of the costs the Exchange incurs to provide physical connectivity in the third party data centers where it maintains its equipment as well as related costs. The data center provider operates the data centers (primary, secondary, and disaster recovery) that host the Exchange’s network infrastructure. Without the retention of a third party data center, the Exchange would not be able to operate its systems and provide a trading platform for market participants. The Exchange does

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44 See supra note 42.
45 Id.
not employ a separate fee to cover its data center expense and recoups that expense, in part, by charging for the cToM data feed.

The Exchange reviewed its data center footprint, including its total rack space, cage usage, number of servers, switches, cabling within the data center, heating and cooling of physical space, storage space, and monitoring and divided its data center expenses among providing transaction services, market data, and connectivity. Based on this review, the Exchange determined that 0.20% of the total applicable data center provider expense is applicable to providing the cToM data feed. The Exchange believes this allocation is reasonable because it represents the costs associated with the Exchange’s servers and internal cabling dedicated to processing and disseminating market data. The Exchange excluded from this allocation portion of the Exchange’s data center expense that is due to providing and maintaining connectivity to the Exchange’s System Networks, including providing cabling within the data center between market participants and the Exchange. The Exchange also did not allocate the remainder of the data center expense because it pertains to other areas of the Exchange’s operations, such as ports and transaction services.

Fiber Connectivity Provider

The Exchange engages a third-party service provider that provides the internet, fiber and bandwidth connections between the Exchange’s networks, primary and secondary data center, and office locations in Princeton and Miami. Fiber connectivity is necessary for the Exchange to switch to its secondary data center in the case of an outage in its primary data center. Fiber connectivity also allows the Exchange’s National Operations & Control Center (“NOCC”) and Security Operations Center (“SOC”) in Princeton to communicate with the Exchange’s primary and secondary data centers. As such, all trade data, including the billions of messages each day,
flow through this third-party provider’s infrastructure over the Exchange’s network. Without these services, the Exchange would not be able to operate and support the network and provide the cToM data feed. Without the retention of a third party fiber connectivity provider, they Exchange would not be able to communicate between its data centers and office locations. The Exchange does not employ a separate fee to cover its fiber connectivity expense and recoups that expense, in part, by charging for cToM data feeds.

The Exchange reviewed it costs to retain fiber connectivity from a third party, including the ongoing costs to support fiber connectivity, ensuring adequate bandwidth and infrastructure maintenance to support exchange operations, and ongoing network monitoring and maintenance and determined that 0.20% of the total fiber connectivity expense was applicable to providing the cToM data feed. The Exchange believes this allocation is reasonable because it reflects the portion of the fiber connectivity expense that relates to maintaining and providing the cToM data feed. The Exchange excluded a large portion of the Exchange’s fiber connectivity expense that is due to providing and maintaining connectivity between the Exchange’s System Networks, data centers, and office locations and is core to the daily operation of the Exchange. Fiber connectivity is a necessary integral means to disseminate information from the Exchange’s primary data center to other Exchange locations. The Exchange excluded from this allocation fiber connectivity usage related to system connectivity or other business lines. The Exchange also did not allocate the remainder of this expense because it pertains to other areas of the Exchange’s operations and does not directly relate to providing the cToM data feed. The Exchange believes this allocation is reasonable because it represents the Exchange’s actual cost to provide the cToM data feed.

*Connectivity and Content Services Provided by SFTI and Other Providers*
The Exchange did not allocate any expense associated with the proposed fees towards SFTI and various other service providers’ because the Exchange’s architecture takes advantage of an advance in design to eliminate the need for a market data distribution gateway layer. The computation and dissemination via an API is done solely within the match engine environment and is then delivered via the Member and non-Member connectivity infrastructure. This architecture delivers a market data system that is more efficient both in cost and performance. Accordingly, the Exchange determined not to allocate any expense associated with SFTI and various other service providers.

**Hardware and Software Providers**

The Exchange relies on dozens of third-party hardware and software providers for equipment necessary to operate its System Networks. This includes either the purchase or licensing of physical equipment, such as servers, switches, cabling, and monitoring devices. It also includes the purchase or license of software necessary for security monitoring, data analysis and Exchange operations. Hardware and software providers are necessary to maintain its System Networks and provide the cToM data feed. Hardware and software equipment and licenses for that equipment are also necessary to operate and monitor physical assets necessary to offer the cToM data feed. Hardware and software equipment and licenses are key to the operation of the Exchange and without them the Exchange would not be able to operate and support the cToM data feed. The Exchange does not employ a separate fee to cover its hardware and software expense and recoups that expense, in part, by charging for cToM data feed dissemination.

The Exchange reviewed its hardware and software related costs, including software patch management, vulnerability management, administrative activities related to equipment and software management, professional services for selection, installation and configuration of
equipment and software supporting exchange operations and determined that 0.20% of the total applicable hardware and software expense is allocated to providing the cToM data feed.

Hardware and software equipment and licenses are key to the operation of the Exchange and its System Networks. Without them, the Exchange would not be able to develop and market participants would not be able to purchase the cToM data feed. The Exchange only allocated the portion of this expense to the hardware and software that is related to the cToM data feed, such as operating servers and equipment necessary to produce the cToM data feed. The Exchange, therefore, did not allocate portions of its hardware and software expense that related to other areas of the Exchange’s business, such as hardware and software used for connectivity or unrelated administrative services. The Exchange also did not allocate the remainder of this expense because it pertains to other areas of the Exchange’s operations, such as ports or transaction services, and does not directly relate to providing the cToM data feed. The Exchange believes this allocation is reasonable because it represents the Exchange’s cost to the cToM data feed, and not any other service, as supported by its cost review.

**Internal Expense Allocations**

For 2022, total internal expenses relating to the Exchange providing and maintaining its System Networks and access to its System Networks for cToM data feeds are estimated to be $225,075. This includes, but is not limited to, costs associated with: (1) employee compensation and benefits for full-time employees that support the System Networks and access to System Networks, 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 as well as important system upgrades; (2) depreciation and amortization of hardware and software used to provide and maintain access
services and System Networks associated with the cToM data feed, 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 cToM data feed. The breakdown of these costs is more fully described below.

**Employee Compensation and Benefits**

Human personnel are key to exchange operations and supporting the Exchange’s ongoing provision the cToM data feed. The Exchange’s reviewed its employee compensation and benefits expense and the portion of that expense allocated to providing the cToM data feed. As part of this review, the Exchange considered employees whose functions include providing and maintaining the cToM data feed and used a blended rate of compensation reflecting salary, stock and bonus compensation, bonuses, benefits, payroll taxes, and 401K matching contributions.\(^{46}\)

Based on this review, the Exchange determined to allocate $209,610 in employee compensation and benefits expense to providing the cToM data feeds. To determine the appropriate allocation the Exchange reviewed the time employees allocated to supporting the cToM data feeds. Senior staff also reviewed these time allocations with department heads and team leaders to determine whether those allocations were appropriate. These employees are critical to the Exchange to provide the cToM data feeds. The Exchange determined the above

\(^{46}\) For purposes of this allocation, the Exchange did not consider expenses related to supporting employees who support cToM data feeds, such as office space and supplies. The Exchange determined cost allocation for employees who perform work in support of offering access services and System Networks to arrive at a full time equivalent (“FTE”) of 0.6 FTEs across all the identified personnel. The Exchange then multiplied the FTE times a blended compensation rate for all relevant Exchange personnel to determine the personnel costs associated with providing the access services and System Networks associated with the cToM data feeds.
allocation based on the personnel whose work focused on functions necessary to provide and maintain the cToM data feeds. The Exchange does not charge a separate fee regarding employees who support the cToM data feeds and the Exchange seeks to recoup that expense, in part, by charging for the cToM data feeds.

**Depreciation and Amortization**

A key expense incurred by the Exchange relates to the depreciation and amortization of equipment that the Exchange procured to provide and maintain the cToM data feeds. The Exchange reviewed all of its physical assets and software, owned and leased, and determined whether each asset is related to providing and maintaining the cToM data feeds, and added up the depreciation of those assets. All physical assets and software, which includes assets used for testing and monitoring of Exchange infrastructure, were valued at cost, depreciated or leased over periods ranging from three to five years. In determining the amount of depreciation and amortization to apply to providing the cToM data feeds, the Exchange considered the depreciation of hardware and software that are key to the operation of the Exchange and its provision of the cToM data feeds. This includes servers, computers, laptops, monitors, information security appliances and storage, and network switching infrastructure equipment, including switches and taps that were previously purchased to maintain and provide the cToM data feeds. Without them, market participants would not be able to receive the cToM data feeds. The Exchange seeks to recoup a portion of its depreciation expense by charging for the cToM data feeds.

Based on this review, the Exchange determined to allocate $4,055 in depreciation and amortization expense to providing the cToM data feeds. The Exchange only allocated the portion of this depreciation expense to the hardware and software related to providing the cToM
data feeds. The Exchange, therefore, did not allocate portions of depreciation expense that relates to other areas of the Exchange’s business, such as the depreciation of hardware and software used for connectivity or unrelated administrative services.47

**Occupancy**

The Exchange rents and maintains multiple physical locations to house staff and equipment necessary to support access services, System Networks, and exchange operations. The Exchange’s occupancy expense is not limited to the housing of personnel and includes locations used to store equipment necessary for Exchange operations. In determining the amount of its occupancy related expense, the Exchange considered actual physical space used to house employees whose functions include providing and maintaining the cToM data feeds. Similarly, the Exchange also considered the actual physical space used to house hardware and other equipment necessary to provide and maintain the cToM data feeds. This equipment includes computers, servers, and accessories necessary to support the System Networks and cToM data feeds. Based on this review, the Exchange determined to allocate $11,410 of its occupancy expense to provide and maintain the cToM data feeds. The Exchange believes this allocation is reasonable because it represents the Exchange’s cost to rent and maintain a physical location for the Exchange’s staff who operate and support the cToM data feeds. The Exchange considered the rent paid for the Exchange’s Princeton and Miami offices, as well as various related costs, such as physical security, property management fees, property taxes, and utilities at each of those

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47 All of the expenses outlined in this proposed fee change refer to the operating expenses of the Exchange. The Exchange did not included any future capital expenditures within these costs. Depreciation and amortization represent the expense of previously purchased hardware and internally developed software spread over the useful life of the assets. Due to the fact that the Exchange has only included operating expense and historical purchases, there is no double counting of expenses in the Exchange’s cost estimates.
locations. The Exchange did not include occupancy expenses related to housing employees and equipment related to other Exchange operations, such as transaction and administrative services.

Allocated Shared Expense

Finally, a limited portion of general shared expenses was allocated to overall the cToM data feed costs as without these general shared costs, the Exchange would not be able to operate in the manner that it does and provide the cToM data feeds. The costs included in general shared expenses include recruiting and training, marketing and advertising costs, professional fees for legal, tax and accounting services, and telecommunications costs. For 2022, the Exchange’s general shared expense allocated to the cToM data feeds is estimated to be $5,755. The Exchange used the weighted average of the above allocations to determine the amount of general shared expenses to allocate to the Exchange. Next, based on additional management and expense analysis, these fees are allocated to the proposal.

Revenue and Estimated Profit Margin

The Exchange only has four primary sources of revenue and cost recovery mechanisms to fund all of its operations: transaction fees, access fees, regulatory fees, and market data fees. Accordingly, the Exchange must cover all of its expenses from these four primary sources of revenue and cost recovery mechanisms.

To determine the Exchange’s estimated revenue associated with the cToM data feed, the Exchange analyzed the number of Members and non-Members currently receiving the cToM data feed and used a recent monthly billing cycle representative of current monthly revenue. The Exchange also provided its baseline by analyzing March 2022, the monthly billing cycle prior to the proposed cToM data fee, and compared this to its expenses for that month. As discussed below, the Exchange does not believe it is appropriate to factor into its analysis future revenue
growth or decline into its estimates for purposes of these calculations, given the uncertainty of
such estimates due to the continually changing access needs of market participants and potential
changes in internal and third party expenses.

For March 2022, prior to the proposed the cToM data fee, Members and non-Members
purchased a total of 13 cToM data feeds, for which the Exchange anticipates charging $0. This
will result in a loss of $19,690 for that month. For April 2022, the Exchange anticipates
Members and non-Members purchasing a total of 13 cToM data feeds. Assuming the Exchange
charges its proposed fees for Distributors, the Exchange would generate revenue of $16,250 for
that month. This would result in a loss of $3,440 ($16,250 minus $19,690) for that month (a
negative 21% margin from March 2022 to April 2022).

The Exchange believes that conducting the above analysis on a per month basis is
reasonable as the revenue generated from access services subject to the proposed fee generally
remains static from month to month. The Exchange also conducted the above analysis on a per
month basis to comply with the Commission Staff’s Guidance, which requires a baseline analysis
to assist in determining whether the proposal generates a supra-competitive profit. The
Exchange cautions that this profit margin may also fluctuate from month to month based on the
uncertainty of predicting how many connections may be purchased from month to month as
Members and non-Members are free to add and drop connections at any time based on their own
business decisions.

The Exchange believes the proposed margin is reasonable and will not result in a “supra-
competitive” profit. The Guidance defines “supra-competitive profit” as “profits that exceed the
profits that can be obtained in a competitive market.”

Until recently, the Exchange has operated at a cumulative net annual loss since it launched operations in 2019. The Exchange has operated at a net loss due to a number of factors, one of which is choosing to forgo revenue by offering certain products, such as market data, at lower rates than other options exchanges to attract order flow and encourage market participants to experience the high determinism, low latency, and resiliency of the Exchange’s trading systems. The Exchange previously provided the cToM data feed free of charge and absorbed all costs associated with providing the cToM data feed to market participants. In this proposal, the Exchange would continue to offer the cToM data feed for a fee that still falls short of covering the Exchange’s expenses. The Exchange is not generating a profit, and therefore, cannot be deemed to be generating a “supra-competitive” profit by now charging for the cToM data feed. The Exchange should not now be penalized for now seeking to raise it fees to at least cover a portion of its costs after offering the cToM data feed free of charge.

The Exchange notes that its revenue estimate is based on projections and will only be realized to the extent such revenue actually produces the revenue estimated. As a generally new entrant to the hyper-competitive exchange environment, and an exchange focused on driving competition, the Exchange does not yet know whether such expectations will be realized. For instance, in order to generate the revenue expected from the cToM data feed, the Exchange will have to be successful in retaining existing clients that wish to receive the cToM data feed or

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48 See Guidance, supra note 32.
49 The Exchange has incurred a cumulative loss of $22 million since its inception in 2019 to 2020, the last year for which the Exchange’s Form 1 data is available. See Exchange’s Form 1/A, Application for Registration or Exemption from Registration as a National Securities Exchange, filed July 28, 2021, available at https://sec.report/Document/9999999997-21-004557/.
obtaining new clients that will purchase such data. To the extent the Exchange is successful in
encouraging new clients to receive the cToM data feed, the Exchange does not believe it should
be penalized for such success. The Exchange, like other exchanges, is, after all, a for-profit
business. While the Exchange believes in transparency around costs and potential margins, the
Exchange does not believe that these estimates should form the sole basis of whether or not a
proposed fee is reasonable or can be adopted. Instead, the Exchange believes that the
information should be used solely to confirm that an Exchange is not earning supra-competitive
profits, and the Exchange believes its cost analysis and related estimates demonstrate this fact.

The Proposed Fees are Reasonable when Compared to The Fees of other Options
Exchanges with Similar Market Share

The Exchange does not have visibility into other equities exchanges’ costs to provide
market data or their fee markup over those costs, and therefore cannot use other exchange’s
market data fees as a benchmark to determine a reasonable markup over the costs of providing
market data. Nevertheless, the Exchange believes the other exchanges’ market data fees are a
useful example of alternative approaches to providing and charging for connectivity
notwithstanding that the competing exchanges may have different system architectures that may
result in different cost structures for the provision of market data. To that end, the Exchange
believes the proposed cToM market data fees are reasonable because the proposed fees are still
less than fees charged for similar connectivity provided by other options exchanges with
comparable market shares.

As described in the below table, the Exchange’s proposed fee remains less than fees
charged for similar market data products provided by other options exchanges with similar
market share. In the each of the above cases, the Exchange’s proposed fees are still significantly
lower than that of competing options exchanges with similar market share. Each of the market
data rates in place at competing options exchanges were filed with the Commission for immediate effectiveness and remain in place today.

<table>
<thead>
<tr>
<th>Exchange</th>
<th>Monthly Fee</th>
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| MIAx Emerald (as proposed) | $1,250 – Internal Distributor  
$1,750 – External Distributor |
| Amex⁵⁰                 | $1,500 Access Fee  
$1,000 Redistribution Fee (this fee is in addition to the Access Fee resulting in a $2,500 monthly fee for external distribution) |
| Arca⁵¹                 | $1,500 Access Fee  
$1,000 Redistribution Fee (this fee is in addition to the Access Fee resulting in a $2,500 monthly fee for external distribution) |
| PHLX⁵²                 | $3,000 – Internal Distributor  
$3,500 – External Distributor |

**The Proposed Pricing is not Unfairly Discriminatory and Provides for the Equitable Allocation of Fees, Dues, and other Charges**

The Exchange believes that it is reasonable, equitable and not unfairly discriminatory to assess Internal Distributors fees that are less than the fees assessed for External Distributors for subscriptions to the cToM data feed because Internal Distributors have limited, restricted usage rights to the market data, as compared to External Distributors, which have more expansive usage rights. All Members and non-Members that determine to receive any market data feed of


the Exchange (or its affiliates, MIAX Pearl and MIAX), must first execute, among other things, the MIAX Exchange Group Exchange Data Agreement (the “Exchange Data Agreement”).

Pursuant to the Exchange Data Agreement, Internal Distributors are restricted to the “internal use” of any market data they receive. This means that Internal Distributors may only distribute the Exchange’s market data to the recipient’s officers and employees and its affiliates.

External Distributors may distribute the Exchange’s market data to persons who are not officers, employees or affiliates of the External Distributor, and may charge their own fees for the redistribution of such market data. Accordingly, the Exchange believes it is fair, reasonable and not unfairly discriminatory to assess External Distributors a higher fee for the Exchange’s market data products as External Distributors have greater usage rights to commercialize such market data and can adjust their own fee structures if necessary. The Exchange also utilizes more resources to support External Distributors versus Internal Distributors, as External Distributors have reporting and monitoring obligations that Internal Distributors do not have, thus requiring additional time and effort of Exchange staff. The Exchange believes the proposed cToM fees are equitable and not unfairly discriminatory because the fee level results in a reasonable and equitable allocation of fees amongst subscribers for similar services, depending on whether the subscriber is an Internal or External Distributor. Moreover, the decision as to whether or not to purchase market data is entirely optional to all market participants. Potential purchasers are not required to purchase the market data, and the Exchange is not required to make the market data


54 See id.

55 See id.
available. Purchasers may request the data at any time or may decline to purchase such data. The allocation of fees among users is fair and reasonable because, if market participants determine not to subscribe to the data feed, firms can discontinue their use of the cToM data.

Further, the Exchange believes that the proposal is equitable and not unfairly discriminatory because the proposed cToM fees will apply to all market participants of the Exchange on a uniform basis. The Exchange also notes that the proposed monthly cToM fees for Internal and External Distributors are the same prices that the Exchange charges for its ToM data product.

The Exchange believes the proposed change to delete certain text from Section 6)a) of the Fee Schedule promotes just and equitable principles of trade and removes impediments to and perfects the mechanism of a free and open market and a national market system because the proposed change is a non-substantive edit to the Fee Schedule to remove unnecessary text. The Exchange believes that this proposed change will provide greater clarity to Members and the public regarding the Exchange’s Fee Schedule and that it is in the public interest for theFee Schedule to be accurate and concise so as to eliminate the potential for confusion.

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

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

Intra-Market Competition

The Exchange believes the proposed fees will not result in any burden on intra-market competition that is not necessary or appropriate in furtherance of the purposes of the Act because the proposed fees will allow the Exchange to recoup some of its costs in providing cToM to market participants. As described above, the Exchange has operated at a cumulative net annual
loss since it launched operations in 2019\textsuperscript{56} due to providing a low cost alternative to attract order flow and encourage market participants to experience the high determinism and resiliency of the Exchange’s trading Systems. To do so, the Exchange chose to waive the fees for some non-transaction related services and Exchange products or provide them at a very marginal cost, which was not profitable to the Exchange. This resulted in the Exchange forgoing revenue it could have generated from assessing any fees or higher fees. The Exchange could have sought to charge higher fees at the outset, but that could have served to discourage participation on the Exchange. Instead, the Exchange chose to provide a low cost exchange alternative to the options industry which resulted in lower initial revenues. An example of this is cToM, for which the Exchange only now seeks to adopt fees at a level similar to or lower than those of other options exchanges.

Since the Exchange initially launched operations with the cToM data product in 2019, all Exchange Members and non-Members have had the ability to receive the Exchange’s cToM data free of charge for the past three years.\textsuperscript{57} Since 2019, when the Exchange adopted Complex Order functionality, the Exchange has spent time and resources building out various Complex Order functionality in its System to provide better trading strategies and risk functionality for market participants in order to better compete with other exchanges’ complex functionality and similar data products focused on complex orders.\textsuperscript{58} The Exchange now seeks to recoup its costs for providing cToM to market participants and believes the proposed fees will not result in excessive pricing or supra-competitive profit.

\textsuperscript{56} See supra note 49.
\textsuperscript{57} See supra note 18.
\textsuperscript{58} See supra note 15.
Inter-Market Competition

The Exchange also does not believe the proposed fees would cause any unnecessary or inappropriate burden on intermarket competition as other exchanges are free to introduce their own comparable data product and lower their prices to better compete with the Exchange’s offering. There is no reason to believe that the newly proposed fees for receive the cToM data feed would impair other exchange’s ability to compete or cause any unnecessary or inappropriate burden on inter-market competition. Particularly, the proposed product and fees apply uniformly to any purchaser, in that it does not differentiate between subscribers that purchase cToM. The proposed fees are set at a modest level that would allow any interested Member or non-Member to purchase such data based on their business needs.

The Exchange does not believe that the proposed rule change to make a minor, non-substantive edit to Section 6(a) of the Fee Schedule by deleting unnecessary text will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. This proposed rule change is not being made for competitive reasons, but rather is designed to remedy a minor non-substantive issue and will provide added clarity to the Fee Schedule. The Exchange believes that it is in the public interest for the Fee Schedule to be accurate and concise so as to eliminate the potential for confusion on the part of market participants. In addition, the Exchange does not believe the proposal will impose any burden on inter-market competition as the proposal does not address any competitive issues and is intended to protect investors by providing further transparency regarding the Exchange’s Fee Schedule.

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

Written comments were neither solicited nor received.
III. Suspension of the Proposed Rule Change

Pursuant to Section 19(b)(3)(C) of the Act, at any time within 60 days of the date of filing of a proposed rule change pursuant to Section 19(b)(1) of the Act, the Commission summarily may temporarily suspend the change in the rules of a self-regulatory organization (“SRO”) 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. As discussed below, the Commission believes a temporary suspension of the proposed rule change is necessary and appropriate to allow for additional analysis of the proposed rule change’s consistency with the Act and the rules thereunder.

As the Exchange further details above, the Exchange first filed a proposed rule change proposing fee changes as proposed herein on June 30, 2021, with the proposed fee changes effective beginning July 1, 2021. That proposal, EMERALD-2021-21, was published for comment in the Federal Register on July 15, 2021. On August 27, 2021, pursuant to Section 19(b)(3)(C) of the Act, the Commission: (1) temporarily suspended the proposed rule change; and (2) instituted proceedings to determine whether to approve or disapprove the proposal. On September 30, 2021, the Exchange withdrew the proposed rule change, and filed two other proposed rule changes proposing fee changes as proposed herein, which were each also

61 See supra note 5, and accompanying text.
subsequently withdrawn. On February 7, 2022, the Exchange filed a proposed rule change proposing fee changes as proposed herein and, on February 15, 2022, the Commission issued a notice of the proposed rule change and, pursuant to Section 19(b)(3)(C) of the Act, simultaneously: (1) temporarily suspended the proposed rule change; and (2) instituted proceedings to determine whether to approve or disapprove the proposal.\(^65\) The instant filing is substantially similar.\(^66\)

When exchanges file their proposed rule changes with the Commission, including fee filings like the Exchange’s present proposal, they are required to provide a statement supporting the proposal’s basis under the Act and the rules and regulations thereunder applicable to the exchange.\(^67\) The instructions to Form 19b-4, on which exchanges file their proposed rule changes, specify that such statement “should be sufficiently detailed and specific to support a finding that the proposed rule change is consistent with [those] requirements.”\(^68\)

Among other things, exchange proposed rule changes are subject to Section 6 of the Act, including Sections 6(b)(4), (5), and (8), which requires the rules of an exchange to (1) provide for the equitable allocation of reasonable fees among members, issuers, and other persons using the exchange’s facilities;\(^69\) (2) perfect the mechanism of a free and open market and a national market system, protect investors and the public interest, and not be designed to permit unfair


\(^{66}\) See id.

\(^{67}\) See 17 CFR 240.19b-4 (Item 3 entitled “Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change”).

\(^{68}\) Id.

discrimination between customers, issuers, brokers, or dealers;\textsuperscript{70} and (3) not impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act.\textsuperscript{71}

In temporarily suspending the Exchange’s fee change, the Commission intends to further consider whether the proposed fees for the cToM market data feed are consistent with the statutory requirements applicable to a national securities exchange under the Act. In particular, the Commission will consider whether the proposed rule change satisfies the standards under the Act and the rules thereunder requiring, among other things, that an exchange’s rules provide for the equitable allocation of reasonable fees among members, issuers, and other persons using its facilities; not permit unfair discrimination between customers, issuers, brokers or dealers; and do not impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act.\textsuperscript{72}

Therefore, the Commission finds that it is appropriate in the public interest, for the protection of investors, and otherwise in furtherance of the purposes of the Act, to temporarily suspend the proposed rule change.\textsuperscript{73}

\textsuperscript{70} 15 U.S.C. 78f(b)(5).
\textsuperscript{71} 15 U.S.C. 78f(b)(8).
\textsuperscript{72} See 15 U.S.C. 78f(b)(4), (5), and (8), respectively.
\textsuperscript{73} For purposes of temporarily suspending the proposed rule change, the Commission has considered the proposed rule’s impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).
IV. Proceedings to Determine Whether to Approve or Disapprove the Proposed Rule Change

In addition to temporarily suspending the proposal, the Commission also hereby institutes proceedings pursuant to Sections 19(b)(3)(C)\(^{74}\) and 19(b)(2)(B) of the Act\(^ {75}\) to determine whether the proposed rule change should be approved or disapproved. Institution of such proceedings is appropriate at this time in view of the legal and policy issues raised by the proposed rule change. Institution of proceedings does not indicate that the Commission has reached any conclusions with respect to any of the issues involved. Rather, the Commission seeks and encourages interested persons to provide additional comment on the proposed rule change to inform the Commission’s analysis of whether to disapprove the proposed rule change.

Pursuant to Section 19(b)(2)(B) of the Act\(^ {76}\), the Commission is providing notice of the grounds for possible disapproval under consideration. The Commission is instituting proceedings to allow for additional analysis of whether the Exchange has sufficiently demonstrated how the proposed rule change is consistent with Sections 6(b)(4),\(^ {77}\) 6(b)(5),\(^ {78}\) and 6(b)(8)\(^ {79}\) of the Act. Section 6(b)(4) of the Act requires that the rules of a national securities exchange provide for the equitable allocation of reasonable dues, fees, and other charges among its members and issuers and other persons using its facilities. Section 6(b)(5) of the Act requires that the rules of a national securities exchange be designed, among other things, to promote just

\(^{74}\) 15 U.S.C. 78s(b)(3)(C). Once the Commission temporarily suspends a proposed rule change, Section 19(b)(3)(C) of the Act requires that the Commission institute proceedings under Section 19(b)(2)(B) to determine whether a proposed rule change should be approved or disapproved.


\(^{76}\) Id.


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 not be designed to permit unfair discrimination between customers, issuers, brokers,
or dealers. Section 6(b)(8) of the Act requires that the rules of a national securities exchange not
impose any burden on competition that is not necessary or appropriate in furtherance of the
purposes of the Act.

The Commission asks that commenters address the sufficiency of the Exchange’s
statements in support of the proposal, which are set forth above, in addition to any other
comments they may wish to submit about the proposed rule change. In particular, the
Commission seeks comment on the following aspects of the proposal and asks commenters to
submit data where appropriate to support their views:

1. **Cost Estimates and Allocation.** The Exchange states that it is not asserting that the
   proposed fees are constrained by competitive forces, but rather sets forth a “cost-plus
   model,” and states that the proposed fees are “reasonable because they will permit
   recovery of the Exchange’s costs in providing cToM data and will not result in the
   Exchange generating a supra-competitive profit.” Setting forth its costs in
   providing the cToM data product, and as summarized in greater detail above, MIAX
   Emerald projects $236,284 in aggregate annual estimated costs for 2022 as the sum
   of: (1) $5,434 in external expenses paid in total to its data center provider (0.20% of
   the total applicable expense) for data center services; its fiber connectivity provider
   for network services (0.20% of the total applicable expense); and various other
   hardware and software providers (0.20% of the total applicable expense) supporting

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80 See supra Section II.A.2.
the production environment; (2) $225,075 in internal expenses, allocated to (a) employee compensation costs ($209,610); (b) depreciation and amortization ($4,055); and (c) occupancy costs ($11,410); and (3) $5,775 in allocated shared expenses, including recruiting and training, marketing and advertising costs, professional fees for legal, tax and accounting services, and telecommunications costs. Do commenters believe that these allocations are reasonable? Should the Exchange be required to provide more specific information regarding the allocation of third-party expenses, such as the overall estimated cost for each category of external expenses or at minimum the total applicable third-party expenses? Should the Exchange have provided either a percentage allocation or statements regarding the Exchange’s overall estimated costs for the internal expense categories and general shared expenses figure? Do commenters believe that the Exchange has provided sufficient detail about how it determined which costs are associated with providing and maintaining the cToM data product and why? Do commenters believe that the Exchange provided sufficient detail or explanation to support its claim that “no expense amount is allocated twice,”\textsuperscript{81} whether among the sub-categories of expenses in this filing, across the Exchange’s fee filings for other products or services, or over time? Do commenters believe that the Exchange has provided sufficient detail about how it determined “general shared expenses” and how it determined what portion should be associated with providing and maintaining the cToM data product? The Exchange describes a “proprietary” process that was applied in making these determinations or arriving at particular allocations. Do commenters believe further

\textsuperscript{81} See id.
explanation is necessary? What are commenters’ views on whether the Exchange has provided sufficient detail on the identity and nature of services provided by third parties? Across all of the Exchange’s projected costs, what are commenters’ views on whether the Exchange has provided sufficient detail on the elements that go into market data costs, including how shared costs are allocated and attributed to market data expenses, to permit an independent review and assessment of the reasonableness of purported cost-based fees and the corresponding profit margin thereon?

2. **Revenue Estimates and Profit Margin Range.** The Exchange provides a single monthly revenue figure from March 2022 as the basis for calculating the profit margin of -21%. Do commenters believe this is reasonable? If not, why not? The profit margin is also dependent on the accuracy of the cost projections which, if inflated (intentionally or unintentionally), may render the projected profit margin meaningless. The Exchange acknowledges that this margin may fluctuate from month to month as Members and non-Members add and drop subscriptions, and that costs may increase. The Exchange does not account for the possibility of cost decreases, however. What are commenters’ views on the extent to which actual costs (or revenues) deviate from projected costs (or revenues)? Do commenters believe that the Exchange’s methodology for estimating the profit margin is reasonable? Should the Exchange provide a range of profit margins that it believes are reasonably possible, and the reasons therefor?

3. **Reasonable Rate of Return.** The Exchange states that its expected profit margin is -21% and that the proposed fees are reasonable because the Exchange is operating at a

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82 [See id.](#)
negative margin for this product. Further, the Exchange states that it chose to initially provide the cToM data product for free and to forego revenue that they otherwise could have generated from assessing any fees.\footnote{See id.} What are commenters’ views regarding what factors should be considered in determining what constitutes a reasonable rate of return for the cToM market data product? Do commenters believe it relevant to an assessment of reasonableness that, according to the Exchange, the Exchange’s proposed fees are similar to or lower than fees charged by competing options exchanges with similar market share? Should an assessment of reasonable rate of return include consideration of factors other than costs; and if so, what factors should be considered, and why?

4. **Periodic Reevaluation.** The Exchange has not stated that it would reevaluate the appropriate level of cToM data product fees if there is a material deviation from the anticipated profit margin. In light of the impact that the number of subscriptions has on profit margins, and the potential for costs to decrease (or increase) over time, what are commenters’ views on the need for exchanges to commit to reevaluate, on an ongoing and periodic basis, their cost-based data fees to ensure that the fees stay in line with their stated profitability projections and do not become unreasonable over time, for example, by failing to adjust for efficiency gains, cost increases or decreases, and changes in subscribers? How formal should that process be, how often should that reevaluation occur, and what metrics and thresholds should be considered? How soon after a new data fee change is implemented should an exchange assess whether its revenue and/or cost estimates were accurate and at what
threshold should an exchange commit to file a fee change if its estimates were inaccurate? Should an initial review take place within the first 30 days after a data fee is implemented? 60 days? 90 days? Some other period?

5. Fees for Internal Distributors versus External Distributors. The Exchange argues that it is reasonable, equitable, and not unfairly discriminatory to assess Internal Distributors fees that are lower than the fees assessed for External Distributors for subscriptions to the cToM data feed ($1,250 per month for Internal Distributors versus $1,750 per month for External Distributors), since Internal Distributors have limited, restricted usage rights to the market data, as compared to External Distributors, which have more expansive usage rights, including rights to commercialize such market data. In addition, the Exchange states that it “utilizes more resources” to support External Distributors as compared to Internal Distributors, as External Distributors have reporting and monitoring obligations that Internal Distributors do not have, thus requiring “additional time and effort” of the Exchange’s staff. What are commenters’ views on the adequacy of the information the Exchange provides regarding the differential between the Internal Distributor and External Distributor fees? Do commenters believe that the fees for Internal Distributors and External Distributors, as well as the fee differences between Distributors, are supported by the Exchange’s assertions that it sets the differentiated pricing structure in a manner that is equitable and not unfairly discriminatory? Do commenters believe that the Exchange should demonstrate how the proposed

84 See text accompanying supra notes 53-55.
85 See id.
Distributor fee levels correlate with different costs to better substantiate how the Exchange “utilizes more resources” to support External Distributors versus Internal Distributors and permit an assessment of the Exchange’s statement that “External Distributors have reporting and monitoring obligations that Internal Distributors do not have, thus requiring additional time and effort of Exchange staff”.\(^86\)

Under the Commission’s Rules of Practice, the “burden to demonstrate that a proposed rule change is consistent with the [Act] and the rules and regulations issued thereunder . . . is on the [SRO] that proposed the rule change.”\(^87\) The description of a proposed rule change, its purpose and operation, its effect, and a legal analysis of its consistency with applicable requirements must all be sufficiently detailed and specific to support an affirmative Commission finding,\(^88\) and any failure of an SRO to provide this information may result in the Commission not having a sufficient basis to make an affirmative finding that a proposed rule change is consistent with the Act and the applicable rules and regulations.\(^89\) Moreover, “unquestioning reliance” on an SRO’s representations in a proposed rule change would not be sufficient to justify Commission approval of a proposed rule change.\(^90\)

The Commission believes it is appropriate to institute proceedings to allow for additional consideration and comment on the issues raised herein, including as to whether the proposal is

\(^{86}\) See id.

\(^{87}\) Rule 700(b)(3), Commission Rules of Practice, 17 CFR 201.700(b)(3).

\(^{88}\) See id.

\(^{89}\) See id.

consistent with the Act, any potential comments or supplemental information provided by the Exchange, and any additional independent analysis by the Commission.

V. Request for Written Comments

The Commission requests written views, data, and arguments with respect to the concerns identified above, as well as any other relevant concerns. In particular, the Commission invites the written views of interested persons concerning whether the proposal is consistent with Sections 6(b)(4), 6(b)(5), and 6(b)(8), or any other provision of the Act, or the rules and regulations thereunder. The Commission asks that commenters address the sufficiency and merit of the Exchange’s statements in support of the proposal, in addition to any other comments they may wish to submit about the proposed rule change. Although there do not appear to be any issues relevant to approval or disapproval that would be facilitated by an oral presentation of views, data, and arguments, the Commission will consider, pursuant to Rule 19b-4, any request for an opportunity to make an oral presentation. 91

Interested persons are invited to submit written data, views, and arguments concerning the proposed rule change, 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 e-mail to rule-comments@sec.gov. Please include File Number SR-

EMERALD-2022-14 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-2022-14. This file number should be included on the subject line if e-mail 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](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-2022-14 and should be submitted on or before [insert date 21 days from date of publication in the Federal Register]. Rebuttal comments should be submitted by [insert date 35 days from date of publication in the Federal Register].
VI. Conclusion

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(3)(C) of the Act, that File Number SR-EMERALD-2022-14 be and hereby is, temporarily suspended. In addition, the Commission is instituting proceedings to determine whether the proposed rule change should be approved or disapproved.

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

J. Matthew DeLesDernier  
Assistant Secretary

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93 17 CFR 200.30-3(a)(12), (57), and (58).