SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-93555; File No. SR-PEARL-2021-54)

November 10, 2021

Self-Regulatory Organizations; MIAX PEARL, LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Amend the MIAX Pearl Options Fee Schedule to Remove Certain Credits and Increase Trading Permit Fees

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 29, 2021, MIAX PEARL, LLC ("MIAX Pearl" 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 Pearl Options Fee Schedule (the "Fee Schedule") to remove certain credits and amend the monthly Trading Permit[3] fees for Exchange Members.[4]

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1 15 U.S.C. 78s(b)(1).

2 17 CFR 240.19b-4.

3 The term "Trading Permit" means a permit issued by the Exchange that confers the ability to transact on the Exchange. See Exchange Rule 100.

4 The term "Member" means an individual or organization that is registered with the Exchange pursuant to Chapter II of Exchange Rules for purposes of trading on the Exchange as an "Electronic Exchange Member" or "Market Maker." Members are deemed "members" under the Exchange Act. See Exchange Rule 100 and the Definitions Section of the Fee Schedule.

The text of the proposed rule change is available on the Exchange's website at http://www.miaxoptions.com/rule-filings/pearl at MIAX Pearl'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 remove certain credits and amend the monthly Trading Permit fees (the "Proposed Access Fees") for Exchange Members.

Removal of the "Monthly Volume Credit"

The Exchange proposes to amend the Definitions section of the Fee Schedule to delete the definition and remove the credits applicable to the Monthly Volume Credit for Members. The Exchange established the Monthly Volume Credit in 2018[5] to encourage Members to send increased Priority Customer[6] order flow to the Exchange, which the Exchange applied to the

5 See Securities Exchange Act Release No. 82867 (March 13, 2018), 83 FR 12044 (March 19, 2018) (SR-PEARL-2018-07).

6 The term "Priority Customer" means a person or entity that (i) is not a broker or dealer in securities, and (ii) does not place more than 390 orders in listed options per day on average during a calendar month for its own beneficial accounts(s). The number of orders shall be counted in accordance with Interpretation and Policy .01 of Exchange

assessment of certain non-transaction rebates and fees for that Member. The Exchange applies a different Monthly Volume Credit depending on whether the Member connects to the Exchange via the FIX Interface[7] or MEO Interface.[8] Currently, the Exchange assesses the Monthly Volume Credit to each Member that has executed Priority Customer volume along with that of

Rule 100. See the Definitions Section of the Fee Schedule and Exchange Rule 100, including Interpretation and Policy .01.

7 The term "FIX Interface" means the Financial Information Exchange interface for certain order types as set forth in Exchange Rule 516. See the Definitions Section of the Fee Schedule and Exchange Rule 100.

8 The term "MEO Interface" or "MEO" means a binary order interface for certain order types as set forth in Rule 516 into the MIAX Pearl System. See the Definitions Section of the Fee Schedule and Exchange Rule 100.

its Affiliates,[9] not including Excluded Contracts,[10] of at least 0.30% of MIAX Pearl-listed Total Consolidated Volume ("TCV"),[11] as set forth in the following table:

Type of Member Connection	Monthly Volume Credit
Member that connects via the FIX Interface	$250
Member that connects via the MEO Interface	$1,000

9 "Affiliate" means (i) an affiliate of a Member of at least 75% common ownership between the firms as reflected on each firm's Form BD, Schedule A, or (ii) the Appointed Market Maker of an Appointed EEM (or, conversely, the Appointed EEM of an Appointed Market Maker). An "Appointed Market Maker" is a MIAX Pearl Market Maker (who does not otherwise have a corporate affiliation based upon common ownership with an EEM) that has been appointed by an EEM and an "Appointed EEM" is an EEM (who does not otherwise have a corporate affiliation based upon common ownership with a MIAX Pearl Market Maker) that has been appointed by a MIAX Pearl Market Maker, pursuant to the following process. A MIAX Pearl Market Maker appoints an EEM and an EEM appoints a MIAX Pearl Market Maker, for the purposes of the Fee Schedule, by each completing and sending an executed Volume Aggregation Request Form by email to membership@miaxoptions.com no later than 2 business days prior to the first business day of the month in which the designation is to become effective. Transmittal of a validly completed and executed form to the Exchange along with the Exchange's acknowledgement of the effective designation to each of the Market Maker and EEM will be viewed as acceptance of the appointment. The Exchange will only recognize one designation per Member. A Member may make a designation not more than once every 12 months (from the date of its most recent designation), which designation shall remain in effect unless or until the Exchange receives written notice submitted 2 business days prior to the first business day of the month from either Member indicating that the appointment has been terminated. Designations will become operative on the first business day of the effective month and may not be terminated prior to the end of the month. Execution data and reports will be provided to both parties. See the Definitions Section of the Fee Schedule.

10 "Excluded Contracts" means any contracts routed to an away market for execution. See the Definitions Section of the Fee Schedule.

11 "TCV" means total consolidated volume calculated as the total national volume in those classes listed on MIAX Pearl for the month for which the fees apply, excluding consolidated volume executed during the period of time in which the Exchange experiences an Exchange System Disruption (solely in the option classes of the affected Matching Engine). See the Definitions Section of the Fee Schedule.

If a Member connects via both the MEO Interface and FIX Interface and qualifies for the Monthly Volume Credit based upon its Priority Customer volume, the greater Monthly Volume Credit shall apply to such Member. The Monthly Volume Credit is a single, once-per-month credit towards the aggregate monthly total of non-transaction fees assessable to a Member.

The Exchange now proposes to amend the Definitions section of the Fee Schedule to delete the definition and remove the Monthly Volume Credit. The Exchange established the Monthly Volume Credit when it first launched operations to attract order flow by lowering the initial fixed cost for Members. The Monthly Volume Credit has achieved its purpose and the Exchange now believes it is appropriate to remove this credit. The Exchange believes that the Exchange's existing Priority Customer rebates and fees will continue to allow the Exchange to remain highly competitive and continue to attract order flow and maintain market share.

Removal of the Trading Permit Fee Credit

The Exchange proposes to amend Section 3)b) of the Fee Schedule to remove the Trading Permit fee credit that is denoted in footnote "*" below the Trading Permit fee table. The Trading Permit fee credit is applicable to Members that connect via both the MEO and FIX Interfaces. Currently, Members who connect via both the MEO and FIX Interfaces are assessed the rates for both types of Trading Permits, but these Members receive a $100 monthly credit towards the Trading Permit fees applicable to the MEO Interface. The Exchange now proposes to remove the Trading Permit fee credit and delete footnote "*" from Section 3)b) of the Fee Schedule.

The Exchange established the Trading Permit fee credit when it first launched operations to attract order flow and increase membership by lowering the costs for Members that connect via both the MEO Interface and FIX Interface. The Trading Permit fee credit has achieved its purpose and the Exchange now believes that it is appropriate to remove this credit in light of the current operating conditions and membership population on the Exchange.

Amendment of Trading Permit Fees

The Exchange proposes to amend Section 3)b) of the Fee Schedule to increase the amount of the monthly Trading Permit fees. The Exchange issues Trading Permits to Members who are either Electronic Exchange Members[12] ("EEMs") or Market Makers.[13] The Exchange assesses Trading Permit fees based upon the monthly total volume executed by the Member and its Affiliates on the Exchange across all origin types, not including Excluded Contracts, as compared to the total TCV in all MIAX Pearl-listed options. The Exchange adopted a tier-based fee structure based upon the volume-based tiers detailed in the definition of "Non-Transaction Fees Volume-Based Tiers"[14] in the Definitions section of the Fee Schedule. The Exchange also assesses Trading Permit fees based upon the type of interface used by the Member to connect to the Exchange – the FIX Interface and/or the MEO Interface.

Current Trading Permit Fees. Currently, each Member who connects to the System[15] via the FIX Interface is assessed the following monthly Trading Permit fees:

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12 The term "Electronic Exchange Member" or "EEM" means the holder of a Trading Permit who is a Member representing as agent Public Customer Orders or Non-Customer Orders on the Exchange and those non-Market Maker Members conducting proprietary trading. Electronic Exchange Members are deemed "members" under the Exchange Act. See the Definitions Section of the Fee Schedule.

13 The term "Market Maker" or "MM" means a Member registered with the Exchange for the purpose of making markets in options contracts traded on the Exchange and that is vested with the rights and responsibilities specified in Chapter VI of these Rules. See the Definitions Section of the Fee Schedule.

14 See the Definitions Section of the Fee Schedule for the monthly volume thresholds associated with each Tier.

15 The term "System" means the automated trading system used by the Exchange for the trading of securities. See Exchange Rule 100.

(i) if its volume falls within the parameters of Tier 1 of the Non-Transaction Fees Volume-Based Tiers, or volume up to 0.30%, $250;

(ii) if its volume falls within the parameters of Tier 2 of the Non-Transaction Fees Volume-Based Tiers, or volume above 0.30% up to 0.60%, $350; and

(iii) if its volume falls with the parameters of Tier 3 of the Non-Transaction Fees Volume-Based Tiers, or volume above 0.60%, $450.

Each Member who connects to the System via the MEO Interface is assessed the following monthly Trading Permit fees:

(i) if its volume falls within the parameters of Tier 1 of the Non-Transaction Fees Volume-Based Tiers, or volume up to 0.30%, $300;

(ii) if its volume falls within the parameters of Tier 2 of the Non-Transaction Fees Volume-Based Tiers, or volume above 0.30% up to 0.60%, $400; and

(iii) if its volume falls with the parameters of Tier 3 of the Non-Transaction Fees Volume-Based Tiers, or volume above 0.60%, $500.

Proposed Trading Permit Fees. The Exchange now proposes to amend its Trading Permit fees as follows. Each Member who connects to the System via the FIX Interface will be assessed the following monthly Trading Permit fees:

(i) if its volume falls within the parameters of Tier 1 of the Non-Transaction Fees Volume-Based Tiers, $500;

(ii) if its volume falls within the parameters of Tier 2 of the Non-Transaction Fees Volume-Based Tiers, $1,000; and

(iii) if its volume falls with the parameters of Tier 3 of the Non-Transaction Fees Volume-Based Tiers, $1,500.

Each Member who connects to the System via the MEO Interface will be assessed the following monthly Trading Permit fees:

(i) if its volume falls within the parameters of Tier 1 of the Non-Transaction Fees Volume-Based Tiers, $2,500;

(ii) if its volume falls within the parameters of Tier 2 of the Non-Transaction Fees Volume-Based Tiers, $4,000; and

(iii) if its volume falls with the parameters of Tier 3 of the Non-Transaction Fees Volume-Based Tiers, $6,000.

Members who use the MEO Interface may also connect to the System through the FIX Interface as well, and vice versa. The Exchange notes that the Trading Permit fees for Members who connect through the MEO Interface are higher than the Trading Permit fees for Members who connect through the FIX Interface, since the FIX Interface utilizes less capacity and resources of the Exchange. The MEO Interface offers lower latency and higher throughput, which utilizes greater capacity and resources of the Exchange. The FIX Interface offers lower bandwidth requirements and an industry-wide uniform message format. Both EEMs and Market Makers may connect to the Exchange using either interface.

Trading Permits grant access to the Exchange, thus providing the ability to submit orders and trade on the Exchange, in the manner defined in the relevant Trading Permit. Without a Trading Permit, a Member cannot directly trade on the Exchange. Therefore, a Trading Permit is a means to directly access the Exchange (which offers meaningful value), and the Exchange now proposes to increase its monthly fees since it has not done so since the fees were first adopted in 2018[16] and are designed to recover a portion of the costs associated with directly accessing the

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16 See supra note 5.

Exchange. The Exchange notes that the its affiliates, Miami International Securities Exchange, LLC ("MIAX") and MIAX Emerald, LLC ("MIAX Emerald"), charge a similar, fixed trading permit fee to certain users, and a similar, varying trading permit fee to other users, based upon the number of assignments of option classes or the percentage of volume in option classes.[17] The Exchange notes that other options exchanges assess certain of their membership fees at different rates, based upon a member's participation on that exchange,[18] and, as such, this concept is not new or novel. The Exchange also notes that the proposed increased Trading Permit fees are in line with, or cheaper than, the trading permit fees or similar membership fees charged by other options exchanges.[19]

Implementation

The proposed rule change will be effective beginning November 1, 2021.

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17 See the MIAX Fee Schedule, Section 3)b); MIAX Emerald Fee Schedule, Section 3)b).

18 See e.g., NYSE Arca Options Fees and Charges, OTP Trading Participant Rights, p.1 (assessing market makers an options trading permit ("OTP") monthly fee of $6,000 for up to 175 option issues, an additional $5,000 for up to 350 option issues, an additional $4,000 for up to 1,000 option issues, an additional $3,000 for all option issues on the exchange, and an additional $1,000 for the fifth OTP and for each OTP thereafter); NYSE American Options Fee Schedule, Section III, Monthly Trading Permit, Rights, Floor Access and Premium Product Fees, p. 23 (assessing market makers an ATP monthly fee of $8,000 for up to 60 plus the bottom 45% of option issues, an additional $6,000 for up to 150 plus the bottom 45% of option issues, an additional $5,000 for up to 500 plus the bottom 45% of option issues, and additional $4,000 for up to 1,100 plus the bottom 45% of option issues, an additional $3,000 for all issues traded on the exchange, and an additional $2,000 for 6th to 9th ATPs; plus an addition fee for premium products). See also Cboe BZX Options Exchange ("BZX Options"), which assesses the Participant Fee, a type of membership fee, according to a member's average daily volume ("ADV"). See Cboe BZX Options Exchange Fee Schedule, Membership Fees. The monthly Participant Fee for BZX Options is $500 if the member's ADV is less than 5,000 contracts and $1,000 if the member's ADV is equal to or greater than 5,000 contracts. Id.

19 See id.

2. Statutory Basis

The Exchange believes that its proposal to amend its Fee Schedule is consistent with Section 6(b) of the Act[20] in general, and furthers the objectives of Section 6(b)(4) of the Act[21] in particular, in that it is an equitable allocation of reasonable dues, fees and other charges among its members and issuers and other persons using its facilities. 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 customers, issuers, brokers and dealers.

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 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 market participants. The Exchange believes this high standard is especially important when an exchange imposes various access fees for market participants to access an exchange's marketplace. The Exchange deems Trading Permit fees to be Access Fees. It records these fees as part of its "Access Fees" revenue in its financial statements. The Exchange believes that it is important to demonstrate that these fees are based on its costs and reasonable business needs. The Exchange believes the Proposed Access Fees will allow the Exchange to offset expenses the Exchange has and will incur, and that the Exchange is providing sufficient transparency (as described below) into how the

[20] 15 U.S.C. 78f(b).

[21] 15 U.S.C. 78f(b)(4) and (5).

Exchange determined to charge such fees. Accordingly, the Exchange is providing an analysis of its revenues, costs, and profitability associated with 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 to provide the access services associated with the Proposed Access Fees, 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 Proposed Access Fees, and, if such expense did so relate, what portion (or percentage) of such expense actually supports the access services. The sum of all such portions of expenses represents the total cost to the Exchange to provide the access services associated with 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 cost to the Exchange to provide the access services associated with the Proposed Access Fees.

In order to determine the Exchange's projected revenues associated with the Proposed Access Fees, the Exchange analyzed the number of Members currently utilizing the Trading Permits, and, utilizing a recent monthly billing cycle representative of 2021 monthly revenue, extrapolated annualized revenue on a going-forward basis. The Exchange does not believe it is appropriate to factor into its analysis future revenue growth or decline into its projections for purposes of these calculations, given the uncertainty of such projections due to the continually changing access needs of market participants, discounts that can be achieved due to lower trading volume and vice versa, market participant consolidation, etc. Additionally, the Exchange similarly does not factor into its analysis future cost growth or decline. 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 2020. However, since the revenue and expense associated with the Proposed Access Fees were not in place in 2020 or for the majority of 2021 (other than July and August 2021), the Exchange believes its 2020 Audited Unconsolidated Financial Statement is not representative of its current total annualized 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 2021 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. The Exchange notes that this is the same justification process utilized by the Exchange's affiliate, MIAX Emerald, in a filing recently noticed by the Commission when MIAX Emerald adopted its own trading permit fees.[22]

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[22] See Securities Exchange Act Release No. 91033 (February 1, 2021), 86 FR 8455 (February 5, 2021) (SR-EMERALD-2021-03) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Its Fee Schedule To Adopt Monthly Trading Permit Fees).

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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").[23] On May 21, 2019, the Commission issued the Staff Guidance on SRO Rule Filings Relating to Fees.[24] 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 revenue and cost data and analysis) that they are fair and reasonable because they will not result in excessive pricing or supra-competitive profit; and (iv) utilize a cost-based justification framework that is substantially similar to a framework previously used by the Exchange, and its affiliates MIAX and MIAX Emerald, to establish or increase other non-transaction fees. Accordingly, the Exchange believes that the Commission should find that the Proposed Access Fees are consistent with the Act.

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Over the course of 2021, the Exchange's market share has fluctuated between approximately 3-6% of the U.S. equity options industry.[25] The Exchange is not aware of any evidence that a market share of approximately 3-6% provides the Exchange with anti-

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23 See Securities Exchange Act Release No. 85459 (March 29, 2019), 84 FR 13363 (April 4, 2019) (SR-BOX-2018-24, SR-BOX-2018-37, and SR-BOX-2019-04).

24 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").

25 See "The market at a glance", available at www.miaxoptions.com (last visited October 29, 2021).

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.

Removal of Monthly Volume Credit and Trading Permit Fee Credit

The Exchange believes its proposal to remove the Monthly Volume Credit is reasonable, equitable and not unfairly discriminatory because all market participants will no longer be offered the ability to achieve the extra credits associated with the Monthly Volume Credit for submitting Priority Customer volume to the Exchange and access to the Exchange is offered on terms that are not unfairly discriminatory. The Exchange believes it is equitable and not unfairly discriminatory to remove the Monthly Volume Credit from the Fee Schedule for business and competitive reasons because, in order to attract order flow when the Exchange first launched operations, the Exchange established the Monthly Volume Credit to lower the initial fixed cost for Members. The Exchange now believes that it is appropriate to remove this credit in light of the current operating conditions and the current type and amount of Priority Customer volume executed on the Exchange. The Exchange believes that the Exchange's Priority Customer rebates and fees will still allow the Exchange to remain highly competitive such that the Exchange should continue to attract order flow and maintain market share.

The Exchange believes its proposal to remove the Trading Permit fee credit for Members that connect via both the MEO Interface and FIX Interface is reasonable, equitable and not unfairly discriminatory because all market participants will no longer be offered the ability to receive the credit and access to the Exchange is offered on terms that are not unfairly discriminatory. The Exchange believes it is equitable and not unfairly discriminatory to remove the Trading Permit fee credit for business and competitive reasons because, in order to attract order flow and membership after the Exchange first launched operations, the Exchange established the Trading Permit fee credit to lower the costs for Members that connect via both the MEO Interface and FIX Interface. The Exchange now believes that it is appropriate to remove this credit in light of the current operating conditions and membership on the Exchange.

Trading Permit Fee Increase

The Exchange believes the proposed Trading Permit fees are equitable and reasonable because the proposed highest tiered fee is less than or equal to similar fees charged for access on other options exchanges with comparable market shares. For example, Nasdaq ISE, LLC ("ISE") (equity options market share of approximately 5-7% throughout 2021) charges the following access fees: $500 per month for Electronic Access Members; $5,000 per month for Primary Market Makers; and $2,500 per month for Competitive Market Makers.[26] Additionally, Cboe C2 Exchange, Inc. ("C2") (equity options market share of approximately 3-4% throughout 2021), charges the following access permit fees: $5,000 per month for market makers; and $1,000 per month for electronic access permits.[27] NYSE American LLC ("NYSE American") (equity options market share of approximately 7-8% throughout 2021), charges the following range of trading permit and access fees, which are dependent upon the number of issues permitted in market makers' quoting assignments: $8,000 per month for the first ATP[28];

26 See Nasdaq ISE LLC Options 7 Pricing Schedule, Section 8.A. Access Services, at https://listingcenter.nasdaq.com/rulebook/ise/rules/ISE%20Options%207.

27 See C2 Fee Schedule, Access Fees, at https://www.cboe.com/us/options/membership/fee_schedule/ctwo/.

28 An "ATP" or "ATP Holder" is a registered Broker-Dealer who is a permit holder on Amex, per Amex Rule 900.2NY(4),(5). See Amex Fee Schedule, Section III, Monthly Trading Permit, Rights, Floor Access and Premium Product Fees, at https://www.nyse.com/publicdocs/nyse/markets/american-options/NYSE_American_Options_Fee_Schedule.pdf.

$6,000 per month for the second ATP; $5,000 per month for the third ATP; $4,000 per month for the fourth ATP; $3,000 per month for the sixth ATP; $2,000 per month for the seventh to the ninth ATP; and $500 per month for the tenth ATP and each one thereafter.[29]

In the each of the above cases, the Exchange's highest tiered fee, as proposed, is similar to or less than the similar access/membership fees of competing options exchanges with like market share. Further, as described in more detail below, many of those exchanges generate higher overall operating profit margins and higher "access fees" than the Exchange, inclusive of the projected revenues associated with the proposed fees. The Exchange believes that it provides a premium network experience to its Members and non-Members via a highly deterministic system, enhanced network monitoring and customer reporting, and a superior network infrastructure than markets with higher market shares and more expensive access fees. Each of the access fee rates in place at competing options exchanges were filed with the Commission for immediate effectiveness and remain in place today.

The Exchange also notes that the higher (or similar) trading permit fees described above for competing exchanges have been in place for years (over 8 years in some cases), allowing those exchanges to derive significantly more revenue from their access or membership fees. For example, in 2012, NYSE American adopted the sliding scale pricing that ranges from $8,000 to $3,000 per month for NYSE American trading permits.[30] In that filing, NYSE American also noted that prior to introducing the sliding scale pricing, each NYSE American market maker was charged $5,000 per month per trading permit (similar to the Exchange's proposed highest tier for

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29 See id.

30 See Securities Exchange Act Release No. 67634 (August 9, 2012), 77 FR 49038 (August 15, 2012) (SR-NYSEMKT-2012-33).

MEO interface users, nearly a decade later).[31] NYSE American received no comment letters on their proposal to institute trading permit fees that were higher 8 years ago as compared to the Exchange's current proposal. Similarly, C2 adopted the pricing for its access permits in 2010 of $5,000 per month for market makers and $1,000 per month for electronic access members.[32]

Separately, the Exchange is not aware of any reason why market participants could not simply drop their access to an exchange (or not initially access 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 access 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 drop their access to 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." Similarly, the Exchange's affiliate, MIAX Emerald, noted in a recent filing that once MIAX Emerald issued a notice that it was instituting Trading Permit fees, among other non-transaction fees, one Member dropped its access to the Exchange as a result of those fees.[33] Accordingly, these examples show that if a market participant believes, based on its business model, that an

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31 See id.

32 See Securities Exchange Act Release No. 63175 (October 25, 2010), 75 FR 66813 (October 29, 2010) (SR-C2-2010-006).

33 See supra note 22.

exchange charges too high of a fee for connectivity and/or other non-transaction fees for its relevant marketplace, market participants can choose to drop their access to 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 pricing or supra-competitive profit. The Proposed Access Fees are also reasonable and equitable because they are in line with, or cheaper than, the trading permit fees or similar membership fees charged by other options exchanges.[34] 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.

The Exchange's high performance network solutions and supporting infrastructure (including employee support), provides unparalleled system throughput and the capacity to handle approximately 10.7 million order messages per second. On an average day, the Exchange handles over approximately 2.7 billion total messages. However, in order to achieve a consistent, premium network performance, the Exchange must build out and maintain a network that has the capacity to handle the message rate requirements of its most heavy network consumers. These billions of messages per day consume the Exchange's resources and significantly contribute to the overall expense for storage and network transport capabilities.

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

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[34] See supra notes 26, 27 and 28.

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 Members to the Exchange may require the purchase of additional hardware to support those Members as well as enhanced monitoring and reporting of customer performance that the Exchange and its affiliates provide. 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 Proposed Access Fees are reasonable in order to offset a portion of the costs to the Exchange associated with providing access to its network infrastructure.

The Exchange only has four primary sources of revenue: transaction fees, access fees (which includes the Proposed Access Fees), regulatory fees, and market data fees. Accordingly, the Exchange must cover all of its expenses from these four primary sources of revenue.

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 total annual expense that the Exchange projects to incur in connection with providing these access services versus the total annual revenue that the Exchange projects to collect in connection with services associated with the Proposed Access Fees. For 2021[35], the total annual expense for providing the access services associated with the Proposed Access Fees for the Exchange is

[35] The Exchange has not yet finalized its 2021 year end results.

projected to be approximately $844,741. The $844,741 in projected total annual expense is comprised of the following, all of which are directly related to the access services associated with the Proposed Access Fees: (1) third-party expense, relating to fees paid by the Exchange to third-parties for certain products and services; and (2) internal expense, relating to the internal costs of the Exchange to provide the services associated with the Proposed Access Fees.[36] As noted above, the Exchange believes it is more appropriate to analyze the Proposed Access Fees utilizing its 2021 revenue and costs, which utilize the same presentation methodology as set forth in the Exchange's previously-issued Audited Unconsolidated Financial Statements.[37] The $844,741 in projected total annual expense is directly related to the access 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 nearly 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 access services associated with the Proposed Access Fees, and, if such expense did so

36 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.

37 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. 87876 (December 31, 2019), 85 FR 757 (January 7, 2020) (SR-PEARL-2019-36). Accordingly, the third-party expense described in this filing is attributed to the same line item for the Exchange's 2021 Form 1 Amendment, which will be filed in 2022.

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 access services associated with the Proposed Access Fees.

For 2021, total third-party expense, relating to fees paid by the Exchange to third-parties for certain products and services for the Exchange to be able to provide the access services associated with the Proposed Access Fees, is projected to be $188,815. 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 of the Exchange’s trading system infrastructure; (2) Zayo Group Holdings, Inc. (“Zayo”) for network services (fiber and bandwidth products and services) linking the Exchange’s office locations in Princeton, New Jersey and Miami, Florida, to all data center locations; (3) Secure Financial Transaction Infrastructure (“SFTI”)[38], which supports connectivity and feeds for the entire U.S. options industry; (4) various other services providers (including Thompson Reuters, NYSE, Nasdaq, and Internap), which provide content, connectivity services, and infrastructure services for

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38 In fact, on October 20, 2021, ICE Data Services announced a 3.5% price increase effective January 1, 2022 for most services. The price increase by ICE Data Services includes their SFTI network, which is relied on by a majority of market participants, including the Exchange. See email from ICE Data Services to the Exchange, dated October 20, 2021. This fee increase by ICE data services, while not subject to Commission review, has a material impact on costs to exchanges and other market participants that provide downstream access to other market participants. The Exchange notes that on October 22, 2019, the Exchange was notified by ICE Data Services that it was raising its fees charged to the Exchange by approximately 11% for the SFTI network, 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.

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 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, the Exchange does not allocate its entire information technology and communication costs to the access services associated with the Proposed Access Fees. Further, the Exchange notes that, with respect to the MIAX Pearl expenses included herein, those expenses only cover the MIAX Pearl options market; expenses associated with the MIAX Pearl equities market are accounted for separately and are not included within the scope of this filing. As noted above, 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. 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, in turn, resulted in a revised percentage allocations in this filing.

The Exchange believes it is reasonable to allocate such third-party expense described above towards the total cost to the Exchange to provide the access 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 access services associated with the Proposed Access Fees to its Members and their customers. The Exchange did not allocate all of the Equinix expense toward the cost of providing the access services associated with the Proposed Access Fees, only that portion which the Exchange identified as being specifically mapped to providing the access services associated with the Proposed Access Fees, approximately 8% of the total applicable Equinix expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the access services associated with the Proposed Access Fees, and not any other service, as supported by its cost review.[39]

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 the Exchange with its affiliates, MIAX and MIAX Emerald, 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 access services associated with the Proposed Access Fees. The Exchange did not allocate all of the Zayo expense toward the cost of providing the access services associated with the Proposed Access Fees, only the portion which the Exchange

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[39] As noted above, 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. Again, as part its ongoing assessment of costs and expenses, the Exchange recently conducted a periodic thorough review of its expenses and resource allocations which, in turn, resulted in a revised percentage allocations in this filing.

identified as being specifically mapped to providing the Proposed Access Fees, approximately 4% of the total applicable Zayo expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the access services associated with the Proposed Access Fees, and not any other service, as supported by its cost review.[40]

The Exchange believes it is reasonable to allocate the identified portions of the SFTI expense and various other service providers' (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 their customers. The Exchange did not allocate all of the SFTI and other service providers' expense toward the cost of providing the access services associated with the Proposed Access Fees, only the portions which the Exchange identified as being specifically mapped to providing the access services associated with the Proposed Access Fees, approximately 3% of the total applicable SFTI and other service providers' expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the access services associated with the Proposed Access Fees.[41]

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

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40 Id.

41 Id.

be able to operate and support the network and provide access to its Members and their customers. The Exchange did not allocate all of the hardware and software provider expense toward the cost of providing the access services associated with the Proposed Access Fees, only the portions which the Exchange identified as being specifically mapped to providing the access services associated with the Proposed Access Fees, approximately 5% of the total applicable hardware and software provider expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the access services associated with the Proposed Access Fees.[42]

For 2021, total projected internal expense, relating to the internal costs of the Exchange to provide the access services associated with the Proposed Access Fees, is projected to be $655,925. This includes, but is not limited to, costs associated with: (1) employee compensation and benefits for full-time employees that support the access 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; (2) depreciation and amortization of hardware and software used to provide the access 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 access 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.

[42] Id.

Accordingly, the Exchange does not allocate its entire costs contained in those items to the access 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 access services associated with the Proposed Access Fees. In particular, the Exchange's employee compensation and benefits expense relating to providing the access services associated with the Proposed Access Fees is projected to be $549,834, which is only a portion of the $9,163,894 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 access services associated with the Proposed Access Fees. Without these employees, the Exchange would not be able to provide the access services associated with the Proposed Access Fees to its Members and their customers. The Exchange did not allocate all of the employee compensation and benefits expense toward the cost of the access services associated with the Proposed Access Fees, only the portions which the Exchange identified as being specifically mapped to providing the access services associated with the Proposed Access Fees, approximately 6% of the total applicable employee compensation and benefits expense. The

Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the access services associated with the Proposed Access Fees, and not any other service, as supported by its cost review.[43]

The Exchange's depreciation and amortization expense relating to providing the access services associated with the Proposed Access Fees is projected to be $66,316, which is only a portion of the $1,326,325 total projected expense for depreciation and amortization. The Exchange believes it is reasonable to allocate the identified portion of such expense because such expense includes the actual cost of the computer equipment, such as dedicated servers, computers, laptops, monitors, information security appliances and storage, and network switching infrastructure equipment, including switches and taps that were purchased to operate and support the network and provide the access services associated with the Proposed Access Fees. Without this equipment, the Exchange would not be able to operate the network and provide the access services associated with the Proposed Access Fees to its Members and their customers. The Exchange did not allocate all of the depreciation and amortization expense toward the cost of providing the access services associated with the Proposed Access Fees, only the portion which the Exchange identified as being specifically mapped to providing the access services associated with the Proposed Access Fees, approximately 5% of the total applicable depreciation and amortization expense, as these access services would not be possible without relying on such. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the access services associated with the Proposed Access Fees, and not any other service, as supported by its cost review.[44]

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43 Id.

44 Id.

The Exchange's occupancy expense relating to providing the access services associated with the Proposed Access Fees is projected to be $39,775, which is only a portion of the $497,180 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 access services associated with the Proposed Access Fees. This amount consists primarily of rent for the Exchange's Princeton, New Jersey 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 access services associated with the proposed Trading Permit fees. Without this office space, the Exchange would not be able to operate and support the network and provide the access services associated with the Proposed Access Fees to its 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 access services associated with the Proposed Access Fees. The Exchange did not allocate all of the occupancy expense toward the cost of providing the access services associated with the Proposed Access Fees, only the portion which the Exchange identified as being specifically mapped to operating and supporting the network, approximately 8% of the total applicable occupancy expense. The Exchange believes this allocation is reasonable because it represents the Exchange's cost to provide the access services associated with the Proposed Access Fees, and not any other service, as supported by its cost review.[45]

The Exchange notes that a material portion of its total overall expense is allocated to the provision of access services (including connectivity, ports, and trading permits). The Exchange believes this is reasonable and in line, as the Exchange operates a technology-based business that differentiates itself from its competitors based on its trading systems that rely on access to a high performance network, resulting in significant technology expense. Over two-thirds of Exchange staff are technology-related employees. The majority of the Exchange's expense is technology-based. As described above, the Exchange has only four primary sources of fees to recover its costs, thus the Exchange believes it is reasonable to allocate a material portion of its total overall expense towards access fees.

Accordingly, based on the facts and circumstances presented, the Exchange believes that its provision of the access services associated with the Proposed Access Fees will not result in excessive pricing or supra-competitive profit. To illustrate, on a going-forward, fully-annualized basis, the Exchange projects that its annualized revenue for providing the access services associated with the Proposed Access Fees would be approximately $1,170,000 per annum, based on a recent billing cycle. The Exchange projects that its annualized expense for providing the access services associated with the Proposed Access Fees would be approximately $844,741 per annum. Accordingly, on a fully-annualized basis, the Exchange believes its total projected revenue for providing the access services associated with the

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45 Id.

Proposed Access Fees will not result in excessive pricing or supra-competitive profit, as the Exchange will make only a 28% profit margin on the Proposed Access Fees ($1,170,000 in revenue minus $844,741 in expense = $325,259 profit per annum). The Exchange notes that the fees charged for Trading Permits can vary from month to month depending on the type of interface used and the Non-Transaction Fees Volume-Based Tier that is achieved for that month. As such, the revenue projection is not a static number, with monthly Trading Permit fees likely to fluctuate month to month.

For the avoidance of doubt, none of the expenses included herein relating to the access services associated with the Proposed Access Fees relate to the provision of any other services offered by the Exchange. Stated differently, no expense amount of the Exchange is allocated twice. The Exchange notes that, with respect to the MIAX Pearl expenses included herein, those expenses only cover the MIAX Pearl options market; expenses associated with the MIAX Pearl equities market and the Exchange's affiliate exchanges, MIAX and MIAX Emerald, are accounted for separately and are not included within the scope of this filing. Stated differently, no expense amount of the Exchange is also allocated to MIAX Pearl Equities, MIAX or MIAX Emerald.

The Exchange believes it is reasonable, equitable and not unfairly discriminatory to allocate the respective percentages of each expense category described above towards the total cost to the Exchange of operating and supporting the network, including providing the access services associated with the Proposed Access Fees because the Exchange performed a line-by-line item analysis of nearly every expense of the Exchange, and has determined the expenses that directly relate to providing access to the Exchange. Further, the Exchange notes that, without the specific third-party and internal items listed above, the Exchange would not be able to provide the access services associated with the Proposed Access Fees to its Members and their customers. Each of these expense items, including physical hardware, software, employee compensation and benefits, occupancy costs, and the depreciation and amortization of equipment, have been identified through a line-by-line item analysis to be integral to providing access services. The Proposed Access Fees are intended to recover the Exchange's costs of providing access to Exchange Systems. Accordingly, the Exchange believes that the Proposed Access Fees are fair and reasonable because they do not result in excessive pricing or supra-competitive profit, when comparing the actual costs to the Exchange versus the projected annual revenue from the Proposed Access Fees.

The Exchange believes the proposed changes are reasonable, equitably allocated and not unfairly discriminatory, and do not result in a "supra-competitive"[46] profit. Of note, the Guidance defines "supra-competitive profit" as profits that exceed the profits that can be obtained in a competitive market.[47] With the proposed changes, the Exchange anticipates that its profit margin will be approximately 28%, inclusive of the Proposed Access Fees. In order to achieve a consistent, premium network performance, the Exchange must build out and continue to maintain a network that has the capacity to handle the message rate requirements of not only firms that consume minimal Exchange connectivity resources, but also those firms that most heavily consume Exchange resources, network consumers, and Members that use the MEO and FIX interfaces, which generate billions of messages per day across the Exchange.[48] Such profit

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46 See supra note 24.

47 See id.

48 Over the period from April 2021 until September 2021, the Exchange processed 3.15 billion messages via the FIX interface (0.43% of total messages received). Over that same time period, the Exchange processed 731.4 billion messages (99.57% of total messages received) over the MEO interface. This marked difference between the number of FIX and MEO messages processed, when mapped to servers, software, storage, and

margin should enable the Exchange to continue to invest in its network and systems, maintain its current infrastructure, support future enhancements to network access, and continue to offer enhanced customer reporting and monitoring services.

While the proposed fees are similar to or less than that of other options exchanges,[49] as discussed above, the incremental increase in revenue generated from the 28% profit margin for trading permits will allow the Exchange to further invest in its system architecture and matching engine functionality to the benefit of all market participants. The revenue generated under the proposed rule change would also provide the Exchange with the resources necessary to further innovate and enhance its systems and seek additional improvements or functionality to offer market participants generally. The Exchange believes that these investments, in turn, will benefit all investors by encouraging other exchanges to further invest, innovate, and improve their own systems in response.

Based on the 2020 Audited Financial Statements of competing options exchanges (since the 2021 Audited Financial Statements will likely not become publicly available until early July 2022, after the Exchange has submitted this filing), the Exchange's revenue that is derived from its access fees is in line with the revenue that is derived from access fees of competing exchanges. For example, the total revenue from "access fees"[50] for 2020 for MIAX Pearl was

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networking results in a much higher allocation of total capital and operational expense to support the MEO interface. For one, the Exchange incurs greater expense in maintaining the resilience of the MEO interface to ensure its ongoing operation in accordance with Regulation SCI. Another, the Exchange must purchase and expand its storage capacity to retain these increased messages in compliance with its record keeping obligations. The Exchange has also seen significant inflationary pressure on capital items that it needs to purchase to maintain its technology. The Exchange has seen pricing increases upwards of 30% on network equipment due to supply chain shortages.

49 See supra notes 26, 27 and 28.

50 As described in MIAX Pearl's Audited Financial Statements, fees for "access services" are assessed to exchange members for the opportunity to trade and use other related

$11,422,000. MIAX Pearl projects that the total revenue from "access fees" for will be $20,001,243, inclusive of the Proposed Access Fees described herein.

The Exchange's projected revenue from access fees is still less than, or similar to, the access fee revenues generated by access fees charged by other U.S. options exchanges. For example, the Cboe Exchange, Inc. ("Cboe") reported $70,893,000 in "access and capacity fee"[51] revenue for 2020. Cboe C2 Exchange, Inc. ("C2") reported $19,016,000 in "access and capacity fee" revenue for 2020.[52] Cboe BZX Exchange, Inc. ("BZX") reported $38,387,000 in "access and capacity fee" revenue for 2020.[53] Cboe EDGX Exchange, Inc. ("EDGX") reported $26,126,000 in "access and capacity fee" revenue for 2020.[54] Nasdaq PHLX LLC ("PHLX") reported $20,817,000 in "Trade Management Services" revenue for 2019.[55] The Exchange notes it is unable to compare "access fee" revenues with PHLX (or other affiliated NASDAQ exchanges) because after 2019, the "Trade Management Services" line item was bundled into a much larger line item in PHLX's Form 1, simply titled "Market services."[56]

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functions of the exchanges. See Form 1 Amendment, at https://www.sec.gov/Archives/edgar/vprr/2100/21000460.pdf.

51 According to Cboe, access and capacity fees represent fees assessed for the opportunity to trade, including fees for trading-related functionality. See Form 1 Amendment, at https://www.sec.gov/Archives/edgar/vprr/2100/21000465.pdf.

52 See id.

53 See id.

54 See id.

55 According to PHLX, "Trade Management Services" includes "a wide variety of alternatives for connectivity to and accessing [the PHLX] markets for a fee. These participants are charged monthly fees for connectivity and support in accordance with [PHLX's] published fee schedules." See Form 1 Amendment, at https://www.sec.gov/Archives/edgar/vprr/2001/20012246.pdf.

56 See Form 1 Amendment, at https://www.sec.gov/Archives/edgar/vprr/2100/21000475.pdf.

The Exchange also believes that, based on the 2020 Audited Financial Statements of competing options exchanges, the Exchange's overall operating margin is in line with or less than the operating margins of competing options exchanges, including the revenue and expense associated with the Proposed Access Fees. For example, the 2020 operating margin for MIAX Pearl was -18%. Based on competing exchanges' Form 1 Amendments, ISE's operating profit margin for 2020 was approximately 85%; PHLX's operating profit margin for 2020 was approximately 49%; NASDAQ's operating profit margin for 2020 was approximately 62%; Arca's operating profit margin for 2020 was approximately 55%; NYSE American's operating profit margin for 2020 was approximately 59%; Cboe's operating profit margin for 2020 was approximately 74%; and BZX's operating profit margin for 2020 was approximately 52%. ISE's operating profit margin, for all of 2019, was 83%.[57] ISE's equity options market share for all of 2019 was 8.99%[58] while its access fees are as follows: $500 per month for Electronic Access Members; $5,000 per month for Primary Market Makers; and $2,500 per month for Competitive Market Makers.[59] PHLX's operating profit margin, for all of 2019, was 67%.[60] PHLX's equity options market share for all of 2019 was 15.85%[61] while its permit fees are as follows: $4,000

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57 See PHLX Form 1, Exhibit D, filed June 30, 2020 available at https://sec.report/Document/9999999997-20-003902/.

58 See https://www.theocc.com/Market-Data/Market-Data-Reports/Volume-and-Open-Interest/Volume-by-Exchange.

59 See Nasdaq ISE LLC Options 7 Pricing Schedule, Section 8.A. Access Services, at https://listingcenter.nasdaq.com/rulebook/ise/rules/ISE%20Options%207.

60 See ISE Form 1, filed June 29, 2020 available at Form 1 - ISE - Final (1).pdf (sec.gov).

61 See supra note 58.

per month for Floor Brokers; $6,000 per month for Floor Lead Market Makers and Floor Market Makers; and $4,000 per month for Remote Lead Market Makers and Remote Market Makers.[62]

In the Initial Proposed Fee Change[63], the Exchange compared projected profit margins to the 2019 operating profit margin of ISE and PHLX, which were 83% and 67% respectively. The SIG Letter[64] contained the opinion that a using the overall operating profit margins of ISE and PHLX was an "apple to oranges" comparison because 2019 was a "record setting year."[65] The SIG Letter's argument assumes that because 2019 was a record setting year for options volumes, that each options exchange generated above average profits without provided any evidence to support this assumption. The Exchange sought to provide additional data to support a 28% profit margin based on the best, most recent data available. The Exchange did not provide this data to do an "apple-to-apples" comparison, but rather to provide insight into the profit margins of other exchanges to put the projected profit margin, inclusive of the proposed fees, into perspective. While the Exchange provided a detailed analysis and disclosure of its projected profit margins in this proposed fee change and the Initial Proposed Fee Change, other exchanges are generally not required to disclose profit margins on a more granular, per-product/non-transaction fee basis within their annual Form 1 filings. The Exchange, therefore, used the best, most recent data available to generate percentages of other exchange's profit margins.

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62 See Nasdaq PHLX Options 7 Pricing Schedule, Section 8.A. Permit and Registration Fees, at https://listingcenter.nasdaq.com/rulebook/phlx/rules/Phlx%20Options%207.

63 See Securities Exchange Act Release No. 92366 (July 9, 2021), 86 FR 37379 (SR-PEARL-2021-32) ("Initial Proposed Fee Change").

64 See letter from Richard J. McDonald, Susquehanna International Group, LLP ("SIG") to Vanessa Countryman, Secretary, Commission, dated September 28, 2021 ("SIG Letter").

65 See id.

The Exchange further believes its proposed fees are reasonable, equitably allocated and not unfairly discriminatory because the Exchange, and its affiliates, are still recouping the initial expenditures from building out their systems while the legacy exchanges have already paid for and built their systems.

The Exchange believes that the Proposed Access Fees are reasonable, equitable and not unfairly discriminatory because they are in line with, or cheaper than, the trading permit fees or similar membership fees charged by other options exchanges.[66]

Finally, the Exchange notes that it operates in a highly competitive market in which market participants can readily favor competing venues if they deem fee levels at a particular venue to be excessive. In such an environment, the Exchange must continually adjust its fees for services and products, in addition to order flow, to remain competitive with other exchanges. The Exchange believes that the proposed changes reflect this competitive environment.

There is also no regulatory requirement that any market participant connect to any one options exchange, that any market participant connect at a particular connection speed or act in a particular capacity on the Exchange, or trade any particular product offered on an exchange. Moreover, membership is not a requirement to participate on the Exchange. A market participant may submit orders to the Exchange via a Sponsored User.[67] Indeed, the Exchange is unaware of any one options exchange whose membership includes every registered broker-dealer. Based on a recent analysis conducted by the Cboe Exchange, Inc. ("Cboe"), as of

66 See supra notes 26, 27 and 28.

67 See Exchange Rule 210. The Sponsored User is subject to the fees, if any, of the Sponsoring Member. The Exchange notes that the Sponsoring Member is not required to publicize, let alone justify or file with the Commission its fees, and as such could charge the Sponsored User any fees it deems appropriate, even if such fees would otherwise be considered supra-competitive, or otherwise potentially unreasonable or uncompetitive.

October 21, 2020, only three (3) of the broker-dealers, out of approximately 250 broker-dealers, were members of at least one exchange that lists options for trading and were members of all 16 options exchanges.[68] Additionally, the Cboe Fee Filing found that several broker-dealers were members of only a single exchange that lists options for trading and that the number of members at each exchange that trades options varies greatly.[69]

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 not necessary or appropriate in furtherance of the purposes of the Act.

Intra-Market Competition

The Exchange believes that the Proposed Access Fees do not place certain market participants at a relative disadvantage to other market participants because the Proposed Access Fees do not favor certain categories of market participants in a manner that would impose a burden on competition; rather, the fee rates are designed in order to provide objective criteria for users that connect via the MEO Interface of different sizes and business models that best matches their activity on the Exchange.

The Exchange believes the removal of the Monthly Volume Credit and Trading Permit fee credit will not place certain market participants at a relative disadvantage to other market participants because, in order to attract order flow when the Exchange first launched operations, the Exchange established these credits to lower the initial fixed cost for Members. The Exchange now believes that it is appropriate to remove this credit in light of the current operating

68 See Securities Exchange Act Release No. 90333 (November 4, 2020), 85 FR 71666 (November 10, 2020) (SR-CBOE-2020-105) (the "Cboe Fee Filing"). The Cboe Fee Filing cited to the October 2020 Active Broker Dealer Report, provided by the Commission's Office of Managing Executive, on October 8, 2020.

69 Id.

conditions, including the Exchange's overall membership and the current type and amount of volume executed on the Exchange. The Exchange believes that the Exchange's rebates and fees will still allow the Exchange to remain highly competitive such that the Exchange should continue to attract order flow and maintain market share.

Inter-Market Competition

The Exchange believes the Proposed Access Fees do not place an undue burden on competition on other options exchanges that is not necessary or appropriate. In particular, options market participants are not forced to become members of all options exchanges. The Exchange notes that it has far less Members as compared to the much greater number of members at other options exchanges. There are a number of large users that connect via the MEO Interface and broker-dealers that are members of other options exchange but not Members of the Exchange. The Exchange is also unaware of any assertion that its existing fee levels or the Proposed Access Fees would somehow unduly impair its competition with other options exchanges. To the contrary, if the fees charged are deemed too high by market participants, they can simply discontinue their membership with the Exchange.

The Exchange operates in a highly competitive market in which market participants can readily favor one of the 15 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 approximately 16% market share. Therefore, no exchange possesses significant pricing power in the execution of multiply-listed equity and ETF options order flow. Over the course of 2021, the Exchange's market share has fluctuated between approximately 3-6% of the U.S. equity options industry.[70] The Exchange is not aware of any evidence that a market share of approximately 3-6% provides the Exchange with anti-competitive pricing power. The Exchange believes that the ever-shifting market share among 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 fee changes. In such an environment, the Exchange must continually adjust its fees to remain competitive with other exchanges and to attract order flow to the Exchange.

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

The Exchange initially filed this proposed fee change on July 1, 2021 and that proposal was published in the Federal Register on July 15, 2021.[71] The Commission received one comment letter on the Initial Proposed Fee Change.[72] The Exchange withdrew Initial Proposed Fee Change on October 12, 2021.[73] The Exchange now responds to the SIG Letter in this filing.

The SIG letter cites Rule 700(b)(3) of the Commission's Rules of Fair Practice which places "the burden to demonstrate that a proposed rule change is consistent with the Act on the self-regulatory organization that proposed the rule change" and states that a "mere assertion that the proposed rule change is consistent with those requirements . . . is not sufficient."[74] The SIG

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70 See "The market at a glance", available at www.miaxoptions.com (last visited October 19, 2021).

71 See supra note 63.

72 See supra note 64.

73 See Securities Exchange Act Release No. 93346 (October 15, 2021), 86 FR 58367 (October 21, 2021) (SR-PEARL-2021-32) (Notice of Withdrawal of a Proposed Rule Change to Amend the MIAX Pearl Options Fee Schedule to Remove Certain Credits and Increase Trading Permit Fees).

74 17 CFR 201.700(b)(3).

Letter's assertion that the Exchange has not met this burden is without merit, especially considering the overwhelming amounts of revenue and cost information the Exchange included in the Initial Proposed Fee Change and this filing.

Until recently, the Exchange has operated at a net annual loss since it launched operations in 2017.[75] As stated above, 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 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 market participants. The Exchange believes this high standard is especially important when an exchange imposes various access fees for market participants to access an exchange's marketplace. The Exchange believes it has achieved this standard in this filing and also in the Initial Proposed Fee Change. A similar justification for the proposed fee change included in the Initial Proposed Fee Change, but also in this filing, was previously included in a similar proposed fee change filed by the Exchange's affiliate, MIAX Emerald, and SIG did not submit a comment letter on that filing.[76] Nor was that filing suspended by the Commission and continues to remain in effect. The Exchange and its affiliates have worked diligently with Commission Staff on ensuring the justification included in past fee filings fully supported an assertion that those proposed fee

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75 The Exchange has incurred a cumulative loss of $86 million since its inception in 2017 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 29, 2021, available at https://sec.report/Document/9999999997-21-004367/.

76 See Securities Exchange Act Release No. 91033 (February 1, 2021), 86 FR 8455 (February 5, 2021) (SR-EMERALD-2021-03) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Amend Its Fee Schedule To Adopt Monthly Trading Permit Fees).

changes were consistent with the Act.[77] The Exchange leveraged its past work with Commission Staff to ensure the justification provided herein and in the Initial Proposed Fee Change included the same level of detail (or more) as those past proposed fee changes that previously survived Commission scrutiny. Further, as stated above, the Exchange notes that the justification and process included in this filing and the Initial Proposed Fee Change was utilized by the Exchange's affiliate, MIAX Emerald, in a filing to adopt Trading Permit fees for MIAX Emerald, which filing was recently noticed by the Commission and remains in effect.[78] Therefore, a finding by the Commission that the Exchange has not met its burden to show that the proposed fee change is consistent with the Act would be different than the Commission's

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77 See, e.g., Securities Exchange Act Release No. 90196 (October 15, 2020), 85 FR 67064 (October 21, 2020) (SR-EMERALD-2020-11) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Its Fee Schedule To Adopt One-Time Membership Application Fees and Monthly Trading Permit Fees). See Securities Exchange Act Release Nos. 90601 (December 8, 2020), 85 FR 80864 (December 14, 2020) (SR-EMERALD-2020-18) (re-filing with more detail added in response to Commission Staff's feedback and after withdrawing SR-EMERALD-2020-11); and 91033 (February 1, 2021), 86 FR 8455 (February 5, 2021) (SR-EMERALD-2021-03) (re-filing with more detail added in response to Commission Staff's feedback and after withdrawing SR-EMERALD-2020-18). The Exchange initially filed a proposal to remove the cap on the number of additional Limited Service MEO Ports available to Members on April 9, 2021. See SR-PEARL-2021-17 (the "First Proposed Rule Change"). On April 22, 2021, the Exchange withdrew the First Proposed Rule Change and refiled that proposal (without increasing the actual fee amounts) to provide further clarification regarding the Exchange's revenues, costs, and profitability any time more Limited Service MEO Ports become available, in general, (including information regarding the Exchange's methodology for determining the costs and revenues for additional Limited Service MEO Ports). See SR-PEARL-2021-20 (the "Second Proposed Rule Change"). On May 3, 2021, the Exchange withdrew the Second Proposed Rule Change and refiled that proposal to further clarify its cost methodology. See SR-PEARL-2021-22 (the "Third Proposed Rule Change"). On May 10, 2021, the Exchange withdrew the Third Proposed Rule Change and refiled SR-PEARL-2021-23. See Securities Exchange Act Release No. 91858 (May 12, 2021), 86 FR 26967 (May 18, 2021).

78 See supra note 76.

treatment of similar past filings, would create further ambiguity regarding the standards exchange fee changes should satisfy, and is not warranted here.

In addition, the arguments in the SIG Letter do not support their claim that the Exchange has not met its burden to show the proposed rule change is consistent with the Act. Prior to and after submitting the Initial Proposed Fee Change, the Exchange solicited feedback from its Members, including SIG. SIG relayed their concerns regarding the proposed change. The Exchange then sought to work with SIG to address their concerns and gain a better understanding of the access/connectivity/quoting infrastructure of other exchanges. In response, SIG provided no substantive suggestions on how to amend the Initial Proposed to address their concerns and instead chose to submit a comment letter. One could argue that SIG is using the comment letter process not to raise legitimate regulatory concerns regarding the proposal, but to inhibit or delay proposed fee changes by the Exchange. Nonetheless, the Exchange submits the below response to the SIG Letter.

MIAX Pearl Provided More than Sufficient Justification for the Proposed Fees

The SIG Letter asserts that the Exchange provided "no affirmative justifiable reason that its legacy fees are no longer sufficient."[79] This statement assumes that the previous fees were "sufficient" and does not state how the legacy fees might have been sufficient to cover the Exchange's expenses. To clarify, the previous fees were not sufficient to cover the costs the Exchange incurred in providing access to the Exchange. However, the previous fees were sufficient to attract order flow as the pricing was set to not discourage participation on the Exchange. The Exchange is relatively new as it only began operations in 2017.[80] Like other

79 See SIG Letter at page 3, supra note 64.

80 See "Miami International Holdings Receives Approval from SEC to Launch MIAX PEARL; Targets February 6, 2017 Launch" (December 14, 2016) available at

new exchange entrants, the Exchange chose to charge lower fees than other more established exchanges to attract order flow and increase membership.[81] The Exchange chose that approach by setting the price of its Trading Permits (as well as other access-type fees) below market rates. SIG's statement assumes that exchanges should charge at market rates that are sufficient to cover its costs. This statement ignores pricing incentives exchanges may offer to attract order flow and that exchanges, like many businesses including SIG, may make a business decision to price certain offerings at a loss or "on sale" as they build their business. Further, a vast majority of the Exchange's Members, if not all, benefited from these lower fees.

As a new entrant in the market, the Exchange chose to forgo any potential additional revenue that may have been generated by higher Trading Permit fees to encourage participation on the new platform. This served to attract participation on the Exchange so market participants could evaluate the Exchange's quality, technology and the quality of their overall customer/user experience. Setting higher rates for non-transaction fees could have served to dissuade market

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https://www.miaxoptions.com/sites/default/files/press_release-files/MIAX_Press_Release_12142016.pdf (last visited October 18, 2021) (stating that the Exchange "plans to launch with an initial moratorium on most non-transaction fees.")

81 See, e.g., "Members Exchange Unveils Transaction Pricing" (September 10, 2020), available at https://www.businesswire.com/news/home/20200910005183/en/Members-Exchange-Unveils-Transaction-Pricing (last visited October 18, 2021) (quoting Jonathan Kellner, CEO of Members Exchange, "[t]o further incentivize participants to connect to a new destination, we are implementing initial pricing that generates a net loss for the exchange on each transaction. We are confident that as participants experience the benefits of our platform, they will continue to incorporate MEMX in their routing strategies."); and "Miami International Holdings Announces Fully Subscribed Strategic Equity Rights Transaction with Leading Equities Firms to Trade on MIAX PEARL Equities Trading to Begin September 25, 2020" available at https://www.miaxoptions.com/sites/default/files/press_release-files/Press_Release_09142020.pdf (last visited October 18, 2021) (quoting Douglas M. Schafer, Jr., Executive Vice President and Chief Information Officer of MIH, MIAX PEARL Equities, "[w]e are excited to be offering a simpler, transparent, low cost venue to market participants and have no doubt that MIAX PEARL Equities will become a competitive alternative venue following our launch on September 25th.")

participants from trading on the Exchange and not experiencing the high quality technological system the Exchange built.

Nonetheless, the Exchange provided significant cost based justification for the proposed fees not only in this filing, but also in the Initial Proposed Fee Change. The SIG Letter conveniently ignores this fact. In fact, the level of disclosure by the Exchange provided in this filing and the Initial Proposed Fee Change has been worked on with Commission Staff over numerous past filings that have been published for comment and remain effect.[82] The Exchange's detailed disclosures in fee filings have also been applauded by one industry group which noted, "[the Exchange's] filings contain significantly greater information about who is impacted and how than other filings that have been permitted to take effect without suspension."[83] That same commenter also noted their "worry that the Commission's process for reviewing and evaluating exchange filings may be inconsistently applied."[84]

The Exchange believes the proposed fees will allow the Exchange to offset expenses the Exchange has and will incur, and that the Exchange provided sufficient transparency into how the Exchange determined to charge such fees. Accordingly, the Exchange provided an analysis of its revenues, costs, and profitability associated with the proposed fees. This analysis included information regarding its methodology for determining the costs and revenues associated with the proposal.

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82 See supra note 77.

83 See letter from Tyler Gellasch, Executive Director, Healthy Markets Association, to Hon. Gary Gensler, Chair, Commission, dated October 29, 2021.

84 Id. (providing examples where non-transaction fee filings by other exchanges have been permitted to remain effective and not suspended by the Commission despite less disclosure and justification).

To determine the Exchange's costs to provide the access services associated with the proposed fees, 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 proposed fees, and, if such expense did so relate, what portion (or percentage) of such expense actually supports the access services. The sum of all such portions of expenses represents the total cost of the Exchange to provide the access services associated with the proposed fees.

Furthermore, the Exchange is beginning to see significant inflationary pressure on capital items that it needs to purchase to maintain the Exchange's technology and systems.[85] The Exchange has seen pricing increases upwards of 30% on network equipment due to supply chain shortages. This, in turn, results in higher overall costs for ongoing system maintenance, but also to purchase the items necessary to ensure ongoing system resiliency, performance, and determinism. These costs are expected to continue to go up as the U.S. economy continues to struggle with supply chain and inflation related issues.

The Proposed Fee Increases Are Not Part of a Discriminatory Fee Structure and Tiered Fee Structures are Commonplace Amongst Exchanges

The SIG Letter correctly notes that the proposed Trading Permit fees are higher for Members who connect through the MEO Interface than for Members who connect through the FIX Interface. Members who use the MEO Interface may also connect to the System through the

85 See "Supply chain chaos is already hitting global growth. And it's about to get worse", by Holly Ellyatt, CNBC, available at https://www.cnbc.com/2021/10/18/supply-chain-chaos-is-hitting-global-growth-and-could-get-worse.html (October 18, 2021); and "There will be things that people can't get, at Christmas, White House warns" by Jarrett Renshaw and Trevor Hunnicutt, Reuters, available at https://www.reuters.com/world/us/americans-may-not-get-some-christmas-treats-white-house-officials-warn-2021-10-12/ (October 12, 2021).

FIX Interface as well, and vice versa. The Exchange notes that the Trading Permit fees for Members who connect through the MEO Interface are higher than the Trading Permit fees for Members who connect through the FIX Interface, since the FIX Interface utilizes less capacity and resources of the Exchange. The MEO Interface offers lower latency and higher throughput, which utilizes greater capacity and resources of the Exchange. The FIX Interface offers lower bandwidth requirements and an industry-wide uniform message format. Both EEMs and Market Makers may connect to the Exchange using either interface.

The SIG Letter asserts that the Exchange "provides no description of the 'capacity and resources' being utilized, and no information on the nature or extent of the disparity in such utilization between the two Interface types." As a MEO user, SIG is uniquely positioned to understand and appreciate the differences between the MEO and FIX interfaces and why rates for the MEO interface are justifiably higher. Nonetheless, the Exchange is providing the below additional data to address the statements made in the SIG Letter.

Orders on the Exchange are supplied by Members via two different interfaces, FIX and MEO. MEO is the Exchange's proprietary binary order interface. Over the period from April 2021 until September 2021, 3.15 billion messages were processed via the FIX interface (0.43% of total messages received). Over that same time period, 731.4 billion messages (99.57% of total messages received) were processed over the MEO interface. Also, the MEO interface allows for mass purging of orders which has a significant impact on the number of messages processed. This marked difference between the number of FIX and MEO messages processed, when mapped to servers, software, storage, and networking results in a much higher allocation of total capital and operational expense to support the MEO interface. For one, the Exchange incurs greater expense in maintaining the resilience of the MEO interface to ensure its ongoing operation in accordance with Regulation SCI. Another, the Exchange must purchase and expand its storage capacity to retain these increased messages in compliance with its record keeping obligations. As noted above, the Exchange has seen significant inflationary pressure on capital items that it needs to purchase to maintain its technology.[86] The Exchange has seen pricing increases upwards of 30% on network equipment due to supply chain shortages.

SIG is also uniquely positioned to know that the fee structure utilized by the Exchange, which charges different Trading Permit fees for MEO interface users than FIX interface users is not a new proposal. In fact, it was first adopted by the Exchange over 3½ years ago in March 2018, published by the Commission and received no comment letters, not even by SIG.[87] SIG claims a fee structure that they have been subject to for years as an MEO interface user is just now unfairly discriminatory.

The Proposed Fees are in Line With, Or Cheaper Than, the Trading Permit Fees or Similar Membership/Access Fees Charged by Other Options Exchanges

The Exchange correctly asserts herein and in the Initial Proposed Fee Change that it's proposed Trading Permit fees "are in line with, or cheaper than, the trading permit fees or similar membership fees charged by other options exchanges." The SIG letter challenges this assertion is an "apples to oranges" comparison because NYSE American and NYSE Arca based their rates on the number of options issued to the member and not trading volume, like the exchange does. In fact, the number of options traded by a member of NYSE American or NYSE Arca is an appropriate proxy for trading volume as the more options issued to the member would result in higher volumes traded by that member. Firms that trade more liquid options generate increased

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86 See id.

87 See Securities Exchange Act Release No. 82867 (March 13, 2018), 83 FR 12044 (March 19, 2018) (SR-PEARL-2018-07).

message traffic and greater pull on exchange resources. Therefore, comparing options traded to trading volume is an "apples to apples" comparison.

The Exchange proposes a range of fees from $500 to $6,000 per month depending on trading volume and the type of interface that is utilized by the Member. These rates are undoubtedly similar to or lower than the rates charged by NYSE Arca and NYSE American. As of October 14, 2021, the Exchange maintained a market share of approximately 3.95%.[88] Among Exchanges with similar market share, the Exchange's proposed Trading Permit Fees remain similar to or lower than fees charged by other options exchanges with comparable market share for access/membership fees.[89] The proposed rates are also lower than those of its affiliates, MIAX and Emerald, which remain in effect today.[90]

The SIG Letter states that "[the Exchange] offers no information about the capacity and resource costs of access to the other exchanges or any other basis to support the reasonability of

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88 See "The Market at a Glance" available at https://www.miaxoptions.com/ (last visited October 4, 2021).

89 See supra notes 26, 27 and 28 and accompanying text. The below market share numbers are as of October 14, 2021. Id. C2 had a market share of 4.44% and charges a monthly Access Fee of $5,000 for market makers and $1,000 per month for an additional Electronic Access Permit regardless of trading volume or options traded. See the C2 fee schedule available at https://www.cboe.com/us/options/membership/fee_schedule/ctwo/ (last visited October 14, 2021). ISE had a market share of 6.74% and charges a monthly Access Fee to Primary Market Makers of $5,000 and Competitive Market Maker of $2,500 regardless of trading volume or options traded. See Section 8.A. of the ISE fee schedule available at https://listingcenter.nasdaq.com/rulebook/ise/rules/ISE%20Options%207 (last visited October 14, 2021).

90 See Section 3)b) of the MIAX fee schedule available at https://www.miaxoptions.com/sites/default/files/fee_schedule-files/MIAX_Options_Fee_Schedule_10142021.pdf, and Section 3)b) of the Emerald fee schedule available at https://www.miaxoptions.com/sites/default/files/fee_schedule-files/MIAX_Emerald_Fee_Schedule_10142021.pdf (both charging monthly trading permit fees ranging from $7,000 to $22,000).

those fees, let alone compare such costs to those of MIAX Pearl."[91] This statement is misleading as SIG should be aware that the Exchange does not have access to this information and when it asked SIG to assist the Exchange in better understanding the access structure of other exchanges, SIG refused.

The SIG Letter further asserts that the Exchange "has not established that the other exchange fees are reasonable, nor that this would mean that the MIAX Pearl fees are reasonable as well.[92] SIG should be aware that it is not the Exchange's obligation to justify why another exchange's fees are reasonable and it is presumed that such fees were deemed reasonable by the Commission when filed by the exchange that proposed said fee. If SIG felt another exchange's fees were or are unreasonable, they are free to share that concern with the Commission and were provided an opportunity to submit comment letter on those earlier proposals from other exchanges. It is the Exchange's responsibility to show that its own proposed fee change is reasonable and consistent with the Act, and that assertion is amply supported by the statements made in this Item 5 and elsewhere herein.

<u>The Proposed Fees are Consistent with Section 6(b)(4) of the Act Because the Proposed Fees Will Not Result in Excessive Pricing or Supra-Competitive Profit</u>

In the Initial Proposed Fee Change, the Exchange provided data that the proposed fee change would not result in excessive pricing or a supra-competitive profit. The Exchange outlined its projected revenues and expense related to the proposed fee change and estimated it would generate a 28% profit margin. The Exchange then compared its projected profit margin to the 2019 operating profit margin of ISE and PHLX, which were 83% and 67% respectively. SIG

91 <u>See</u> SIG Letter at page 5, <u>supra</u> note 64.

92 <u>See</u> <u>id</u>.

opined that a using the overall operating profit margins of ISE and PHLX is an "apple-to-oranges" comparison because 2019 was "record setting year."[93] SIG assumes that because 2019 was a record setting year for options volumes, that each options exchange generated above average profits without provided any evidence to support this assumption. Data for 2019 was the most recent data available at the time the Exchange filed the Initial Proposed Fee Change on July 1, 2021. Since that time, data for 2020 became available and the Exchange discusses that data for numerous other options exchanges under Section 3.b. above in this proposed fee change.[94]

The Exchange sought to provide additional data to support a 28% profit margin based on the best, most recent data available. It did not provide this data to do an "apple-to-apples" comparison, but rather to provide insight into the profit margins of other exchanges to put the projected profit margin here into perspective. While the Exchange provided a detailed analysis and disclosure of its projected profit margins in this proposed fee change and the Initial Proposed Fee Change, other exchanges are generally not required to disclose profit margins on a more granular, per-product/non-transaction fee basis within their annual Form 1 filings. The Exchange, therefore, used the best, most recent data available to generate percentages of other exchange's profit margins. SIG has access to the same public data as the Exchange used in making the above projections regarding ISE and PHLX and is free to generate its own assumptions on that data if it believes the Exchange's calculations are wrong or misguided.

SIG also challenges the Exchange's methodology in determining its projected revenues and allocation of internal and third party expenses related to the proposed fee change. As stated above, the Exchange and its affiliates have worked diligently with Commission Staff on ensuring

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93 See SIG Letter at page 6, supra note 64.

94 See supra notes 50 to 62 and accompanying text.

the justification included in past fee filings fully supported an assertion that those proposed fee changes were consistent with the Act.[95] This work with Commission Staff included thorough reviews of the Exchange's projected revenues and assignment of internal and third party expenses. The SIG Letter simply seeks to ignore the vast amount of disclosure the Exchange provided and kick up some sand in the hopes that raising questions about the analysis with no support on whether the answers to those questions would cause the proposed fee change to be excessive or result in supra-competitive pricing.

The Proposed Fee Change is Reasonable, Equitably Allocated and Not Unfairly Discriminatory Because the Exchange, and its Affiliates, are still Recouping their Initial Expenditures

The Exchange asserts above that its "proposed fees are reasonable, equitably allocated and not unfairly discriminatory because the Exchange, and its affiliates, are still recouping the initial expenditures from building out their systems while the legacy exchanges have already paid for and built their systems." The SIG Letter states that "[t]he Exchange, however, draws no link between the recoupment of capital outlays with the reasonability, equitable allocation, and lack of unfair discriminatory nature of the proposed fees."[96] As stated above, the Exchange and its affiliates have worked diligently with Commission Staff on ensuring the justification included in past fee filings fully supported an assertion that those proposed fee changes were consistent with the Act.[97] The Exchange leveraged its past work with Commission Staff to ensure the justification provided herein and in the Initial Proposed Fee Change included the same level of

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95 See supra note 77.

96 See SIG Letter at page 6, supra note 64.

97 See supra note 77.

detail as those past proposed fee changes that previously survived Commission scrutiny. Asserting that the proposed fees are reasonable, equitably allocated and not unfairly discriminatory because the Exchange, and its affiliates, are still recouping the initial expenditures from building out their systems is one of many justifications for the proposed fees and not a cornerstone of the Exchange's proposal.

As stated above, until recently, the Exchange has operated at a net annual loss since it launched operations in 2017.[98] This is a result of providing a low cost alternative to attract order flow and encourage market participants to experience the determinism and resiliency of the Exchange's trading systems. To do so, the Exchange chose to offer some non-transaction related services for no or little cost. This resulted in the Exchange forgoing revenue it could have generated from assessing higher fees and then use that revenue to more quickly recover its initial capital expenditures. Further, a vast majority of the Exchange's Members, if not all, benefited from these lower 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 and extending the duration during which it would recoup its initial capital expenditures. The SIG Letter choses to ignore this reality and instead criticize the Exchange for initially charging lower fees or providing a moratorium on certain non-transaction fees to the benefit of all market participants. The Exchange is now trying to amend its fee structure to enable it to continue to maintain and improve its overall market and systems while also providing a highly reliable and deterministic trading system to the marketplace.

98 See supra note 75.

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,[99] and Rule 19b-4(f)(2)[100] 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 e-mail to rule-comments@sec.gov. Please include File Number SR-PEARL-2021-54 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-PEARL-2021-54. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your

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99 15 U.S.C. 78s(b)(3)(A)(ii).

100 17 CFR 240.19b-4(f)(2).

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-PEARL-2021-54 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[101]

J. Matthew DeLesDernier
Assistant Secretary

[101] 17 CFR 200.30-3(a)(12).