SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-93556; File No. SR-PEARL-2021-53)

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 Increase the Monthly Fees for MIAX Express Network Full Service Ports

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 November 1, 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 amend the fees for the Exchange's MIAX Express Network Full Service ("MEO")[3] Ports.

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.

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

2 17 CFR 240.19b-4.

3 "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.

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 increase the fees for its Full Service MEO Ports, Bulk and Single (the "Proposed Access Fees"), which allow Members[4] to submit electronic orders in all products to the Exchange. The Exchange currently offers different types of MEO Ports depending on the services required by the Member, including a Full Service MEO Port-Bulk,[5] a Full Service MEO Port-Single,[6] and a Limited Service MEO Port.[7] For one

[4] "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 the Definitions Section of the Fee Schedule and Exchange Rule 100.

[5] "Full Service MEO Port – Bulk" means an MEO port that supports all MEO input message types and binary bulk order entry. See the Definitions Section of the Fee Schedule.

[6] "Full Service MEO Port – Single" means an MEO port that supports all MEO input message types and binary order entry on a single order-by-order basis, but not bulk orders. See the Definitions Section of the Fee Schedule.

[7] "Limited Service MEO Port" means an MEO port that supports all MEO input message types, but does not support bulk order entry and only supports limited order types, as specified by the Exchange via Regulatory Circular. See the Definitions Section of the Fee Schedule.

monthly price, a Member may be allocated two (2) Full-Service MEO Ports of either type per matching engine[8] and may request Limited Service MEO Ports for which MIAX Pearl will assess Members Limited Service MEO Port fees per matching engine based on a sliding scale for the number of Limited Service MEO Ports utilized each month. The two (2) Full-Service MEO Ports that may be allocated per matching engine to a Member may consist of: (a) two (2) Full Service MEO Ports – Bulk; (b) two (2) Full Service MEO Ports – Single; or (c) one (1) Full Service MEO Port – Bulk and one (1) Full Service MEO Port – Single.

Unlike other options exchanges that provide similar port functionality and charge fees on a per port basis,[9] the Exchange offers Full Service MEO Ports as a package and provides Members with the option to receive up to two Full Service MEO Ports (described above) per matching engine to which that Member connects. The Exchange currently has twelve (12) matching engines, which means Members may receive up to twenty-four (24) Full Service MEO Ports for a single monthly fee, that can vary based on certain volume percentages, as described

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8 A "Matching Engine" is a part of the MIAX Pearl electronic system that processes options orders and trades on a symbol-by-symbol basis. Some Matching Engines will process option classes with multiple root symbols, and other Matching Engines may be dedicated to one single option root symbol. A particular root symbol may only be assigned to a single designated Matching Engine. A particular root symbol may not be assigned to multiple Matching Engines. See the Definitions Section of the Fee Schedule.

9 See Cboe Exchange, Inc. Fee Schedule, Logical Connectivity Fees ($750 per port per month for the first 5 BOE/FIX Logical Ports and $800 per port per month for each port over 5; $1,500 per port per month for the first 5 BOE Bulk Logical Ports, $2,500 per port per month for ports 6-30, and $3,000 per port per month for each port over 30); Cboe BXZ Exchange, Inc. ("BZX") Options Fee Schedule, Options Logical Port Fees, Logical Ports ($750 per port per month), Ports with Bulk Quoting Capabilities ($1,500 per port per month for the first and second ports, $2,500 per port per month for three or more); Cboe EDGX Exchange, Inc. ("EDGX") Options Fee Schedule, Options Logical Port Fees, Logical Ports ($500 per port per month), Ports with Bulk Quoting Capabilities ($600 per port per month). See also Nasdaq Stock Market LLC, Options 7, Pricing Schedule, Section 3 ($1,500 per port per month for the first 5 SQF ports; $1,000 per port per month for SQF ports 15-20; and $500 per port per month for all SQF ports over 21).

below. For illustrative purposes and as described in more detail below, the Exchange currently assesses a fee of $5,000 per month for Members that reach the highest Full Service MEO Port – Bulk Tier, regardless of the number of Full Service MEO Ports allocated to the Member. For example, assuming a Member connects to all twelve (12) matching engines during a month, with two Full Service MEO Ports per matching engine, this results in a cost of $208.33 per Full Service MEO Port ($5,000 divided by 24) for the month. This fee has been unchanged since the Exchange adopted Full Service MEO Port fees in 2018.[10] The Exchange now proposes to increase Full Service MEO Port fees as further described below, with the highest monthly fee of $10,000 for the Full Service MEO Port – Bulk. Members will continue to receive two (2) Full Service MEO Ports to each matching engine to which they connect for the single flat monthly fee. Assuming a Member connects to all twelve (12) matching engines during the month, with two Full Service MEO Ports per matching engine, this would result in a cost of $416.67 per Full Service MEO Port ($10,000 divided by 24).

The Exchange assesses Members Full Service MEO Port Fees, either for a Full Service MEO Port - Bulk and/or for a Full Service MEO Port - Single, based upon the monthly total volume executed by a Member and its Affiliates[11] on the Exchange across all origin types, not

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

11 "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

including Excluded Contracts[12], as compared to the Total Consolidated Volume ("TCV"),[13] 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" described in the Definitions section of the Fee Schedule. The Exchange assesses these and other monthly Port fees on Members in each month the market participant is credentialed to use a Port in the production environment.

Current Full Service MEO Port – Bulk Fees. Currently, the Exchange assesses Members monthly Full Service MEO Port – Bulk fees as follows:

(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%, $3,000;

(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%, $4,500; and

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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.

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

13 "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.

(iii) if its volume falls with the parameters of Tier 3 of the Non-Transaction Fees Volume-Based Tiers, or volume above 0.60%, $5,000.

Proposed Full Service MEO Port – Bulk Fees. The Exchange now proposes to assess Members monthly Full Service MEO Port – Bulk fees as follows:

(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%, $5,000;

(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%, $7,500; 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%, $10,000.

Current Full Service MEO Port – Single Fees. Currently, the Exchange assesses Members monthly Full Service MEO Port – Single fees as follows:

(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%, $2,000;

(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%, $3,375; 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%, $3,750.

Proposed Full Service MEO Port – Single Fees. The Exchange now proposes to assess Members monthly Full Service MEO Port – Single fees as follows:

(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%, $2,500;

(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%, $3,500; 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%, $4,500.

The Exchange offers various types of ports with differing prices because each port accomplishes different tasks, are suited to different types of Members, and consume varying capacity amounts of the network. For instance, MEO ports allow for a higher throughput and can handle much higher quote/order rates than FIX ports. Members that are Market Makers[14] or high frequency trading firms utilize these ports (typically coupled with 10Gb ULL connectivity) because they transact in significantly higher amounts of messages being sent to and from the Exchange, versus FIX port users, who are traditionally customers sending only orders to the Exchange (typically coupled with 1Gb connectivity). The different types of ports cater to the different types of Exchange Memberships and different capabilities of the various Exchange Members. Certain Members need ports and connections that can handle using far more of the network's capacity for message throughput, risk protections, and the amount of information that the System has to assess. Those Members may account for the vast majority of network capacity utilization and volume executed on the Exchange, as discussed throughout.

The Exchange now proposes to increase its monthly Full Service MEO Port fees since it has not done so since the fees were adopted in 2018,[15] which are designed to recover a portion of the costs associated with directly accessing the Exchange. The Exchange notes that its affiliates,

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14 The term "Market Maker" 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 Exchange Rules. See the Definitions Section of the Fee Schedule and Exchange Rule 100.

15 See supra note 10.

Miami International Securities Exchange, LLC ("MIAX") and MIAX Emerald, LLC ("MIAX Emerald"), charge fees for their high throughput, low latency MEI Ports in a similar fashion as the Exchange charges for its MEO Ports – generally, the more active user the Member (i.e., the greater number / greater national ADV of classes assigned to quote on MIAX and MIAX Emerald), the higher the MEI Port fee.[16] This concept is not new or novel. The Exchange also notes that the proposed increased fees for the Exchange's Full Service MEO Ports are in line with, or cheaper than, the similar port fees or similar membership fees charged by other options exchanges.[17]

The Exchange has historically undercharged for Full Service MEO Ports as compared to other options exchanges[18] because the Exchange provides Full Service MEO Ports as a package for a single monthly fee. As described above, this package includes two Full Service MEO Ports for each of the Exchange's twelve (12) matching engines. The Exchange understands other options exchanges charge fees on a per port basis. For example, NYSE American, LLC ("NYSE American") and NYSE Arca, Inc. ("NYSE Arca") both charge $450 per port for order/quote entry ports 1-40 and $150 per port for ports 41 and greater,[19] all on a per matching engine basis, with NYSE American and NYSE Arca having 17 match engines and 19 match engines, respectively.[20] Similarly, The Nasdaq Stock Market LLC ("NASDAQ") charges $1,500 per port

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16 See MIAX Fee Schedule, Section 5)d)ii); MIAX Emerald Fee Schedule, Section 5)d)ii).

17 See supra note 9.

18 See id.

19 See NYSE American Options Fee Schedule, Section V.A., Port Fees; NYSE Arca Options Fee Schedule, Port Fees.

20 See NYSE Technology FAQ and Best Practices: Options, Section 5.1 (How many matching engines are used by each exchange?) (September 2020) (providing a link to an Excel file detailing the number of matching engines per options exchange).

for Specialized Quote Interface ("SQF") ports 1-5, $1,000 per SQF port for ports 6-20, and $500 per SQF port for ports 21 and greater,[21] all on a per matching engine basis, with NASDAQ having multiple matching engines.[22] The NASDAQ SQF Interface Specification also provides that NASDAQ's affiliates, Nasdaq PHLX LLC ("Nasdaq Phlx") and Nasdaq BX, Inc. ("Nasdaq BX"), have trading infrastructures that may consist of multiple matching engines with each matching engine trading only a range of option underlyings.[23] Further, the NASDAQ SQF Interface Specification provides that the SQF infrastructure is such that the firms connect to one or more servers residing directly on the matching engine infrastructure.[24] Since there may be multiple matching engines, firms will need to connect to each engine's infrastructure in order to establish the ability to quote the symbols handled by that engine.[25] The proposed monthly fee increases for Full Service MEO Ports would bring the Exchange's fees more in line with that of other options exchanges, while maintaining a competitive fee structure for Full Service MEO Ports.

Implementation

The proposed fees will become effective on November 1, 2021.

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21 See Nasdaq Stock Market, Nasdaq Options 7 Pricing Schedule, Section 3, Nasdaq Options Market – Ports and Other Services.

22 See Nasdaq Specialized Quote Interface (SQF) Specification, Version 6.5b (updated February 13, 2020), Section 2, Architecture, available at https://www.nasdaq.com/docs/2020/02/18/Specialized-Quote-Interface-SQI-6.5b.pdf (the "NASDAQ SQF Interface Specification").

23 See id.

24 See id.

25 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[26] in general, and furthers the objectives of Section 6(b)(4) of the Act[27] 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 are 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 the Full Service MEO Port 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 expense the Exchange has and will incur, and that the Exchange is providing sufficient transparency (as described below) into how

26 15 U.S.C. 78f(b).

27 15 U.S.C. 78f(b)(4) and (5).

the 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 of 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 Full Service MEO Ports, 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 MEI Port fees.[28]

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28 See Securities Exchange Act Release No. 91460 (April 2, 2021), 86 FR 18349 (April 8, 2021) (SR-EMERALD-2021-11) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Its Fee Schedule To Adopt Port Fees, Increase Certain Network Connectivity Fees, and Increase the Number of Additional Limited Service MIAX Emerald Express Interface Ports Available to Market Makers) (adopting tiered MEI Port fee structure ranging from $5,000 to $20,500 per month).

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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").[29] On May 21, 2019, the Commission issued the Staff Guidance on SRO Rule Filings Relating to Fees.[30] 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.[31] The Exchange is not aware of any evidence that a market share of approximately 3-6% provides the Exchange with anti-

29 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).

30 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").

31 See "The market at a glance," available at https://www.miaxoptions.com/ (last visited October 27, 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.

The Exchange believes the proposed 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, some of which charge on a per port basis, unlike the Exchange. For example, NYSE American (equity options market share of 7.73% as of October 27, 2021 for the month of October)[32] charges $450 per port for order/quote entry ports 1-40 and $150 per port for ports 41 and greater,[33] all on a per matching engine basis, with NYSE American having 17 match engines.[34] Similarly, NASDAQ (equity options market share of 8.12% as of October 27, 2021 for the month of October)[35] charges $1,500 per port for SQF ports 1-5, $1,000 per SQF port for ports 6-20, and $500 per SQF port for ports 21 and greater,[36] all on a per matching engine basis, with NASDAQ having multiple matching engines.[37] The NASDAQ SQF Interface Specification provides that PHLX/NOM/BX Options trading infrastructures may consist of multiple matching engines with each matching engine trading only a range of option underlyings. Further, the SQF infrastructure is such that the firms connect to one or more servers residing directly on the matching engine infrastructure.

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32 See id.

33 See supra note 19.

34 See supra note 20.

35 See supra note 21.

36 See supra note 21.

37 See supra note 22.

Since there may be multiple matching engines, firms will need to connect to each engine's infrastructure in order to establish the ability to quote the symbols handled by that engine.[38]

In the each of the above cases, the Exchange's highest tiered port fee, as proposed, is similar to or less than the port fees of competing options exchanges with like market share. Further, as described in more detail below, many competing 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 port fee rates in place at competing options exchanges were filed with the Commission for immediate effectiveness and remain in place today.

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

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38 See id.

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 MEI Port fees, among other non-transaction fees, one Member dropped its access to the Exchange as a result of those fees.[39] Accordingly, these examples show that if a market participant believes, based on its business model, that an 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'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 Information Security services, enhanced network monitoring and customer reporting, as well as Regulation SCI mandated processes, associated with its network technology. While some of

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[39] See supra note 28.

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 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[40], the total annual expense for providing the access services associated with the Proposed Access Fees for the Exchange is projected to be approximately $897,084. The $897,084 in projected total annual expense is comprised of the following, all of which are directly related to the access services associated

40 The Exchange has not yet finalized its 2021 year end results.

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.[41] 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.[42] The $897,084 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 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

41 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.

42 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.

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 $40,166. 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")[43], 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 critical components of options connectivity and network services; and (5) various other

43 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 material impact on cost 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.

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 1.80% 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.[44]

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 identified as being specifically mapped to providing the Proposed Access Fees, approximately

[44] 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.

0.90% 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.[45]

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 0.90% 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.[46]

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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45 Id.

46 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 0.90% 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.[47]

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 $856,918. 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.

[47] 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 $783,513, 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 8.55% 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.[48]

The Exchange's depreciation and amortization expense relating to providing the access services associated with the Proposed Access Fees is projected to be $64,456, which is only a portion of the $2,864,716[49] 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 2.25% 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

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48 Id.

49 The Exchange notes that the total depreciation expense is different from the total for the Exchange's filing relating to Trading Permits because the Exchange factors in the depreciation of its own internally developed software when assessing costs for Full Service MEO Ports, resulting in a higher depreciation expense number in this filing.

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.[50]

The Exchange's occupancy expense relating to providing the access services associated with the Proposed Access Fees is projected to be $8,949, 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 Access 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

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50 Id.

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 1.80% 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.[51]

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 in 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 $1,476,000 per annum, based on a recent billing cycle. The Exchange projects that its annualized expense for

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51 Id.

providing the access services associated with the Proposed Access Fees would be approximately $897,084 per annum. Accordingly, on a fully-annualized basis, the Exchange believes its total projected revenue for the providing the access services associated with the Proposed Access Fees will not result in excessive pricing or supra-competitive profit, as the Exchange will make only a 39% profit margin on the Proposed Access Fees ($1,476,000 in revenue minus $897,084 in expense = $578,916 profit per annum). The Exchange notes that the fees charged to each Member for Full Service MEO Ports can vary from month to month depending on the type used and the Non-Transaction Fees Volume-Based Tier that the Member achieves for that month. As such, the revenue projection is not a static number, with monthly Full Service MEO Port 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"[52] profit. Of note, the Guidance defines "supra-competitive profit" as profits that exceed the profits that can be obtained in a competitive market.[53] With the proposed changes, the Exchange anticipates that its profit margin will be approximately 39%, 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 Full

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52 See supra note 30.

53 See id.

Service MEO ports, which generate billions of messages per day across the Exchange. Such profit 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,[54] as discussed above, the incremental increase in revenue generated from the 39% profit margin for access via Full Service MEO Ports 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"[55] for 2020 for MIAX Pearl was $11,422,000. MIAX Pearl projects that the total revenue from "access fees" for 2021 will be $20,001,243, inclusive of the Proposed Access Fees described herein.

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54 See supra notes 9, 19, and 21.

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

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"[56] revenue for 2020. Cboe C2 Exchange, Inc. ("C2") reported $19,016,000 in "access and capacity fee" revenue for 2020.[57] Cboe BZX Exchange, Inc. ("BZX") reported $38,387,000 in "access and capacity fee" revenue for 2020.[58] Cboe EDGX Exchange, Inc. ("EDGX") reported $26,126,000 in "access and capacity fee" revenue for 2020.[59] PHLX reported $20,817,000 in "Trade Management Services" revenue for 2019.[60] The Exchange notes it is unable to compare "access fee" revenues with Nasdaq Phlx (or other affiliated NASDAQ exchanges) because after 2019, the "Trade Management Services" line item was bundled into a much larger line item in Nasdaq Phlx's Form 1, simply titled "Market services."[61]

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

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56 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.

57 See id.

58 See id.

59 See id.

60 According to Nasdaq 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 [Nasdaq Phlx's] published fee schedules." See Form 1 Amendment, at https://www.sec.gov/Archives/edgar/vprr/2001/20012246.pdf.

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

Pearl was -18%. Based on competing exchanges' Form 1 Amendments, Nasdaq ISE, LLC's ("Nasdaq ISE") operating profit margin for 2020 was approximately 85%; Nasdaq Phlx's operating profit margin for 2020 was approximately 49%; NASDAQ's operating profit margin for 2020 was approximately 62%; NYSE 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%. Nasdaq ISE's operating profit margin, for all of 2019, was 83%.[62] Nasdaq ISE's equity options market share for all of 2019 was 8.99%[63] 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.[64] Nasdaq Phlx's operating profit margin, for all of 2019, was 67%.[65] Nasdaq Phlx's equity options market share for all of 2019 was 15.85%[66] while its permit fees are as follows: $4,000 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.[67]

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

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

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

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

66 See supra note 31.

67 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.

In the Exchange's Initial Proposed Fee Change,[68] the Exchange compared projected profit margins to the 2019 operating profit margin of Nasdaq ISE and Nasdaq Phlx, which were 83% and 67% respectively. The SIG Letter[69] contained the opinion that using the overall operating profit margins of Nasdaq ISE and Nasdaq Phlx was an "apple to oranges" comparison because 2019 was a "record setting year."[70] 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 39% 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.

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

68 See Securities Exchange Act Release No. 92365 (July 9, 2021), 86 FR 37347 (SR-PEARL-2021-33) ("Initial Proposed Fee Change").

69 See letter from Richard J. McDonald, Susquehanna International Group, LLP ("SIG") to Vanessa Countryman, Secretary, Commission, dated September 7, 2021 ("SIG Letter").

70 See id.

expenditures from building out their systems while the legacy exchanges have already paid for and built their systems.

The Exchange believes that the proposed fees are reasonable, equitably allocated and not unfairly discriminatory because, for the flat fee, the Exchange provides each Member two (2) Full Service MEO Ports for each matching engine to which that Member is connected. Unlike other options exchanges that provide similar port functionality and charge fees on a per port basis,[71] the Exchange offers Full Service MEO Ports as a package and provides Members with the option to receive up to two Full Service MEO Ports per matching engine to which it connects. The Exchange currently has twelve (12) matching engines, which means Members may receive up to twenty-four (24) Full Service MEO Ports for a single monthly fee, that can vary based on certain volume percentages. The Exchange currently assesses Members a fee of $5,000 per month in the highest Full Service MEO Port - Bulk Tier, regardless of the number of Full Service MEO Ports allocated to the Member. Assuming a Member connects to all twelve (12) matching engines during a month, with two Full Service MEO Ports per matching engine, this results in a cost of $208.33 per Full Service MEO Port - Bulk ($5,000 divided by 24) for the month. This fee has been unchanged since the Exchange adopted Full Service MEO Port fees in 2018.[72] The Exchange now proposes to increase the Full Service MEO Port fees, with the highest Tier fee for a Full Service MEO Port - Bulk of $10,000 per month. Members will continue to receive two (2) Full Service MEO Ports to each matching engine to which they are connected for the single flat monthly fee. Assuming a Member connects to all twelve (12) matching engines during the month, and achieves the highest Tier for that month, with two Full

[71] See supra notes 19 and 21.

[72] See supra note 10.

Service MEO Ports - Bulk per matching engine, this would result in a cost of $416.67 per Full Service MEO Port ($10,000 divided by 24).

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.[73] 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 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.[74] Additionally, the Cboe Fee Filing found that several broker-dealers were

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73 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.

74 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.

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.[75]

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

The Exchange does not believe that the proposed rule change would place certain market participants at the Exchange at a relative disadvantage compared to other market participants or affect the ability of such market participants to compete.

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 allocation of the Proposed Access Fees reflects the network resources consumed by the various size of market participants – lowest bandwidth consuming members pay the least, and highest bandwidth consuming members pays the most, particularly since higher bandwidth consumption translates to higher costs to the Exchange.

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 connect to (and purchase MEO Ports from) all options exchanges. The Exchange also notes that it has far less Members as compared to the much greater number of members at other options exchanges. Not only does MIAX Pearl have less than half the number of members as certain other options exchanges, but there are also a number of the Exchange's Members that do not connect directly to MIAX Pearl. There are a

75 Id.

number of large users of the MEO Interface and broker-dealers that are members of other options exchange but not Members of MIAX Pearl. 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 disconnect.

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.[76] The Exchange is not aware of any evidence that a market share of approximately 3-6% provides the Exchange with anti-competitive pricing power. If the Exchange were to attempt to establish unreasonable pricing, then no market participant would join or connect, and existing market participants would disconnect. 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 and fee waivers to remain competitive with other exchanges and to attract order flow to the Exchange.

[76] See supra note 31.

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.[77] The Commission received one comment letter on the Initial Proposed Fee Change.[78] The Exchange withdrew Initial Proposed Fee Change on October 12, 2021.[79] 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."[80] The SIG 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.[81] 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

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77 See supra note 68.

78 See supra note 69.

79 See Securities Exchange Act Release No. 93347 (October 15, 2021), 86 FR 58341 (October 21, 2021) (SR-PEARL-2021-33) (Notice of Withdrawal of a Proposed Rule Change to Amend the MIAX Pearl Options Fee Schedule to Increase the Monthly Fees for MIAX Express Network Full Service Ports).

80 17 CFR 201.700(b)(3).

81 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/.

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. Similar justifications for the proposed fee change included in the Initial Proposed Fee Change, but also in this filing, were previously included in similar fee changes filed by the Exchange and its affiliates, MIAX Emerald and MIAX, and SIG did not submit a comment letter on those filings.[82] Those filings were not suspended by the Commission and continue to remain in effect. The justification included in each of the prior filings was the result of numerous withdrawals and re-filings of the proposals to address comments received from Commission Staff over many months. 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.[83] The Exchange

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82 See Securities Exchange Act Release Nos. 91858 (May 12, 2021), 86 FR 26967 (May 18, 2021) (SR-PEARL-2021-23) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Amend the MIAX Pearl Fee Schedule to Remove the Cap on the Number of Additional Limited Service Ports Available to Market Makers); 91460 (April 2, 2021), 86 FR 18349 (April 8, 2021) (SR-EMERALD-2021-11) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Its Fee Schedule To Adopt Port Fees, Increase Certain Network Connectivity Fees, and Increase the Number of Additional Limited Service MIAX Emerald Express Interface Ports Available to Market Makers); and 91857 (May 12, 2021), 86 FR 26973 (May 18, 2021) (SR-MIAX-2021-19) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Its Fee Schedule To Remove the Cap on the Number of Additional Limited Service Ports Available to Market Makers).

83 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,

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 the prior fee changes that survived Commission scrutiny. 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."[84] That same commenter also noted their "worry that the Commission's process for reviewing and evaluating exchange filings may be inconsistently applied."[85]

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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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) (SR-PEARL-2021-23).

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

85 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).

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. The SIG Letter was submitted in response to six (6) filings submitted by the Exchange and its affiliates, MIAX and MIAX Emerald, and is primarily focused on proposed fee changes concerning 10Gb ULL connectivity.[86] With regards to the Initial Proposed Fee Change, the SIG Letter does not directly address the proposed fees or lay out specific arguments as to why the proposal is not consistent with Section 6(b)(4) of the Act. Rather, it simply describes the proposed fee change and flippantly states that its claims concerning the 10Gb ULL fee change proposals by the Exchange,

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86 See Securities Exchange Act Release Nos. 92643 (August 11, 2021), 86 FR 46034 (August 17, 2021) (SR-MIAX-2021-35); 92661 (August 13, 2021), 86 FR 46737 (August 19, 2021) (SR-MIAX-2021-37); 92644 (August 11, 2021), 86 FR 46055 (August 17, 2021) (SR-PEARL-2021-36); 92645 (August 11, 2021), 86 FR 46048 (August 17, 2021) (SR-EMERALD-2021-23); and 92662 (August 13, 2021), 86 FR 46726 (August 19, 2021) (SR-EMERALD-2021-25).

and its affiliates, apply to the Initial Proposed Fee Change. Nonetheless, the Exchange submits the below response to the SIG Letter concerning the Initial Proposed Fee Change.

General

First, the SIG Letter states that 10Gb ULL "lines are critical to Exchange members to be competitive *and to provide essential protection from adverse market events*" (*emphasis added*).[87] The Exchange notes that this statement is generally not true for Full Service MEO Ports as those ports are used primarily for order entry and not risk protection activities like purging quotes resting on the MIAX Pearl Options Book. Full Service MEO Ports are essentially used for competitive reasons and Members may choose to utilize one or two Full Service MEO Ports[88] based on their business needs and desire to attempt to access the market quicker by using one port that may have less latency. For instance, a Member may have just sent numerous messages and/or orders over one of their Full Service MEO Ports that are in queue to be processed. That same Member then seeks to enter an order to remove liquidity from the Exchange's Book. That Member may choose to send that order over another of their other Full Service MEO Ports with less message and/or order traffic or any of their optional additional Limit Service MEO Ports[89] to ensure that their liquidity taking order accesses the Exchange quicker because that port's queue is shorter.

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87 See SIG Letter at page 2, supra note 69.

88 The rates set forth for Full Service MEO Ports under Section 5)d) of the Exchange's Fee Schedule entitle a Member to two (2) such Ports for each Matching Engine for a single port fee.

89 Members may be allocated two (2) Full-Service MEO Ports per Matching Engine and may request Limited Service MEO Ports for which the Exchange will assess no fee for the first two Limited Service MEO Ports requested by the Member. See Section 5)d) of the Exchange's Fee Schedule.

The Tiered Pricing Structure for Full Service MEO Ports Provides for the Equitable Allocation of Reasonable Dues, Fees, and Other Charges

The SIG Letter challenges the below two bases the Exchange set forth in its Initial Proposed Fee Change and herein to support the assertion that the proposal provides for the equitable allocation of reasonable dues, fees, and other charges:

- "If the Exchanges were to attempt to establish unreasonable pricing, then no market participant would join or connect to the Exchanges, and existing market participants would disconnect.
- The fees will not result in excessive pricing or supra-competitive profit."[90]

The Exchange responds to each of SIG's challenges in turn below.

If the Exchanges Were to Attempt to Establish Unreasonable Pricing, then No Market Participant Would Join or Connect to the Exchange, and Existing Market Participants Would Disconnect

The SIG Letter asserts that the prospect that a market participant may withdraw from the Exchange "if the participant determines that any of their fees are too high is in no way a basis for claiming that a fee increase is reasonable."[91] The SIG Letter further asserts that the Exchange's "claim that a market participant would leave the Exchanges, or any of them, if a given fee was felt to be too high is an unsupported claim."[92] The Exchange, in fact, did support its claim by providing two examples where members chose to depart the Exchange, or a competing exchange, directly due to the specific fee increases. SIG attempts to dismiss the examples

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90 See SIG Letter at page 3, supra note 69.

91 Id.

92 Id.

provided by the Exchange by implying that the members may have chosen to depart the Exchange, or the competing exchange, for other reasons. In the first example, R2G explicitly stated in their comment letter "[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." There is no other way to interpret R2G's statement other than that R2G terminated their access to that particular exchange because of that particular non-transaction fee increase. In the second example, MIAX Emerald, not SIG, is uniquely positioned to know why this Member chose to depart MIAX Emerald as it discussed the issues with the Member at the time of their departure and that Member stated it was related to the imposition of non-transaction fees. The SIG Letter correctly asserts that "[t]here are many reasons a market participant may join, remain at, or leave an exchange…."[93] However, the members discussed in the examples above terminated their exchange access because of fees alone.

Further, the argument that a Member's ability to terminate access to an exchange based on fees has been used not only in this proposal, but also in other fee filings submitted by the Exchange and its affiliates to justify certain non-transaction fees.[94] The Exchange discussed this basis with Commission Staff as it shows that market participants may choose not to pay a fee where they view that fee as excessive. The ability to terminate access to an exchange shows that if a market participant believes, based on its business model, that an 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. A Member's ability to terminate

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93 Id.

94 See supra note 82.

access to the Exchange where it deems a fee increase too excessive is not the only basis, but one of many, used to support the Exchange's justification that the proposal is consistent with the Act.

<u>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 39% profit margin. The Exchange then compared its projected profit margin to the 2019 operating profit margin of Nasdaq ISE and Nasdaq Phlx, which were 83% and 67%, respectively. SIG opined that a using the overall operating profit margins of Nasdaq ISE and Nasdaq Phlx is an "apple-to-oranges" comparison because 2019 was "record setting year."[95] SIG assumes that because 2019 was a record setting year for options volumes, that each options exchange generated above average profits without providing 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.[96] The Exchange also included in this proposal additional data from its own 2021 Audited Financial Statements and projections of future revenues and costs from the proposed fee change.

The Exchange sought to provide additional data to support a 39% profit margin based on the best, most recent data available. It did not provide this data to do an "apple-to-apples"

95 <u>See</u> SIG Letter at page 6, <u>supra</u> note 69.

96 <u>See</u> <u>supra</u> notes 60, 61, 62, and 65 and accompanying text.

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 exchanges' profit margins. SIG has access to the same public data as the Exchange used in making the above projections regarding Nasdaq ISE and Nasdaq Phlx and is free to generate its own assumptions on that data if it believes the Exchange's calculations are wrong or misguided.

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] 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.

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[97] See supra note 83.

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.[98] The Exchange has seen price 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 Tiered Pricing Structure is Not Part of a Discriminatory Fee Structure and Tiered Fee Structures are Commonplace Amongst Exchanges

The SIG Letter challenges the below three bases the Exchange set forth in its Initial Proposed Fee Change and herein to support that the proposed tiered pricing structure provides for the equitable allocation of reasonable dues, fees, and other charges:

- "The Exchanges contend that the proposed structure would encourage firms to be more economical and efficient in the number of connections they purchase. The Exchanges assert that this will enable them to better monitor and provide access to their networks to ensure sufficient capacity and headroom in the System.
- The Exchanges claim that the majority of members and non-members that purchase 10Gb ULL connections will either save money or pay the same amount after the tiered-pricing structure is implemented.

98 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).

- The Exchanges contend that it benefits overall competition in the marketplace to allow relatively new entrants like the Exchanges to propose fees that may help these new entrants recoup their infrastructure investments."[99]

The SIG Letter's challenges to the first two assertions above are not applicable here as a tiered pricing structure for Full Service MEO Ports is not a new proposal, but was previously in place prior to this proposal and the Initial Proposed Fee Change. The Exchange is therefore only responding to the SIG Letter's challenge to the Exchange's third assertion.

<u>SIG Incorrectly Claims that the Exchange Contends that it Benefits Overall Competition in the Marketplace to Allow Relatively New Entrants like the Exchange to Propose Fees that May Help These New Entrants Recoup their Infrastructure Investments</u>

Nowhere in this proposal or in the Initial Proposed Fee change did the Exchange assert that it benefits competition to allow a new exchange entrant to recoup their infrastructure costs. Rather, 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." 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.[100] 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 as those past

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99 <u>See</u> SIG Letter at page 4, <u>supra</u> note 69.

100 <u>See</u> <u>supra</u> note 83.

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.[101] 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 little to no 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 chose 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.

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101 See supra note 81.

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,[102] and Rule 19b-4(f)(2)[103] 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-2021-53 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-2021-53. 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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102 15 U.S.C. 78s(b)(3)(A)(ii).

103 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-2021-53 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.[104]

J. Matthew DeLesDernier
Assistant Secretary

[104] 17 CFR 200.30-3(a)(12).