

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-93894; File No. SR-PEARL-2021-58)

January 4, 2022

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 Port

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 December 21, 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.

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 Members⁴ to submit electronic orders in all products to the Exchange. The Exchange initially filed this proposal on July 1, 2021, with the proposed fee changes being immediately effective (“First Proposed Rule Change”).⁵ The First Proposed Rule Change was published for comment in the Federal Register on July 15, 2021.⁶ The Commission received one comment letter on the First Proposed Rule Change⁷ and subsequently suspended the First Proposed Rule Change on August

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 See Securities Exchange Act Release No. 92365 (July 9, 2021), 86 FR 37347 (July 15, 2021) (SR-PEARL-2021-33).

⁶ See id.

⁷ See Letter from Richard J. McDonald, Susquehanna International Group, LLC (“SIG”), to Vanessa Countryman, Secretary, Commission, dated September 7, 2021 (“SIG Letter”).

27, 2021.⁸ The Exchange withdrew First Proposed Rule Change on October 12, 2021 and re-submitted the proposal on November 1, 2021, with the proposed fee changes being immediately effective (“Second Proposed Rule Change”).⁹ The Second Proposed Rule Change provided additional justification for the proposed fee changes and addressed certain points raised in the single comment letter that was submitted on the First Proposed Rule Change. The Second Proposed Rule Change was published for comment in the Federal Register on November 17, 2021.¹⁰ The Commission received no comment letters on the Second Proposed Rule Change. Nonetheless, the Exchange withdrew the Second Proposed Rule Change on December 20, 2021 and now submits this proposal for immediate effectiveness (“Third Proposed Rule Change”). This Third Proposed Rule Change meaningfully attempts to provide additional justification and explanation for the proposed fee changes, directly respond again to the points raised in the single comment letter submitted on the First Proposed Rule Change, and be responsive to feedback provided by Commission Staff during a telephone conversation on November 18, 2021 relating to the Second Proposed Rule Change.

Full Service MEO Port Fee Changes

The Exchange currently offers different types of MEO Ports depending on the services required by the Member, including a Full Service MEO Port-Bulk,¹¹ a Full Service MEO Port-

⁸ See Securities Exchange Act Release No. 92798 (August 27, 2021), 86 FR 49360 (September 2, 2021).

⁹ See Securities Exchange Act Release No. 93556 (November 10, 2021), 86 FR 64235 (November 17, 2021) (SR-PEARL-2021-53).

¹⁰ See id.

¹¹ “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.

Single,¹² and a Limited Service MEO Port.¹³ For one monthly price, a Member may be allocated two (2) Full-Service MEO Ports of either type per matching engine¹⁴ 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,¹⁵ the Exchange offers Full Service MEO Ports as a package and provides

¹² “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.

¹³ “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.

¹⁴ 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.

¹⁵ See NYSE American Options Fee Schedule, Section V.A., Port Fees (each port charged on a per matching engine basis, with NYSE American having 17 match engines). 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); NYSE Arca Options Fee Schedule, Port Fees (each port charged on a per matching engine basis, NYSE Arca having 19 match engines); and 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). See NASDAQ Fee Schedule, Nasdaq Options 7 Pricing Schedule, Section 3, Nasdaq Options Market – Ports and Other Services (each port charged on a per matching

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 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 2018.¹⁶ 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

engine basis, with Nasdaq having multiple matching engines). 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”). 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. 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. 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.

¹⁶ See Securities Exchange Act Release No. 82867 (March 13, 2018), 83 FR 12044 (March 19, 2018) (SR-PEARL-2018-07).

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 Affiliates¹⁷ on the Exchange across all origin types, not including Excluded Contracts¹⁸, as compared to the Total Consolidated Volume (“TCV”),¹⁹ in all

¹⁷ “Affiliate” means (i) an affiliate of a Member of at least 75% common ownership between the firms as reflected on each firm’s Form BD, Schedule A, or (ii) the Appointed Market Maker of an Appointed EEM (or, conversely, the Appointed EEM of an Appointed Market Maker). An “Appointed Market Maker” is a MIAX Pearl Market Maker (who does not otherwise have a corporate affiliation based upon common ownership with an EEM) that has been appointed by an EEM and an “Appointed EEM” is an EEM (who does not otherwise have a corporate affiliation based upon common ownership with a MIAX Pearl Market Maker) that has been appointed by a MIAX Pearl Market Maker, pursuant to the following process. A MIAX Pearl Market Maker appoints an EEM and an EEM appoints a MIAX Pearl Market Maker, for the purposes of the Fee Schedule, by each completing and sending an executed Volume Aggregation Request Form by email to membership@miaxoptions.com no later than 2 business days prior to the first business day of the month in which the designation is to become effective. Transmittal of a validly completed and executed form to the Exchange along with the Exchange’s acknowledgement of the effective designation to each of the Market Maker and EEM will be viewed as acceptance of the appointment. The Exchange will only recognize one designation per Member. A Member may make a designation not more than once every 12 months (from the date of its most recent designation), which designation shall remain in effect unless or until the Exchange receives written notice submitted 2 business days prior to the first business day of the month from either Member indicating that the appointment has been terminated. Designations will become operative on the first business day of the effective month and may not be terminated prior to the end of the month. Execution data and reports will be provided to both parties. See the Definitions Section of the Fee Schedule.

¹⁸ “Excluded Contracts” means any contracts routed to an away market for execution. See the Definitions Section of the Fee Schedule.

¹⁹ “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.

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
- (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 Makers²⁰ 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

²⁰ 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.

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 2018,²¹ which are designed to recover a portion of the costs associated with directly accessing the Exchange. The Exchange notes that its affiliates, Miami International Securities Exchange, LLC (“MIAX”) and MIAX Emerald, LLC (“MIAX Emerald”), charge fees for their high throughput, low latency MIAX Express Interface (“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.²² 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 for similar membership fees charged by other options exchanges.²³

²¹ See supra note 16.

²² See MIAX Fee Schedule, Section 5)d)ii); MIAX Emerald Fee Schedule, Section 5)d)ii).

²³ See NYSE American Options Fee Schedule, Section V.A., Port Fees; NYSE Arca Options Fee Schedule, Port Fees; Nasdaq Stock Market LLC (“NASDAQ”), Options 7, Pricing Schedule, Section 3.

The Exchange has historically undercharged for Full Service MEO Ports as compared to other options exchanges²⁴ 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. The Exchange believes other exchange’s port fees are a useful example of alternative approaches to providing and charging for port access and provides the below table for comparison purposes only to show how its proposed fees compare to fees currently charged by other options exchanges for similar port access.

Exchange	Type of Port	Monthly Fee
MIAX Pearl (as proposed)	MEO Full Service – Bulk	Tier 1: \$5,000 (or \$208.33 per Matching Engine) Tier 2: \$7,500 (or \$312.50 per Matching Engine) Tier 3: \$10,000 (or \$416.66 per Matching Engine)
	MEO Full Service – Single	Tier 1: \$2,500 (or \$104.16 per Matching Engine) Tier 2: \$3,500 (or \$145.83 per Matching Engine) Tier 3: \$4,500 (or \$187.50 per Matching Engine)

²⁴ See id.

NYSE American, LLC (“NYSE American”) ²⁵	Order/Quote Entry	Ports 1-40: \$450 each Ports 41 or more: \$150 each
NYSE Arca, Inc. (“NYSE Arca”) ²⁶	Order/Quote Entry	Ports 1-40: \$450 each Ports 41 or more: \$150 each
NASDAQ ²⁷	Specialized Quote Interface	Ports 1-5: \$1,500 each Ports 6-20: \$1,000 each Ports 21 or more: \$500

Implementation

The proposed fees are immediately effective.

2. Statutory Basis

The Exchange believes that its proposal to amend its Fee Schedule is consistent with Section 6(b) of the Act²⁸ in general, and furthers the objectives of Section 6(b)(4) of the Act²⁹ 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

²⁵ See id.

²⁶ See id.

²⁷ See id.

²⁸ 15 U.S.C. 78f(b).

²⁹ 15 U.S.C. 78f(b)(4) and (5).

interest and is not designed to permit unfair discrimination between customers, issuers, brokers and dealers.

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”).³⁰ On May 21, 2019, the Commission issued the Staff Guidance on SRO Rule Filings Relating to Fees.³¹ 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.

The Proposed Access Fees Will not Result in a Supra-Competitive Profit

The Exchange believes that exchanges, in setting fees of all types, should meet very high standards of transparency to demonstrate why each new fee or fee increase meets the requirements of the Act that fees are reasonable, equitably allocated, not unfairly discriminatory,

³⁰ 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).

³¹ 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”).

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.

In its Guidance, the Commission Staff stated that, “[a]s an initial step in assessing the reasonableness of a fee, staff considers whether the fee is constrained by significant competitive forces.”³² The Commission Staff Guidance further states that, “... even where an SRO cannot demonstrate, or does not assert, that significant competitive forces constrain the fee at issue, a cost-based discussion may be an alternative basis upon which to show consistency with the Exchange Act.”³³ In its Guidance, the Commission staff further states that, “[i]f an SRO seeks to support its claims that a proposed fee is fair and reasonable because it will permit recovery of the SRO’s costs, or will not result in excessive pricing or supracompetitive profit, specific information, including quantitative information, should be provided to support that argument.”³⁴ The Exchange does not assert that the Proposed Access Fees are constrained by competitive forces. Rather, the Exchange asserts that the Proposed Access Fees are reasonable because they will permit recovery of the Exchange’s costs in providing access via Full Service MEO Ports and will not result in the Exchange generating a supra-competitive profit.

The Guidance defines “supra-competitive profit” as “profits that exceed the profits that can be obtained in a competitive market.”³⁵ The Commission Staff further states in the Guidance

32 See id.

33 Id.

34 Id.

35 Id.

that “the SRO should provide an analysis of the SRO’s baseline revenues, costs, and profitability (before the proposed fee change) and the SRO’s expected revenues, costs, and profitability (following the proposed fee change) for the product or service in question.”³⁶ The Exchange provides this analysis below.

Based on this analysis, the Exchange believes the Proposed Access Fees are reasonable and do not result in a “supra-competitive”³⁷ profit. 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 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. As a result of this analysis, the Exchange believes the Proposed Access Fees are fair and reasonable as a form of cost recovery plus present the possibility of a reasonable return for the Exchange’s aggregate costs of offering Full Service MEO Port access to the Exchange.

The Proposed Access Fees are based on a cost-plus model. In determining the appropriate fees to charge, the Exchange considered its costs to provide Full Service MEO Ports, using what it believes to be a conservative methodology (i.e., that strictly considers only those costs that are most clearly directly related to the provision and maintenance of Full Service MEO

³⁶ Id.

³⁷ Id.

Ports) to estimate such costs,³⁸ as well as the relative costs of providing and maintaining Full Service MEO Ports, and set fees that are designed to cover its costs with a limited return in excess of such costs. However, as discussed more fully below, such fees may also result in the Exchange recouping less than all of its costs of providing and maintaining Full Service MEO Ports because of the uncertainty of forecasting subscriber decision making with respect to firms' port needs and the likely potential for increased costs to procure the third-party services described below.

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.

The Exchange also provides 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. The Exchange conducted a thorough internal analysis to determine the portion (or percentage) of each expense to allocate to the support of access services associated with the

³⁸ For example, the Exchange only included the costs associated with providing and supporting Full Service MEO Ports and excluded from its cost calculations any cost not directly associated with providing and maintaining such ports. Thus, the Exchange notes that this methodology underestimates the total costs of providing and maintaining Full Service MEO Port access.

Proposed Access Fees. This analysis included discussions with each Exchange department head to determine the expenses that support access services associated with the Proposed Access Fees. Once the expenses were identified, the Exchange department heads, with the assistance of the Exchange's internal finance department, reviewed such expenses holistically on an Exchange-wide level to determine what portion of that expense supports providing access services for the Proposed Access Fees. The sum of all such portions of expenses represents the total cost to the Exchange to provide access services associated with the Proposed Access Fees. For the avoidance of doubt, no expense amount was allocated twice.

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 and not suspended by the Commission when MIAX Emerald adopted MEI Port fees.³⁹ As outlined in more detail below, the Exchange projects that the annualized expense for 2021 to provide Full Service MEO Ports to be approximately \$897,084 per annum or an average of \$74,757 per month. The Exchange implemented the Proposed Access Fees on July 1, 2021 in the First Proposed Rule Change. For June 2021, prior to the Proposed Access Fees, Members and non-Members purchased a total of 20 Full Service MEO Ports, for which the Exchange charged a total of approximately \$71,625. This resulted in a loss of \$3,132 for that month (a margin of -4.37%). For the month of November 2021, which includes the Proposed Access Fees, Members and

³⁹ 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).

non-Members purchased a total of 19 Full Service MEO Ports,⁴⁰ for which the Exchange charged a total of approximately \$122,000 for that month. This resulted in a profit of \$47,243 for that month, representing a profit margin of approximately 38%. The Exchange believes that the Proposed Access Fees are reasonable because they are designed to approximately generate a modest profit margin of 38% per-month.⁴¹ The Exchange cautions that this profit margin may fluctuate from month to month based on the uncertainty of predicting how many Full Service MEO Ports may be purchased from month to month as Members and non-Members are able to add and drop ports at any time based on their own business decisions, which they frequently do. This profit margin may also decrease due to the significant inflationary pressure on capital items that the Exchange needs to purchase to maintain the Exchange’s technology and systems.⁴²

The Exchange has been subject to 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

⁴⁰ The Exchange notes that one Member dropped one Full Service MEO Port – Bulk between June 2021 and November 2021, as a result of the Proposed Access Fees.

⁴¹ The Exchange notes that this profit margin differs from the First and Second Proposed Rule Changes because the Exchange now has the benefit of using a more recent billing cycle under the Proposed Access Fees (November 2021) and comparing it to a baseline month (June 2021) from before the Proposed Access Fees were in effect.

⁴² 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).

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.

As mentioned above, the Exchange projects that the annualized expense for 2021 to provide the services associated with the Proposed Access Fees to be approximately \$897,084 per annum or an average of \$74,757 per month and that these costs are expected to increase not only due to anticipated significant inflationary pressure, but also periodic fee increases by third parties.⁴³ The Exchange notes that there are material costs associated with providing the infrastructure and headcount to fully-support access to the Exchange. The Exchange incurs technology expense related to establishing and maintaining Information Security services, enhanced network monitoring and customer reporting, as well as Regulation SCI mandated processes, associated with its network technology. While some of the expense is fixed, much of the expense is not fixed, and thus increases the cost to the Exchange to provide access services associated with the Proposed Access Fees. For example, new Members to the Exchange may require the purchase of additional hardware to support those Members as well as enhanced monitoring and reporting of customer performance that the Exchange and its affiliates provide. Further, as the total number of Members increases, the Exchange and its affiliates may need to increase their data center footprint and consume more power, resulting in increased costs charged by their third-party data center provider. Accordingly, the cost to the Exchange and its affiliates to provide access to its Members is not fixed. The Exchange

⁴³ For example, 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. The Exchange further 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.

believes the Proposed Access Fees are a reasonable attempt 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 and cost recovery mechanisms: 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 and cost recovery mechanisms. Until recently, the Exchange has operated at a cumulative net annual loss since it launched operations in 2017.⁴⁴ This is a result of providing a low cost alternative to attract order flow and encourage market participants to experience the high determinism and resiliency of the Exchange's trading Systems.⁴⁵ To do so, the Exchange chose to waive the fees for some non-transaction related services or provide them at a very marginal cost, which was not profitable to the Exchange. This resulted in the Exchange forgoing revenue it could have generated from assessing higher fees.

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 2021⁴⁶, the total annual expense for providing the access services associated with the Proposed Access Fees for the Exchange is

⁴⁴ 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 28, 2021, available at <https://www.sec.gov/Archives/edgar/vpr/2100/21000461.pdf>.

⁴⁵ The term "System" means the automated trading system used by the Exchange for the trading of securities. See Exchange Rule 100.

⁴⁶ The Exchange has not yet finalized its 2021 year end results.

projected to be approximately \$897,084, or approximately \$74,757 per month. The \$897,084 in projected total annual expense is comprised of the following, all of which are directly related to the access services associated with the Proposed Access Fees: (1) third-party expense, relating to fees paid by the Exchange to third-parties for certain products and services; and (2) internal expense, relating to the internal costs of the Exchange to provide the services associated with the Proposed Access Fees.⁴⁷ 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.⁴⁸ 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

⁴⁷ 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.

⁴⁸ 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.

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 sum of all such portions of expenses represents the total cost of the Exchange to provide access services associated with the Proposed Access Fees.

External Expense Allocations

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”)⁴⁹, which supports connectivity and feeds for the entire U.S. options

⁴⁹ 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.

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 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, the Exchange took a conservative approach in determining the expense and the percentage of that expense to be allocated to the providing access services in connection with the Proposed Access Fees. 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. This may result in the Exchange under allocating an expense to the provision of access services in connection with the Proposed Access Fees and such expenses may actually be higher or increase above what the Exchange utilizes within this proposal. 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. Therefore, the percentage allocations

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

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.⁵⁰

⁵⁰ 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

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 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.⁵¹

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

different system architecture of the Exchange as compared to its affiliates. Again, as part of 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.

⁵¹

Id.

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.⁵²

The Exchange believes it is reasonable to allocate the identified portion of the other hardware and software provider expense because this includes costs for dedicated hardware licenses for switches and servers, as well as dedicated software licenses for security monitoring and reporting across the network. Without this hardware and software, the Exchange would not be able to operate and support the network and provide access to its Members and 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.⁵³

⁵² Id.

⁵³ Id.

Internal Expense Allocations

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. Accordingly, the Exchange does not allocate its entire costs contained in those items to the access services associated with the Proposed Access Fees.

For clarity, and as stated above, the Exchange took a conservative approach in determining the expense and the percentage of that expense to be allocated to providing the access services in connection with the Proposed Access Fees. Only a portion of all such internal expenses are included in the internal expense herein, and no expense amount is allocated twice. Accordingly, the Exchange does not allocate its entire costs contained in those items to the access services associated with the Proposed Access Fees. This may result in the

Exchange under allocating an expense to the provision of access services in connection with the Proposed Access Fees and such expenses may actually be higher or increase above what the Exchange utilizes within this proposal. Further, as part its ongoing assessment of costs and expenses (described above), 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 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.⁵⁴

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 \$2,864,716⁵⁵ 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

⁵⁴ Id.

⁵⁵ 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.

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 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.⁵⁶

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 200 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

⁵⁶ Id.

to allocate the identified portion of its occupancy expense because such amount represents the Exchange's actual cost to house the equipment and personnel who operate and support the Exchange's network infrastructure and the access services associated with the Proposed Access Fees. The Exchange did not allocate all of the occupancy expense toward the cost of providing the access services associated with the Proposed Access Fees, only the portion which the Exchange identified as being specifically mapped to operating and supporting the network, approximately 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.⁵⁷

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.

Based on the above, the Exchange believes that its provision of access services associated with the Proposed Access Fees will not result in excessive pricing or supra-competitive profit. As discussed above, the Exchange projects that the annualized expense for

⁵⁷ Id.

2021 to provide Full Service MEO Ports to be approximately \$897,084 per annum or an average of \$74,757 per month. The Exchange implemented the Proposed Access Fees on July 1, 2021 in the First Proposed Rule Change. For June 2021, prior to the Proposed Access Fees, Members and non-Members purchased a total of 20 Full Service MEO Ports, for which the Exchange charged a total of approximately \$71,625. This resulted in a loss of \$3,132 for that month (a margin of -4.37%). For the month of November 2021, which includes the Proposed Access Fees, Members and non-Members purchased a total of 19 Full Service MEO Ports, for which the Exchange charged a total of approximately \$122,000 for that month. This resulted in a profit of \$47,243 for that month, representing a profit margin of 38%. The Exchange believes that the Proposed Access Fees are reasonable because they are designed to generate an approximate profit margin of 38% per-month. The Exchange believes this modest profit margin will allow it to continue to recoup its expenses and continue to invest in its technology infrastructure. Therefore, the Exchange also believes that this proposed profit margin increase is reasonable because it represents a reasonable rate of return.

Again, the Exchange cautions that this profit margin may fluctuate from month to month based in the uncertainty of predicting how many Full Service MEO Ports may be purchased from month to month as Members and non-Members are free to add and drop ports at any time based on their own business decisions. This profit margin may also decrease due to the significant inflationary pressure on capital items that it needs to purchase to maintain the Exchange's technology and systems.⁵⁸ Accordingly, the Exchange believes its total projected revenue for providing the access services associated with the Proposed Access Fees will not result in excessive pricing or supra-competitive profit.

⁵⁸ See supra note 42.

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 Proposed Tiered-Pricing Structure is not Unfairly Discriminatory and Provides for the Equitable Allocation of Fees, Dues, and other Charges

The Exchange believes the proposed tiered-pricing structure is reasonable, fair, equitable, and not unfairly discriminatory because it is the model adopted by the Exchange when it launched operations for its Full Service MEO Port fees. Moreover, the tiered pricing structure for Full Service MEO Ports is not a new proposal and has been in place since 2018, well prior to the filing of the First Proposed Rule Change. The proposed tiers of Full Service MEO Port fees

will continue to apply to all Members and non-Members in the same manner based upon the monthly total volume executed by a Member and its Affiliates on the Exchange across all origin types, not including Excluded Contracts, as compared to the TCV in all MIAX Pearl-listed options. Members and non-Members may choose to purchase more than the two Full Service MEO Ports the Exchange currently provides upfront based on their own business decisions and needs. All similarly situated Members and non-Members would be subject to the same fees. The fees do not depend on any distinction between Members and non-Members because they are solely determined by the individual Members' or non-Members' business needs and their impact on Exchange resources.

The proposed tiered-pricing structure is not unfairly discriminatory and provides for the equitable allocation of fees, dues, and other charges because it is designed to encourage Members and non-Members to be more efficient and economical when determining how to access the Exchange and the amount of the fees are based on the number of Full Service MEO Ports utilized, in addition to the amount of volume conducted on the Exchange. The proposed tiered pricing structure should also enable the Exchange to better monitor and provide access to the Exchange's network to ensure sufficient capacity and headroom in the System.

The proposed tiered-pricing structure is not unfairly discriminatory and provides for the equitable allocation of fees, dues, and other charges because the amount of the fee is directly related to the Member or non-Member's TCV resulting in higher fees for greater TCV. The higher the volume, the greater pull on Exchange resources. 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.

There are material costs associated with providing the infrastructure and headcount to fully-support access to the Exchange. The Exchange incurs technology expense related to establishing and maintaining Information Security services, enhanced network monitoring and customer reporting, as well as Regulation SCI mandated processes, associated with its network technology. While some of the expense is fixed, much of the expense is not fixed, and thus increases as the services associated with the Proposed Access Fees increase. For example, new Members to the Exchange may require the purchase of additional hardware to support those Members as well as enhanced monitoring and reporting of customer performance that the Exchange and its affiliates provide. Further, as the total number of Members increases, the Exchange and its affiliates may need to increase their data center footprint and consume more power, resulting in increased costs charged by their third-party data center provider.

Accordingly, the cost to the Exchange and its affiliates to provide access to its Members is not fixed. The Exchange believes the Proposed Access Fees are reasonable in order to offset a portion of the costs to the Exchange associated with providing access to its network infrastructure.

The Exchange notes that the firms that purchase more than two Full Service MEO Ports that the Exchange initially provides essentially do so for competitive reasons amongst themselves and choose to utilize numerous ports based on their business needs and desire to

attempt to access the market quicker by using the port with the least amount of latency. These firms are generally engaged in sending liquidity removing orders to the Exchange and seek to add more ports so they can access resting liquidity ahead of their competitors. 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 one or more of their other Full Service MEO Ports with less message and/or order traffic to ensure that their liquidity taking order accesses the Exchange quicker because that port's queue is shorter. These firms also tend to frequently add and drop ports mid-month to determine which have the least latency, which results in increased costs to the Exchange to constantly make changes in the data center.

The firms that engage in the above-described liquidity removing and advanced trading strategies typically require more than two Full Service MEO Ports and, therefore, generate higher costs by utilizing more of the Exchange's resources. Those firms may also conduct other latency measurements over their ports and drop and simultaneously add ports mid-month based on their own assessment of their performance. This results in Exchange staff processing such requests, potentially purchasing additional equipment, and performing the necessary network engineering to replace those ports in the data center. Therefore, the Exchange believes it is equitable for these firms to experience increased port costs based on their disproportionate pull on Exchange resources to provide the additional ports.

In addition, the proposed tiered-pricing structure is equitable because it is designed to encourage Members and non-Members to be more efficient and economical when determining how to connect to the Exchange. Section 6(b)(5) of the Exchange Act requires the Exchange to

provide access on terms that are not unfairly discriminatory.⁵⁹ As stated above, Full Service MEO Ports are not an unlimited resource and the Exchange's network is limited in the amount of ports it can provide. However, the Exchange must accommodate requests for additional ports and access to the Exchange's System to ensure that the Exchange is able to provide access on non-discriminatory terms and ensure sufficient capacity and headroom in the System. To accommodate requests for additional ports on top of current network capacity constraints, requires that the Exchange purchase additional equipment to satisfy these requests. The Exchange also needs to provide personnel to set up new ports and to maintain those ports on behalf of Members and non-Members. The proposed tiered-pricing structure is equitable because it is designed to encourage Members and non-Members to be more efficient and economical in selecting the amount of ports they request while balancing that against the Exchange's increased expenses when expanding its network to accommodate additional port access.

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

The Exchange does not have visibility into other equities exchanges' costs to provide ports and port access or their fee markup over those costs, and therefore cannot use other exchanges' port fees as a benchmark to determine a reasonable markup over the costs of providing port access. Nevertheless, the Exchange believes the other exchanges' port fees are a useful example of alternative approaches to providing and charging for port access. To that end, the Exchange believes the proposed tiered-pricing structure for its Full Service MEO Ports is reasonable because the proposed highest tier is still less than or similar to fees charged for

⁵⁹ 15 U.S.C. 78f(b)(5).

similar port access provided by other options exchanges with comparable market shares. For example, NASDAQ (equity options market share of 8.38% as of December 15, 2021 for the month of December)⁶⁰ 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,⁶¹ all on a per matching engine basis, with NASDAQ having multiple matching engines.⁶² NYSE American (equity options market share of 6.74% as of December 15, 2021 for the month of December)⁶³ charges \$450 per port for order/quote entry ports 1-40 and \$150 per port for ports 41 and greater,⁶⁴ all on a per matching engine basis, with NYSE American having 17 match engines.⁶⁵ The below table further illustrates this comparison.

Exchange	Type of Port	Monthly Fee
MIAX Pearl (as proposed)	MEO Full Service – Bulk	Tier 1: \$5,000 (or \$208.33 per Matching Engine) Tier 2: \$7,500 (or \$312.50 per Matching Engine) Tier 3: \$10,000 (or \$416.66 per Matching Engine)

⁶⁰ See “The market at a glance,” available at <https://www.miaxoptions.com/> (last visited December 15, 2021).

⁶¹ See supra note 27.

⁶² See supra note 15.

⁶³ See supra note 60.

⁶⁴ See supra note 25.

⁶⁵ See supra note 15.

	MEO Full Service – Single	Tier 1: \$2,500 (or \$104.16 per Matching Engine) Tier 2: \$3,500 (or \$145.83 per Matching Engine) Tier 3: \$4,500 (or \$187.50 per Matching Engine)
NYSE American	Order/Quote Entry	Ports 1-40: \$450 each Ports 41 or more: \$150 each
NYSE Arca	Order/Quote Entry	Ports 1-40: \$450 each Ports 41 or more: \$150 each
NASDAQ	Specialized Quote Interface	Ports 1-5: \$1,500 each Ports 6-20: \$1,000 each Ports 21 or more: \$500

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.

The Exchange further 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,⁶⁶ 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 2018.⁶⁷ 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 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).

⁶⁶ See supra note 15.

⁶⁷ See supra note 16.

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 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.⁶⁸ 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.

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

As described above, the Exchange received one comment letter on the First Proposed Rule Change⁶⁹ and no comment letters on the Second Proposed Rule Change. The Exchange now responds to the one comment letter in this filing. The SIG Letter cites Rule 700(b)(3) of the

⁶⁸ See supra note 60.

⁶⁹ See supra note 7.

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.”⁷⁰ 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 First and Second Proposed Rule Changes and this filing.

Until recently, the Exchange has operated at a net annual loss since it launched operations in 2017.⁷¹ As stated above, the Exchange believes that exchanges in setting fees of all types should meet very high standards of transparency to demonstrate why each new fee or fee increase meets the requirements of the Act that fees be reasonable, equitably allocated, not unfairly discriminatory, and not create an undue burden on competition among market participants. The Exchange believes this high standard is especially important when an exchange imposes various access fees for market participants to access an exchange’s marketplace. The Exchange believes it has achieved this standard in this filing and in the First and Second Proposed Rules Changes. Similar justifications for the proposed fee change included in the First and Second Proposed Rule Changes, 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.⁷² Those filings were not suspended by the Commission

⁷⁰ 17 CFR 201.700(b)(3).

⁷¹ See supra note 44.

⁷² 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 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.⁷³ The Exchange leveraged its past work with Commission Staff to ensure the justification provided herein and in the First and Second Proposed Rule Changes included the same level of detail (or more) as the prior fee changes that survived Commission scrutiny. The Exchange's detailed

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).

⁷³ See, e.g., Securities Exchange Act Release No. 90196 (October 15, 2020), 85 FR 67064 (October 21, 2020) (SR-EMERALD-2020-11) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Its Fee Schedule To Adopt One-Time Membership Application Fees and Monthly Trading Permit Fees). See Securities Exchange Act Release Nos. 90601 (December 8, 2020), 85 FR 80864 (December 14, 2020) (SR-EMERALD-2020-18) (re-filing with more detail added in response to Commission Staff's feedback and after withdrawing SR-EMERALD-2020-11); and 91033 (February 1, 2021), 86 FR 8455 (February 5, 2021) (SR-EMERALD-2021-03) (re-filing with more detail added in response to Commission Staff's feedback and after withdrawing SR-EMERALD-2020-18). The Exchange initially filed a proposal to remove the cap on the number of additional Limited Service MEO Ports available to Members on April 9, 2021. See SR-PEARL-2021-17. On April 22, 2021, the Exchange withdrew SR-PEARL-2021-17 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. On May 3, 2021, the Exchange withdrew SR-PEARL-2021-20 and refiled that proposal to further clarify its cost methodology. See SR-PEARL-2021-22. On May 10, 2021, the Exchange withdrew SR-PEARL-2021-22 and refiled that proposal as SR-PEARL-2021-23. See Securities Exchange Act Release No. 91858 (May 12, 2021), 86 FR 26967 (May 18, 2021) (SR-PEARL-2021-23).

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.”⁷⁴ That same industry group also noted their “worry that the Commission’s process for reviewing and evaluating exchange filings may be inconsistently applied.”⁷⁵

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 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 First Proposed Rule 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 First Proposed Rule Change 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.

⁷⁴ See letter from Tyler Gellasch, Executive Director, Healthy Markets Association, to Hon. Gary Gensler, Chair, Commission, dated October 29, 2021.

⁷⁵ *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).

Nonetheless, the Exchange has enhanced its cost and revenue analysis and data in this Third Proposed Rule Change to further justify that the Proposed Access Fees are reasonable in accordance with the Commission Staff’s Guidance. Among other things, these enhancements include providing baseline information in the form of data from the month before the Proposed Access Fees became effective.

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*).⁷⁶ 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 Ports⁷⁷ 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 one of their other Full Service MEO Ports with less message and/or order traffic or any of their optional additional Limit Service MEO Ports⁷⁸ to

⁷⁶ See SIG Letter, supra note 7.

⁷⁷ 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) Full Service MEO Ports for each Matching Engine for a single monthly fee.

⁷⁸ 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 Fee Schedule, Section 5)d).

ensure that their liquidity taking order accesses the Exchange quicker because that port's queue is shorter.

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.”⁷⁹

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

SIG asserts that “the prospect that a member may withdraw from the Exchanges if a fee is too costly is not a basis for asserting that the fee is reasonable.”⁸⁰ SIG misinterprets the Exchange's argument here. The Exchange provided the examples of firms terminating access to certain markets due to fees to support its assertion that firms, including market makers, are not required to connect to all markets and may drop access if fees become too costly for their business models and alternative or substitute forms of connectivity are available to those firms

⁷⁹ See SIG Letter, supra note 7.

⁸⁰ Id.

who choose to terminate access. The Commission Staff Guidance also provides that “[a] statement that substitute products or services are available to market participants in the relevant market (e.g., equities or options) can demonstrate competitive forces if supported by evidence that substitute products or services exist.”⁸¹ Nonetheless, the Third Proposed Rule Change no longer makes this assertion as a basis for the proposed fee change and, therefore, the Exchange believes it is not necessary to respond to this portion of the SIG Letter.

The Proposed Fees Will Not Result in Excessive Pricing or Supra-Competitive Profit

Next, SIG asserts that the Exchange’s “profit margin comparisons do not support the Exchange’s claims that they will not realize a supracompetitive profit,” that “the Exchanges’ respective profit margins of 30% (for MIAX and Pearl) and 51% (for Emerald) in relation to connectivity fees are high in any event,” and “comparisons to competing exchanges’ overall operating profit margins are an inapt ‘apples-to-oranges’ comparison.”

The Exchange has provided ample data that the proposed fees would not result in excessive pricing or a supra-competitive profit. In this Third Proposed Rule Change, the Exchange no longer utilizes a comparison of its profit margin to that of other options exchanges as a basis that the Proposed Access Fees are reasonable. Rather, the Exchange has enhanced its cost and revenue analysis and data in this Third Proposed Rule Change to further justify that the Proposed Access Fees are reasonable in accordance with the Commission Staff’s Guidance. Therefore, the Exchange believes it is no longer necessary to respond to this portion of the SIG Letter.

⁸¹ See Guidance, supra note 31.

The Proposed Tiered Pricing Structure is Not Unfairly Discriminatory

SIG challenges the proposed fees by arguing that “the Exchange[] provide[s] no support for [its] claim that [the] proposed tiered pricing structure is needed to encourage efficiency in connectivity usage and the Exchange[] provided no support for [the] claim that the tiered pricing structure allows them to better monitor connectivity usage, nor that this is an appropriate basis for the pricing structure in any event.” The tiered pricing structure for Full Service MEO Ports is not a new proposal and has been in place since 2018, well prior to the filing of the First Proposed Rule Change. Nonetheless, the Exchange provided additional justification to support that the Proposed Access Fees are equitable and not unfairly discriminatory above in response to SIG’s assertions.

Recoupment of Exchange Infrastructure Costs

Nowhere in this proposal or in the First Proposed Rule 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.” The Exchange no longer makes this assertion in this filing and, therefore, does not believe it is necessary to respond to SIG’s assertion here.

Nonetheless, the Exchange notes that until recently it has operated at a net annual loss since it launched operations in 2017.⁸² 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-

⁸² See supra note 44.

transaction related services for little to no cost. This resulted in the Exchange forgoing revenue it could have generated from assessing higher fees. 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. 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.

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,⁸³ and Rule 19b-4(f)(2)⁸⁴ 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.

⁸³ 15 U.S.C. 78s(b)(3)(A)(ii).

⁸⁴ 17 CFR 240.19b-4(f)(2).

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-2021-58 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-2021-58. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). 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-2021-58 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.⁸⁵

J. Matthew DeLesDernier
Assistant Secretary

⁸⁵ 17 CFR 200.30-3(a)(12).