

Required fields are shown with yellow backgrounds and asterisks.

Page 1 of * <input type="text" value="66"/>	SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 Form 19b-4	File No.* SR - <input type="text" value="2021"/> - * <input type="text" value="33"/>	Amendment No. (req. for Amendments *) <input type="text"/>
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Filing by **MIAX PEARL, LLC**
Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934

Initial * <input checked="" type="checkbox"/>	Amendment * <input type="checkbox"/>	Withdrawal <input type="checkbox"/>	Section 19(b)(2) * <input type="checkbox"/>	Section 19(b)(3)(A) * <input checked="" type="checkbox"/>	Section 19(b)(3)(B) * <input type="checkbox"/>
Pilot <input type="checkbox"/> Extension of Time Period for Commission Action * <input type="checkbox"/> Date Expires * <input type="text"/>			Rule		
			<input type="checkbox"/> 19b-4(f)(1)	<input type="checkbox"/> 19b-4(f)(4)	
			<input checked="" type="checkbox"/> 19b-4(f)(2)	<input type="checkbox"/> 19b-4(f)(5)	
			<input type="checkbox"/> 19b-4(f)(3)	<input type="checkbox"/> 19b-4(f)(6)	

Notice of proposed change pursuant to the Payment, Clearing, and Settlement Act of 2010 Section 806(e)(1) * <input type="checkbox"/> Section 806(e)(2) * <input type="checkbox"/>	Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934 Section 3C(b)(2) * <input type="checkbox"/>
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Exhibit 2 Sent As Paper Document <input type="checkbox"/>	Exhibit 3 Sent As Paper Document <input type="checkbox"/>
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Description

Provide a brief description of the action (limit 250 characters, required when Initial is checked *).

Proposal to amend the MIAX Pearl Options Fee Schedule to amend the fees for Full Service MEO Ports.

Contact Information

Provide the name, telephone number, and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the action.

First Name * Last Name *

Title *

E-mail *

Telephone * Fax

Signature

Pursuant to the requirements of the Securities Exchange Act of 1934,

has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.

(Title *)

Date

By

(Name *)

NOTE: Clicking the button at right will digitally sign and lock this form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

For complete Form 19b-4 instructions please refer to the EFFS website.

Form 19b-4 Information *

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The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act.

Exhibit 1 - Notice of Proposed Rule Change *

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The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

Exhibit 1A- Notice of Proposed Rule Change, Security-Based Swap Submission, or Advance Notice by Clearing Agencies *

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The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change, security-based swap submission, or advance notice being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

Exhibit 2 - Notices, Written Comments, Transcripts, Other Communications

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Exhibit Sent As Paper Document

Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G.

Exhibit 3 - Form, Report, or Questionnaire

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Exhibit Sent As Paper Document

Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change.

Exhibit 4 - Marked Copies

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The full text shall be marked, in any convenient manner, to indicate additions to and deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit the staff to identify immediately the changes made from the text of the rule with which it has been working.

Exhibit 5 - Proposed Rule Text

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The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change.

Partial Amendment

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If the self-regulatory organization is amending only part of the text of a lengthy proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions.

1. **Text of the Proposed Rule Change**

(a) MIAX PEARL, LLC (“MIAX Pearl” or “Exchange”), pursuant to the provisions of Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)¹ and Rule 19b-4 thereunder,² proposes 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.

A notice of the proposed rule change for publication in the Federal Register is attached hereto as Exhibit 1, and a copy of the applicable section of the proposed Fee Schedule is attached hereto as Exhibit 5.

(b) Not applicable.

(c) Not applicable.

2. **Procedures of the Self-Regulatory Organization**

The proposed rule change was approved by the Chief Executive Officer of the Exchange or his designee pursuant to authority delegated by the MIAX Pearl Board of Directors on January 28, 2021. Exchange staff will advise the Board of Directors of any action taken pursuant to delegated authority. No other action by the Exchange is necessary for the filing of the proposed rule change.

Questions and comments on the proposed rule change may be directed to Michael Slade, AVP, Associate Counsel, at 609-897-8499.

3. **Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change**

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.

a. Purpose

The Exchange proposes to amend the Fee Schedule to increase the fees for its Full Service MEO Ports (the “Proposed Access Fees”), which allow Members⁴ to submit electronic orders in all products to the Exchange. The Exchange currently offers different options of MEO Ports depending on the services required by the Member, including a Full Service MEO Port-Bulk,⁵ a Full Service MEO Port-Single,⁶ and a Limited Service MEO Port.⁷ A Member may be allocated two (2) Full-Service MEO Ports of either type per matching engine⁸ and may request Limited Service MEO Ports for which MIAX Pearl will assess Members Limited Service MEO Port fees per Matching Engine based on the table above. 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

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

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

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

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

⁸ “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.

MEO Ports – Bulk; (b) two (2) Full Service MEO Ports – Single; or (c) one (1) Full Service MEO Port – Bulk and one (1) Full Service MEO Port - Single.

Unlike other options exchanges that provide similar port functionality and charge fees on a per port basis,⁹ the Exchange offers Full Service MEO Ports as a package and provides Members with the option to receive up to two Full Service MEO Ports (described above) per matching engine to which 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, as described below. For illustrative purposes and as described in more detail below, 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. 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 Purge Port fees in 2018.¹⁰ The Exchange now proposes to increase the Full Service MEO Port

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

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

fees as described below, 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, with two Full Service MEO Ports per matching engine, this would result in a cost of \$416.67 per Full Service MEO Port (\$10,000 divided by 24).

The Exchange assesses Members Full Service MEO Port Fees, either for a Full Service MEO Port - Bulk and/or for a Full Service MEO Port - Single, based upon the monthly total volume executed by a Member and its Affiliates¹¹ on the Exchange across all origin types, not

¹¹ “Affiliate” means (i) an affiliate of a Member of at least 75% common ownership between the firms as reflected on each firm’s Form BD, Schedule A, or (ii) the Appointed Market Maker of an Appointed EEM (or, conversely, the Appointed EEM of an Appointed Market Maker). An “Appointed Market Maker” is a MIAX Pearl Market Maker (who does not otherwise have a corporate affiliation based upon common ownership with an EEM) that has been appointed by an EEM and an “Appointed EEM” is an EEM (who does not otherwise have a corporate affiliation based upon common ownership with a MIAX Pearl Market Maker) that has been appointed by a MIAX Pearl Market Maker, pursuant to the following process. A MIAX Pearl Market Maker appoints an EEM and an EEM appoints a MIAX Pearl Market Maker, for the purposes of the Fee Schedule, by each completing and sending an executed Volume Aggregation Request 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.

including Excluded Contracts¹², as compared to the Total Consolidated Volume (“TCV”),¹³ in all MIAX Pearl-listed options. The Exchange adopted a tier-based fee structure based upon the volume-based tiers detailed in the definition of “Non-Transaction Fees Volume-Based Tiers” described in the Definitions section of the Fee Schedule. The Exchange assesses these and other monthly Port fees on Members in each month the market participant is credentialed to use a Port in the production environment.

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

- (i) if its volume falls within the parameters of Tier 1 of the Non-Transaction Fees Volume-Based Tiers, or volume up to 0.30%, \$3,000;
- (ii) if its volume falls within the parameters of Tier 2 of the Non-Transaction Fees Volume-Based Tiers, or volume above 0.30% up to 0.60%, \$4,500; and
- (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;

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

¹³ “TCV” means total consolidated volume calculated as the total national volume in those classes listed on MIAX Pearl for the month for which the fees apply, excluding consolidated volume executed during the period of time in which the Exchange experiences an Exchange System Disruption (solely in the option classes of the affected Matching Engine). See the Definitions Section of the Fee Schedule.

- (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 Makers¹⁴ or high frequency trading firms utilize these ports (typically coupled with 10Gb ULL connectivity) because they transact in significantly higher amounts of messages being sent to and from the Exchange, versus FIX port users, who are traditionally customers sending only orders to the Exchange (typically coupled with 1Gb connectivity). The different types of ports cater to the different types of Exchange Memberships and different capabilities of the various Exchange Members. Certain Members need ports and connections that can handle using far more of the network's capacity for message throughput, risk protections, and the amount of information that has to be assessed. 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 first adopted in 2018¹⁵ and 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 MEI Ports in a similar fashion as the Exchange charges for its MEO Ports – generally, the more active user the Member (i.e., the greater number / greater national ADV of classes assigned to quote on MIAX and MIAX Emerald), the higher the MEI Port fee.¹⁶ This concept is not new or novel. The Exchange

¹⁴ "Market Maker" means a Member registered with the Exchange for the purpose of making markets in options contracts traded on the Exchange and that is vested with the rights and responsibilities specified in Chapter VI of Exchange Rules. See the Definitions Section of the Fee Schedule and Exchange Rule 100.

¹⁵ See supra note 10.

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

also notes that the proposed increased Full Service MEO Port fees are in line with, or cheaper than, the similar port fees or similar membership fees charged by other options exchanges.¹⁷

The Exchange has historically undercharged for Full Service MEO Ports as compared to other options exchanges¹⁸ 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 proposed monthly fee increases for Full Service MEO Ports would bring the Exchange's fees more in line with that of other options exchanges, while maintaining a competitive fee structure for Full Service MEO Ports.

b. Statutory Basis

The Exchange believes that its proposal to amend its Fee Schedule is consistent with Section 6(b) of the Act¹⁹ in general, and furthers the objectives of Section 6(b)(4) of the Act²⁰ in particular, in that it is an equitable allocation of reasonable dues, fees and other charges among its members and issuers and other persons using its facilities. The Exchange also believes the proposal furthers the objectives of Section 6(b)(5) of the Act in that it is designed to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general to protect investors and the public interest and is not designed to permit unfair discrimination between customers, issuers, brokers and dealers.

¹⁷ See supra note 9.

¹⁸ See id.

¹⁹ 15 U.S.C. 78f(b).

²⁰ 15 U.S.C. 78f(b)(4) and (5).

The Exchange believes that exchanges, in setting fees of all types, should meet very high standards of transparency to demonstrate why each new fee or fee increase meets the requirements of the Act that fees be reasonable, equitably allocated, not unfairly discriminatory, and not create an undue burden on competition among market participants. The Exchange believes this high standard is especially important when an exchange imposes various access fees for market participants to access an exchange's marketplace. The Exchange deems the Full Service MEO Port fees to be access fees. It records these fees as part of its "Access Fees" revenue in its financial statements. The Exchange believes that it is important to demonstrate that these fees are based on its costs and reasonable business needs. The Exchange believes the Proposed Access Fees will allow the Exchange to offset expense the Exchange has and will incur, and that the Exchange is providing sufficient transparency (as described below) into how the Exchange determined to charge such fees. Accordingly, the Exchange is providing an analysis of its revenues, costs, and profitability associated with the Proposed Access Fees. This analysis includes information regarding its methodology for determining the costs and revenues associated with the Proposed Access Fees.

In order to determine the Exchange's costs to provide the access services associated with the Proposed Access Fees, the Exchange conducted an extensive cost review in which the Exchange analyzed every expense item in the Exchange's general expense ledger to determine whether each such expense relates to the Proposed Access Fees, and, if such expense did so relate, what portion (or percentage) of such expense actually supports the access services. The sum of all such portions of expenses represents the total cost of the Exchange to provide the access services associated with the Proposed Access Fees. For the avoidance of doubt, no expense amount was allocated twice. The Exchange is also providing detailed information

regarding the Exchange's cost allocation methodology – namely, information that explains the Exchange's rationale for determining that it was reasonable to allocate certain expenses described in this filing towards the cost to the Exchange to provide the access services associated with the Proposed Access Fees.

In order to determine the Exchange's projected revenues associated with the Proposed Access Fees, the Exchange analyzed the number of Members currently utilizing the 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 first two quarters of 2021, the Exchange believes its 2020 Audited Unconsolidated Financial Statement is not useful for analyzing the reasonableness of the total annual revenue and costs associated with the Proposed Access Fees. Accordingly, the Exchange believes it is more appropriate to analyze the Proposed Access Fees utilizing its 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 process utilized by the Exchange's affiliate, MIAX Emerald, in a filing recently noticed by the Commission when MIAX Emerald adopted its own MEI Port fees.²¹

* * * * *

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").²² On May 21, 2019, the Commission issued the Staff Guidance on SRO Rule Filings Relating to Fees.²³ 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

²¹ 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).

²² 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).

²³ 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").

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.

* * * * *

As of June 30, 2021, the Exchange had only a 5.31% market share of the U.S. equity options industry for the month of June 2021.²⁴ The Exchange is not aware of any evidence that a market share of approximately 5-6% 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.

Separately, the Exchange is not aware of any reason why market participants could not simply drop their access to an exchange (or not initially access an exchange) if an exchange were to establish prices for its non-transaction fees that, in the determination of such market participant, did not make business or economic sense for such market participant to access such exchange. No options market participant is required by rule, regulation, or competitive forces to be a Member of the Exchange. As evidence of the fact that market participants can and do drop their access to exchanges based on non-transaction fee pricing, R2G Services LLC (“R2G”) filed a comment letter after BOX’s proposed rule changes to increase its connectivity fees (SR-BOX-2018-24, SR-BOX-2018-37, and SR-BOX-2019-04). The R2G Letter stated,

²⁴ See “The market at a glance”, available at www.miaxoptions.com (last visited June 30, 2021).

“[w]hen BOX instituted a \$10,000/month price increase for connectivity; we had no choice but to terminate connectivity into them as well as terminate our market data relationship. The cost benefit analysis just didn’t make any sense for us at those new levels.” Similarly, the Exchange’s affiliate, MIAX Emerald, noted in a recent filing that once MIAX Emerald issued a notice that it was instituting MEI Port fees, among other non-transaction fees, one Member dropped its access to the Exchange as a result of those fees.²⁵ Accordingly, these examples show that if an exchange sets too high of a fee for connectivity and/or other non-transaction fees for its relevant marketplace, market participants can choose to drop their access to such exchange.

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

In order to provide more detail and to quantify the Exchange’s costs associated with providing access to the Exchange in general, the Exchange notes that there are material costs associated with providing the infrastructure and headcount to fully-support access to the Exchange. The Exchange incurs technology expense related to establishing and maintaining Information Security services, enhanced network monitoring and customer reporting, as well as

²⁵ See supra note 21.

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 Members increases, the Exchange and its affiliates may need to increase their data center footprint and consume more power, resulting in increased costs charged by their third-party data center provider. Accordingly, the cost to the Exchange and its affiliates to provide access to its Members is not fixed. The Exchange believes the Proposed Access Fees are reasonable in order to offset a portion of the costs to the Exchange associated with providing access to its network infrastructure.

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

The Exchange believes that the Proposed Access Fees are fair and reasonable because they will not result in excessive pricing or supra-competitive profit, when comparing the total annual expense that the Exchange projects to incur in connection with providing these access services versus the total annual revenue that the Exchange projects to collect in connection with services associated with the Proposed Access Fees. For 2021²⁶, the total annual expense for providing the access services associated with the Proposed Access Fees for the Exchange is projected to be approximately \$897,084. The \$897,084 in projected total annual expense is

²⁶ The Exchange has not yet finalized its 2021 year end results.

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.²⁷ 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.²⁸ 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 every expense item in the Exchange's general expense ledger (this includes over 150 separate and distinct expense items) to determine whether each such expense relates to the access services associated with the Proposed Access Fees, and, if such expense did so relate, what portion (or percentage) of such expense actually supports those services, and thus bears a

²⁷ 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.

²⁸ 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.

relationship that is, “in nature and closeness,” directly related to those services. The sum of all such portions of expenses represents the total cost of the Exchange to provide access services associated with the Proposed Access Fees.

For 2021, total third-party expense, relating to fees paid by the Exchange to third-parties for certain products and services for the Exchange to be able to provide the access services associated with the Proposed Access Fees, is projected to be \$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”)²⁹, which supports connectivity and feeds for the entire U.S. options industry; (4) various other services providers (including Thompson Reuters, NYSE, Nasdaq, and Internap), which provide content, connectivity services, and infrastructure services for critical components of options connectivity and network services; and (5) various other hardware and software providers (including Dell and Cisco, which support the production environment in which Members connect to the network to trade, receive market data, etc.).

For clarity, only a portion of all fees paid to such third-parties is included in the third-party expense herein, and no expense amount is allocated twice. Accordingly, the Exchange

²⁹ In fact, on October 22, 2019, the Exchange was notified by SFTI that it is again raising its fees charged to the Exchange by approximately 11%, without having to show that such fee change complies with the Act by being reasonable, equitably allocated, and not unfairly discriminatory. It is unfathomable to the Exchange that, given the critical nature of the infrastructure services provided by SFTI, that its fees are not required to be rule-filed with the Commission pursuant to Section 19(b)(1) of the Act and Rule 19b-4 thereunder. See 15 U.S.C. 78s(b)(1) and 17 CFR 240.19b-4, respectively.

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

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.

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.

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

being specifically mapped to providing the access services associated with the Proposed Access Fees, approximately 0.90% of the total applicable SFTI and other service providers' expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the access services associated with the Proposed Access Fees.

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.

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 (including

an increase as a result of the higher determinism project); (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.

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.

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 \$2,864,716³⁰ 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

³⁰ The Exchange notes that the total depreciation expense is different from the total for the Exchange's recent Trading Permit filing (SR-PEARL-2021-32) 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.

provide the access services associated with the Proposed Access Fees to its Members and their customers. The Exchange did not allocate all of the depreciation and amortization expense toward the cost of providing the access services associated with the Proposed Access Fees, only the portion which the Exchange identified as being specifically mapped to providing the access services associated with the Proposed Access Fees, approximately 2.25% of the total applicable depreciation and amortization expense, as these access services would not be possible without relying on such. The Exchange believes this allocation is reasonable because it represents the 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.

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, NJ office, as well as various related costs, such as physical security, property management fees, property taxes, and utilities. The Exchange operates its Network Operations Center ("NOC") and Security Operations Center ("SOC") from its Princeton, New Jersey office location. A centralized office space is required to house the staff that operates and supports the network. The Exchange currently has approximately 150 employees. Approximately two-thirds of the Exchange's staff are in the Technology department, and the majority of those staff have some role in the operation and performance of the access services associated with the Proposed

Access Fees. Without this office space, the Exchange would not be able to operate and support the network and provide the access services associated with the Proposed Access Fees to its Members and their customers. Accordingly, the Exchange believes it is reasonable to allocate the identified portion of its occupancy expense because such amount represents the Exchange's actual cost to house the equipment and personnel who operate and support the Exchange's network infrastructure and the access services associated with the Proposed Access 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.

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

Accordingly, based on the facts and circumstances presented, the Exchange believes that its provision of the access services associated with the Proposed Access Fees will not result

in excessive pricing or supra-competitive profit. To illustrate, on a going-forward, fully-annualized basis, the Exchange projects that its annualized revenue for providing the access services associated with the Proposed Access Fees would be approximately \$1,476,000 per annum, based on a recent billing cycle. The Exchange projects that its annualized expense for providing the access services associated with the Proposed Access Fees would be approximately \$897,084 per annum. Accordingly, on a fully-annualized basis, the Exchange believes its total projected revenue for the providing the access services associated with the Proposed Access Fees will not result in excessive pricing or supra-competitive profit, as the Exchange will make only a 39% profit margin on the Proposed Access Fees (\$1,476,000 in revenue minus \$897,084 in expense = \$578,916 profit per annum). The Exchange notes that the fees charged to each Member for Full Service MEO Ports can vary from month to month depending on the type used and the Non-Transaction Fees Volume-Based Tier that the Member achieves for that month. As such, the revenue projection is not a static number, with monthly Full Service MEO Port fees likely to fluctuate month to month.

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

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

The Exchange believes the proposed changes are reasonable, equitably allocated and not unfairly discriminatory, and do not result in a "supra-competitive"³¹ profit. Of note, the Guidance defines "supra-competitive profit" as profits that exceed the profits that can be obtained in a competitive market.³² With the proposed changes, the Exchange anticipates it will have a profit margin of 39% for its Full Service MEO Ports. Based on the 2019 Audited

³¹ See supra note 23.

³² See id.

Financial Statements of the competing options exchanges (since the 2020 Audited Financial Statements will likely not become publicly available until early July 2021, after the Exchange has submitted this filing), the Exchange's profit margin is well below the operating profit margins of other competing exchanges. For example, Nasdaq ISE, LLC's ("ISE") operating profit margin, for all of 2019, was 83%. Nasdaq PHLX LLC's ("PHLX") operating profit margin, for all of 2019, was 67%.

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

The Exchange believes that the proposed 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,³³ 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,

³³ See supra note 9.

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 Purge Port fees in 2018.³⁴ 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).

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

The Guidance provides that in determining whether a proposed fee is constrained by significant competitive forces, the Commission will consider whether there are reasonable substitutes for the product or service that is the subject of a proposed fee. As described below, the Exchange believes substitute products and services are available to market participants, including, among other things, other options exchanges that market participants may connect to in lieu of the Exchange, indirect connectivity to the Exchange via a third-party reseller and/or trading of any options products, including proprietary products, in the Over-the-Counter (“OTC”) markets.

³⁴ See supra note 10.

There is also no regulatory requirement that any market participant connect to any one options exchange, that any market participant connect at a particular connection speed or act in a particular capacity on the Exchange, or trade any particular product offered on an exchange. Moreover, membership is not a requirement to participate on the Exchange. A market participant may submit orders to the Exchange via a Sponsored User.³⁵ Indeed, the Exchange is unaware of any one options exchange whose membership includes every registered broker-dealer. Based on a recent analysis conducted by the Cboe Exchange, Inc. (“Cboe”), as of October 21, 2020, only three (3) of the broker-dealers, out of approximately 250 broker-dealers, were members of at least one exchange that lists options for trading and were members of all 16 options exchanges.³⁶ Additionally, the Cboe Fee Filing found that several broker-dealers were members of only a single exchange that lists options for trading and that the number of members at each exchange that trades options varies greatly.³⁷

4. 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

³⁵ See Exchange Rule 210. The Sponsored User is subject to the fees, if any, of the Sponsoring Member. The Exchange notes that the Sponsoring Member is not required to publicize, let alone justify or file with the Commission its fees, and as such could charge the Sponsored User any fees it deems appropriate, even if such fees would otherwise be considered supra-competitive, or otherwise potentially unreasonable or uncompetitive.

³⁶ See Securities Exchange Act Release No. 90333 (November 4, 2020), 85 FR 71666 (November 10, 2020) (SR-CBOE-2020-105) (the “Cboe Fee Filing”). The Cboe Fee Filing cited to the October 2020 Active Broker Dealer Report, provided by the Commission’s Office of Managing Executive, on October 8, 2020.

³⁷ Id.

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 16% market share. Therefore, no exchange possesses significant pricing power in the execution of multiply-listed equity and ETF options order flow. As of June 30, 2021, the Exchange had only a 5.31% market share of the U.S. equity options industry for the month of June 2021.³⁸ The Exchange is not aware of any evidence that a market share of approximately 5-6% 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.

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

No written comments were either solicited or received.

6. Extension of Time Period for Commission Action

Not applicable.

7. Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2)

Pursuant to Section 19(b)(3)(A)(ii) of the Act, and Rule 19b-4(f)(2) thereunder the Exchange has designated this proposal as establishing or changing a due, fee, or other charge

³⁸ See “The market at a glance”, available at www.miaxoptions.com (last visited June 30, 2021).

imposed on any person, whether or not the person is a member of the self-regulatory organization, which renders the proposed rule change effective upon filing.

8. Proposed Rule Change Based on Rules of Another Self-Regulatory Organization or of the Commission

The proposed rule change is not based upon the rules of any other exchange.

9. Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act

Not applicable.

10. Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing and Settlement Supervision Act

Not applicable.

11. Exhibits

1. Notice of proposed rule for publication in the Federal Register.

5. Applicable section of the Fee Schedule.

EXHIBIT 1

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34- ; File No. SR-PEARL-2021-33)

July ____, 2021

Self-Regulatory Organizations: Notice of Filing and Immediate Effectiveness of a Proposed Rule Change by MIAX PEARL, LLC to Amend the MIAX Pearl Options Fee Schedule

Pursuant to the provisions of 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 July ____, 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.

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

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.

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 (the “Proposed Access Fees”), which allow Members⁴ to submit electronic orders in all products to the Exchange. The Exchange currently offers different options of MEO Ports depending on the services required by the Member, including a Full Service MEO Port-Bulk,⁵ a Full Service MEO Port-Single,⁶ and a Limited Service MEO Port.⁷ A Member may be allocated two (2) Full-Service MEO Ports of either type per matching engine⁸ and may request

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

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

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

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

⁸ “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

Limited Service MEO Ports for which MIAX Pearl will assess Members Limited Service MEO Port fees per Matching Engine based on the table above. The two (2) Full-Service MEO Ports that may be allocated per matching engine to a Member may consist of: (a) two (2) Full Service MEO Ports – Bulk; (b) two (2) Full Service MEO Ports – Single; or (c) one (1) Full Service MEO Port – Bulk and one (1) Full Service MEO Port - Single.

Unlike other options exchanges that provide similar port functionality and charge fees on a per port basis,⁹ the Exchange offers Full Service MEO Ports as a package and provides Members with the option to receive up to two Full Service MEO Ports (described above) per matching engine to which 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, as described below. For illustrative purposes and as described in more detail below, 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. For example, assuming a Member connects to all twelve (12) matching engines during a month, with two Full Service

to one single option root symbol. A particular root symbol may only be assigned to a single designated Matching Engine. A particular root symbol may not be assigned to multiple Matching Engines. See the Definitions Section of the Fee Schedule.

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

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 Purge Port fees in 2018.¹⁰ The Exchange now proposes to increase the Full Service MEO Port fees as described below, 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, with two Full Service MEO Ports per matching engine, this would result in a cost of \$416.67 per Full Service MEO Port (\$10,000 divided by 24).

The Exchange assesses Members Full Service MEO Port Fees, either for a Full Service MEO Port - Bulk and/or for a Full Service MEO Port - Single, based upon the monthly total volume executed by a Member and its Affiliates¹¹ on the Exchange across all origin types, not

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

¹¹ “Affiliate” means (i) an affiliate of a Member of at least 75% common ownership between the firms as reflected on each firm’s Form BD, Schedule A, or (ii) the Appointed Market Maker of an Appointed EEM (or, conversely, the Appointed EEM of an Appointed Market Maker). An “Appointed Market Maker” is a MIAX Pearl Market Maker (who does not otherwise have a corporate affiliation based upon common ownership with an EEM) that has been appointed by an EEM and an “Appointed EEM” is an EEM (who does not otherwise have a corporate affiliation based upon common ownership with a MIAX Pearl Market Maker) that has been appointed by a MIAX Pearl Market Maker, pursuant to the following process. A MIAX Pearl Market Maker appoints an EEM and an EEM appoints a MIAX Pearl Market Maker, for the purposes of the Fee Schedule, by each completing and sending an executed Volume Aggregation Request 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

including Excluded Contracts¹², as compared to the Total Consolidated Volume (“TCV”),¹³ in all MIAX Pearl-listed options. The Exchange adopted a tier-based fee structure based upon the volume-based tiers detailed in the definition of “Non-Transaction Fees Volume-Based Tiers” described in the Definitions section of the Fee Schedule. The Exchange assesses these and other monthly Port fees on Members in each month the market participant is credentialed to use a Port in the production environment.

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

- (i) if its volume falls within the parameters of Tier 1 of the Non-Transaction Fees Volume-Based Tiers, or volume up to 0.30%, \$3,000;
- (ii) if its volume falls within the parameters of Tier 2 of the Non-Transaction Fees Volume-Based Tiers, or volume above 0.30% up to 0.60%, \$4,500; and
- (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:

Member indicating that the appointment has been terminated. Designations will become operative on the first business day of the effective month and may not be terminated prior to the end of the month. Execution data and reports will be provided to both parties. See the Definitions Section of the Fee Schedule.

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

¹³ “TCV” means total consolidated volume calculated as the total national volume in those classes listed on MIAX Pearl for the month for which the fees apply, excluding consolidated volume executed during the period of time in which the Exchange experiences an Exchange System Disruption (solely in the option classes of the affected Matching Engine). See the Definitions Section of the Fee Schedule.

- (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 Makers¹⁴ or high frequency trading firms utilize these ports (typically coupled with 10Gb ULL connectivity) because they transact in significantly higher amounts of messages being sent to and from the Exchange, versus FIX port users, who are traditionally customers sending only orders to the Exchange (typically coupled with 1Gb connectivity). The different types of ports cater to the different types of Exchange Memberships and different capabilities of the various Exchange Members. Certain Members need ports and connections that can handle using far more of the network's capacity for message throughput, risk protections, and the amount of information that has to be assessed. 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 first adopted in 2018¹⁵ and 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 MEI Ports in a similar fashion as the Exchange charges for its MEO Ports – generally, the more active user the Member (i.e., the greater number / greater national ADV of classes assigned to quote on MIAX and MIAX Emerald), the higher the MEI Port fee.¹⁶ This concept is not new or novel. The Exchange

¹⁴ "Market Maker" means a Member registered with the Exchange for the purpose of making markets in options contracts traded on the Exchange and that is vested with the rights and responsibilities specified in Chapter VI of Exchange Rules. See the Definitions Section of the Fee Schedule and Exchange Rule 100.

¹⁵ See supra note 10.

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

also notes that the proposed increased Full Service MEO Port fees are in line with, or cheaper than, the similar port fees or similar membership fees charged by other options exchanges.¹⁷

The Exchange has historically undercharged for Full Service MEO Ports as compared to other options exchanges¹⁸ 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 proposed monthly fee increases for Full Service MEO Ports would bring the Exchange's fees more in line with that of other options exchanges, while maintaining a competitive fee structure for Full Service MEO Ports.

2. Statutory Basis

The Exchange believes that its proposal to amend its Fee Schedule is consistent with Section 6(b) of the Act¹⁹ in general, and furthers the objectives of Section 6(b)(4) of the Act²⁰ in particular, in that it is an equitable allocation of reasonable dues, fees and other charges among its members and issuers and other persons using its facilities. The Exchange also believes the proposal furthers the objectives of Section 6(b)(5) of the Act in that it is designed to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general to protect investors and the public interest and is not designed to permit unfair discrimination between customers, issuers, brokers and dealers.

¹⁷ See supra note 9.

¹⁸ See id.

¹⁹ 15 U.S.C. 78f(b).

²⁰ 15 U.S.C. 78f(b)(4) and (5).

The Exchange believes that exchanges, in setting fees of all types, should meet very high standards of transparency to demonstrate why each new fee or fee increase meets the requirements of the Act that fees be reasonable, equitably allocated, not unfairly discriminatory, and not create an undue burden on competition among market participants. The Exchange believes this high standard is especially important when an exchange imposes various access fees for market participants to access an exchange's marketplace. The Exchange deems the Full Service MEO Port fees to be access fees. It records these fees as part of its "Access Fees" revenue in its financial statements. The Exchange believes that it is important to demonstrate that these fees are based on its costs and reasonable business needs. The Exchange believes the Proposed Access Fees will allow the Exchange to offset expense the Exchange has and will incur, and that the Exchange is providing sufficient transparency (as described below) into how the Exchange determined to charge such fees. Accordingly, the Exchange is providing an analysis of its revenues, costs, and profitability associated with the Proposed Access Fees. This analysis includes information regarding its methodology for determining the costs and revenues associated with the Proposed Access Fees.

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

Exchange's rationale for determining that it was reasonable to allocate certain expenses described in this filing towards the cost to the Exchange to provide the access services associated with the Proposed Access Fees.

In order to determine the Exchange's projected revenues associated with the Proposed Access Fees, the Exchange analyzed the number of Members currently utilizing the 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 first two quarters of 2021, the Exchange believes its 2020 Audited Unconsolidated Financial Statement is not useful for analyzing the reasonableness of the total annual revenue and costs associated with the Proposed Access Fees. Accordingly, the Exchange believes it is more appropriate to analyze the Proposed Access Fees utilizing its 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 process utilized by the Exchange's affiliate, MIAX Emerald, in a filing recently noticed by the Commission when MIAX Emerald adopted its own MEI Port fees.²¹

* * * * *

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").²² On May 21, 2019, the Commission issued the Staff Guidance on SRO Rule Filings Relating to Fees.²³ 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

²¹ 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).

²² 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).

²³ 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").

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.

* * * * *

As of June 30, 2021, the Exchange had only a 5.31% market share of the U.S. equity options industry for the month of June 2021.²⁴ The Exchange is not aware of any evidence that a market share of approximately 5-6% 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.

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

²⁴ See “The market at a glance”, available at www.miaxoptions.com (last visited June 30, 2021).

Exchange's affiliate, MIAX Emerald, noted in a recent filing that once MIAX Emerald issued a notice that it was instituting MEI Port fees, among other non-transaction fees, one Member dropped its access to the Exchange as a result of those fees.²⁵ Accordingly, these examples show that if an exchange sets too high of a fee for connectivity and/or other non-transaction fees for its relevant marketplace, market participants can choose to drop their access to such exchange.

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

In order to provide more detail and to quantify the Exchange's costs associated with providing access to the Exchange in general, the Exchange notes that there are material costs associated with providing the infrastructure and headcount to fully-support access to the Exchange. The Exchange incurs technology expense related to establishing and maintaining Information Security services, enhanced network monitoring and customer reporting, as well as Regulation SCI mandated processes, associated with its network technology. While some of 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

²⁵ See supra note 21.

Exchange may require the purchase of additional hardware to support those Members as well as enhanced monitoring and reporting of customer performance that the Exchange and its affiliates provide. Further, as the total number Members increases, the Exchange and its affiliates may need to increase their data center footprint and consume more power, resulting in increased costs charged by their third-party data center provider. Accordingly, the cost to the Exchange and its affiliates to provide access to its Members is not fixed. The Exchange believes the Proposed Access Fees are reasonable in order to offset a portion of the costs to the Exchange associated with providing access to its network infrastructure.

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

The Exchange believes that the Proposed Access Fees are fair and reasonable because they will not result in excessive pricing or supra-competitive profit, when comparing the total annual expense that the Exchange projects to incur in connection with providing these access services versus the total annual revenue that the Exchange projects to collect in connection with services associated with the Proposed Access Fees. For 2021²⁶, the total annual expense for providing the access services associated with the Proposed Access Fees for the Exchange is projected to be approximately \$897,084. The \$897,084 in projected total annual expense is comprised of the following, all of which are directly related to the access services associated 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

²⁶ The Exchange has not yet finalized its 2021 year end results.

internal costs of the Exchange to provide the services associated with the Proposed Access Fees.²⁷ 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.²⁸ 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 every expense item in the Exchange's general expense ledger (this includes over 150 separate and distinct expense items) to determine whether each such expense relates to the access services associated with the Proposed Access Fees, and, if such expense did so relate, what portion (or percentage) of such expense actually supports those services, and thus bears a relationship that is, "in nature and closeness," directly related to those services. The sum of all such portions of expenses represents the total cost of the Exchange to provide access services associated with the Proposed Access Fees.

²⁷ 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.

²⁸ 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.

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")²⁹, which supports connectivity and feeds for the entire U.S. options industry; (4) various other services providers (including Thompson Reuters, NYSE, Nasdaq, and Internap), which provide content, connectivity services, and infrastructure services for critical components of options connectivity and network services; and (5) various other hardware and software providers (including Dell and Cisco, which support the production environment in which Members connect to the network to trade, receive market data, etc.).

For clarity, only a portion of all fees paid to such third-parties is included in the third-party expense herein, and no expense amount is allocated twice. Accordingly, the Exchange does not allocate its entire information technology and communication costs to the access services associated with the Proposed Access Fees. Further, the Exchange notes that, with respect to the MIAX Pearl expenses included herein, those expenses only cover the MIAX

²⁹ In fact, on October 22, 2019, the Exchange was notified by SFTI that it is again raising its fees charged to the Exchange by approximately 11%, without having to show that such fee change complies with the Act by being reasonable, equitably allocated, and not unfairly discriminatory. It is unfathomable to the Exchange that, given the critical nature of the infrastructure services provided by SFTI, that its fees are not required to be rule-filed with the Commission pursuant to Section 19(b)(1) of the Act and Rule 19b-4 thereunder. See 15 U.S.C. 78s(b)(1) and 17 CFR 240.19b-4, respectively.

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.

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.

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.

The Exchange believes it is reasonable to allocate the identified portions of the SFTI expense and various other service providers' (including Thompson Reuters, NYSE, Nasdaq, and Internap) expense because those entities provide connectivity and feeds for the entire U.S. options industry, as well as the content, connectivity services, and infrastructure services for critical components of the network. Without these services from SFTI and various other service providers, the Exchange would not be able to operate and support the network and provide access to its Members and their customers. The Exchange did not allocate all of the SFTI and other service providers' expense toward the cost of providing the access services associated with the Proposed Access Fees, only the portions which the Exchange identified as being specifically mapped to providing the access services associated with the Proposed Access Fees, approximately 0.90% of the total applicable SFTI and other service providers' expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the access services associated with the Proposed Access Fees.

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.

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 (including an increase as a result of the higher determinism project); (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.

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.

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 \$2,864,716³⁰ total projected expense for depreciation and amortization. The Exchange believes it is reasonable to allocate the identified portion of such expense because such expense includes the actual cost of the computer equipment, such as dedicated servers, computers, laptops, monitors, information security appliances and storage, and network switching infrastructure equipment, including switches and taps that were purchased to operate and support the network and provide the access services associated with the Proposed Access Fees. Without this equipment, the Exchange would not be able to operate the network and provide the access services associated with the Proposed Access Fees to its Members and their customers. The Exchange did not allocate all of the depreciation and amortization expense toward the cost of providing the access services associated with the Proposed Access Fees, only the portion which the Exchange identified as being specifically mapped to providing the access services associated with the Proposed Access Fees, approximately 2.25% of the total applicable depreciation and amortization expense, as these access services would not be possible without relying on such. The Exchange believes this allocation is reasonable because it represents the

³⁰ The Exchange notes that the total depreciation expense is different from the total for the Exchange's recent Trading Permit filing (SR-PEARL-2021-32) because the Exchange factors in the depreciation of its own internally developed software when assessing costs for Full Service MEO Ports, resulting in a higher depreciation expense number in this filing.

Exchange's actual cost to provide the access services associated with the Proposed Access Fees, and not any other service, as supported by its cost review.

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, NJ office, as well as various related costs, such as physical security, property management fees, property taxes, and utilities. The Exchange operates its Network Operations Center ("NOC") and Security Operations Center ("SOC") from its Princeton, New Jersey office location. A centralized office space is required to house the staff that operates and supports the network. The Exchange currently has approximately 150 employees. Approximately two-thirds of the Exchange's staff are in the Technology department, and the majority of those staff have some role in the operation and performance of the access services associated with the Proposed Access Fees. Without this office space, the Exchange would not be able to operate and support the network and provide the access services associated with the Proposed Access Fees to its Members and their customers. Accordingly, the Exchange believes it is reasonable to allocate the identified portion of its occupancy expense because such amount represents the Exchange's actual cost to house the equipment and personnel who operate and support the Exchange's network infrastructure and the access services associated with the Proposed Access 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.

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

Accordingly, based on the facts and circumstances presented, the Exchange believes that its provision of the access services associated with the Proposed Access Fees will not result in excessive pricing or supra-competitive profit. To illustrate, on a going-forward, fully-annualized basis, the Exchange projects that its annualized revenue for providing the access services associated with the Proposed Access Fees would be approximately \$1,476,000 per annum, based on a recent billing cycle. The Exchange projects that its annualized expense for providing the access services associated with the Proposed Access Fees would be approximately \$897,084 per annum. Accordingly, on a fully-annualized basis, the Exchange believes its total projected revenue for the providing the access services associated with the Proposed Access Fees will not result in excessive pricing or supra-competitive profit, as the Exchange will make only a 39% profit margin on the Proposed Access Fees (\$1,476,000 in

revenue minus \$897,084 in expense = \$578,916 profit per annum). The Exchange notes that the fees charged to each Member for Full Service MEO Ports can vary from month to month depending on the type used and the Non-Transaction Fees Volume-Based Tier that the Member achieves for that month. As such, the revenue projection is not a static number, with monthly Full Service MEO Port fees likely to fluctuate month to month.

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

The Exchange believes it is reasonable, equitable and not unfairly discriminatory to allocate the respective percentages of each expense category described above towards the total cost to the Exchange of operating and supporting the network, including providing the access services associated with the Proposed Access Fees because the Exchange performed a line-by-line item analysis of all the expenses of the Exchange, and has determined the expenses that directly relate to providing access to the Exchange. Further, the Exchange notes that, without the specific third-party and internal items listed above, the Exchange would not be able to provide the access services associated with the Proposed Access Fees to its Members and their customers. Each of these expense items, including physical hardware, software, employee compensation and benefits, occupancy costs, and the depreciation and amortization of

equipment, have been identified through a line-by-line item analysis to be integral to providing access services. The Proposed Access Fees are intended to recover the Exchange's costs of providing access to Exchange Systems. Accordingly, the Exchange believes that the Proposed Access Fees are fair and reasonable because they do not result in excessive pricing or supra-competitive profit, when comparing the actual costs to the Exchange versus the projected annual revenue from the Proposed Access Fees.

The Exchange believes the proposed changes are reasonable, equitably allocated and not unfairly discriminatory, and do not result in a "supra-competitive"³¹ profit. Of note, the Guidance defines "supra-competitive profit" as profits that exceed the profits that can be obtained in a competitive market.³² With the proposed changes, the Exchange anticipates it will have a profit margin of 39% for its Full Service MEO Ports. Based on the 2019 Audited Financial Statements of the competing options exchanges (since the 2020 Audited Financial Statements will likely not become publicly available until early July 2021, after the Exchange has submitted this filing), the Exchange's profit margin is well below the operating profit margins of other competing exchanges. For example, Nasdaq ISE, LLC's ("ISE") operating profit margin, for all of 2019, was 83%. Nasdaq PHLX LLC's ("PHLX") operating profit margin, for all of 2019, was 67%.

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

³¹ See supra note 23.

³² See id.

The Exchange believes that the proposed fees are reasonable, equitably allocated and not unfairly discriminatory because, for the flat fee, the Exchange provides each Member two (2) Full Service MEO Ports for each matching engine to which that Member is connected. Unlike other options exchanges that provide similar port functionality and charge fees on a per port basis,³³ 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 Purge Port fees in 2018.³⁴ 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).

³³ See supra note 9.

³⁴ See supra note 10.

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

The Guidance provides that in determining whether a proposed fee is constrained by significant competitive forces, the Commission will consider whether there are reasonable substitutes for the product or service that is the subject of a proposed fee. As described below, the Exchange believes substitute products and services are available to market participants, including, among other things, other options exchanges that market participants may connect to in lieu of the Exchange, indirect connectivity to the Exchange via a third-party reseller and/or trading of any options products, including proprietary products, in the Over-the-Counter (“OTC”) markets.

There is also no regulatory requirement that any market participant connect to any one options exchange, that any market participant connect at a particular connection speed or act in a particular capacity on the Exchange, or trade any particular product offered on an exchange. Moreover, membership is not a requirement to participate on the Exchange. A market participant may submit orders to the Exchange via a Sponsored User.³⁵ Indeed, the Exchange is unaware of any one options exchange whose membership includes every registered broker-dealer. Based on a recent analysis conducted by the Cboe Exchange, Inc. (“Cboe”), as of October 21, 2020, only

³⁵ See Exchange Rule 210. The Sponsored User is subject to the fees, if any, of the Sponsoring Member. The Exchange notes that the Sponsoring Member is not required to publicize, let alone justify or file with the Commission its fees, and as such could charge the Sponsored User any fees it deems appropriate, even if such fees would otherwise be considered supra-competitive, or otherwise potentially unreasonable or uncompetitive.

three (3) of the broker-dealers, out of approximately 250 broker-dealers, were members of at least one exchange that lists options for trading and were members of all 16 options exchanges.³⁶ Additionally, the Cboe Fee Filing found that several broker-dealers were members of only a single exchange that lists options for trading and that the number of members at each exchange that trades options varies greatly.³⁷

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,

³⁶ See Securities Exchange Act Release No. 90333 (November 4, 2020), 85 FR 71666 (November 10, 2020) (SR-CBOE-2020-105) (the “Cboe Fee Filing”). The Cboe Fee Filing cited to the October 2020 Active Broker Dealer Report, provided by the Commission’s Office of Managing Executive, on October 8, 2020.

³⁷ Id.

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 16% market share. Therefore, no exchange possesses significant pricing power in the execution of multiply-listed equity and ETF options order flow. As of June 30, 2021, the Exchange had only a 5.31% market share of the U.S. equity options industry for the month of June 2021.³⁸ The Exchange is not aware of any evidence that a market share of approximately 5-6% 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

³⁸ See "The market at a glance", available at www.miaxoptions.com (last visited June 30, 2021).

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

Written comments were neither solicited nor received.

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

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)(ii) of the Act,³⁹ and Rule 19b-4(f)(2)⁴⁰ thereunder. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act.

Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>);

or

³⁹ 15 U.S.C. 78s(b)(3)(A)(ii).

⁴⁰ 17 CFR 240.19b-4(f)(2).

- Send an e-mail [to rule-comments@sec.gov](mailto:to_rule-comments@sec.gov). Please include File Number SR-PEARL-2021-33 on the subject line.

Paper comments:

- Send paper comments in triplicate to Vanessa Countryman, Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-PEARL-2021-33. 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 Web site (<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; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly.

All submissions should refer to File Number SR-PEARL-2021-33 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.⁴¹

Vanessa Countryman
Secretary

⁴¹ 17 CFR 200.30-3(a)(12).

Exhibit 5

New text is underlined;

Deleted text is in [brackets]

MIAX PEARL Options Fee Schedule

* * * * *

5) System Connectivity Fees

a) - c) (No change).

d) **Port Fees**

MIAX Pearl will assess monthly Port Fees on Members in each month the Member is credentialed to use a Port in the production environment. The Port Fees assessable for FIX Ports, Limited Service MEO Ports, Purge Ports, CTD Ports and FXD Ports are as set forth in the table below. The Port Fees assessable for Full Service MEO Ports, both Bulk and/or Single, are based upon the Non-Transaction Fees Volume-Based Tiers, as set forth in the table below. MIAX Pearl has primary and secondary data centers and a disaster recovery center. Each Port provides access to all three data centers for a single fee. Unless otherwise specifically set forth in the Fee Schedule, the Port Fees include the information communicated through the Port at no additional charge.

Type of Port	Monthly Port Fees Includes Connectivity to the Primary, Secondary and Disaster Recovery Data Centers
FIX Port [^]	(No change).
Full Service MEO Port - Bulk [*]	Tier 1 [\$3,000] <u>\$5,000</u> Tier 2 [\$4,500] <u>\$7,500</u> Tier 3 [\$5,000] <u>\$10,000</u>
Full Service MEO Port - Single [*]	Tier 1 [\$2,000] <u>\$2,500</u> Tier 2 [\$3,375] <u>\$3,500</u> Tier 3 [\$3,750] <u>\$4,500</u>
Limited Service MEO Port ^{**}	(No change).
MEO Purge Port ^{***}	\$7,500
CTD Port [^]	(No change).
FXD Port [^]	(No change).

* * * * *