

Required fields are shown with yellow backgrounds and asterisks.

Filing by MIAX PEARL, LLC
Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934

Initial *	Amendment *	Withdrawal	Section 19(b)(2) *	Section 19(b)(3)(A) *	Section 19(b)(3)(B) *
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Rule		
Pilot	Extension of Time Period for Commission Action *	Date Expires *	<input type="checkbox"/> 19b-4(f)(1)	<input type="checkbox"/> 19b-4(f)(4)	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<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	Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934
Section 806(e)(1) *	Section 806(e)(2) *
<input type="checkbox"/>	<input type="checkbox"/>
	Section 3C(b)(2) *
	<input type="checkbox"/>

Exhibit 2 Sent As Paper Document	Exhibit 3 Sent As Paper Document
<input type="checkbox"/>	<input type="checkbox"/>

Description

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

Proposal to amend the Fee Schedule to amend the cap on additional Limited 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 * Michael	Last Name * Slade
Title * AVP, Associate Counsel	
E-mail * mslade@miami-holdings.com	
Telephone * (609) 897-8499	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 05/10/2021	AVP, Associate Counsel
By Michael Slade	
(Name *)	

mslade@miami-holdings.com

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 EFFF 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 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 remove the cap on the number of additional Limited Service MIAX Express Order Interface (“MEO”) Ports (defined below) available to Members.³ The Exchange does not propose to amend the fees for additional Limited Service MEO 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 proposed amended 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 of the Exchange 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.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ The term “Member” means an individual or organization that is registered with the Exchange pursuant to Chapter II of these Rules for purposes of trading on the Exchange as an “Electronic Exchange Member” or “Market Maker.” Members are deemed “members” under the Exchange Act. See Exchange Rule 100.

Questions and comments on the proposed rule change may be directed to Michael Slade, Assistant Vice President, Associate Counsel, at (609) 897-8499.

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

a. Purpose

The Exchange proposes to amend Section 5)d) of the Fee Schedule to remove the cap on the number of additional Limited Service MEO Ports available to Members. The Exchange does not propose to amend the fees charged for any additional Limited Service MEO Ports purchased by Members.

The Exchange initially filed this proposal to remove the cap on the number of additional Limited Service MEO Ports available to Members on April 9, 2021.⁴ On April 22, 2021, the Exchange withdrew the First Proposed Rule Change and refiled this proposal (without increasing the actual fee amounts) to provide further clarification regarding the Exchange’s revenues, costs, and profitability any time more Limited Service MEO Ports become available, in general, (including information regarding the Exchange’s methodology for determining the costs and revenues for additional Limited Service MEO Ports).⁵ On May 3, 2021, the Exchange withdrew the Second Proposed Rule Change and refiled this proposal to further clarify its cost methodology.⁶ On May 10, 2021, the Exchange withdrew the Third Proposed Rule Change and refiled this proposal.

⁴ See SR-PEARL-2021-17 (the “First Proposed Rule Change”).

⁵ See SR-PEARL-2021-20 (the “Second Proposed Rule Change”).

⁶ See SR-PEARL-2021-22 (the “Third Proposed Rule Change”).

Currently, the Exchange offers different options of MEO Ports depending on the services required by an Exchange Member, including a Full Service MEO Port-Bulk,⁷ a Full Service MEO Port-Single,⁸ and a Limited Service MEO Port.⁹ A Member may be allocated two (2) Full-Service MEO Ports of either type, Bulk and/or Single, per Matching Engine,¹⁰ and up to eight (8) Limited Service MEO Ports, per Matching Engine. The two (2) Full-Service MEO Ports that may be allocated per Matching Engine to a Member currently may consist of: (a) two (2) Full Service MEO Ports – Bulk; or (b) two (2) Full Service MEO Ports – Single. The Exchange also has a third option, option (c), which permits a Member to have one (1) Full Service MEO Port – Bulk, and one (1) Full Service MEO Port – Single.

The Exchange currently provides Members the first two (2) requested Limited Service MEO Ports free of charge and charges \$200 per month for Limited Service MEO Ports three (3) and four (4), \$300 per month for Limited Service MEO Ports five (5) and six (6), and \$400 per

⁷ “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.

⁸ “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.

⁹ “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.

¹⁰ The term “Matching Engine” means 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 (for example, options on SPY may be processed by one single Matching Engine that is dedicated only to SPY). 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.

month for Limited Service MEO Ports seven (7) to ten (10). These fees have been unchanged since they were adopted in 2018.¹¹

The Exchange originally added the Limited Service MEO Ports to enhance the MEO Port connectivity made available to Members, and subsequently made additional Limited Service MEO Ports available to Members.¹² Limited Service MEO Ports have been well received by Members since their addition. Members are currently limited to purchasing eight (8) additional Limited Service MEO Ports per Matching Engine, for a total of ten (10) per Matching Engine.¹³

The Exchange now proposes to amend Section 5)d) of the Fee Schedule to remove the cap on the number of additional Limited Service MEO Ports that are available to Members. The Exchange notes that no other exchange provides similar caps concerning connectivity and access in their rulebooks or fee schedules.¹⁴ Including the cap on the number of additional Limited

¹¹ See Securities Exchange Act Release No. 83867 (March 13, 2018), 83 FR 12044 (March 19, 2018) (SR-PEARL-2018-07).

¹² See Securities Exchange Act Release Nos. 90812 (December 29, 2020), 86 FR 338 (January 5, 2021) (SR-PEARL-2020-35) (the “Cost Analysis Filing”).

¹³ See Fee Schedule, Section 5)d).

¹⁴ See Cboe Exchange, Inc. Fee Schedule, available at https://cdn.cboe.com/resources/membership/Cboe_FeeSchedule.pdf; Cboe BZX Exchange, Inc. Options Fee Schedule, available at https://www.cboe.com/us/options/membership/fee_schedule/bzx/; Cboe C2 Exchange, Inc. Fee Schedule, available at https://www.cboe.com/us/options/membership/fee_schedule/ctwo/; Cboe EDGX Exchange, Inc. Options Fee Schedule, available at https://www.cboe.com/us/options/membership/fee_schedule/edgx/; The Nasdaq Stock Market LLC Options Fee Schedule, available at <https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/Nasdaq%20Options%207>; Nasdaq PHLX LLC Options Fee Schedule, available at <https://listingcenter.nasdaq.com/rulebook/phlx/rules/Phlx%20Options%207>; NYSE Arca, Inc. Options Fee Schedule, available at https://www.nyse.com/publicdocs/nyse/markets/arca-options/NYSE_Arca_Options_Fee_Schedule.pdf; NYSE American LLC Options Fee Schedule, available at https://www.nyse.com/publicdocs/nyse/markets/american-options/NYSE_American_Options_Fee_Schedule.pdf.

Service MEO Ports in the Fee Schedule unnecessarily hampers the Exchange's ability to adjust access to the Exchange's network in order to ensure that the Exchange meets its obligations under the Act such that access to the Exchange is offered on terms that are not unfairly discriminatory¹⁵ among its Members, as well as to ensure sufficient capacity and headroom in the System.¹⁶ The Exchange monitors the System's performance and makes adjustments to its System based on market conditions and Member demand. Accordingly, the Exchange's obligations under the Act to provide access on terms that are not unfairly discriminatory and market conditions are key drivers of the System's architecture and expansion. Thus the Exchange believes a cap in the Fee Schedule is inconsistent with other exchanges access offerings and not an appropriate mechanism to govern access to the Exchange.

The Exchange also notes that adjusting the amount of available Limited Service MEO Ports does not change on a material basis the overall profitability of Limited Service MEO Ports. Any increase in revenue associated with adding more Limited Service MEO Ports is generally offset by the cost of purchasing and operating such new equipment and providing the services associated with Limited Service MEO Ports. When the Exchange provides fewer Limited Service MEO Ports, its overall expense is lower, but is generally offset by lower revenues associated with Limited Service MEO Ports. The Exchange's recent filing¹⁷ to increase the number of additional Limited Service MEO Ports provides clear evidence of that fact.

¹⁵ See 15 U.S.C. 78f(b)(5).

¹⁶ The term "System" means the automated trading system used by the Exchange for the trading of securities. See Exchange Rule 100.

¹⁷ See supra note 12.

All fees related to MEO Ports shall remain unchanged and Members that voluntarily purchase additional Limited Service MEO Ports will remain subject to the existing monthly fees per Limited Service MEO Port as described in Section 5)d) of the Fee Schedule.

The Exchange proposes to amend the port fee table in Section 5)d) of the Fee Schedule to remove the cap of 10 Limited Service MEO Ports as the total number that Members may purchase. With the proposed changes, the port fee table will read as follows:

Type of Port	Monthly Port Fees
	Includes Connectivity to the Primary, Secondary and Disaster Recovery Data Centers
FIX Port [^]	Per Port: 1 st \$275, 2 nd to 5 th \$175, 6 th or more \$75
Full Service MEO Port - Bulk*	Tier 1 \$3,000 Tier 2 \$4,500 Tier 3 \$5,000
Full Service MEO Port - Single*	Tier 1 \$2,000 Tier 2 \$3,375 Tier 3 \$3,750
Limited Service MEO Port**	1 st to 2 nd \$0, 3 rd to 4 th \$200, 5 th to 6 th \$300, 7 or more \$400
MEO Purge Port***	\$750
CTD Port [^]	Per Port: \$450
FXD Port [^]	Per Port: \$250

The Exchange also proposes to make corresponding changes to the paragraph below the port fee table in Section 5)d) of the Fee Schedule such that, with the proposed amendments, the explanatory paragraph will read as follows:

Members may be allocated two (2) Full-Service MEO Ports of either type per Matching Engine 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 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.

The Exchange notes that it does not propose to make any changes to the MIAX Pearl Equities Fee Schedule as part of this proposal.

b. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act¹⁸ in general, and furthers the objectives of Section 6(b)(5) of the Act¹⁹ in that it is designed to promote just and equitable principles of trade, remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general protect investors and the public interest and is not designed to permit unfair discrimination between customers, issuers, brokers and dealers.

The Exchange believes that its proposal is consistent with the objectives of Section 6(b)(5) of the Act²⁰ because the proposal to remove the cap on the number of additional Limited Service MEO Ports available to Members will apply equally to all Members, regardless of type or size, and will allow the Exchange to offer access to its System on terms that are not unfairly discriminatory. The Exchange does not propose to change the amount of fees charged for additional Limited Service MEO Ports. The existing fees will apply equally to all Members that choose to purchase additional Limited Service MEO Ports, which is a business decision of each Member and not a requirement of the Exchange.

The Exchange believes that its proposal is consistent with the requirements under Section 6(b)(5) of the Exchange Act that the Exchange provide access on terms that are not unfairly discriminatory.²¹ Including the cap on the number of additional Limited Service MEO Ports in the Fee Schedule unnecessarily burdens the Exchange from being able to adjust the connectivity and access to the Exchange's System in order to ensure that the Exchange is able to provide

¹⁸ 15 U.S.C. 78f(b).

¹⁹ 15 U.S.C. 78f(b)(5).

²⁰ Id.

²¹ Id.

access²² to Members on non-discriminatory terms and ensure sufficient capacity and headroom in the System. The Exchange constantly monitors the System's performance based on market conditions and needs to make adjustments based on customer demand. Adjusting the amount of available Limited Service MEO Ports does not change on a material basis the overall profitability of Limited Service MEO Ports. Any increase in revenue associated with adding more Limited Service MEO Ports is generally offset by the cost of purchasing and operating such new equipment and providing the services associated with Limited Service MEO Ports. When the Exchange provides fewer Limited Service MEO Ports, its overall expense is lower, but is generally offset by lower revenues associated with Limited Service MEO Ports. The Exchange's recent filing²³ to increase the number of additional Limited Service MEO Ports provides clear evidence of that fact. Accordingly, the Exchange's obligations under Section 6(b)(5) of the Act²⁴ and market conditions are key drivers of the System's architecture and expansion and thus the Exchange believes a cap in the Fee Schedule is not an appropriate mechanism to govern access to the Exchange.

Other exchanges, like MIAX Pearl, are required to provide access and connectivity pursuant to the same requirements under Section 6(b)(5) of the Act regardless of whether their rules or fee schedules set forth caps on access.²⁵ Further, the Exchange anticipates that it will continue to expand its System and provide Members and other market participants with additional access, including Limited Service MEO Ports, based on customer demand and in response to changing market conditions. The Exchange represents that any expansion or

²² Id.

²³ See supra note 12.

²⁴ See 15 U.S.C. 78f(b).

²⁵ Id.

reduction in the number of additional Limited Service MEO Ports will be conducted in a similar manner that ensures fair access to its System.²⁶ The Exchange will also continuously assess its connectivity options and availability to ensure that they meet the needs of all market participants seeking to access the Exchange.

The Exchange believes that its proposal is consistent with Section 6(b)(4) of the Act because only Members that voluntarily purchase additional Limited Service MEO Ports will be charged the existing monthly fees per port, which has been unchanged since they were adopted in 2018.²⁷ The Exchange does not propose to amend the fees applicable to additional Limited Service MEO Ports, which were filed with the Commission and became effective after notice and public comment.²⁸ As stated above, the Exchange anticipates that in the future, it may provide more Limited Service MEO Ports due to customer demand and increased volatility in the marketplace, which will result in increased message traffic rates across the network.

The Exchange further believes its proposal is consistent with Section 6(b)(4) of the Act in that any time the Exchange makes available more Limited Service MEO Ports, such ports that are voluntarily purchased by Members will not result in the Exchange making a supracompetitive profit. The Exchange recently 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 additional Limited Service MEO Ports, and, if such expense did so relate, what portion (or percentage) of such expense actually supports additional Limited Service MEO

²⁶ Id.

²⁷ See supra note 11.

²⁸ See id.

Ports, and thus bears a relationship that is, “in nature and closeness,” directly related to those services.

To provide continuity with the Exchange’s most recent filing to add two additional Limited Service MEO Ports²⁹ and this filing, the Exchange performed this cost review anticipating that Members may purchase two additional Limited Service MEO Ports.³⁰ The sum of all such portions of expenses represents the total cost of the Exchange to provide services associated with two additional Limited Service MEO Ports pursuant to this proposed rule change. Assuming the costs outlined in this proposal remain unchanged, the Exchange represents that the below cost and revenue analysis would continue to be true should the Exchange make additional Limited Service MEO Ports available beyond the analysis for two additional Limited Service MEO Ports discussed below.³¹

For the avoidance of doubt, none of the expenses included herein relating to the services associated with providing two additional Limited Service MEO Ports also 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 it made certain representations in a previous filing³² regarding its expense allocation for the provision of network connectivity services. The Exchange represents that none of the expenses allocated to the provision of

²⁹ See supra note 12.

³⁰ The cost review in this proposal is based on two additional Limited Service MEO Ports because two additional Limited Service MEO Ports were purchased since the First Proposed Rule Change was submitted on April 12, 2021.

³¹ As stated above, currently the number of available Limited Service MEO Ports does not change on a material basis the overall profitability of Limited Service MEO Ports; however, the Exchange represents that it will continue to monitor its costs and revenue analysis for material changes.

³² See Securities Exchange Act Release No. 87876 (December 31, 2019), 85 FR 757 (January 7, 2020) (SR-PEARL-2019-36).

network connectivity services are also allocated to the provision of ports – that is, there is no overlap of any such expenses that are included in the costs associated with services the Exchange provides for connectivity and for the services the Exchange provides for ports.

Specifically, utilizing 2020³³ expense figures, 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 two additional Limited Service MEO Ports is approximately \$11,611. 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, NJ and Miami, FL to all data center locations; (3) Secure Financial Transaction Infrastructure (“SFTI”)³⁴, which supports network feeds for the entire U.S. options industry; (4) various other services providers (including Thompson Reuters, NYSE, Nasdaq, and Internap), which provide content, network services, and infrastructure services for critical components of options network services; and (5) various other hardware and software providers (including Dell and Cisco, which support the production environment in which Members and non-Members connect to the network to trade, receive market data, etc.). For clarity, only a portion of all fees

³³ The Exchange has not yet finalized its 2020 year-end results. The Exchange is utilizing year-end 2020 expenses because expenses incurred within 2021 have not yet been reviewed and full year 2021 expenses have not yet been fully projected. Therefore, the 2020 year-end expenses are the most accurate to date.

³⁴ 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.

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 services associated with providing two additional Limited Service MEO Ports.

The Exchange believes it is reasonable to allocate such third-party expense described above towards the total cost to the Exchange to provide the services associated with two additional Limited Service MEO Ports. 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 services associated with two additional Limited Service MEO Ports to its Members and non-Members and their customers. The Exchange did not allocate all of the Equinix expense toward the cost of providing the services associated with two additional Limited Service MEO Ports, only that portion which the Exchange identified as being specifically mapped to providing the services associated with two additional Limited Service MEO Ports, approximately 0.5% of the total Equinix expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the services associated with two additional Limited Service MEO Ports, 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 services associated with two additional Limited Service MEO Ports. The Exchange did not allocate all of the Zayo expense toward the cost of providing the services associated with two additional Limited Service MEO Ports, only the portion which the Exchange identified as being specifically mapped to providing two additional Limited Service MEO Ports, approximately 0.4% of the total Zayo expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the services associated with two additional Limited Service MEO Ports, 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, network 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 non-Members and their customers. The Exchange did not allocate all of the SFTI and other service providers' expense toward the cost of providing the services associated with two additional Limited Service MEO Ports, only the portions which the

Exchange identified as being specifically mapped to providing the services associated with two additional Limited Service MEO Ports, approximately 0.5% of the total SFTI and other service providers' expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the services associated with two additional Limited Service MEO Ports.

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 non-Members and their customers. The Exchange did not allocate all of the hardware and software provider expense toward the cost of providing the services associated with the two additional Limited Service MEO Ports, only the portions which the Exchange identified as being specifically mapped to providing the services associated with two additional Limited Service MEO Ports, approximately 0.3% of the total hardware and software provider expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the services associated with two additional Limited Service MEO Ports.

For 2020, total projected internal expense relating to the internal costs of the Exchange to provide the services associated with two additional Limited Service MEO Ports is approximately \$64,797. This includes, but is not limited to, costs associated with: (1) employee compensation and benefits for full-time employees that support the services associated with providing two additional Limited Service MEO Ports, 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 services associated with two additional Limited Service MEO Ports, 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 services associated with two additional Limited Service MEO Ports. 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 services associated with providing two additional Limited Service MEO Ports.

The Exchange believes it is reasonable to allocate such internal expense described above towards the total cost to the Exchange to provide the services associated with two additional Limited Service MEO Ports. In particular, the Exchange's employee compensation and benefits expense relating to providing the services associated with two additional Limited Service MEO Ports is approximately \$50,553, which is only a portion of the \$8,425,565 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 services associated with two additional Limited Service MEO Ports. Without these employees, the Exchange would not be able to provide the services associated with two additional Limited Service MEO Ports to its Members and non-Members and their customers. The Exchange did not allocate all of the employee compensation and benefits expense toward the cost of the services associated with providing two additional Limited Service MEO Ports, only the portions which the Exchange identified as being specifically mapped to providing the services associated with two additional Limited Service MEO Ports, approximately 0.6% of the total employee compensation and benefits expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the services associated with two additional Limited Service MEO Ports, and not any other service, as supported by its cost review.

The Exchange's depreciation and amortization expense relating to providing the services associated with two additional Limited Service MEO Ports is approximately \$12,779, which is only a portion of the \$2,555,832 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 services associated with two additional Limited Service MEO Ports. Without this equipment, the Exchange would not be able to operate the network and provide the services associated with two additional Limited

Service MEO Ports to its Members and non-Members and their customers. The Exchange did not allocate all of the depreciation and amortization expense toward the cost of providing the services associated with two additional Limited Service MEO Ports, only the portion which the Exchange identified as being specifically mapped to providing the services associated with the two additional Limited Service MEO Ports, approximately 0.5% of the total depreciation and amortization expense, as these services would not be possible without relying on such equipment. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the services associated with two additional Limited Service MEO Ports, and not any other service, as supported by its cost review.

The Exchange's occupancy expense relating to providing the services associated with providing two additional Limited Service MEO Ports is approximately \$1,465, which is only a portion of the \$366,245 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 services associated with two additional Limited Service MEO Ports. 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 160 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 services

associated with providing additional Limited Service MEO Ports. Without this office space, the Exchange would not be able to operate and support the network and provide the services associated with two additional Limited Service MEO Ports to its Members and non-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 services associated with two additional Limited Service MEO Ports. The Exchange did not allocate all of the occupancy expense toward the cost of providing the services associated with two additional Limited Service MEO Ports, only the portion which the Exchange identified as being specifically mapped to operating and supporting the network, approximately 0.4% of the total occupancy expense. The Exchange believes this allocation is reasonable because it represents the Exchange's cost to provide the services associated with two additional Limited Service MEO Ports, and not any other service, as supported by its cost review. Accordingly, based on the facts and circumstances presented, the Exchange believes that its provision of the services associated with two additional Limited Service MEO Ports will not result in excessive pricing or supra-competitive profit.

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 services associated with two additional Limited Service MEO Ports 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 operation and support of the network. Further, the Exchange notes that, without the specific third-party and internal items listed above, the Exchange would not be able

to operate and support the network, including providing the services associated with two additional Limited Service MEO Ports to its Members and non-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 the operation and support of the network.

To provide continuity with the Exchange's most recent filing to add two additional Limited Service MEO Ports³⁵ and this filing, the Exchange is basing its projected revenue from additional Limited Service MEO Ports that may be purchased by Members as though seven Members purchased two additional Limited Service MEO Ports each. The Exchange notes that any time it needs to expand its network by making available two additional Limited Service MEO Ports due to increased customer demand and increased volatility in the marketplace, which translates into increased message traffic rates across the network, there is an initial build out cost. The cost to expand the network in this manner is greater than the revenue the Exchange anticipates the additional Limited Service MEO Ports will generate. Specifically, the Exchange estimates it will incur a one-time cost of approximately \$175,000 in capital expenditures ("CapEx") on hardware, software, and other items to expand the network to make available two additional Limited Service MEO Ports. This estimated cost also includes expense associated with providing the necessary engineering and support personnel to transition those Members who wish to acquire two additional Limited Service MEO Ports. Further, the Exchange projects that the annualized revenue from the two additional Limited Service MEO Ports will be approximately \$67,200 (assuming seven Members purchase the two additional Limited

³⁵ See supra note 12.

Service MEO Ports). Therefore, the Exchange's upfront cost in expanding its network to provide its Members with two additional Limited Service MEO Ports – approximately \$175,000 – is significant relative to the anticipated annualized revenue the Exchange expects to bring in from two additional Limited Service MEO Ports – approximately \$67,200. Further, the Exchange anticipates it will incur approximately \$76,408 in annualized ongoing operating expense (“OpEx”) in order to support the expanded network and two additional Limited Service MEO Ports. Thus, even excluding the upfront CapEx of \$175,000, the Exchange is not generating a supra-competitive profit from the provision of two additional Limited Service MEO Ports. In fact, even excluding the one-time CapEx cost of \$175,000, the Exchange anticipates generating an annual loss from the provision of two additional Limited Service MEO Ports of (\$9,208) – that is, \$67,200 in revenue minus \$76,408 in expense equates to a loss of (\$9,208) to support the additional ports annually.

The Exchange also notes that no other exchange has a similar cap on the amount of ports that firms can purchase in their rulebooks or fee schedules and those exchanges have the same requirements under Section 6(b)(5) of the Exchange Act³⁶ as MIAX Pearl.³⁷

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

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended. The proposed rule change will not impose a burden on competition but will benefit competition by enhancing the Exchange's ability to compete by providing additional services to market participants. It is not intended to address a competitive issue. Rather, the proposal is

³⁶ 15 U.S.C. 78f(b)(5).

³⁷ See supra note 14.

intended to allow the Exchange to increase its inventory of MEO Ports to meet increased Member demand and increased message traffic resulting from greater marketplace volatility. The Exchange also does not believe that the proposed rule change will impose a burden on intramarket competition because additional Limited Service MEO Ports are available to all Members on an equal basis. It is a business decision of each Member whether to pay for the additional Limited Service MEO Ports.

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**

The Exchange does not consent to an extension of the time period for Commission action.

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,³⁸ and Rule 19b-4(f)(2) thereunder³⁹ the Exchange has designated this proposal as establishing or changing a due, fee, or other charge 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 on the rules of another self-regulatory organization or of the Commission.

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

³⁸ 15 U.S.C. 78s(b)(3)(A)(ii).

³⁹ 17 CFR 240.19b-4.

Not applicable.

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

Not applicable.

11. Exhibits

1. Completed notice of proposed rule change for publication in the Federal Register.
5. Copy of the applicable section of the Fee Schedule.

EXHIBIT 1

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34- ; File No. SR-PEARL-2021-23)

May ____, 2021

Self-Regulatory Organizations: Notice of Filing and Immediate Effectiveness of a Proposed Rule Change by MIAX Pearl, LLC to Amend the MIAX Pearl 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 May 10, 2021, MIAX Pearl, LLC (“MIAX Pearl” or “Exchange”) filed with the Securities and Exchange Commission (“Commission”) a proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange is filing a proposal to amend the MIAX Pearl Options Fee Schedule (the “Fee Schedule”) to remove the cap on the number of additional Limited Service MIAX Express Order Interface (“MEO”) Ports (defined below) available to Members.³ The Exchange does not propose to amend the fees for additional Limited Service MEO Ports.

The text of the proposed rule change is available on the Exchange’s website at <http://www.miaxoptions.com/rule-filings/pearl> at MIAX Pearl’s principal office, and at the Commission’s Public Reference Room.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ The term “Member” means an individual or organization that is registered with the Exchange pursuant to Chapter II of these Rules for purposes of trading on the Exchange as an “Electronic Exchange Member” or “Market Maker.” Members are deemed “members” under the Exchange Act. See Exchange Rule 100.

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

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

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

1. Purpose

The Exchange proposes to amend Section 5)d) of the Fee Schedule to remove the cap on the number of additional Limited Service MEO Ports available to Members. The Exchange does not propose to amend the fees charged for any additional Limited Service MEO Ports purchased by Members.

The Exchange initially filed this proposal to remove the cap on the number of additional Limited Service MEO Ports available to Members on April 9, 2021.⁴ On April 22, 2021, the Exchange withdrew the First Proposed Rule Change and refiled this proposal (without increasing the actual fee amounts) to provide further clarification regarding the Exchange's revenues, costs, and profitability any time more Limited Service MEO Ports become available, in general, (including information regarding the Exchange's methodology for determining the costs and revenues for additional Limited Service MEO Ports).⁵ On May 3, 2021, the Exchange withdrew the Second Proposed Rule Change and refiled this proposal to further clarify its cost

⁴ See SR-PEARL-2021-17 (the "First Proposed Rule Change").

⁵ See SR-PEARL-2021-20 (the "Second Proposed Rule Change").

methodology.⁶ On May 10, 2021, the Exchange withdrew the Third Proposed Rule Change and refiled this proposal.

Currently, the Exchange offers different options of MEO Ports depending on the services required by an Exchange Member, including a Full Service MEO Port-Bulk,⁷ a Full Service MEO Port-Single,⁸ and a Limited Service MEO Port.⁹ A Member may be allocated two (2) Full-Service MEO Ports of either type, Bulk and/or Single, per Matching Engine,¹⁰ and up to eight (8) Limited Service MEO Ports, per Matching Engine. The two (2) Full-Service MEO Ports that may be allocated per Matching Engine to a Member currently may consist of: (a) two (2) Full Service MEO Ports – Bulk; or (b) two (2) Full Service MEO Ports – Single. The Exchange also has a third option, option (c), which permits a Member to have one (1) Full Service MEO Port – Bulk, and one (1) Full Service MEO Port – Single.

⁶ See SR-PEARL-2021-22 (the “Third Proposed Rule Change”).

⁷ “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.

⁸ “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.

⁹ “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.

¹⁰ The term “Matching Engine” means 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 (for example, options on SPY may be processed by one single Matching Engine that is dedicated only to SPY). 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.

The Exchange currently provides Members the first two (2) requested Limited Service MEO Ports free of charge and charges \$200 per month for Limited Service MEO Ports three (3) and four (4), \$300 per month for Limited Service MEO Ports five (5) and six (6), and \$400 per month for Limited Service MEO Ports seven (7) to ten (10). These fees have been unchanged since they were adopted in 2018.¹¹

The Exchange originally added the Limited Service MEO Ports to enhance the MEO Port connectivity made available to Members, and subsequently made additional Limited Service MEO Ports available to Members.¹² Limited Service MEO Ports have been well received by Members since their addition. Members are currently limited to purchasing eight (8) additional Limited Service MEO Ports per Matching Engine, for a total of ten (10) per Matching Engine.¹³

The Exchange now proposes to amend Section 5)d) of the Fee Schedule to remove the cap on the number of additional Limited Service MEO Ports that are available to Members. The Exchange notes that no other exchange provides similar caps concerning connectivity and access in their rulebooks or fee schedules.¹⁴ Including the cap on the number of additional Limited

¹¹ See Securities Exchange Act Release No. 83867 (March 13, 2018), 83 FR 12044 (March 19, 2018) (SR-PEARL-2018-07).

¹² See Securities Exchange Act Release Nos. 90812 (December 29, 2020), 86 FR 338 (January 5, 2021) (SR-PEARL-2020-35) (the “Cost Analysis Filing”).

¹³ See Fee Schedule, Section 5)d).

¹⁴ See Cboe Exchange, Inc. Fee Schedule, available at https://cdn.cboe.com/resources/membership/Cboe_FeeSchedule.pdf; Cboe BZX Exchange, Inc. Options Fee Schedule, available at https://www.cboe.com/us/options/membership/fee_schedule/bzx/; Cboe C2 Exchange, Inc. Fee Schedule, available at https://www.cboe.com/us/options/membership/fee_schedule/ctwo/; Cboe EDGX Exchange, Inc. Options Fee Schedule, available at https://www.cboe.com/us/options/membership/fee_schedule/edgx/; The Nasdaq Stock Market LLC Options Fee Schedule, available at <https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/Nasdaq%20Options%207>; Nasdaq PHLX LLC Options Fee Schedule, available at <https://listingcenter.nasdaq.com/rulebook/phlx/rules/Phlx%20Options%207>; NYSE Arca,

Service MEO Ports in the Fee Schedule unnecessarily hampers the Exchange's ability to adjust access to the Exchange's network in order to ensure that the Exchange meets its obligations under the Act such that access to the Exchange is offered on terms that are not unfairly discriminatory¹⁵ among its Members, as well as to ensure sufficient capacity and headroom in the System.¹⁶ The Exchange monitors the System's performance and makes adjustments to its System based on market conditions and Member demand. Accordingly, the Exchange's obligations under the Act to provide access on terms that are not unfairly discriminatory and market conditions are key drivers of the System's architecture and expansion. Thus the Exchange believes a cap in the Fee Schedule is inconsistent with other exchanges access offerings and not an appropriate mechanism to govern access to the Exchange.

The Exchange also notes that adjusting the amount of available Limited Service MEO Ports does not change on a material basis the overall profitability of Limited Service MEO Ports. Any increase in revenue associated with adding more Limited Service MEO Ports is generally offset by the cost of purchasing and operating such new equipment and providing the services associated with Limited Service MEO Ports. When the Exchange provides fewer Limited Service MEO Ports, its overall expense is lower, but is generally offset by lower revenues associated with Limited Service MEO Ports. The Exchange's recent filing¹⁷ to increase the number of additional Limited Service MEO Ports provides clear evidence of that fact.

Inc. Options Fee Schedule, available at https://www.nyse.com/publicdocs/nyse/markets/arca-options/NYSE_Arca_Options_Fee_Schedule.pdf; NYSE American LLC Options Fee Schedule, available at https://www.nyse.com/publicdocs/nyse/markets/american-options/NYSE_American_Options_Fee_Schedule.pdf.

¹⁵ See 15 U.S.C. 78f(b)(5).

¹⁶ The term "System" means the automated trading system used by the Exchange for the trading of securities. See Exchange Rule 100.

¹⁷ See supra note 12.

All fees related to MEO Ports shall remain unchanged and Members that voluntarily purchase additional Limited Service MEO Ports will remain subject to the existing monthly fees per Limited Service MEO Port as described in Section 5)d) of the Fee Schedule.

The Exchange proposes to amend the port fee table in Section 5)d) of the Fee Schedule to remove the cap of 10 Limited Service MEO Ports as the total number that Members may purchase. With the proposed changes, the port fee table will read as follows:

Type of Port	Monthly Port Fees
	Includes Connectivity to the Primary, Secondary and Disaster Recovery Data Centers
FIX Port [^]	Per Port: 1 st \$275, 2 nd to 5 th \$175, 6 th or more \$75
Full Service MEO Port - Bulk*	Tier 1 \$3,000 Tier 2 \$4,500 Tier 3 \$5,000
Full Service MEO Port - Single*	Tier 1 \$2,000 Tier 2 \$3,375 Tier 3 \$3,750
Limited Service MEO Port**	1 st to 2 nd \$0, 3 rd to 4 th \$200, 5 th to 6 th \$300, 7 or more \$400
MEO Purge Port***	\$750
CTD Port [^]	Per Port: \$450
FXD Port [^]	Per Port: \$250

The Exchange also proposes to make corresponding changes to the paragraph below the port fee table in Section 5)d) of the Fee Schedule such that, with the proposed amendments, the explanatory paragraph will read as follows:

Members may be allocated two (2) Full-Service MEO Ports of either type per Matching Engine 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 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.

The Exchange notes that it does not propose to make any changes to the MIAX Pearl Equities Fee Schedule as part of this proposal.

2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act¹⁸ in general, and furthers the objectives of Section 6(b)(5) of the Act¹⁹ in that it is designed to promote just and equitable principles of trade, remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general protect investors and the public interest and is not designed to permit unfair discrimination between customers, issuers, brokers and dealers.

The Exchange believes that its proposal is consistent with the objectives of Section 6(b)(5) of the Act²⁰ because the proposal to remove the cap on the number of additional Limited Service MEO Ports available to Members will apply equally to all Members, regardless of type or size, and will allow the Exchange to offer access to its System on terms that are not unfairly discriminatory. The Exchange does not propose to change the amount of fees charged for additional Limited Service MEO Ports. The existing fees will apply equally to all Members that choose to purchase additional Limited Service MEO Ports, which is a business decision of each Member and not a requirement of the Exchange.

The Exchange believes that its proposal is consistent with the requirements under Section 6(b)(5) of the Exchange Act that the Exchange provide access on terms that are not unfairly discriminatory.²¹ Including the cap on the number of additional Limited Service MEO Ports in the Fee Schedule unnecessarily burdens the Exchange from being able to adjust the connectivity and access to the Exchange's System in order to ensure that the Exchange is able to provide

¹⁸ 15 U.S.C. 78f(b).

¹⁹ 15 U.S.C. 78f(b)(5).

²⁰ Id.

²¹ Id.

access²² to Members on non-discriminatory terms and ensure sufficient capacity and headroom in the System. The Exchange constantly monitors the System's performance based on market conditions and needs to make adjustments based on customer demand. Adjusting the amount of available Limited Service MEO Ports does not change on a material basis the overall profitability of Limited Service MEO Ports. Any increase in revenue associated with adding more Limited Service MEO Ports is generally offset by the cost of purchasing and operating such new equipment and providing the services associated with Limited Service MEO Ports. When the Exchange provides fewer Limited Service MEO Ports, its overall expense is lower, but is generally offset by lower revenues associated with Limited Service MEO Ports. The Exchange's recent filing²³ to increase the number of additional Limited Service MEO Ports provides clear evidence of that fact. Accordingly, the Exchange's obligations under Section 6(b)(5) of the Act²⁴ and market conditions are key drivers of the System's architecture and expansion and thus the Exchange believes a cap in the Fee Schedule is not an appropriate mechanism to govern access to the Exchange.

Other exchanges, like MIAX Pearl, are required to provide access and connectivity pursuant to the same requirements under Section 6(b)(5) of the Act regardless of whether their rules or fee schedules set forth caps on access.²⁵ Further, the Exchange anticipates that it will continue to expand its System and provide Members and other market participants with additional access, including Limited Service MEO Ports, based on customer demand and in response to changing market conditions. The Exchange represents that any expansion or

²² Id.

²³ See supra note 12.

²⁴ See 15 U.S.C. 78f(b).

²⁵ Id.

reduction in the number of additional Limited Service MEO Ports will be conducted in a similar manner that ensures fair access to its System.²⁶ The Exchange will also continuously assess its connectivity options and availability to ensure that they meet the needs of all market participants seeking to access the Exchange.

The Exchange believes that its proposal is consistent with Section 6(b)(4) of the Act because only Members that voluntarily purchase additional Limited Service MEO Ports will be charged the existing monthly fees per port, which has been unchanged since they were adopted in 2018.²⁷ The Exchange does not propose to amend the fees applicable to additional Limited Service MEO Ports, which were filed with the Commission and became effective after notice and public comment.²⁸ As stated above, the Exchange anticipates that in the future, it may provide more Limited Service MEO Ports due to customer demand and increased volatility in the marketplace, which will result in increased message traffic rates across the network.

The Exchange further believes its proposal is consistent with Section 6(b)(4) of the Act in that any time the Exchange makes available more Limited Service MEO Ports, such ports that are voluntarily purchased by Members will not result in the Exchange making a supracompetitive profit. The Exchange recently 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 additional Limited Service MEO Ports, and, if such expense did so relate, what portion (or percentage) of such expense actually supports additional Limited Service MEO

²⁶ Id.

²⁷ See supra note 11.

²⁸ See id.

Ports, and thus bears a relationship that is, “in nature and closeness,” directly related to those services.

To provide continuity with the Exchange’s most recent filing to add two additional Limited Service MEO Ports²⁹ and this filing, the Exchange performed this cost review anticipating that Members may purchase two additional Limited Service MEO Ports.³⁰ The sum of all such portions of expenses represents the total cost of the Exchange to provide services associated with two additional Limited Service MEO Ports pursuant to this proposed rule change. Assuming the costs outlined in this proposal remain unchanged, the Exchange represents that the below cost and revenue analysis would continue to be true should the Exchange make additional Limited Service MEO Ports available beyond the analysis for two additional Limited Service MEO Ports discussed below.³¹

For the avoidance of doubt, none of the expenses included herein relating to the services associated with providing two additional Limited Service MEO Ports also 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 it made certain representations in a previous filing³² regarding its expense allocation for the provision of network connectivity services. The Exchange represents that none of the expenses allocated to the provision of

²⁹ See supra note 12.

³⁰ The cost review in this proposal is based on two additional Limited Service MEO Ports because two additional Limited Service MEO Ports were purchased since the First Proposed Rule Change was submitted on April 12, 2021.

³¹ As stated above, currently the number of available Limited Service MEO Ports does not change on a material basis the overall profitability of Limited Service MEO Ports; however, the Exchange represents that it will continue to monitor its costs and revenue analysis for material changes.

³² See Securities Exchange Act Release No. 87876 (December 31, 2019), 85 FR 757 (January 7, 2020) (SR-PEARL-2019-36).

network connectivity services are also allocated to the provision of ports – that is, there is no overlap of any such expenses that are included in the costs associated with services the Exchange provides for connectivity and for the services the Exchange provides for ports.

Specifically, utilizing 2020³³ expense figures, 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 two additional Limited Service MEO Ports is approximately \$11,611. 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, NJ and Miami, FL to all data center locations; (3) Secure Financial Transaction Infrastructure (“SFTI”)³⁴, which supports network feeds for the entire U.S. options industry; (4) various other services providers (including Thompson Reuters, NYSE, Nasdaq, and Internap), which provide content, network services, and infrastructure services for critical components of options network services; and (5) various other hardware and software providers (including Dell and Cisco, which support the production environment in which Members and non-Members connect to the network to trade, receive market data, etc.). For clarity, only a portion of all fees

³³ The Exchange has not yet finalized its 2020 year-end results. The Exchange is utilizing year-end 2020 expenses because expenses incurred within 2021 have not yet been reviewed and full year 2021 expenses have not yet been fully projected. Therefore, the 2020 year-end expenses are the most accurate to date.

³⁴ 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.

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 services associated with providing two additional Limited Service MEO Ports.

The Exchange believes it is reasonable to allocate such third-party expense described above towards the total cost to the Exchange to provide the services associated with two additional Limited Service MEO Ports. 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 services associated with two additional Limited Service MEO Ports to its Members and non-Members and their customers. The Exchange did not allocate all of the Equinix expense toward the cost of providing the services associated with two additional Limited Service MEO Ports, only that portion which the Exchange identified as being specifically mapped to providing the services associated with two additional Limited Service MEO Ports, approximately 0.5% of the total Equinix expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the services associated with two additional Limited Service MEO Ports, 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 services associated with two additional Limited Service MEO Ports. The Exchange did not allocate all of the Zayo expense toward the cost of providing the services associated with two additional Limited Service MEO Ports, only the portion which the Exchange identified as being specifically mapped to providing two additional Limited Service MEO Ports, approximately 0.4% of the total Zayo expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the services associated with two additional Limited Service MEO Ports, 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, network 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 non-Members and their customers. The Exchange did not allocate all of the SFTI and other service providers' expense toward the cost of providing the services associated with two additional Limited Service MEO Ports, only the portions which the Exchange identified as being specifically mapped to providing the services associated with two additional Limited Service MEO Ports, approximately 0.5% of the total SFTI and other service providers' expense. The Exchange believes this allocation is reasonable because it represents

the Exchange's actual cost to provide the services associated with two additional Limited Service MEO Ports.

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 non-Members and their customers. The Exchange did not allocate all of the hardware and software provider expense toward the cost of providing the services associated with the two additional Limited Service MEO Ports, only the portions which the Exchange identified as being specifically mapped to providing the services associated with two additional Limited Service MEO Ports, approximately 0.3% of the total hardware and software provider expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the services associated with two additional Limited Service MEO Ports.

For 2020, total projected internal expense relating to the internal costs of the Exchange to provide the services associated with two additional Limited Service MEO Ports is approximately \$64,797. This includes, but is not limited to, costs associated with: (1) employee compensation and benefits for full-time employees that support the services associated with providing two additional Limited Service MEO Ports, 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 services associated with two additional Limited Service MEO Ports, 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 services associated with two additional Limited Service MEO Ports. 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 services associated with providing two additional Limited Service MEO Ports.

The Exchange believes it is reasonable to allocate such internal expense described above towards the total cost to the Exchange to provide the services associated with two additional Limited Service MEO Ports. In particular, the Exchange's employee compensation and benefits expense relating to providing the services associated with two additional Limited Service MEO Ports is approximately \$50,553, which is only a portion of the \$8,425,565 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 services associated with two additional Limited Service MEO Ports. Without these employees, the Exchange would not be able to provide the services associated with two additional Limited Service MEO Ports to its Members and non-Members and their

customers. The Exchange did not allocate all of the employee compensation and benefits expense toward the cost of the services associated with providing two additional Limited Service MEO Ports, only the portions which the Exchange identified as being specifically mapped to providing the services associated with two additional Limited Service MEO Ports, approximately 0.6% of the total employee compensation and benefits expense. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the services associated with two additional Limited Service MEO Ports, and not any other service, as supported by its cost review.

The Exchange's depreciation and amortization expense relating to providing the services associated with two additional Limited Service MEO Ports is approximately \$12,779, which is only a portion of the \$2,555,832 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 services associated with two additional Limited Service MEO Ports. Without this equipment, the Exchange would not be able to operate the network and provide the services associated with two additional Limited Service MEO Ports to its Members and non-Members and their customers. The Exchange did not allocate all of the depreciation and amortization expense toward the cost of providing the services associated with two additional Limited Service MEO Ports, only the portion which the Exchange identified as being specifically mapped to providing the services associated with the two additional Limited Service MEO Ports, approximately 0.5% of the total depreciation and amortization expense, as these services would not be possible without relying on such

equipment. The Exchange believes this allocation is reasonable because it represents the Exchange's actual cost to provide the services associated with two additional Limited Service MEO Ports, and not any other service, as supported by its cost review.

The Exchange's occupancy expense relating to providing the services associated with providing two additional Limited Service MEO Ports is approximately \$1,465, which is only a portion of the \$366,245 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 services associated with two additional Limited Service MEO Ports. 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 160 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 services associated with providing additional Limited Service MEO Ports. Without this office space, the Exchange would not be able to operate and support the network and provide the services associated with two additional Limited Service MEO Ports to its Members and non-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 services associated with two additional Limited Service MEO

Ports. The Exchange did not allocate all of the occupancy expense toward the cost of providing the services associated with two additional Limited Service MEO Ports, only the portion which the Exchange identified as being specifically mapped to operating and supporting the network, approximately 0.4% of the total occupancy expense. The Exchange believes this allocation is reasonable because it represents the Exchange's cost to provide the services associated with two additional Limited Service MEO Ports, and not any other service, as supported by its cost review. Accordingly, based on the facts and circumstances presented, the Exchange believes that its provision of the services associated with two additional Limited Service MEO Ports will not result in excessive pricing or supra-competitive profit.

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 services associated with two additional Limited Service MEO Ports 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 operation and support of the network. Further, the Exchange notes that, without the specific third-party and internal items listed above, the Exchange would not be able to operate and support the network, including providing the services associated with two additional Limited Service MEO Ports to its Members and non-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 the operation and support of the network.

To provide continuity with the Exchange's most recent filing to add two additional Limited Service MEO Ports³⁵ and this filing, the Exchange is basing its projected revenue from additional Limited Service MEO Ports that may be purchased by Members as though seven Members purchased two additional Limited Service MEO Ports each. The Exchange notes that any time it needs to expand its network by making available two additional Limited Service MEO Ports due to increased customer demand and increased volatility in the marketplace, which translates into increased message traffic rates across the network, there is an initial build out cost. The cost to expand the network in this manner is greater than the revenue the Exchange anticipates the additional Limited Service MEO Ports will generate. Specifically, the Exchange estimates it will incur a one-time cost of approximately \$175,000 in capital expenditures ("CapEx") on hardware, software, and other items to expand the network to make available two additional Limited Service MEO Ports. This estimated cost also includes expense associated with providing the necessary engineering and support personnel to transition those Members who wish to acquire two additional Limited Service MEO Ports. Further, the Exchange projects that the annualized revenue from the two additional Limited Service MEO Ports will be approximately \$67,200 (assuming seven Members purchase the two additional Limited Service MEO Ports). Therefore, the Exchange's upfront cost in expanding its network to provide its Members with two additional Limited Service MEO Ports – approximately \$175,000 – is significant relative to the anticipated annualized revenue the Exchange expects to bring in from two additional Limited Service MEO Ports – approximately \$67,200. Further, the Exchange anticipates it will incur approximately \$76,408 in annualized ongoing operating expense ("OpEx") in order to support the expanded network and two additional Limited

³⁵ See supra note 12.

Service MEO Ports. Thus, even excluding the upfront CapEx of \$175,000, the Exchange is not generating a supra-competitive profit from the provision of two additional Limited Service MEO Ports. In fact, even excluding the one-time CapEx cost of \$175,000, the Exchange anticipates generating an annual loss from the provision of two additional Limited Service MEO Ports of (\$9,208) – that is, \$67,200 in revenue minus \$76,408 in expense equates to a loss of (\$9,208) to support the additional ports annually.

The Exchange also notes that no other exchange has a similar cap on the amount of ports that firms can purchase in their rulebooks or fee schedules and those exchanges have the same requirements under Section 6(b)(5) of the Exchange Act³⁶ as MIAX Pearl.³⁷

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

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended. The proposed rule change will not impose a burden on competition but will benefit competition by enhancing the Exchange's ability to compete by providing additional services to market participants. It is not intended to address a competitive issue. Rather, the proposal is intended to allow the Exchange to increase its inventory of MEO Ports to meet increased Member demand and increased message traffic resulting from greater marketplace volatility. The Exchange also does not believe that the proposed rule change will impose a burden on intramarket competition because additional Limited Service MEO Ports are available to all Members on an equal basis. It is a business decision of each Member whether to pay for the additional Limited Service MEO Ports.

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

³⁶ 15 U.S.C. 78f(b)(5).

³⁷ See supra note 14.

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,³⁸ and Rule 19b-4(f)(2)³⁹ thereunder. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

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

Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>);
- or
- Send an e-mail [to rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-PEARL-2021-23 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.

³⁸ 15 U.S.C. 78s(b)(3)(A)(ii).

³⁹ 17 CFR 240.19b-4(f)(2).

All submissions should refer to File Number SR-PEARL-2021-23. 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-2021-23 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.⁴⁰

Vanessa Countryman
Secretary

⁴⁰ 17 CFR 200.30-3(a)(12).

Exhibit 5

New text is underlined>;
 Deleted text is in [brackets]

MIAX Pearl 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 [^]	Per Port: 1 st \$275, 2 nd to 5 th \$175, 6 th or more \$75
Full Service MEO Port - Bulk [*]	Tier 1 \$3,000 Tier 2 \$4,500 Tier 3 \$5,000
Full Service MEO Port - Single [*]	Tier 1 \$2,000 Tier 2 \$3,375 Tier 3 \$3,750
Limited Service MEO Port ^{**}	1 st to 2 nd \$0, 3 rd to 4 th \$200, 5 th to 6 th \$300, 7 or more [7 th to 10 th] \$400
MEO Purge Port ^{***}	\$750
CTD Port [^]	Per Port: \$450
FXD Port [^]	Per Port: \$250

* The rates set forth above for Full Service MEO Ports, both Bulk and/or Single, entitle a Member to two (2) such Ports for each Matching Engine for a single port fee. If a Member selects at least one Full Service MEO Port – Bulk as part of their two (2) Ports, i.e. option (c) described below, the rates applicable to Full Service MEO Port – Bulk set forth above apply.

** Each Limited Service MEO Port fee entitles a Member to one (1) such port for each Matching Engine. For example, the purchase of 4 Limited Service MEO Ports will allow the Member to access 4 ports per Matching Engine.

*** The MEO Purge Port fee entitles a Member to two (2) such ports for each Matching Engine for a single port fee.

^ Each port will have access to all Matching Engines.

Members may be allocated two (2) Full-Service MEO Ports of either type per Matching Engine and may request [and up to ten (10)] 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.

e) - f) No change.