SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-100036; File No. SR-MIAX-2024-22)

April 26, 2024

Self-Regulatory Organizations; Miami International Securities Exchange, LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Amend Its Fee Schedule for Purge Ports

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),[1] and Rule 19b-4 thereunder,[2] notice is hereby given that on April 15, 2024, Miami International Securities Exchange, LLC ("MIAX" 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 proposes to amend the MIAX Options Exchange Fee Schedule (the "Fee Schedule") to amend fees for Purge Ports.[3]

The text of the proposed rule change is available on the Exchange's website at https://www.miaxglobal.com/markets/us-options/miax-options/rule-filings, at MIAX's principal office, and at the Commission's Public Reference Room.

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

2 17 CFR 240.19b-4.

3 The proposed fee change is based on a recent proposal by Nasdaq Phlx LLC ("Phlx") to adopt fees for purge ports. See Securities Exchange Act Release No. 97825 (June 30, 2023), 88 FR 43405 (July 7, 2023) (SR-Phlx-2023-28).

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

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

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

1. Purpose

The Exchange proposes to amend the fees for Purge Ports, which is a function enabling Market Makers[4] to cancel all open quotes or a subset of open quotes through a single cancel message. The Exchange currently provides Market Makers the option to purchase Purge Ports to assist in their quoting activity. Purge Ports provide Market Makers with the ability to send purge messages to the Exchange System.[5] Purge Ports are not capable of sending or receiving any other type of messages or information. The use of Purge Ports is completely optional and no rule or regulation requires that a Market Maker utilize them.

The Exchange initially filed the proposal on September 29, 2023 (the "Initial Proposal").[6] On November 22, 2023, the Exchange withdrew the Initial Proposal and replaced with a revised

[4] The term "Market Makers" refers to Lead Market Makers ("LMMs"), Primary Lead Market Makers ("PLMMs"), and Registered Market Makers ("RMMs") collectively. See Exchange Rule 100.

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

[6] See Securities Exchange Act Release No. 98732 (October 12, 2023), 88 FR 71913 (October 18, 2023) (SR-MIAX-2023-37).

filing (the "Second Proposal").[7] On January 17, 2024, the Exchange withdrew the Second Proposal and, on January 31, 2024, replaced it with a further revised filing (the "Third Proposal").[8] On March 8, 2024, the Exchange withdrew the Third Proposal and replaced it with a further revised filing (the "Fourth Proposal").[9] On April 15, 2024, the Exchange withdrew the Fourth Proposal and replaced it with a further revised filing (the "Fifth Proposal").

The Exchange is including a cost analysis in this filing to justify the proposed fees. As described more fully below, the cost analysis includes, among other things, descriptions of how the Exchange allocated costs among it and its affiliated exchanges for similar proposed fee changes (separately between MIAX Pearl Options[10] and MIAX Emerald,[11] collectively referred to herein as the "affiliated markets"), to ensure no cost was allocated more than once, as well as detail supporting its cost allocation processes and explanations as to why a cost allocation in this proposal may differ from the same cost allocation in similar proposals submitted by the affiliated markets. The proposed fees are intended to cover the Exchange's cost of providing Purge Ports with a reasonable mark-up over those costs.

Purge Port Fee Change

Unlike other options exchanges that charge fees for Purge Ports on a per port basis,[12] the Exchange assesses a flat fee of $1,500 per month, regardless of the number of Purge Ports

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7 See Securities Exchange Act Release No. 99088 (December 5, 2023), 88 FR 85958 (December 11, 2023) (SR-MIAX-2023-43).

8 See Securities Exchange Act Release No. 99526 (February 13, 2024), 89 FR 12898 (February 20, 2024) (SR-MIAX-2024-07).

9 See Securities Exchange Act Release No. 99813 (March 20, 2024), 89 FR 21140 (March 26, 2024) (SR-MIAX-2024-14).

10 MIAX Pearl Options is the options market of MIAX PEARL, LLC ("MIAX Pearl"), which also operates an equities trading facility called MIAX Pearl Equities. See Exchange Rule 100 and MIAX Pearl Rule 1901.

11 The term "MIAX Emerald" means MIAX Emerald, LLC. See Exchange Rule 100.

12 See Cboe BXZ Exchange, Inc. ("BZX") Options Fee Schedule, Options Logical Port Fees, Purge Ports ($750 per purge port per month); Cboe EDGX Exchange, Inc. ("EDGX") Options Fee Schedule, Options

utilized by a Market Maker. Prior to the Initial Proposal, a Market Maker could request and be allocated two (2) Purge Ports per Matching Engine[13] to which it connects and not all Market Makers connected to all of the Exchange's Matching Engines.

The Exchange now proposes to amend the fee for Purge Ports to align more closely with other exchanges who charge on a per port basis by providing two (2) Purge Ports per Matching Engine for a monthly flat fee of $300 per month per Matching Engine. The only difference with a per port structure is that Market Makers receive two (2) Purge Ports per Matching Engine for the same proposed monthly fee, rather than being charged a separate fee for each Purge Port. The Exchange proposes to charge the proposed fee for Purge Ports per Matching Engine, instead on a per Purge Port basis, due to its System architecture which provides two (2) Purge Ports per Matching Engine for redundancy purposes. In addition, the proposed fee is lower than the comparable fee charged by competing exchanges that also charge on a per port basis, notwithstanding that the Exchange is providing up to two (2) Purge Ports for that same lower fee.[14] Other exchanges may also maintain a different number of matching engines within their architecture than the Exchange (i.e., MIAX maintains twenty-four (24) matching engines, MIAX

Logical Port Fees, Purge Ports ($750 per purge port per month); Cboe Exchange, Inc. ("Cboe") Fee Schedule ($850 per purge port per month). See also Nasdaq GEMX, Options 7, Pricing Schedule, Section 6.C.(3). Nasdaq GEMX, LLC ("Nasdaq GEMX") assesses its members $1,250 per SQF Purge Port per month, subject to a monthly cap of $17,500 for SQF Purge Ports and SQF Ports, applicable to market makers. See also Securities Exchange Act Release No. 97825 (June 30, 2023), 88 FR 43405 (July 7, 2023) (SR-Phlx-2023-28).

13 A Matching Engine is a part of the MIAX electronic system that processes options quotes and trades on a symbol-by- symbol basis. Some matching engines will process option classes with multiple root symbols, and other matching engines will be dedicated to one single option root symbol (for example, options on SPY will 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 Fee Schedule, Section 5)d), note 29.

14 See supra note 12.

Pearl Options maintains twelve (12) matching engines, and MIAX Emerald maintains twelve (12) matching engines).

Similar to a per port charge, Market Makers are able to select the Matching Engines that they want to connect to,[15] based on the business needs of each Market Maker, and pay the applicable fee based on the number of Matching Engines and ports utilized. The Exchange believes that the proposed fee provides Market Makers with flexibility to control their Purge Port costs based on the number of Matching Engines each Marker Maker elects to connect to based on each Market Maker's business needs.

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A logical port represents a port established by the Exchange within the Exchange's System for trading and billing purposes. Each logical port grants a Member[16] the ability to accomplish a specific function, such as order entry, order cancellation, access to execution reports, and other administrative information.

Purge Ports are designed to assist Market Makers[17] in the management of, and risk control over, their quotes, particularly if the firm is dealing with a large number of securities. For example, if a Market Maker detects market indications that may influence the execution potential of their quotes, the Market Maker may use Purge Ports to reduce uncertainty and to manage risk by purging all quotes in a number of securities. This allows Market Makers to seamlessly avoid unintended executions, while continuing to evaluate the market, their positions,

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15 The Exchange notes that each Matching Engine corresponds to a specified group of symbols. Certain Market Makers choose to only quote in certain symbols while other Market Makers choose to quote the entire market.

16 The term "Member" means an individual or organization approved to exercise the trading rights associated with a Trading Permit. Members are deemed "members" under the Exchange Act. See Exchange Rule 100.

17 Members seeking to become registered as a Market Maker must comply with the applicable requirements of Chapter VI of the Exchange's Rules.

and their risk levels. Purge Ports are used by Market Makers that conduct business activity that exposes them to a large amount of risk across a number of securities. Purge Ports enable Market Makers to cancel all open quotes, or a subset of open quotes through a single cancel message. The Exchange notes that Purge Ports increase efficiency of already existing functionality enabling the cancellation of quotes.

The Exchange operates highly performant systems with significant throughput and determinism which allows participants to enter, update and cancel quotes at high rates. Market Makers may currently cancel individual quotes through the existing functionality, such as through the use of a mass cancel message by which a Market Maker may request that the Exchange remove all or a subset of its quotations and block all or a subset of its new inbound quotations.[18] Other than Purge Ports being a dedicated line for cancelling quotations, Purge Ports operate in the same manner as a mass cancel message being sent over a different type of port. For example, like Purge Ports, mass cancellations sent over a logical port may be done at either the firm or MPID level. As a result, Market Makers can currently cancel quotes in rapid succession across their existing logical ports[19] or through a single cancel message, all open quotes or a subset of open quotes.

Similarly, Market Makers may also use cancel-on-disconnect control when they experience a disruption in connection to the Exchange to automatically cancel all quotes, as configured or instructed by the Member or Market Maker.[20] In addition, the Exchange already provides similar ability to mass cancel quotes through the Exchange's risk controls, which are

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[18] See Exchange Rule 519C(a) and (b).

[19] Current Exchange port functionality supports cancelation rates that exceed one thousand messages per second and the Exchange's research indicates that certain market participants rely on such functionality and at times utilize such cancelation rates.

[20] See Exchange Rule 519C(c).

offered at no charge and enables Market Makers to establish pre-determined levels of risk exposure, and can be used to cancel all open quotes.[21] Accordingly, the Exchange believes that the Purge Ports provide an efficient option as an alternative to already available services and enhance the Market Maker's ability to manage their risk.

The Exchange believes that market participants benefit from a dedicated purge mechanism for specific Market Makers and to the market as a whole. Market Makers will have the benefit of efficient risk management and purge tools. The market will benefit from potential increased quoting and liquidity as Market Makers may use Purge Ports to manage their risk more robustly. Only Market Makers that request Purge Ports would be subject to the proposed fees, and other Market Makers can continue to operate in exactly the same manner as they do today without dedicated Purge Ports, but with the additional purging capabilities described above.

Implementation Date

The proposed fee change is immediately effective.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,[22] in general, and furthers the objectives of Section 6(b)(5) of the Act,[23] in particular, in that it is not designed to permit unfair discrimination among customers, brokers, or dealers. The Exchange also believes that its proposed fee is consistent with Section 6(b)(4) of the Act[24] because it represents an equitable allocation of reasonable dues, fees and other charges among market participants.

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21 See Exchange Rule 532.

22 15 U.S.C. 78f(b).

23 15 U.S.C. 78f(b)(5).

24 15 U.S.C. 78f(b)(4).

Cost Analysis

In general, the Exchange believes that exchanges, in setting fees of all types, should meet very high standards of transparency to demonstrate why each new fee or fee increase meets the Exchange Act requirements that fees be reasonable, equitably allocated, not unfairly discriminatory, and not create an undue burden on competition among members and markets. In particular, the Exchange believes that each exchange should take extra care to be able to demonstrate that these fees are based on its costs and reasonable business needs.

In proposing to charge fees for port services, the Exchange is especially diligent in assessing those fees in a transparent way against its own aggregate costs of providing the related service, and in carefully and transparently assessing the impact on Members – both generally and in relation to other Members, i.e., to assure the fee will not create a financial burden on any participant and will not have an undue impact in particular on smaller Members and competition among Members in general. The Exchange believes that this level of diligence and transparency is called for by the requirements of Section 19(b)(1) under the Act,[25] and Rule 19b-4 thereunder,[26] with respect to the types of information exchanges should provide when filing fee changes, and Section 6(b) of the Act,[27] which requires, among other things, that exchange fees be reasonable and equitably allocated,[28] not designed to permit unfair discrimination,[29] and that they not impose a burden on competition not necessary or appropriate in furtherance of the purposes of the Act.[30] This rule change proposal addresses those requirements, and the analysis and data

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25 15 U.S.C. 78s(b)(1).

26 17 CFR 240.19b-4.

27 15 U.S.C. 78f(b).

28 15 U.S.C. 78f(b)(4).

29 15 U.S.C. 78f(b)(5).

30 15 U.S.C. 78f(b)(8).

in each of the sections that follow are designed to clearly and comprehensively show how they are met. The Exchange notes that the legacy exchanges with whom the Exchange vigorously competes for order flow and market share, were not subject to any such diligence or transparency in setting their baseline non-transaction fees, most of which were put in place before the Staff Guidance.[31]

As detailed below, the Exchange recently calculated its aggregate annual costs for providing Purge Ports to be $910,413 (or approximately $75,868 per month, rounded to the nearest dollar when dividing the annual cost by 12 months). In order to cover the aggregate costs of providing Purge Ports to its Market Makers going forward and to make a modest profit, as described below, the Exchange proposes to modify its Fee Schedule to charge a fee of $300 per Matching Engine for Purge Ports.

In 2019, the Exchange completed a study of its aggregate costs to produce market data and connectivity (the "Cost Analysis").[32] The Cost Analysis required a detailed analysis of the Exchange's aggregate baseline costs, including a determination and allocation of costs for core services provided by the Exchange – transaction execution, market data, membership services, physical connectivity, and port access (which provide order entry, cancellation and modification functionality, risk and purge functionality, the ability to receive drop copies, and other functionality). The Exchange separately divided its costs between those costs necessary to deliver each of these core services, including infrastructure, software, human resources (i.e.,

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31 See Staff Guidance on SRO Rule Filings Relating to Fees (May 21, 2019), available at https://www.sec.gov/tm/staff-guidance-sro-rule-filings-fees (the "Staff Guidance").

32 The Exchange frequently updates it Cost Analysis as strategic initiatives change, costs increase or decrease, and market participant needs and trading activity changes. The Exchange's most recent Cost Analysis was conducted ahead of this filing.

personnel), and certain general and administrative expenses (“cost drivers”). The Exchange recently update its Cost Analysis using its 2024 estimated budget as described below.

As an initial step, the Exchange determined the total cost for the Exchange and the affiliated markets for each cost driver as part of its 2024 budget review process. The 2024 budget review is a company-wide process that occurs over the course of many months, includes meetings among senior management, department heads, and the Finance Team. Each department head is required to send a “bottom up” budget to the Finance Team allocating costs at the profit and loss account and vendor levels for the Exchange and its affiliated markets based on a number of factors, including server counts, additional hardware and software utilization, current or anticipated functional or non-functional development projects, capacity needs, end-of-life or end-of-service intervals, number of members, market model (e.g., price time or pro-rata, simple only or simple and complex markets, auction functionality, etc.), which may impact message traffic, individual system architectures that impact platform size,[33] storage needs, dedicated infrastructure versus shared infrastructure allocated per platform based on the resources required to support each platform, number of available connections, and employees allocated time. All of these factors result in different allocation percentages among the Exchange and its affiliated markets, i.e., the different percentages of the overall cost driver allocated to the Exchange and its affiliated markets will cause the dollar amount of the overall cost allocated among the Exchange and its affiliated markets to also differ. Because the Exchange’s parent company currently owns and operates four separate and distinct marketplaces, the Exchange must determine the costs associated with each actual market – as opposed to the

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[33] For example, MIAX maintains 24 matching engines, MIAX Pearl Options maintains 12 matching engines, MIAX Pearl Equities maintains 24 matching engines, and MIAX Emerald maintains 12 matching engines.

Exchange's parent company simply concluding that all costs drivers are the same at each individual marketplace and dividing total cost by four (4) (evenly for each marketplace). Rather, the Exchange's parent company determines an accurate cost for each marketplace, which results in different allocations and amounts across exchanges for the same cost drivers, due to the unique factors of each marketplace as described above. This allocation methodology also ensures that no cost would be allocated twice or double-counted between the Exchange and its affiliated markets. The Finance Team then consolidates the budget and sends it to senior management, including the Chief Financial Officer and Chief Executive Officer, for review and approval. Next, the budget is presented to the Board of Directors and the Finance and Audit Committees for each exchange for their approval. The above steps encompass the first step of the cost allocation process.

The next step involves determining what portion of the cost allocated to the Exchange pursuant to the above methodology is to be allocated to each core service, e.g., connectivity and ports, market data, and transaction services. The Exchange and its affiliated markets adopted an allocation methodology with thoughtful and consistently applied principles to guide how much of a particular cost amount allocated to the Exchange should be allocated within the Exchange to each core service. This is the final step in the cost allocation process and is applied to each of the cost drivers set forth below.

This next level of the allocation methodology at the individual exchange level also took into account factors similar to those set forth under the first step of the allocation methodology process described above, to determine the appropriate allocation to connectivity or market data versus allocations for other services. This allocation methodology was developed through an assessment of costs with senior management intimately familiar with each area of the

Exchange’s operations. After adopting this allocation methodology, the Exchange then applied an allocation of each cost driver to each core service, resulting in the cost allocations described below. Each of the below cost allocations is unique to the Exchange and represents a percentage of overall cost that was allocated to the Exchange pursuant to the initial allocation described above.

By allocating segmented costs to each core service, the Exchange was able to estimate by core service the potential margin it might earn based on different fee models. The Exchange notes that as a non-listing venue it has five primary sources of revenue that it can potentially use to fund its operations: transaction fees, fees for connectivity and port services, membership fees, regulatory fees, and market data fees. Accordingly, the Exchange must cover its expenses from these five primary sources of revenue. The Exchange also notes that as a general matter each of these sources of revenue is based on services that are interdependent. For instance, the Exchange’s system for executing transactions is dependent on physical hardware and connectivity; only Members and parties that they sponsor to participate directly on the Exchange may submit orders to the Exchange; many Members (but not all) consume market data from the Exchange in order to trade on the Exchange; and, the Exchange consumes market data from external sources in order to comply with regulatory obligations. Accordingly, given this interdependence, the allocation of costs to each service or revenue source required judgment of the Exchange and was weighted based on estimates of the Exchange that the Exchange believes are reasonable, as set forth below. While there is no standardized and generally accepted methodology for the allocation of an exchange’s costs, the Exchange’s methodology is the result of an extensive review and analysis and will be consistently applied going forward for any other potential fee proposals. In the absence of the Commission attempting to specify a methodology for the allocation of exchanges' interdependent costs, the Exchange will continue to be left with its best efforts to attempt to conduct such an allocation in a thoughtful and reasonable manner.

Through the Exchange's extensive updated Cost Analysis, which was again recently further refined, the Exchange analyzed every expense item in the Exchange's general expense ledger to determine whether each such expense relates to the provision of connectivity and port services, and, if such expense did so relate, what portion (or percentage) of such expense actually supports the provision of Purge Port services, and thus bears a relationship that is, "in nature and closeness," directly related to Purge Port services. In turn, the Exchange allocated certain costs more to physical connectivity and others to ports, while certain costs were only allocated to such services at a very low percentage or not at all, using consistent allocation methodologies as described above. Based on this analysis, the Exchange estimates that the aggregate monthly cost to provide Purge Port services is $75,868, as further detailed below.

Costs Related to Offering Purge Ports

The following chart details the individual line-item costs considered by the Exchange to be related to offering Purge Ports as well as the percentage of the Exchange's overall costs that such costs represent for each cost driver (e.g., as set forth below, the Exchange allocated approximately 2.2% of its overall Human Resources cost to offering Purge Ports).

COST DRIVERS	ALLOCATED ANNUAL COST[a]	ALLOCATED MONTHLY COST[b]	% OF ALL
Human Resources	$492,357	$41,030	2.2%
Connectivity (external fees, cabling, switches, etc.)	$1,036	$86	1.1%
Internet Services and External Market Data	$16,081	$1,340	2.1%
Data Center	$31,102	$2,592	2.1%
Hardware and Software Maintenance and Licenses	$42,539	$3,545	2.1%
Depreciation	$82,610	$6,884	1.9%
Allocated Shared Expenses	$244,688	$20,391	2.8%
TOTAL	**$910,413**	**$75,868**	**2.3%**

a. The Annual Cost includes figures rounded to the nearest dollar.
b. The Monthly Cost was determined by dividing the Annual Cost for each line item by twelve (12) months and rounding up or down to the nearest dollar.

Below are additional details regarding each of the line-item costs considered by the Exchange to be related to offering Purge Ports. While some costs were attempted to be allocated as equally as possible among the Exchange and its affiliated markets, the Exchange notes that some of its cost allocation percentages for certain cost drivers differ when compared to the same cost drivers for the Exchange's affiliated markets in their similar proposed fee changes for Purge Ports. This is because the Exchange's cost allocation methodology utilizes the actual projected costs of the Exchange (which are specific to the Exchange and are independent of the costs projected and utilized by the Exchange's affiliated markets) to determine its actual costs, which may vary across the Exchange and its affiliated markets based on factors that are unique to each marketplace. The Exchange provides additional explanation below (including the reason for the deviation) for the significant differences.

Human Resources

The Exchange notes that it and its affiliated markets anticipate that by year-end 2024, there will be 289 employees (excluding employees at non-options/equities exchange subsidiaries of Miami International Holdings, Inc. ("MIH"), the holding company of the Exchange and its affiliated markets), and each department leader has direct knowledge of the time spent by each employee with respect to the various tasks necessary to operate the Exchange. Specifically, twice a year, and as needed with additional new hires and new project initiatives, in consultation with employees as needed, managers and department heads assign a percentage of time to every employee and then allocate that time amongst the Exchange and its affiliated markets to determine each market's individual Human Resources expense. Then, managers and department heads assign a percentage of each employee's time allocated to the Exchange into buckets including network connectivity, ports, market data, and other exchange services. This process ensures that every employee is 100% allocated, ensuring there is no double counting between the Exchange and its affiliated markets.

For personnel costs (Human Resources), the Exchange calculated an allocation of employee time for employees whose functions include providing and maintaining Purge Ports and performance thereof (primarily the Exchange's network infrastructure team, which spends most of their time performing functions necessary to provide port and connectivity services). As described more fully above, the Exchange's parent company allocates costs to the Exchange and its affiliated markets and then a portion of the Human Resources costs allocated to the Exchange is then allocated to port services. From that portion allocated to the Exchange that applied to ports, the Exchange then allocated a weighted average of 2.7% of each employee's time from the above group to Purge Ports.

The Exchange also allocated Human Resources costs to provide Purge Ports to a limited subset of personnel with ancillary functions related to establishing and maintaining such ports (such as information security, sales, membership, and finance personnel). The Exchange allocated cost on an employee-by-employee basis (i.e., only including those personnel who support functions related to providing Purge Ports) and then applied a smaller allocation to such employees' time to Purge Ports (1.2%). This other group of personnel with a smaller allocation of Human Resources costs also have a direct nexus to Purge Ports, whether it is a sales person selling port services, finance personnel billing for port services or providing budget analysis, or information security ensuring that such ports are secure and adequately defended from an outside intrusion.

The estimates of Human Resources cost were therefore determined by consulting with such department leaders, determining which employees are involved in tasks related to providing Purge Ports, and confirming that the proposed allocations were reasonable based on an understanding of the percentage of time such employees devote to those tasks. This includes personnel from the Exchange departments that are predominately involved in providing Purge Ports: Business Systems Development, Trading Systems Development, Systems Operations and Network Monitoring, Network and Data Center Operations, Listings, Trading Operations, and Project Management. Again, the Exchange allocated 2.7% of each of their employee's time assigned to the Exchange for Purge Ports, as stated above. Employees from these departments perform numerous functions to support Purge Ports, such as the installation, re-location, configuration, and maintenance of Purge Ports and the hardware they access. This hardware includes servers, routers, switches, firewalls, and monitoring devices. These employees also perform software upgrades, vulnerability assessments, remediation and patch installs, equipment configuration and hardening, as well as performance and capacity management. These employees also engage in research and development analysis for equipment and software supporting Purge Ports and design, and support the development and on-going maintenance of internally-developed applications as well as data capture and analysis, and Member and internal

Exchange reports related to network and system performance. The above list of employee functions is not exhaustive of all the functions performed by Exchange employees to support Purge Ports, but illustrates the breath of functions those employees perform in support of the above cost and time allocations.

Lastly, the Exchange notes that senior level executives' time was only allocated to the Purge Ports related Human Resources costs to the extent that they are involved in overseeing tasks related to providing Purge Ports. The Human Resources cost was calculated using a blended rate of compensation reflecting salary, equity and bonus compensation, benefits, payroll taxes, and 401(k) matching contributions.

Connectivity (external fees, cabling, switches, etc.)

The Connectivity cost driver includes external fees paid to connect to other exchanges and third parties, cabling and switches required to operate the Exchange. The Connectivity cost driver is more narrowly focused on technology used to complete connections to the Exchange and to connect to external markets. The Exchange notes that its connectivity to external markets vendors is required in order to receive market data to run the Exchange's matching engine and basic operations compliant with existing regulations, primarily Regulation NMS.

The Exchange relies on various connectivity providers for connectivity to the entire U.S. options industry, and infrastructure services for critical components of the network that are necessary to provide and maintain its System Networks and access to its System Networks via 10Gb ULL connectivity. Specifically, the Exchange utilizes connectivity providers to connect to other national securities exchanges and the Options Price Reporting Authority ("OPRA"). The Exchange understands that these service providers provide services to most, if not all, of the other U.S. exchanges and other market participants. Connectivity provided by these service providers is critical to the Exchanges daily operations and performance of its System Networks which includes Purge Ports. Without these services providers, the Exchange would not be able to connect to other national securities exchanges, market data providers or OPRA and, therefore, would not be able to operate and support its System Networks, including Purge Ports. In addition, the connectivity is necessary for the Exchange to notify OPRA and other market participants that an order has been cancelled, and that quotes may have been cancelled as a result of a Member purging quotes via their Purge Port. Also, like other types of ports offered by the Exchange, Purge Ports leverage the Exchange's existing 10Gb ULL connectivity, which also relies on connectivity to other national securities exchanges and OPRA. The Exchange does not employ a separate fee to cover its connectivity provider expense and recoups that expense, in part, by charging for Purge Ports.

Internet Services and External Market Data

The next cost driver consists of internet services and external market data. Internet services includes third-party service providers that provide the internet, fiber and bandwidth connections between the Exchange's networks, primary and secondary data centers, and office locations in Princeton and Miami. For purposes of Purge Ports, the Exchange also includes a portion of its costs related to external market data. External market data includes fees paid to third parties, including OPRA, to receive and consume market data from other markets. The Exchange includes external market data costs towards Purge Ports because such market data is necessary to offer certain services related to such ports, such as checking for market conditions (e.g., halted securities). External market data is also consumed at the Matching Engine level for, among other things, as validating quotes on entry against the national best bid or offer

("NBBO").[34] Purge Ports are a component of the Matching Engine, and used by market participants to cancel multiple resting quotes within the Matching Engine. While resting, the Exchange uses external market data to manage those quotes, such as preventing trade-throughs, and those quotes are also reported to OPRA for inclusion in this consolidated data stream. The Exchange also must notify OPRA and other market participants that an order has been cancelled, and that quotes may have been cancelled as a result of a Member purging quotes via their Purge Port. Thus, since market data from other exchanges is consumed by the Matching Engine to validate quotes and check market conditions, the Exchange believes it is reasonable to allocate a small amount of such costs to Purge Ports.

For the reasons set forth above, the Exchange believes it is reasonable to allocate a small amount of such costs to Purge Ports since market data from other exchanges is consumed at the Exchange's Purge Port level to validate purge messages and the necessity to cancel a resting quote via a purge message or via some other means.

Data Center

Data Center costs includes an allocation of the costs the Exchange incurs to provide Purge Ports in the third-party data centers where it maintains its equipment as well as related costs for market data to then enter the Exchange's System. The Exchange does not own the Primary Data Center or the Secondary Data Center, but instead, leases space in data centers operated by third-parties. The Exchange has allocated a percentage of its Data Center cost (2.1%) to Purge Ports because the third-party data centers and the Exchange's physical equipment contained therein are necessary for providing Purge Ports. In other words, for the

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[34] The term "NBBO" means the national best bid or offer as calculated by the Exchange based on market information received by the Exchange from OPRA. See Exchange Rule 100.

Exchange to operate in a dedicated physical space with direct connectivity by market participants to its trading platform, the data centers are a critical component to the provision of Purge Ports. If the Exchange did not maintain such a presence, then Purge Ports would be of little value to market participants.

Hardware and Software Maintenance and Licenses

Hardware and Software Licenses includes hardware and software licenses used to operate and monitor physical assets necessary to offer Purge Ports for each Matching Engine of the Exchange. This hardware includes servers, network switches, cables, optics, protocol data units, and cabinets, to maintain a state-of-the-art technology platform. Without hardware and software licenses, Purge Ports would not be able to be offered to market participants because hardware and software are necessary to operate the Exchange's Matching Engines, which are necessary to enable the purging of quotes. The Exchange also routinely works to improve the performance of the hardware and software used to operate the Exchange's network and System. The costs associated with maintaining and enhancing a state-of-the-art exchange network is a significant expense for the Exchange, and thus the Exchange believes that it is reasonable and appropriate to allocate a certain percentage of its hardware and software expense to help offset those costs of providing Purge Port connectivity to its Matching Engines.

Depreciation

The vast majority of the software the Exchange uses to provide Ports has been developed in-house and the cost of such development, which takes place over an extended period of time and includes not just development work, but also quality assurance and testing to ensure the software works as intended, is depreciated over time once the software is activated in the production environment. Hardware used to provide Purge Ports includes equipment used for testing and monitoring of order entry infrastructure and other physical equipment the Exchange purchased and is also depreciated over time.

All hardware and software, which also includes assets used for testing and monitoring of order entry infrastructure, were valued at cost, depreciated or leased over periods ranging from three to five years. Thus, the depreciation cost primarily relates to servers necessary to operate the Exchange, some of which is owned by the Exchange and some of which is leased by the Exchange in order to allow efficient periodic technology refreshes. The Exchange allocated 1.9% of all depreciation costs to providing Purge Ports. The Exchange allocated depreciation costs for depreciated software necessary to operate the Exchange because such software is related to the provision of Purge Ports. As with the other allocated costs in the Exchange's updated Cost Analysis, the Depreciation cost driver was therefore narrowly tailored to depreciation related to Purge Ports.

Allocated Shared Expenses

Finally, a portion of general shared expenses was allocated to overall Purge Port costs as without these general shared costs the Exchange would not be able to operate in the manner that it does and provide Purge Ports. The costs included in general shared expenses include general expenses of the Exchange, including office space and office expenses (e.g., occupancy and overhead expenses), utilities, recruiting and training, marketing and advertising costs, professional fees for legal, tax and accounting services (including external and internal audit expenses), and telecommunications costs. The Exchange again notes that the cost of paying directors to serve on its Board of Directors is included in the calculation of Allocated Shared Expenses, and thus a portion of such overall cost amounting to less than 3% of the overall cost for directors was allocated to providing Purge Ports.

Approximate Cost for Purge Ports per Month

Based on projected 2024 data, the total monthly cost allocated to Purge Ports of $75,868 was divided by the total number of Matching Engines in which Market Makers used Purge Ports for the month of December 2023, which was 291, resulting in an approximate cost of $261 per Matching Engine per month for Purge Port usage (when rounding to the nearest dollar). The Exchange notes that the flat fee of $300 per month per Matching Engine entitles each Market Maker to two Purge Ports per Matching Engine. The majority of Market Makers are connected to all twenty-four of the Exchange's Matching Engines and utilize Purge Ports on each Matching Engine, except one Market Maker, which only utilizes Purge Ports on three Matching Engines.

Cost Analysis – Additional Discussion

In conducting its Cost Analysis, the Exchange did not allocate any of its expenses in full to any core services (including Purge Ports) and did not double-count any expenses. Instead, as described above, the Exchange allocated applicable cost drivers across its core services and used the same Cost Analysis to form the basis of this proposal. For instance, in calculating the Human Resources expenses to be allocated to Purge Ports based upon the above described methodology, the Exchange has a team of employees dedicated to network infrastructure and with respect to such employees the Exchange allocated network infrastructure personnel with a higher percentage of the cost of such personnel (19.6%) given their focus on functions necessary to provide Ports. The salaries of those same personnel were allocated only 2.7 to Purge Ports and the remaining 97.3% was allocated to connectivity, other port services, transaction services, membership services and market data. The Exchange did not allocate any other Human Resources expense for providing Purge Ports to any other employee group, outside of a smaller allocation of 1.2% for Purge Ports, of the cost associated with certain specified personnel who work closely with and support network infrastructure personnel. This is because a much wider range of personnel are involved in functions necessary to offer, monitor and maintain Purge Ports but the tasks necessary to do so are not a primary or full-time function.

In total, the Exchange allocated 2.2% of its personnel costs to providing Purge Ports. In turn, the Exchange allocated the remaining 97.8% of its Human Resources expense to membership services, transaction services, connectivity services, other port services and market data. Thus, again, the Exchange's allocations of cost across core services were based on real costs of operating the Exchange and were not double-counted across the core services or their associated revenue streams.

As another example, the Exchange allocated depreciation expense to all core services, including Purge Ports, but in different amounts. 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. Without this equipment, the Exchange would not be able to operate the network and provide Purge Port services to its Market Makers. However, the Exchange did not allocate all of the depreciation and amortization expense toward the cost of providing Purge Port services, but instead allocated approximately 1.9% of the Exchange's overall depreciation and amortization expense to Purge Ports. The Exchange allocated the remaining depreciation and amortization expense (approximately 98.1%) toward the cost of providing transaction services, membership services, connectivity services, other port services, and market data.

The Exchange notes that its revenue estimates are based on projections across all potential revenue streams and will only be realized to the extent such revenue streams actually produce the revenue estimated. The Exchange does not yet know whether such expectations will be realized. For instance, in order to generate the revenue expected from Purge Ports, the Exchange will have to be successful in retaining existing Market Makers that wish to maintain Purge Ports or in obtaining new Market Makers that will purchase such services. Similarly, the Exchange will have to be successful in retaining a positive net capture on transaction fees in order to realize the anticipated revenue from transaction pricing.

The Exchange notes that the Cost Analysis is based on the Exchange's 2024 fiscal year of operations and projections. It is possible, however, that actual costs may be higher or lower. To the extent the Exchange sees growth in use of connectivity services it will receive additional revenue to offset future cost increases. However, if use of port services is static or decreases, the Exchange might not realize the revenue that it anticipates or needs in order to cover applicable costs. Accordingly, the Exchange is committing to conduct a one-year review after implementation of these fees. The Exchange expects that it may propose to adjust fees at that time, to increase fees in the event that revenues fail to cover costs and a reasonable mark-up of such costs. Similarly, the Exchange may propose to decrease fees in the event that revenue materially exceeds our current projections. In addition, the Exchange will periodically conduct a review to inform its decision making on whether a fee change is appropriate (e.g., to monitor for costs increasing/decreasing or subscribers increasing/decreasing, etc. in ways that suggest the then-current fees are becoming dislocated from the prior cost-based analysis) and would propose to increase fees in the event that revenues fail to cover its costs and a reasonable mark-up, or decrease fees in the event that revenue or the mark-up materially exceeds our current projections.

In the event that the Exchange determines to propose a fee change, the results of a timely review, including an updated cost estimate, will be included in the rule filing proposing the fee change. More generally, the Exchange believes that it is appropriate for an exchange to refresh and update information about its relevant costs and revenues in seeking any future changes to fees, and the Exchange commits to do so.

Projected Revenue[35]

The proposed fees will allow the Exchange to cover certain costs incurred by the Exchange associated with providing and maintaining necessary hardware and other network infrastructure as well as network monitoring and support services; without such hardware, infrastructure, monitoring and support the Exchange would be unable to provide port services. Much of the cost relates to monitoring and analysis of data and performance of the network via the subscriber's connection(s). The above cost, namely those associated with hardware, software, and human capital, enable the Exchange to measure network performance with nanosecond granularity. These same costs are also associated with time and money spent seeking to continuously improve the network performance, improving the subscriber's experience, based on monitoring and analysis activity. The Exchange routinely works to improve the performance of the network's hardware and software. The costs associated with maintaining and enhancing a state-of-the-art exchange network is a significant expense for the Exchange, and thus the Exchange believes that it is reasonable and appropriate to help offset those costs by amending fees for Purge Port services. Subscribers, particularly those of Purge Ports, expect the Exchange to provide this level of support so they continue to receive the

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[35] For purposes of calculating projected 2024 revenue for Purge Ports, the Exchange used revenues for the most recently completed full month.

performance they expect. This differentiates the Exchange from its competitors. As detailed above, the Exchange has five primary sources of revenue that it can potentially use to fund its operations: transaction fees, fees for connectivity services (connections and ports), membership and regulatory fees, and market data fees. Accordingly, the Exchange must cover its expenses from these five primary sources of revenue.

The Exchange's Cost Analysis estimates the annual cost to provide Purge Port services will equal $910,413. Based on current Purge Port services usage, the Exchange would generate annual revenue of approximately $1,047,600. The Exchange believes this represents a modest profit of 13.1% when compared to the cost of providing Purge Port services, which could decrease over time.[36]

Based on the above discussion, the Exchange believes that even if the Exchange earns the above revenue or incrementally more or less, the proposed fees are fair and reasonable because they will not result in pricing that deviates from that of other exchanges or a supra-competitive profit, when comparing the total expense of the Exchange associated with providing Purge Port services versus the total projected revenue of the Exchange associated with network Purge Port services.

The Proposed Fees are also Equitable, Reasonable, and Not Unfairly Discriminatory

The Exchange believes that the proposed rule change would promote just and equitable principles of trade and remove impediments to and perfect the mechanism of a free and open market because offering Market Makers optional Purge Port services with a flexible fee structure

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36 Assuming the U.S. inflation rate continues at its current rate, the Exchange believes that the projected profit margins in this proposal will decrease; however, the Exchange cannot predict with any certainty whether the U.S. inflation rate will continue at its current rate or its impact on the Exchange's future profits or losses. See, e.g., https://www.usinflationcalculator.com/inflation/current-inflation-rates/ (last visited April 15, 2024).

promotes choice, flexibility, and efficiency. The Exchange believes Purge Ports enhance Market Makers' ability to manage quotes, which would, in turn, improve their risk controls to the benefit of all market participants. The Exchange believes that Purge Ports foster cooperation and coordination with persons engaged in facilitating transactions in securities because designating Purge Ports for purge messages may encourage better use of such ports. This may, concurrent with the ports that carry quotes and other information necessary for market making activities, enable more efficient, as well as fair and reasonable, use of Market Makers' resources. The Exchange believes that proper risk management, including the ability to efficiently cancel multiple quotes quickly when necessary is valuable to all firms, including Market Makers that have heightened quoting obligations that are not applicable to other market participants.

Purge Ports do not relieve Market Makers of their quoting obligations or firm quote obligations under Regulation NMS Rule 602.[37] Specifically, any interest that is executable against a Member's or Market Maker's quotes that is received by the Exchange prior to the time of the removal of quotes request will automatically execute. Market Makers that purge their quotes will not be relieved of the obligation to provide continuous two-sided quotes on a daily basis, nor will it prohibit the Exchange from taking disciplinary action against a Market Maker for failing to meet their continuous quoting obligation each trading day.[38]

The Exchange also believes that offering Purge Ports at the Matching Engine level promotes risk management across the industry, and thereby facilitates investor protection. Some market participants, in particular the larger firms, could and do build similar risk functionality in their trading systems that permit the flexible cancellation of quotes entered on the Exchange at a

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[37] See Exchange Rule 604. See also generally Chapter VI of the Exchange's Rules.

[38] Id.

high rate. Offering Matching Engine level protections ensures that such functionality is widely available to all firms, including smaller firms that may otherwise not be willing to incur the costs and development work necessary to support their own customized mass cancel functionality. The Exchange also believes that moving to a per Matching Engine fee for Purge Ports is reasonable due to the Exchange's architecture that provides the Exchange the ability to provide two (2) Purge Ports per Matching Engine.

The Exchange believes that the proposed Purge Port fees are equitable because the proposed Purge Ports are completely voluntary as they relate solely to optional risk management functionality.

The Exchange also believes that the proposed amendments to its Fee Schedule are not unfairly discriminatory because they will apply uniformly to all Market Makers that choose to use the optional Purge Ports. Purge Ports are completely voluntary and, as they relate solely to optional risk management functionality, no Market Maker is required or under any regulatory obligation to utilize them. All Market Makers that voluntarily select this service option will be charged the same amount for the same services. All Market Makers have the option to select any port or connectivity option, and there is no differentiation among Market Makers with regard to the fees charged for the services offered by the Exchange.

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

The Exchange does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. Purge Ports are completely voluntary and are available to all Market Makers on an equal basis at the same cost. While the Exchange believes that Purge Ports provide a valuable service, Market Makers can choose to purchase, or not purchase, these ports based on their own determination of the value and their business needs. No Market Maker is required or under any regulatory obligation to utilize Purge Ports. Accordingly, the Exchange believes that Purge Ports offer appropriate risk management functionality to firms that trade on the Exchange without imposing an unnecessary or inappropriate burden on competition.

The Exchange also does not believe the proposal would cause any unnecessary or inappropriate burden on intermarket competition as other exchanges are free to introduce their own purge port functionality and lower their prices to better compete with the Exchange's offering. The Exchange does not believe the proposed rule change would cause any unnecessary or inappropriate burden on intramarket competition. Particularly, the proposal would apply uniformly to any market participant, in that it does not differentiate between Market Makers. The proposal would allow any interested Market Makers to purchase Purge Port functionality based on their business needs.

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

The Exchange received one comment letter on the Initial Proposal and one comment letter on the Second Proposal, both from the same commenter.[39] These comment letters were submitted not only on these proposals, but also the proposals by the Exchange and its affiliates to amend fees for 10Gb ULL connectivity and certain other ports. The Exchange received one other comment letter on the Second Proposal, another on the Third Proposal, and another on the Fourth Proposal from a separate commenter.[40] Overall, the Exchange believes that the issues raised by the first commenter are not germane to this proposal because they apply primarily to

[39] See letters from Thomas M. Merritt, Deputy General Counsel, Virtu Financial, Inc. ("Virtu"), to Vanessa Countryman, Secretary, Commission, dated November 8, 2023 and January 2, 2024.

[40] See letters from John C. Pickford, Counsel, Susquehanna International Group, LLP ("SIG"), to Vanessa Countryman, Secretary, Commission, dated January 4, 2024, March 1, 2024, and April 11, 2024.

the other fee filings. Also, both commenters raised concerns with the current environment surrounding exchange non-transaction fee proposals that should be addressed by the Commission through rule making, or Congress, more holistically and not through an individual exchange fee filings. However, the commenters do raise one issue that concerns this proposal whereby it asserts that the Exchange's comparison to fees charged by other exchanges for similar ports is irrelevant and unpersuasive. The core of the issue raised is regarding the cost to connect to one exchange compared to the cost to connect to others. A thorough response to this comment would require the Exchange to obtain competitively sensitive information about other exchanges' architecture and how their members connect. The Exchange is not privy to this information. Further, the commenters compare the Exchange's proposed rate to other exchanges that offer purge port functionality across all matching engines for a single fee, but fails to provide the same comparison to other exchanges that charge for purge functionality as proposed herein. Nonetheless, the Exchange notes that it is relying on a cost-based justification to support the proposed fee change, not a comparison of the proposed fees to the fees charged by other exchanges for similar purging services. The Exchange does not have insight into the technical architecture of other exchanges so it is difficult to ascertain the number of purge ports a firm would need to connect to another exchange's entire market. Therefore, the Exchange is limited to comparing its proposed fee to other exchanges' purge port fees as listed in their fee schedules.

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,[41] and Rule 19b-4(f)(2)[42] thereunder. At any time within 60 days of the filing of the proposed

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41 15 U.S.C. 78s(b)(3)(A)(ii).

42 17 CFR 240.19b-4(f)(2).

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 (https://www.sec.gov/rules/sro.shtml); or
- Send an email to rule-comments@sec.gov. Please include file number SR-MIAX-2024-22 on the subject line.

Paper Comments:

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

All submissions should refer to file number SR-MIAX-2024-22. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (https://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 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR-MIAX-2024-22 and should be submitted on or before [INSERT DATE 21 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[43]

Sherry R. Haywood,

Assistant Secretary.

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[43] 17 CFR 200.30-3(a)(12).