



SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-102796; File No. SR-CboeBZX-2025-052]

Self-Regulatory Organizations; Cboe BZX Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Adopt Fees for New Logical Ports in Connection with a New Connectivity Offering on its Equity Options Platform

April 9, 2025.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the “Act”),¹ and Rule 19b-4 thereunder,² notice is hereby given that on April 4, 2025, Cboe BZX Exchange, Inc. (the “Exchange” or “BZX”) filed with the Securities and Exchange Commission (the “Commission”) the 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

Cboe BZX Exchange, Inc. (the “Exchange” or “BZX”) proposes to adopt fees for new logical ports in connection with a new connectivity offering on its equity options platform. The text of the proposed rule change is provided in Exhibit 5.

The text of the proposed rule change is also available on the Exchange’s website (https://www.cboe.com/us/options/regulation/rule_filings/bzx/), at the Exchange’s Office of the Secretary, and at the Commission’s Public Reference Room.

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

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

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

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 its fee schedule to adopt fees for Unitized Logical Ports, a new connectivity offering for its equity options platform (“BZX Options”) and adopt new Average Daily Quote and Average Daily Order fees.³

Unitized Port Fees

By way of background, Exchange Members may interface with the Exchange’s Trading System by utilizing either the Financial Information Exchange (“FIX”) protocol or the Binary Order Entry (“BOE”) protocol. The Exchange further offers a variety of logical ports,⁴ which provide users of these ports with the ability within the Exchange’s System to accomplish a specific function through a connection, such as order entry, data receipt or access to information. For example, such ports include Logical Ports⁵, Purge Ports,⁶ and Ports with Bulk Quoting Capabilities⁷ (“Bulk Ports”). By way of further background, each of these ports corresponds to a

³ The Exchange initially submitted the proposed rule change on August 30, 2024 and was effective September 3, 2024 (SR-CboeBZX-2024-082). On September 13, 2024, the Exchange withdrew that filing and submitted SR-CboeBZX-2024-088. On November 12, 2024, the Exchange withdrew that filing and submitted SR-CboeBZX-2024-113. On December 20, 2024, the Exchange withdrew that filing and submitted SR-CboeBZX-2024-131. On February 3, 2025, the Exchange withdrew that filing and submitted SR-CboeBZX-2025-016. On April 4, [sic]the Exchange withdrew that filing and submitted this filing.

⁴ See Exchange Rule 21.1 (1)(2), definition of “logical port.” Logical ports include FIX and BOE ports (used for order entry), drop logical port (which grants users the ability to receive and/or send drop copies) and ports that are used for receipt of certain market data feeds.

⁵ The term “Logical Ports” used herein shall refer to FIX and BOE ports (used for order entry). See Cboe BZX Options Fee Schedule, Options Logical Port Fees, “Logical Ports” (which exclude Purge Port, Multicast PITCH Spin Server Port or GRP Port).

⁶ Purge Ports provide users the ability to cancel a subset (or all) of open orders across Executing Firm ID(s) (“EFID(s)”), Underlying symbol(s), or CustomGroupID(s), across multiple logical ports/sessions. See Securities Exchange Act Release 79956 (February 3, 2017), 82 FR 10102 (February 9, 2017) (SR-BatsBZX-2017-05). See also https://cdn.cboe.com/resources/membership/US_Options_BOE_Specification.pdf and https://cdn.cboe.com/resources/membership/US_Options_FIX_Specification.pdf.

⁷ See Exchange Rule 21.1 (1)(3), definition of “bulk port.” Bulk Ports provide users with the ability to submit

single running order handler. Each order handler processes the messages it receives from these ports from the connected Members. This processing includes determining whether the message contains the required information to enter the System, whether the message parameters satisfy port-level (i.e., pre-trade) risk controls, and where to send that message within the System (i.e., to which matching engine⁸). Once an order handler completes the processing of a message, it sends that message to the appropriate matching engine.

Historically, all order handlers connect to all matching engines. That is, under the BOEv2 and FIX protocols, Members were able to access all symbols from a single logical port since each port corresponds to a single order handler that conveniently connects to all matching engines (“convenience layer”). Although the Exchange configures the software and hardware for its order handlers in the same manner, there can be a natural variance in the amount of time it takes individual order handlers to process messages of the same type under this architecture. Factors that contribute to this differentiation in processing times include the availability of shared resources (such as memory), which is impacted by (among other things) then-current message rates, the number of active symbols (i.e., classes), and recent messages for a symbol. This natural differentiation in processing times inherently may cause some messages to be sent from an order handler to a matching engine ahead of other messages that the Exchange’s System may have received earlier on a different order handler.

The Exchange recently implemented a new architecture and protocol which includes, among other things, a single gateway per matching engine (“unitized layer”), which renders the above-described natural variance of order handler processing irrelevant for Members that

and update multiple quote bids and offers in one message through logical ports enabled for bulk-quoting.

⁸ A matching engine is a part of the Exchange’s 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.

connect to the unitized order handler.⁹ More specifically, effective August 19, 2024, the Exchange implemented this new unitized access architecture and a new version of its Binary Order Entry (BOE) protocol¹⁰ (“BOEv3”), which also resulted in the adoption of new logical port types (“Unitized Logical Ports”), for which the Exchange is now seeking to establish fees.¹¹ Under the new unitized BOEv3 architecture, a single BOEv3 order handler corresponds to a single matching engine and all message traffic (including FIX port traffic)¹² pass through this unitized BOEv3 order handler before reaching that order handler’s corresponding matching engine. If a Member desires to access this optional unitized layer of the BOEv3 architecture (which it is not required to do), the Member would need to obtain a Unitized Logical Port for each unitized BOEv3 order handler and corresponding matching engine(s) that process the symbol(s) that Member desires to trade.¹³ The three new port types that have been adopted are: (1) BOE Unitized Logical Ports,¹⁴ (2) Bulk Unitized Logical Ports,¹⁵ and (3) Purge Unitized Logical Ports.¹⁶ As noted above, use of Unitized Logical Ports is completely voluntary, and no Member is required, or under any regulatory obligation, to utilize them.

⁹ See Securities Exchange Act Release 100582 (July 23, 2024), 89 FR 60958 (July 29, 2024) (SR-CboeBZX-2024-071).

¹⁰ The BOE protocol is a proprietary order entry protocol used by Members to connect to the Exchange. The current version is BOEv2.

¹¹ See Securities Exchange Act Release No. 100582 (July 23, 2024) 89 FR 60958 (July 29, 2024) (SR-CboeBZX-2024-071).

¹² The Exchange decommissioned BOEv2 in March 2025.

¹³ Members will be able to purchase Unitized Logical Ports individually or may purchase a “set,” which will provide the total number of ports needed to connect to each available matching engine.

¹⁴ Similar to the Exchange’s preexisting Logical Ports, the new Unitized Logical Ports allow Members to submit orders and quotes.

¹⁵ Similar to the Exchange’s preexisting Bulk Ports, the new Bulk Unitized Logical Ports allow Members to submit and update multiple quote bids and offers in one message and are particularly useful for Members that provide quotations in many different options.

¹⁶ Similar to the Exchange’s preexisting Purge Ports, the new Purge Unitized Logical Ports are dedicated logical ports that provide the ability to cancel/purge all open orders, or a subset thereof, across multiple logical ports through a single cancel/purge message. They also solely process purge messages and are designed to assist Members, including Market Makers, in the management of, and risk control over, their orders and quotes, particularly if the Member is dealing with a large number of options.

The Exchange proposes to establish fees for the new Unitized Logical Ports, which can be purchased on an individual basis (i.e., capable of accessing a specified matching engine (“Matching Unit”)) and/or as a set (“Unitized Logical Port Set”) (i.e., will include the total number of ports needed to connect to each available Matching Unit). The proposed fees for Unitized Logical Ports purchased individually and as sets are as follows:

| | |
|-----------------------------------|--|
| BOE Unitized Logical Port | \$350/port/month |
| Bulk Unitized Logical Port | \$550/port/month |
| Purge Unitized Logical Port | \$400/port/month |
| BOE Unitized Logical Port (Set) | \$2,500/month for 1st and 2nd port set \$3,000/month for 3rd – 14th port set \$3,500/month for 15th– 30th port set |
| Bulk Unitized Logical Port (Set) | \$5,500/month for 1st and 2nd port set \$6,000/month for 3rd – 14th port set \$6,500/month for 15th– 30th port set |
| Purge Unitized Logical Port (Set) | \$2,500/month for 1st and 2nd port set \$3,000/month for 3rd – 14th port set \$3,500/month for 15th– 30th port set |

The proposed fees for Unitized Logical Port Sets are progressive. For example, if a User were to purchase 11 BOE Unitized Logical Port Sets, it will be charged a total of \$32,000 per month ($\$2,500 * 2 + \$3,000 * 9$). As is the case today for existing logical ports, the monthly fees are assessed and applied in their entirety and are not prorated. The Exchange notes the current standard fees assessed for existing logical ports will remain applicable and unchanged.¹⁷ The proposed fees for Unitized Logical Port Sets will be assessed per set, per Port Type. As an example, if a Member requests three BOE Unitized Logical Port Sets, one Bulk Unitized Logical Port Set, and one Purge Unitized Logical Port Set, the firm would be charged \$8,000 ($\$2,500 + \$2,500 + \$3,000$) for the three BOE Unitized Logical Port Sets, \$5,500 for the one Bulk Unitized Logical Port Set, and \$2,500 for the one Purge Unitized Logical Port Set.¹⁸

¹⁷ For example, the Exchange currently assesses a monthly per port fee of \$750 for Logical Ports and Purge Ports. It also assesses \$1,500 per port month for the 1st and 2nd Bulk Ports and \$2,500 for the 3rd or more Bulk Ports. See Cboe BZX Options Fee Schedule, Options Logical Port Fees.

¹⁸ The Exchange proposes to include this example in the Fee Schedule to provide further clarity as to the application of the proposed fees.

Since the Exchange has a finite amount of capacity, it also proposes to prescribe a maximum limit on the number of Unitized Logical Ports that may be purchased and used on a per firm, per Matching Unit basis. The purpose of establishing these limits is to manage the allotment of Unitized Logical Ports in a fair and reasonable manner while preventing the Exchange from being required to expend large amounts of resources in order to provide an unlimited capacity to its matching engines. The Exchange previously proposed to provide that the two structures (i.e., individual unitized ports or unitized port sets) can be combined for up to a maximum of 20 Unitized Logical Ports per Member, per Matching Unit, per port type.¹⁹ The Exchange noted at the time it adopted this maximum that it would continue monitoring interest by all Members and system capacity availability with the goal of increasing these limits to meet Members' needs if and when the demand is there and/or the Exchange is able to accommodate it.²⁰ Since then, the Exchange has determined that it is able to accommodate an increased cap relative to current demand and available to the Exchange's matching engine and order handler capacity. As such, the Exchange proposes to increase the maximum to 30 Unitized Logical Ports per Member, per Matching Unit, per port type. As an example, a Member may request 12 BOE Unitized Logical Port Sets and 18 individual BOE Unitized Logical Ports for Matching Unit 1, providing a total max of 30 BOE Unitized Logical Ports on Matching Unit 1 specifically. This would result in having 30 BOE Unitized Logical Ports on Matching Unit 1 and 12 BOE Unitized Ports on all additional Matching Units as part of the 12 BOE Unitized Logical Port Sets requested. Additionally, a firm may request 30 Bulk Unitized Logical Port Sets and 30 Purge Unitized Logical Port Sets as those would constitute different port types.²¹ The Exchange

¹⁹ See Securities Exchange Act Release 101212 (September 27, 2024), 89 FR 80614 (October 3, 2024) (SR-CboeBZX-2024-088).

²⁰ Id.

²¹ The Exchange proposes to include this example in its Fee Schedule to provide clarity as to how Unitized Logical Port fees will be assessed. The Exchange further notes that in its prior filing (SR-CboeBZX-2025-016), it increased the cap to 30 and noted as such in its fee schedule; however, the Exchange will now as include a clarifying update in its fee schedule to update the max tier amount from 20 to 30 for consistency and clarity.

believes the proposed cap will be sufficient for the vast majority of Members. The Exchange notes that it will continue to monitor interest in Unitized Logical Ports and system capacity availability with the goal of further increasing these limits to meet Members needs if and when the demand is there, and the Exchange is able to accommodate it. Additionally, Members will still be able to utilize the existing logical port connectivity offerings with no maximum limit in addition to their Unitized Logical Port allocation. As further discussed below, the Exchange's pricing for these new Unitized Logical Ports are less than or comparable to similar offerings from other exchanges.²²

Average Daily Quotes and Average Daily Order Fees

The Exchange also proposes to adopt Average Daily Order (“ADO”) and Average Daily Quote (“ADQ”) fees. “ADO” represents the total number of orders for the month, divided by the number of trading days. “ADQ” represents the total number of quotes for the month, divided by the number of trading days. When measuring a Member’s ADO and ADQ, orders, quotes, cancel/replace modify orders, and quote updates which submit a bid or offer and do not include cancels, are included. Further ADO and ADQ will include orders and quotes submitted by a Member from all logical port types (i.e., non-unitized logical ports and Unitized Logical Ports). Each Member may submit up to 2,000,000 average daily orders or up to 250,000,000 average daily quotes per calendar month without incurring any ADO or ADQ fees. In the event that the average number of quotes per trading day during a calendar month submitted exceeds

²² See MIAX Express Interface for Quoting and Trading Options, MEI Interface Specification, Section 1.2 (MEI Architecture) available at: [MIAX_Express_Interface_MEI_v2.10a.pdf](https://www.miaxglobal.com/sites/default/files/page-files/FIX_Order_Interface_FOI_v2.10a.pdf) (miaxglobal.com) which indicates firms can connect directly to one or more matching engines depending on which symbols they wish to trade and states “MIAX trading architecture is highly scalable and consists of multiple trade matching environments (clouds). Each cloud handles trading for all options for a set of underlying instruments” and provides that “Market Maker firms can connect to one or more pre-assigned servers on each cloud. This will require the firm to connect to more than one cloud in order to quote in all underlying instruments they are approved to make markets in” See also MIAX Emerald Options Order Management Using FIX Protocol, FIX Interface Specification, available at https://www.miaxglobal.com/sites/default/files/page-files/FIX_Order_Interface_FOI_v2.6c.pdf. MIAX describes its FIX Order Interface Gateway as “a high-speed FIX Order Interface gateway [that] conveniently routes orders to our trading engines through a common entry point to our trading platform.” See <https://www.miaxglobal.com/markets/us-options/miax-options/interface-specifications>.

250,000,000, each incremental usage of up to 20,000 average daily quotes will incur an additional fee as set forth in the table below. Similarly, in the event that the average number of orders per trading day during a calendar month submitted exceeds 2,000,000, each incremental usage of up to 1,000 average daily orders will incur an additional ADO fee as set forth in the table below.²³ A Member’s ADO and ADQ will be aggregated together with any affiliated Member sharing at least 75% common ownership.

| ADQ Fee Rate per 20,000 ADQ | Fee | | | | |
|-----------------------------|----------------|---------------|--------------|----------------|----------------|
| | Tier 1 | Tier 2 | Tier 3 | Tier 4 | Tier 5 |
| | <= 250,000,000 | > 250,000,000 | >500,000,000 | >1,000,000,000 | >3,500,000,000 |
| | \$0.00 | \$0.05 | \$0.075 | \$0.10 | \$0.20 |
| | | | | | |
| ADO Fee Rate per 1,000 ADO | Tier 1 | Tier 2 | Tier 3 | Tier 4 | Tier 5 |
| | <= 2,000,000 | > 2,000,000 | >2,500,000 | >3,000,000 | >3,500,000 |
| | \$0.00 | \$1.00 | \$1.50 | \$2.00 | \$2.50 |

As an example, a Member that has 510,000,000 ADQ would subsequently have 25,500 “ADQ increments” (510,000,000 ADQ / 20,000 ADQ increments). While 12,500 of the 25,500 ADQ increments are free within Tier 1, 12,500 of the ADQ increments would be fee liable at \$0.050 within Tier 2, while the remaining 500 ADQ increments would be fee liable at \$.075 within Tier 3, resulting in a total ADQ fee of \$662.50 for that month.²⁴

The Exchange notes that market participants with incrementally higher ADO or ADQ have the potential residual effect of exhausting system resources, bandwidth, and capacity. Higher ADO or ADQ may therefore, in turn, create latency and impact other Members’ ability to receive timely executions. The proposed fee structure has multiple thresholds, and the proposed fees are incrementally greater at higher ADO and ADQ rates because the potential impact on

²³ The term “quote” refers to bids and offers submitted in bulk messages. A bulk message means a single electronic message a user submits with an M (Market-Maker) capacity to the Exchange in which the User may enter, modify, or cancel up to an Exchange-specified number of bids and offers. A User may submit a bulk message through a bulk port as set forth in Exchange Rule 21.1(j)(3). See Rule 16.1 (definition of bulk message).

²⁴ The Exchange proposes to include this example in the Fees Schedule to provide further clarity as to the application of the proposed fees.

exchange systems, bandwidth and capacity becomes greater with increased ADO and ADQ rates. As noted above, the proposal contemplates that a Member would have to exceed the high ADO rate of 2,000,000 and a Market Maker would have to exceed the high ADQ rate of 250,000,000 before that market participant would be charged a fee under the proposed respective tiers. The Exchange believes that it is in the interests of all Members and market participants who access the Exchange to not allow other market participants to exhaust System resources, but to encourage efficient usage of network capacity. The Exchange also believes this proposal (and in particular the proposed fee amounts associated with higher ADO and ADQ) will reduce the incentive for market participants to engage in excessive order/quote and trade activity that may require the Exchange to otherwise increase its storage capacity and will encourage such activity to be submitted in good faith for legitimate purposes.

The Exchange also represents that the proposed fees are not intended to raise revenue; rather, as noted above, it is intended to encourage efficient behavior so that market participants do not exhaust System resources. Moreover, the Exchange intends to provide Members with daily reports, free of charge, which will detail their order and trade activity in order for those firms to be fully aware of all order and trade activity they (and their affiliates) are sending to the Exchange. This will allow Members to monitor their behavior and determine whether it is approaching any of the ADO or ADQ thresholds that trigger the proposed fees.

The Exchange lastly notes that other exchanges have adopted various fee programs that assess incrementally higher fees to Members that have incrementally higher order and/or quoting trading activity for similar reasons.²⁵

²⁵ See, e.g., Securities Exchange Act Release No. 60102 (June 11, 2009), 74 FR 29251 (June 19, 2009) (SR-NYSEArca-2009-50) (adopting fees applicable to Members based on the number of orders entered compared to the number of executions received in a calendar month). It appears that Nasdaq similarly assesses a penalty charge to its members that exceed certain “weighted order-to-trade ratios”. See *Price List—Trading Connectivity*, NASDAQ, available at <https://www.nasdaqtrader.com/trader.aspx?id=pricelisttrading2>. See also Securities Exchange Act Release No. 91406 (March 25, 2021), 86 FR 16795 (March 31, 2023) (SR-EMERALD-2021-10) (adopting an “Excessive Quoting Fee” to ensure that Market Makers do not over utilize the exchange’s System by sending messages to the MIAX Emerald, to the detriment of all other Members of the exchange).

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the “Act”) and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.²⁶ Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)²⁷ requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)²⁸ requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers. The Exchange also believes the proposed rule change is consistent with Section 6(b)(4)²⁹ of the Act, which requires that Exchange rules provide for the equitable allocation of reasonable dues, fees, and other charges among its Members and other persons using its facilities.

The Exchange believes the proposed fees are reasonable because Unitized Logical Ports provide an optional, valuable service in that the ports are intended to create a more consistent, deterministic experience for messages once received within the Exchange’s System under the recently adopted unitized BOEv3 architecture. As discussed above, the new architecture (and thereby the new Unitized Logical Ports) was designed to create a more consistent, deterministic experience for messages once received within the Exchange’s System, which the Exchange believes improves the overall access experience on the Exchange and will enable future system

²⁶ 15 U.S.C. 78f(b).

²⁷ 15 U.S.C. 78f(b)(5).

²⁸ Id.

²⁹ 15 U.S.C. 78f(b)(4).

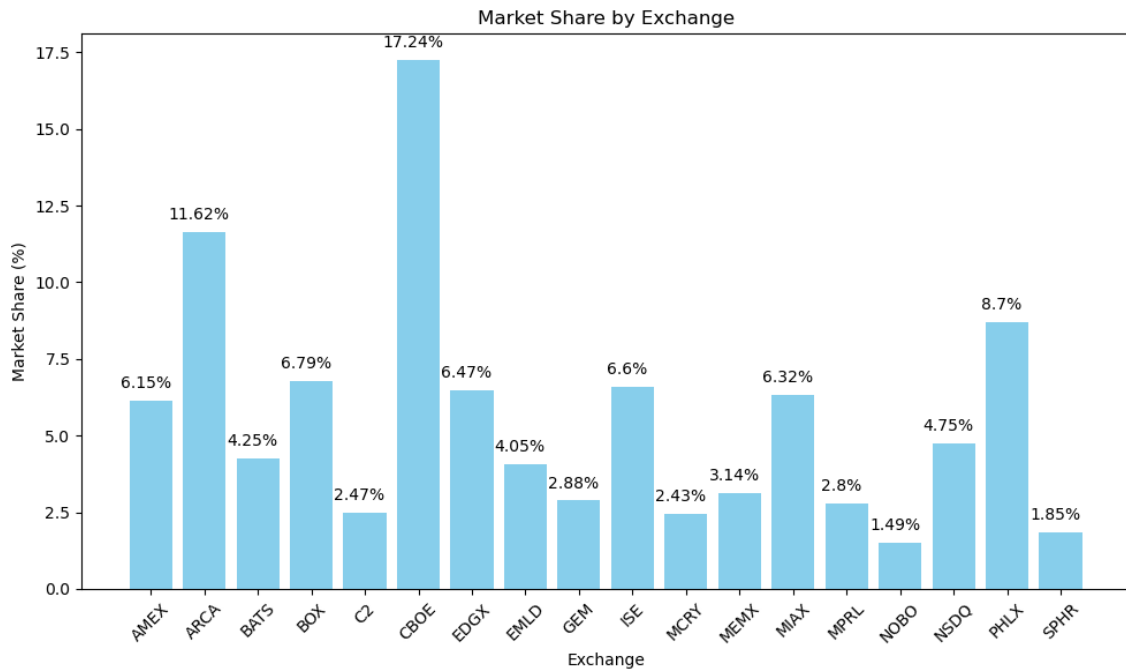
enhancements. As noted, the BOEv3 protocol and architecture, along with the three new corresponding Unitized Logical Ports, are intended to reduce the natural variance of order handler processing times for messages, and as a result reduce the potential resulting “reordering” of messages when they are sent from order handlers to matching engines. The adoption of the unitized BOEv3 structure (including the corresponding new Unitized Ports) was a technical solution that is intended to reduce the potential of this reordering and increase determinism.³⁰ The Exchange believes the proposed fees are also reasonable to offset costs incurred in order to build out an entirely new unitized architecture.

Furthermore, the Exchange also notes that it believes the proposed fees are similar to or less than fees assessed by other exchanges, for analogous connections as explained in further detail below.³¹ The Exchange notes that other exchanges that offer similar pricing for similar connections have a comparable, or even lower, market share as the Exchange, as detailed further below. Indeed, the Exchange has reviewed the U.S. options market share for each of the eighteen options markets utilizing total options contracts traded in 2025 through February 27, 2025, as set forth in the following graph:³²

³⁰ See Securities Exchange Act Release 100582 (July 23, 2024), 89 FR 60958 (July 29, 2024) (SR-CboeBZX-2024-071).

³¹ See e.g. MIAX Pearl Options Fee Schedule.

³² Market share is the percentage of volume on a particular exchange relative to the total volume across all exchanges, and indicates the amount of order flow directed to that exchange. High levels of market share enhance the value of trading and ports. Total contracts include both multi-list options and proprietary options products. Proprietary options products are products with intellectual property rights that are not multi-listed. The Exchange does not currently list proprietary products.



The Exchange (market share of 4.25%) notes that the proposed Unitized Purge Port fee of \$400 to connect to a matching engine is lower than fees charged by at least two other exchanges with comparable (indeed, even lower) market share, particularly by MIAX Emerald (4.05% market share) and MIAX Pearl (2.8% market share)[sic] The Exchange does note that both MIAX Emerald and MIAX Pearl offer two purge ports for a matching engine connection at a cost of \$600,³³ while the Exchange offers the primary Unitized Purge Port as well as a secondary Unitized Purge Port for its redundant secondary data center ports for \$400. The Exchange believes that the bulk of the value customers derive isn't within the quantity itself of the purge ports, but the ability to connect to the specific matching engine.³⁴ For this reason, the Exchange still believes it is better priced than MIAX Emerald's and MIAX Pearl's comparable offerings.

Furthermore, comparing the costs of purchasing Purge Ports to connect to all matching engines, the Exchange still comes in at a lower cost than MIAX Pearl or MIAX Emerald. Connecting to all matching engines on MIAX Emerald or MIAX Pearl would cost \$7,200, while

³³ See e.g., MIAX Emerald Options Fee Schedule.

³⁴ Due to the higher performance that offers higher throughput with more deterministic outcomes for participants, the revised architecture leads to a decreased demand in ports generally.

connecting to all matching engines on BZX Options costs \$2,500.³⁵ As noted above, while the Exchange believes the bulk of the value customers derive is the ability to connect to specific matching engines, and in this case, all matching engines, if a customer did want to have two purge ports for all matching engines (in addition to the included secondary purge ports provided), it would cost the participant \$5,000 ($\$2,500/\text{set} \times 2$) – still lower than the cost of \$7,200 for two purge ports for all matching engines that MIAX Emerald and MIAX Pearl offer.

While not as closely comparable, MIAX Emerald and MIAX Pearl both offer Full Service MEI Ports (analogous to the Exchange's Bulk Port offering) and Limited Service MEI Ports (analogous to the Exchange's BOE Port offering) that are based on the lesser of a participant's per class basis or percentage of total national average daily volume measurement; for each matching engine a participant connects to (based on their activity), they receive two Full Service MEI Ports and four Limited Service MEI Ports.³⁶ Presuming a participant is quoting up to 10 classes for MIAX Pearl or 5 classes for MIAX Emerald (the lowest available tier for each exchange), they are connecting to fewer matching engines than another participant who may be quoting over 100 classes (the highest tier available for both MIAX Pearl and MIAX Emerald). In comparing the monthly cost using the pricing of the lowest tiers for MIAX Pearl and MIAX Emerald, the Exchange presumes an estimated comparable connection of connecting to 3 different matching engines at a cost of \$550 per Bulk Port per matching engine and \$350 per BOE Port per matching engine. This equates to \$7,500 ($(\$350 \times 4 \text{ Ports} \times 3 \text{ matching engines}) + (\$550 \times 2 \text{ Ports} \times 3 \text{ matching engines})$) per month for BZX Options, and \$5,000 per month for both MIAX Pearl and Emerald. For the highest tier, the Exchange presumes that if a participant was quoting over 100 classes, they are likely connecting to all matching engines. In this case, it costs a participant \$12,000 per month for MIAX Pearl, \$20,500 per month for MIAX Emerald,

³⁵ The pricing amounts for MIAX Pearl and MIAX Emerald are based off of \$600 per Purge Port fee per matching engine with a total of 12 matching engines (see [MIAX_Emerald_User_Manual_12082020.pdf](#) and see https://www.miaxglobal.com/miax_pearl_user_manual.pdf). While the pricing for BZX Options is based on connecting to all Matching Engines by purchasing a set.

³⁶ See e.g., [MIAX Pearl Options Fee Schedule](#).

and \$22,000 (\$5,500 *2 Bulk Sets) + (\$2,500 * 2 BOE Sets (Tier 1)) + (\$3,000 * 2 BOE Sets (Tier 2)) per month for BZX Options to connect to all matching engines.

While the Exchange is priced higher in these specific examples, it again believes the value comes from the ability to connect to additional matching engines as opposed to the quantity of ports itself and participants of the Exchange are able to determine their number of desired ports as opposed to having a set package based on their Exchange activity. For example, a participant of BZX Options can have similar matching engine connectivity to the lowest tier of MIAX Emerald or MIAX Pearl by connecting to three matching engines (using the same presumed number as above) by purchasing three Bulk Ports for a cost of \$1,650 per month, substantially less than the fixed costs of \$5,000 per month of MIAX Emerald and MIAX Pearl. Additionally, a participant on BZX Options is able to connect to all matching engines for a price of \$5,500 per month by purchasing a Bulk Set as opposed to the fixed cost of MIAX Emerald and MIAX Pearl at \$20,000 per month and \$12,000 per month, respectively. Furthermore, MIAX Emerald does allow participants to purchase additional Limited Service ports at a price of \$420 per month, higher than the Exchange's comparable offering of \$350 per month for a BOE port. While it is challenging to compare the exact pricing on these products, the Exchange believes that it is priced competitively, if not lower than MIAX Pearl and MIAX Emerald.

The Exchange also emphasizes that the use of the Unitized Logical Ports is not necessary for trading on the Exchange and, as noted above, is entirely optional. Users can also continue to access the Exchange through existing logical port offerings at existing rates. It is a Member's specific business needs that will drive its decision whether to use Unitized Logical Ports in lieu of, or in addition to, existing logical ports (or, as emphasized, not use them at all). If a User finds little benefit in having these ports based on its business model and trading strategies, or determines the Unitized Logical ports are not cost-efficient for its needs, or does not provide sufficient value to the firm, such User may continue connecting to the Exchange in the manner it does today, unchanged. Indeed, the Exchange notes that since the adoption of Unitized Logical

Ports on August 19, only approximately 27% of logical ports, bulk ports and purge ports being used are Unitized Logical Ports and approximately 73% are the preexisting Logical Ports, Bulk Ports and Purge Ports. Moreover, the Exchange believes that providing Members the option of purchasing Unitized Logical Ports individually or in sets provides Members further flexibility and an opportunity for cost savings for those Members that wish to only trade a subset of classes. The Exchange has seen firms take advantage of individually priced Unitized Logical Ports when their needs do not require connectivity to all matching engines – further allowing its Members to pay reduced fees relative to a Unitized Logical Port set.

The Exchange also believes that the proposed Unitized Logical Port fees are equitable and not unfairly discriminatory because they continue to be assessed uniformly to similarly situated users in that all Users who choose to purchase Unitized Logical Ports will be subject to the same proposed tiered fee schedule. Moreover, Members purchasing Unitized Logical Ports will only do so if they find a benefit and sufficient value in such ports as, all Members can otherwise continue to use the preexisting logical connectivity options. As such, Members can choose whether or not to purchase Unitized Logical Ports based on their respective business needs.

The proposed ascending tier structure for Unitized Logical Port Sets is reasonable, equitable and not unfairly discriminatory as it's designed to encourage market participants to be efficient with their respective Unitized Logical Port usage. It also is designed so that Members that use a higher allotment of the Exchange's system resources pay higher rates, rather than placing that burden on market participants that have more modest needs. The Exchange believes the proposed ascending fee structure is therefore another appropriate means, in conjunction with an established Unitized Logical Port limit, to manage this finite resource (system capacity) and ensure its apportioned fairly. Furthermore, the Exchange already assesses higher fees to those that consume more Exchange resources for the existing non-Unitized Bulk Ports.³⁷ The proposed

³⁷ See Cboe U.S. Options Fees Schedule, BZX Options, Options Logical Port Fees, Ports with Bulk Quoting

limit on Unitized Logical Ports is also reasonable, equitable and not unfairly discriminatory as the Exchange believes that it is in the interests of all Members and market participants who access the Exchange to not allow Members to exhaust System resources, but to encourage efficient usage of network capacity. The Exchange also notes that the new BOEv3 unitized architecture is subject to software limitations on the number of sessions that can be created on any one unitized process. Consideration was given to this limitation as well as to the amount of ports firms had indicated they would need prior to the implementation of Unitized Logical Ports.

The Exchange believes the proposed ADO and ADQ fees are reasonable as Members that do not exceed the high thresholds of 2,000,000 ADO and 250,000,000 ADQ will not be charged any fee under the proposed tiers. The Exchange notes that in establishing the proposed thresholds, it evaluated average ADO and ADQ rates over several months and the thresholds were designed to protect the Exchange's Matching Engines from being adversely impacted from sustained and excessive orders/quotes throughout the course of a given month. The ADQ thresholds are also designed to ensure Market Makers quoting activity, which acts as important source of liquidity, is not impeded by the proposal.³⁸ The Exchange believes it's reasonable, equitable and not unfairly discriminatory to assess higher fees when a Member has higher ADO and ADQ rates because the potential impact on exchange systems, bandwidth and capacity becomes greater with increased ADO and ADQ rates. The Exchange believes the proposed fee amounts are reasonable as the Exchange believes them to be commensurate with the proposed thresholds. Particularly, the proposed fee amounts that correspond to higher ADO and ADQ rates are designed to incentivize Members to reduce excessive order and quoting trade activity that the Exchange believes can be detrimental to all market participants at those levels and encourage such activity to be made in good faith and for legitimate purposes. As noted above, the Exchange

Capabilities.

³⁸ Since the implementation of the proposal on September 3, 2024, the Exchange notes that it has not received any feedback from Market Maker participants that the proposal has impeded their ability to meet their quoting obligations.

believes that it is in the interests of all Members and market participants who access the Exchange to not allow Members to exhaust System resources, but to encourage efficient usage of network capacity. The Exchange therefore also believes that the proposed fees appropriately reflect the benefits to different firms of being able to send orders and quotes into the Exchange's System and also believes the proposed fees are one method of facilitating the Commission's goal of ensuring that critical market infrastructure has "levels of capacity, integrity, resiliency, availability, and security adequate to maintain their operational capability and promote the maintenance of fair and orderly markets."³⁹

The Exchange believes adopting the proposed ADO and ADQ fees are reasonable as unfettered usage of System capacity and network resource consumption can have a detrimental effect on all market participants who access and use the Exchange. As discussed above, high ADO and ADQ rates may adversely impact system resources, bandwidth, and capacity which may, in turn, create latency and impact other Members' ability to receive timely executions. The Exchange believes the proposed fees are therefore reasonable as they are designed to focus on activity that is truly disproportionate while fairly allocating costs.

Further, the Exchange believes that the proposed ADO and ADQ fees are equitable and not unfairly discriminatory because they will be assessed uniformly to similarly situated users in that all Members that exceed the thresholds in connection with ADO and ADQ will be assessed the proposed ADO and ADQ rates. Regarding ADO and ADQ, no market participant is assessed any fees unless it exceeds the proposed thresholds. As noted above, the Exchange believes the proposed ADO and ADQ thresholds (i.e., 2,000,000 ADO and 250,000,000 ADQ) are appropriately high rates respectively, such that the Exchange expects the vast majority of Members to not exceed them. While the Exchange has no way of predicting with certainty how the proposed changes will impact Member activity, based on trading activity from the prior

³⁹ See Securities Exchange Act Release No. 73639 (November 19, 2014), 79 FR 72251 (December 5, 2014) (File No. S7-01-13) (Regulation SCI Adopting Release).

months the Exchange would expect that, absent any changes to Member behavior, all Members would fall within proposed ADO Tier 1 (and thus not be subject to any new fees) and approximately 74% of Members would fall within proposed ADQ Tier 1 (and thus also not be subject to any new fees). With respect to the remaining Members (approximately 26%) that would exceed the ADQ Tier 1 threshold based on current activity, the Exchange would anticipate, absent any change in behavior, approximately 3 Members to fall within Tier 2, approximately 6 Members to fall within Tier 3, approximately 3 Members to fall within Tier [sic] and no Members to fall within Tier 5. Notwithstanding this impact, the Exchange believes that Market Makers are able to continue providing important liquidity to the Exchange and meet their quoting obligations[sic]

The Exchange believes it's equitable and not unfairly discriminatory to assess incrementally higher fees to Members that have higher ADO and ADQ rates because the potential impact on exchange systems, bandwidth and capacity becomes greater with increased ADO and ADQ. The Exchange also believes it's equitable and not unfairly discriminatory to aggregate Members trading activity with any affiliated Member sharing at least 75% common ownership in order to prevent members from shifting their order flow or quoting activity to other affiliates in order to circumvent the proposed fees.

The Exchange lastly believes that its proposal is reasonable, equitably allocated and not unfairly discriminatory because it is not intended to raise revenue for the Exchange; rather, it is intended to encourage efficient behavior so that Members do not exhaust System resources. Moreover, as noted above, competing options exchanges similarly assess fees to deter Members from over utilizing the exchange's System by having excessive order and/or quoting trading activity.⁴⁰

⁴⁰ See supra note 20.

The Exchange finally notes that it operates in a highly competitive market in which market participants can readily direct order flow to competing venues if they deem fee levels at a particular venue to be excessive or incentives to be insufficient. The Exchange is only one of 18 options exchanges which market participants may direct their order flow and/or participate on, and it represents a small percentage of the overall market.⁴¹

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

The Exchange does not believe that the proposed rule change to adopt fees for Unitized Logical Ports will impose any burden on intramarket competition that is not necessary in furtherance of the purposes of the Act because the proposed fees for will apply equally to all similarly situated Members. As discussed above, Unitized Logical Ports are optional and Members may choose to utilize Unitized Logical Ports, or not, based on their views of the additional benefits and added value provided by these ports. The Exchange believes the proposed fees will be assessed proportionately to the potential value or benefit received by Members with a greater number of Unitized Logical Ports and notes that Members may determine to cease using Unitized Logical Ports. As discussed, Members can also continue to access the Exchange through existing Logical Ports, which fees are not changing.

Similarly, the Exchange does not believe that the proposed rule change to adopt ADO and ADQ fees will impose any burden on intramarket competition that is not necessary in furtherance of the purposes of the Act because such fees will apply equally to all similarly situated Members. Particularly, the proposed fees apply uniformly to all Members, in that any Member who exceeds the ADO and/or ADQ Tier 1 thresholds will be subject to a fee under the proposed corresponding tiers. The Exchange believes that the proposed change neither favors nor penalizes one or more categories of market participants in a manner that would impose an undue burden on competition. Rather, the proposal seeks to benefit all market participants by

⁴¹ See Cboe Global Markets, U.S. Options Market Volume Summary, Month-to-Date (August 27, 2024), available at https://www.cboe.com/us/options/market_statistics/ which reflects the Exchange representing only 3.3% of total market share.

encouraging the efficient utilization of the Exchange's network while taking into account the important liquidity provided by its Members. As discussed above potential impact on exchange systems, bandwidth and capacity becomes greater with increased ADO and ADQ rates. The Exchange also anticipates that the vast majority of Members on the Exchange will not be subject to any fees under the proposed tiers. Accordingly, the Exchange believes that the proposed ADO and ADQ fees do not favor certain categories of market participants in a manner that would impose a burden on competition.

Next, the Exchange believes the proposed rule change does not impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act. As previously discussed, the Exchange operates in a highly competitive market, including competition for exchange memberships. Market Participants have numerous alternative venues that they may participate on, including 17 other options exchanges (including 3 other non-Cboe options exchanges), as well as off-exchange venues, where competitive products are available for trading. Indeed, participants can readily choose to submit their order flow to other exchange and off-exchange venues if they deem fee levels at those other venues to be more favorable. Moreover, the Commission has repeatedly expressed its preference for competition over regulatory intervention in determining prices, products, and services in the securities markets. Specifically, in Regulation NMS, the Commission highlighted the importance of market forces in determining prices and SRO revenues and, also, recognized that current regulation of the market system "has been remarkably successful in promoting market competition in its broader forms that are most important to investors and listed companies."⁴² The fact that this market is competitive has also long been recognized by the courts. In *NetCoalition v. Securities and Exchange Commission*, the D.C. Circuit stated as follows: "[n]o one disputes that competition for order flow is 'fierce.' ... As the SEC explained, '[i]n the U.S. national market system, buyers

⁴² See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, 37499 (June 29, 2005).

and sellers of securities, and the broker-dealers that act as their order-routing agents, have a wide range of choices of where to route orders for execution’; [and] ‘no exchange can afford to take its market share percentages for granted’ because ‘no exchange possesses a monopoly, regulatory or otherwise, in the execution of order flow from broker dealers’”⁴³ Accordingly, the Exchange does not believe its proposed change imposes any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

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

The Exchange neither solicited nor received comments on the proposed rule change.

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) of the Act⁴⁴ and paragraph (f) of Rule 19b-4⁴⁵ 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 will institute proceedings to determine whether the proposed rule change 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:

⁴³ *NetCoalition v. SEC*, 615 F.3d 525, 539 (D.C. Cir. 2010) (quoting Securities Exchange Act Release No. 59039 (December 2, 2008), 73 FR 74770, 74782-83 (December 9, 2008) (SR-NYSEArca-2006-21)).

⁴⁴ 15 U.S.C. 78s(b)(3)(A).

⁴⁵ 17 CFR 240.19b-4(f).

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-CboeBZX-2025-052 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-CboeBZX-2025-052. 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-CboeBZX-2025-052 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.⁴⁶

Sherry R. Haywood,

Assistant Secretary.

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