Page 1 of * 42		SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 Form 19b-4			File No. * SR 2025 - * 092 No. (req. for Amendments *)			
Filing by Cboe BZX Exchange, Inc.								
Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934								
Initial *	Amendment *	Withdrawal	Section 19(t	✓	(3)(A) * Section 19(b)(3)(B) *			
Pilot	Extension of Time Period for Commission Action *	Date Expires *		Rule 19b-4(f)(1) √ 19b-4(f)(2) 19b-4(f)(3)	19b-4(f)(4) 19b-4(f)(5) 19b-4(f)(6)			
Notice of proposed change pursuant to the Payment, Clearing, and Settlement Ad Section 806(e)(1) * Section 806(e)(2) *				Security-Based Swa Securities Exchange Section 3C(b)(2) *	p Submission pursuant to the Act of 1934			
Exhibit 2 Sent As Paper Document Exhibit 3 Sent As Paper Document								
Description Provide a brief description of the action (limit 250 characters, required when Initial is checked *). The Exchange proposes to amend its fee schedule.								
Contact Information Provide the name, telephone number, and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the action.								
First Name *	Allyson	Last Name *	Van Marter					
Title *	Counsel							
E-mail *	avanmarter@cboe.com							
Telephone *	(312) 786-7098	Fax						
Signature Pursuant to the requirements of the Securities Exchange of 1934, Cboe BZX Exchange, Inc. has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.								
Date	07/16/2025			(Title *)				
Ву	Matthew Iwamaye (Name *)		VP, Associate Genera	ai Counsel				
NOTE: Clicking the signature block at right will initiate digitally signing the form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.				Date: 2025.07.16 11:37:20 -05'00'				

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

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

Form 19b-4 Information *						
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25-092 (BZX Dedicated Cores - Fees)						

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

Exhibit 1 - Notice of Proposed Rule Change *

Add Remove View
25-092 (BZX Dedicated Cores - Fees)

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

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

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

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

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

Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help

Exhibit Sent As Paper Document

Exhibit Sent As Paper Document

Exhibit 3 - Form, Report, or Questionnaire

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implement or operate the proposed rule change, or that is referred to by the proposed rule change.

Exhibit 4 - Marked Copies

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

Exhibit 5 - Proposed Rule Text

Add Remove View

25-092 (BZX Dedicated Cores - Fees)

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

Partial Amendment

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

Item 1. <u>Text of the Proposed Rule Change</u>

- (a) Cboe BZX Exchange, Inc. (the "Exchange" or "BZX Equities") proposes to amend its Fees Schedule. The text of the proposed rule change is provided in Exhibit 5.
 - (b) Not applicable.
 - (c) Not applicable.

Item 2. <u>Procedures of the Self-Regulatory Organization</u>

- (a) The Exchange's President (or designee) pursuant to delegated authority approved the proposed rule change on March 28, 2024.
- (b) Please refer questions and comments on the proposed rule change to Pat Sexton, Executive Vice President, General Counsel, and Corporate Secretary, (312) 786-7467, or Allyson Van Marter, (312) 786-7098, Cboe BZX Exchange, Inc., 433 West Van Buren Street, Chicago, Illinois 60607.

Item 3. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change</u>

(a) <u>Purpose</u>

The Exchange proposes to amend its fee schedule to adopt fees for Dedicated Cores.¹

The Exchange initially introduced pricing for Dedicated Cores on June 10, 2024 (SR-CboeBZX-2024-054). On August 1, 2024, the Exchange withdrew that filing and submitted SR-CboeBZX-2024-075. On business date September 30, 2024, the Exchange withdrew that filing and submitted SR-CboeBZX-2024-094. On November 26, 2024, the Exchange withdrew that filing and submitted this SR-CboeBZX-2024-122. On January 24, 2025, the Exchange withdrew that filing and submitted SR-CboeBZX-2025-009. On March 12, 2025, the Exchange withdrew that filing and submitted SR-CboeBZX-2025-041. On May 7, 2025, the Exchange withdrew that filing and submitted SR-CboeBZX-2025-064. On July 2, 2025, the Exchange withdrew that filing and submitted SR-CboeBZX-2025-085. On July 16, 2025, the Exchange withdrew that filing and submitted this filing.

By way of background, the Exchange recently began to allow Users² to assign a Single Binary Order Entry ("BOE") logical order entry port³ to a single dedicated Central Processing Unit (CPU Core) ("Dedicated Core"). Historically, CPU Cores had been shared by logical order entry ports (i.e., multiple logical ports from multiple firms may connect to a single CPU Core). Use of Dedicated Cores however, can provide reduced latency, enhanced throughput, and improved performance since a firm using a Dedicated Core is utilizing the full processing power of a CPU Core instead of sharing that power with other firms. This offering is completely voluntary and is available to all Users that wish to purchase Dedicated Cores. Users may utilize BOE logical order entry ports on shared CPU Cores, either in lieu of, or in addition to, their use of Dedicated Core(s). As such, Users are able to operate across a mix of shared and dedicated CPU Cores which the Exchange believes provides additional risk and capacity management. Further, Dedicated Cores are not required nor necessary to participate on the Exchange and as such Users may opt not to use Dedicated Cores at all.

The Exchange proposes to assess the following monthly fees for Users that wish to use Dedicated Cores and adopt a maximum limit. First, the Exchange proposes to provide up to two Dedicated Cores to all Users who wish to use Dedicated Cores, at no additional cost. In the event that a User voluntarily chooses to use more than two

A User may be either a Member or Sponsored Participant. The term "Member" shall mean any registered broker or dealer that has been admitted to membership in the Exchange, limited liability company or other organization which is a registered broker or dealer pursuant to Section 15 of the Act, and which has been approved by the Exchange. A Sponsored Participant may be a Member or non-Member of the Exchange whose direct electronic access to the Exchange is authorized by a Sponsoring Member subject to certain conditions. See Exchange Rule 11.3.

Users may currently connect to the Exchange using a logical port available through an application programming interface ("API"), such as the Binary Order Entry ("BOE") protocol. A BOE logical order entry port is used for order entry.

Dedicated Cores, only then would the Exchange assess the following fees: \$650 per

Dedicated Core for 3-15 Dedicated Cores; \$850 per Dedicated Core for 16 – 30

Dedicated Cores; and \$1,050 per Dedicated Core for 31 or more Dedicated Cores. The

proposed fees are progressive and the Exchange proposes to include the following

example in the Fees Schedule to provide clarity as to how the fees will be applied.

Particularly, the Exchange will provide the following example: if a User were to purchase

16 Dedicated Cores, it will be charged a total of \$9,300 per month (\$0 * 2) + (\$650 * 13)

+ (\$850 * 1). The Exchange also proposes to make clear in the Fees Schedule that the

monthly fees are assessed and applied in their entirety and are not prorated. The

Exchange notes the current standard fees assessed for BOE Logical Ports, whether used

with Dedicated or shared CPU cores, will remain applicable and unchanged.⁴

Since the Exchange currently has a finite amount of physical space in its data centers in which its servers (and therefore corresponding CPU Cores) are located, the Exchange also proposes to prescribe a maximum limit on the number of Dedicated Cores that Users may purchase each month. The purpose of establishing these limits is to manage the allotment of Dedicated Cores in a fair manner and to prevent the Exchange from being required to expend large amounts of limited resources in order to provide an unlimited number of Dedicated Cores. The Exchange previously established a limit for Members of a maximum number of 60 Dedicated Cores and Sponsoring Members a limit of a maximum number of 25 Dedicated Cores for each of their Sponsored Access

The Exchange currently assesses \$550 per port per month. Port fees will also continue to be assessed on the first two Dedicated Cores that Users receive at no additional cost. <u>See</u> Cboe BZX Equities Fee Schedule.

relationships. ⁵ The Exchange has since been able to procure additional physical space in its third-party data century as well as additional servers with CPU Cores and also has a better understanding of User demand relative to its available space and available Dedicated Cores since the initial launch of Dedicated Cores. After seeing increased User demand, the Exchange proposed to increase the cap and provided that Members will be limited to a maximum number of 80 Dedicated Cores and Sponsoring Members will be limited to a maximum number of 35 Dedicated Cores for each of their Sponsored Access relationships. 6 The Exchange noted at that time that it would continue monitoring Dedicated Core interest by all Users and allotment availability with the goal of increasing these limits to meet Users' needs if and when the demand is there and/or the Exchange is able to accommodate additional Dedicated Cores. Since then, the Exchange has determined that it is able to accommodate an increased cap relative to current demand. As such, the Exchange proposed to increase the cap to 120 Dedicated Cores for Members, effective December 1, 2024. Sponsoring Members will continue to be limited to a maximum of 35 Dedicated Cores for each of their Sponsored Access relationships. 8

See Securities Exchange Act Release No. 100395 (June 21, 2024), 89 FR 53687 (June 27, 2024) (SR-CboeBZX-2024-054).

See Securities Exchange Act Release No. 101302 (October 10, 2024), 89 FR 83727 (October 17, 2024) (SR-CboeBZX-2024-094).

The prescribed maximum quantity of Dedicated Cores for Members applies regardless of whether that Member purchases the Dedicated Cores directly from the Exchange and/or through a Service Bureau. In a Service Bureau relationship, a customer allows its MPID to be used on the ports of a technology provider, or Service Bureau. One MPID may be allowed on several different Service Bureaus.

The fee tier(s) applicable to Sponsoring Members are determined on a per Sponsored Access relationship basis and not on the combined total of Dedicated Cores across Sponsored Users. For example, under the proposed changes, a Sponsoring Member that has three Sponsored Access relationships is entitled to a total of 105 Dedicated Cores for those 3 Sponsored Access relationships but would be assessed fees separately based on the 35 Dedicated Cores for each Sponsored User (instead of combined total of 105 Dedicated Cores). For example, a Sponsoring Member with 3 Sponsored Access relationships would pay \$30,450 per month if each Sponsored Access relationship purchased the maximum 35 Dedicated Cores. More specifically, the

(b) 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.⁹ Specifically, the Exchange believes the proposed rule change is consistent with the Section $6(b)(5)^{10}$ 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 $6(b)(5)^{11}$ 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)¹² 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.

Sponsoring Member would be provided 2 Dedicated Cores at no additional cost for each Sponsored User under Tier 1 (total of 6 Dedicated Cores at no additional cost) and provided an additional 8 Dedicated Cores at \$650 each for each Sponsored User, 5 Dedicated Cores at \$850 each for each Sponsored User and 20 Dedicated Cores at \$1,050 each for each Sponsored User (combined total of 99 additional Dedicated Cores).

⁹ 15 U.S.C. 78f(b).

¹⁰ 15 U.S.C. 78f(b)(5).

¹¹ Id

¹⁵ U.S.C. 78f(b)(4).

The Exchange believes the proposal is reasonable because the Exchange is offering all User who voluntarily choose to utilize Dedicated Cores up to two Dedicated Cores at no additional cost. Notably, as of the beginning of May, of the Members that currently maintain Dedicated Cores, 23% maintain only 1 or 2 Dedicated Cores and therefore pay no additional fees. 13 The Exchange believes the proposed fees are reasonable because Dedicated Cores provide a valuable service in that it can provide reduced latency, enhanced throughput, and improved performance compared to use of a shared CPU Core since a firm using a Dedicated Core is utilizing the full processing power of a CPU Core. The Exchange also emphasizes however, that the use of Dedicated Cores is not necessary for trading and as noted above, is entirely optional. Users can also continue to access the Exchange through shared CPU Cores at no additional cost. Indeed, as of the beginning of May, only 36% of the Exchange's Members currently use Dedicated Cores and as noted above, of that 36%, only 23% take 1 or 2 Dedicated Cores at no additional cost. Depending on a firm's specific business needs, the proposal enables Users to choose to use Dedicated Cores in lieu of, or in addition to, shared CPU Cores (or as emphasized, not use Dedicated Cores at all). If a User finds little benefit in having Dedicated Cores based on its business model and trading strategies, or determines Dedicated Cores are not cost-efficient for its needs or does not provide sufficient value to the firm, such User may continue its use of the shared CPU Cores, unchanged. The Exchange is not aware of any specific reason (operational or otherwise) why a firm would not partake in the use of the one to two free Dedicated Cores the Exchange offers.

The Exchange notes that its numbers only include Members since it does not have the same level of insight into customer segments for Sponsored Access.

Indeed the Exchange does not believe that the set up a firm would undertake to use free Dedicated Cores offered by the Exchange is prohibitively difficult or burdensome; ultimately, whether or not a firm avails itself of the free Dedicated Cores is a business decision, and some firms may decide that the impact that Dedicated Cores may have is simply not beneficial or necessary to how that firm operates. The Exchange also has no plans to eliminate shared CPU Cores nor to require Users to purchase Dedicated Cores.

The Exchange has seen general interest in Dedicated Cores from a variety of market participants, with varying size and business models. Such market participants include proprietary trading firms (who tend to be more latency sensitive), as well as sellside market participants and buy-side market participants (who tend to be less latency sensitive). For background, proprietary trading firms utilize their own capital to trade without taking outside money from clients. Due to the nature of their respective businesses, the Exchange has classified proprietary trading firms as latency sensitive, and other groups, such as buy-side hedge funds, sell-side banks and sell-side non-banks (such as agency brokers) as non-latency sensitive. Proprietary trading firms' strategies may range from, market making, to relative value trading and arbitrage- these all rely on profiting from general market activity and, generally, requires faster entry and exit into trades and positions making proprietary trading firms more latency sensitive than other market segments. Buy-side hedge funds, banks and agency brokers are not as latency sensitive as, generally, the strategy for hedge funds is based on overall long-term positioning in the market, and banks and agency brokers may profit from commissions of customer order flow; both are generally strategies that are not reliant on speed to the same extent proprietary trading firms are. Further, Users have various reasons for

obtaining Dedicated Cores. Some Users for example, may be seeking to further reduce latency or increase execution determinism, whereas others may use Dedicated Cores as a general risk mitigation by siloing their respective activity. For example, by using the Dedicated Core(s) to silo its respective activity, a firm may be able to mitigate risk during periods of heightened volatility as the firm will not need to compete for a shared resource (i.e., the shared core). Of further note, as of the beginning of May, only 64% of Members that are propriety trading firms (who again, generally tend to be more latency sensitive) utilize Dedicated Cores, and of that 64%, 25% are only utilizing the 1 to 2 free Dedicated Cores available to all Users. As mentioned above, some non-latency sensitive firms have chosen to also adopt Dedicated Cores. As of the beginning of May, 21% of Members that are not latency sensitive utilize Dedicated Cores, and of that 21%, 20% are only utilizing the 1 to 2 free Dedicated Cores available to all Users.

The lack of universal, or even widespread, adoption by all such users therefore demonstrates that purchasing Dedicated Cores is not effectively a requirement to compete for any one type of market participant, including latency sensitive market participants. Instead, Dedicated Cores are an optional and voluntary connectivity offering, which market participants are free to choose whether or not to utilize based on whether they meet their unique business needs. Moreover, the Exchange has received overwhelming positive feedback and support for Dedicated Cores from the firms that have chosen to utilize these in furtherance of their respective needs, with some Users even noting that they have moved more of their order flow to the Exchange and its affiliated equities exchanges (the "Equities Exchanges") as they have noticed both better fills and greater consistency of order execution at the Equities Exchanges. This demonstrates that despite

any incurred costs for Users that choose to purchase Dedicated Cores, it is ultimately a net win for them as they benefit from better execution. The Exchange believes it also demonstrates that Users find the proposed fees to be both reasonable and have benefited from purchasing or, are alternatively benefiting from the proposed one or two free Dedicated Cores available at no additional cost. The Exchange believes this is shown by both the level of demand for Dedicated Cores and the feedback from market participants that have used the Dedicated Cores for its unique business needs, including as described above. The Exchange also believes it's notable that no negative comment letters in connection with the proposed pricing have been received since the Exchange first filed proposed fees for Dedicated Cores back on June 10, 2024. Additionally, as noted earlier, Users can (and many have) decide that utilizing even a free Dedicated Core is not needed for their business. The Exchange also notes it has not received any feedback for Users that raise concerns over the barrier to entry to use Dedicated Cores, including notably the free Dedicated Cores- nor is the Exchange aware of any reason why a firm would ultimately choose not to use the free Dedicated Cores, other than it is not necessary for its business. Ultimately, this is a business decision that each User must make and is best suited to determine and will ultimately depend on the priorities and strategies of that User's respective business needs.

The Exchange also notes that at least one other exchange also has a comparable offering. ¹⁴ The Nasdaq Stock Market, LLC ("Nasdaq"), introduced the Dedicated Ouch

See The Nasdaq Stock Market, Equity 7 Pricing Schedule, Section 115(g)(3), Dedicated Ouch Port Infrastructure.

Port Infrastructure in 2014¹⁵ which allows a member firm to assign up to 30 of its OUCH ports to a dedicated server infrastructure for its exclusive use. 16 The Dedicated OUCH server handles only the subscribing member firm's message traffic sent through their ports on the Dedicated OUCH to Nasdaq's system. 17 Similarly, as previously described, a Dedicated Core only handles that subscribing firm's messaging activity. Nasdaq notes that with its Dedicated OUCH offering, member firms can develop a tailored solution by controlling their message traffic in order to optimize their trading strategies. ¹⁸ As described above with Dedicated Cores, one of the benefits is greater execution determinism as subscribers only need to account for their order flow when using a Dedicated Core, similar to the existing Nasdaq Dedicated OUCH offering. In addition to using Dedicated Cores and Dedicated OUCH for the purpose of greater execution determinism, firms may also use either offering for greater risk mitigation as, with either offering, the subscribing firm only needs to take their specific messaging traffic into account. Nasdaq notes as well that its Dedicated OUCH offering is wholly optional and therefore member firms are not compelled to subscribe and that its offering is procompetitive as it adds an additional connectivity option available to Nasdag members. 19 Similar to the Dedicated OUCH offering, the Exchange has noted that no User is required to purchase or to use the two free Dedicated Cores offered to all Users.

See Securities Exchange Act Release No. 70693 (October 16, 2013), 78 FR 62761 (October 22, 2013) (SR-NASDAQ-2013-131).

See supra note 13.

See Securities Exchange Act Release No. 70036 (July 25, 2013), 78 FR 45993 (July 30, 2013) (SR-NASDAQ-2013-097).

¹⁸ Id.

¹⁹ Id.

Despite these similarities, there are some differences. Specifically, with the Nasdaq OUCH offering, a member firm would need to purchase an entire server, of which, 30 OUCH ports could be utilized on the Dedicated OUCH server—a participant may purchase up to four Dedicated OUCH servers based on its needs. ²⁰ In contrast, the Exchange's offering allows for a purchase by cores (as opposed to an entire server), allowing a participant to more efficiently scale its business by purchasing only the number of cores that it needs. Ultimately, the Exchange's offering is more akin to a service offering while the Nasdaq offering is more akin to an infrastructure offering (and as such, the pricing structure does differ)—both offerings better enable a firm to utilize the full processing power of a CPU Core.

A Dedicated OUCH Port Infrastructure subscription is available to a member firm for a fee of \$5,000 per month, which is in addition to the standard fees assessed for each OUCH port. A one-time installation fee of \$5,000 is assessed to subscribers for each Dedicated OUCH Port Server subscription. ²¹In contrast, the Exchange offers 1-2 Dedicated Cores at no cost, making this widely available to any participant who may find a benefit from using this offering. Additionally, by the Exchange not charging an installation fee upfront, participants are able to try the offering at no cost, by receiving up to two Dedicated Cores at no cost to the User. The Exchange's model allows for widespread participation by all who wish to use Dedicated Cores – the steep initial cost of Nasdaq's model of spending, at a minimum, \$10,000 for the first month requires a

²⁰ See

 $https://nasdaqtrader.com/Trader.aspx?id=OUCH\#:\sim:text=Each\%20server\%20can\%20house\%20up\%20to\%20a\%20maximum, Nasdaq\%20Market\%20Sales\%20at\%20\%2B1\%20800\%20846\%200477$

See The Nasdaq Stock Market Rulebook, Equity 7 Pricing Schedule.

heavy investment, which in the case of smaller participants, may not be feasible. In contrast, the Exchange's model of providing up to two Dedicated Cores at no cost, allows participants to easily utilize this service if they believe it is helpful for their business needs. Moreover, the Exchange's service offering also provides more Users with more modest CPU capacity needs a zero-cost option, as well as the ability to buy only as many Dedicated Cores that they need, whereas Nasdaq's Dedicated OUCH offering requires a User to buy all cores offered on a single server (even if a firm does not have the corresponding full amount of 30 ports), with no discounted or fee waiver for the first two cores, as well as no ability to buy fewer cores than necessary.

Lastly, the Exchange emphasizes that order processing itself is not affected by the introduction of Dedicated Cores. No relevant changes are intended to the matching engine, which is, and remains, the main component of the Exchange's infrastructure being responsible for the actual processing of orders. While Users of Dedicated Cores may notice a latency reduction, this is an inherent byproduct of introducing improved technology. ²²

The Exchange also believes that the proposed Dedicated Core 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 Dedicated Cores will be subject to the same proposed tiered fee schedule. Moreover, all Users are entitled to up to 2 Dedicated Cores at no additional cost and, as previously discussed, as of the beginning

Moreover, there has been a longstanding history of exchanges providing enhanced technology where the latency reduction that follows is a natural result. For example, other exchanges may offer a variety of co-location services where subscribers of these services may benefit from lower latency based on the specific offering they choose based on their business needs. See e.g., The Nasdaq Stock Market General 8 Connectivity, Section 1 Co-Location Services (demonstrating a range of cabinet offerings).

of May, 23% of all Members that take Dedicated Cores (including both latency sensitive and non-latency sensitive Members) take only 1 or 2 Dedicated Cores at no additional cost. The Exchange believes the proposed ascending fee structure is also reasonable, equitable and not unfairly discriminatory as it is designed so that firms that use a higher allotment of the Exchange's finite number of Dedicated Cores pay higher rates, rather than placing that burden on market participants that have more modest needs who will have the flexibility of obtaining Dedicated Cores at lower price points in the lower tiers. As such, the proposed fees do not favor certain categories of market participants in a manner that would impose a burden on competition; rather, the ascending fee structure reflects the (finite) resources consumed by the various needs of market participants that is, the lowest Dedicated Core consuming Users pay the least, and highest Dedicated Core consuming Users pay the most. The Exchange believes that such pricing further creates a lower barrier to entry for all Users, making this service widely available to all who deem it helpful for their business, including those with more modest needs. Other exchanges similarly assess higher fees to those that consume more Exchange resources, including the Exchange on its options platform.²³ Moreover, those consuming more Dedicated Cores do so if they find a benefit in having higher quantities of Dedicated Cores based on their respective business needs. The proposed tier structure is also designed to encourage firms to manage their needs in a fair manner and to prevent the Exchange from being required to expend large amounts of limited resources in order to provide an additional number of Dedicated Cores or put the Exchange in a position that it

See e.g., Cboe U.S. Options Fee Schedule, BZX Options, Options Logical Port Fees, Ports with Bulk Quoting Capabilities.

cannot accommodate demand. Moreover, as discussed above and in more detail below, the Exchange cannot currently offer an unlimited number of Dedicated Cores due in part to physical space constraints in the third-party data center. The Exchange believes the proposed ascending fee structure is therefore another appropriate means, in conjunction with an established cap, to manage this finite resource and ensure the resource is apportioned more fairly.

The Exchange believes it is reasonable to limit the number of Dedicated Cores Users can purchase because the Exchange has a finite amount of space in its third-party data centers to accommodate CPU cores, including Dedicated Cores. The Exchange must also take into account timing and cost considerations in procuring additional Dedicated Cores and related hardware such as servers, switches, optics and cables, as well as the readiness of the Exchange's data center space to accommodate additional Dedicated Cores in the Exchange's respective Order Handler Cabinets. ²⁴ Moreover, procuring data center space has grown to be more challenging than it was five years ago with the increased demand for data center space. For example, the U.S. colocation data center market has doubled in size in just four years. In addition to the Exchange's rollout of Dedicated Cores, the Exchange is mindful of its other business areas and the need to continue to be mindful of its existing, external restraints in procuring additional space in this area. The Exchange has, and will continue to, monitor market participant demand and space availability and endeavor to adjust the limit if and when the Exchange is able to acquire additional space and power within the third-party data centers and/or additional

The Exchange notes that it cannot currently convert shared CPU cores into Dedicated Cores.

CPU Cores to accommodate additional Dedicated Cores. 25 The Exchange monitors its capacity and data center space and thus is in the best place to determine these limits and modify them as appropriate in response to changes to this capacity and space, as well as market demand. For example, the Exchange's affiliate Cboe EDGA Exchange, Inc. has increased the prescribed maximum limit three times since the launch of Dedicated Cores on its exchange on February 26, 2024 as a result of evaluating the demand relative to Dedicated Cores availability.²⁶ The proposed increased limits continue to apply uniformly to similarly situated market participants (i.e., all Members are subject to the same limit and all Sponsored Participants are subject to the same limit, respectively). The Exchange believes it's not unfairly discriminatory to provide for different limits for different types of Users. For example, the Exchange believes it's not unfairly discriminatory to provide for an initial lower limit to be allocated for Sponsored Participants because unlike Members, Sponsored Participants are able to access the Exchange without paying a Membership Fee. Members also have more regulatory obligations and risk that Sponsored Participants do not. For example, while Sponsored Participants must agree to comply with the Rules of the Exchange, it is the Sponsoring Member of that Sponsored Participant that remains ultimately responsible for all orders entered on or through the Exchange by that Sponsored Participant. The industry also has a history of applying fees differently to Members as compared to Sponsored

As of the beginning of May, the Exchange noted that only one User that has Dedicated Cores is at or near the maximum limits. As of the beginning of May, the average number of Dedicated Cores used for the Exchange is 23.

See Securities Exchange Act Release No. 99983 (April 17, 2024), 89 FR 30418 (April 23, 2024) (SR-CboeEDGA-2024-014) Securities Exchange Act Release No. 100300 (June 10, 2024), 89 FR 50653 (June 14, 2024) (SR-CboeEDGA-2024-020); and Securities Exchange Act Release No. 100736 (August 21, 2024), 89 FR 67696 (August 15, 2024) (SR-CboeEDGA-2024-032).

Participants.²⁷ Lastly, the Exchange believes its proposed maximum limits, and distinction between Members and Sponsored Participants, is another appropriate means to help the Exchange manage its allotment of Dedicated Cores and better ensure this finite resource is apportioned fairly.

Item 4. <u>Self-Regulatory Organization's Statement on Burden on</u> Competition

The Exchange does not believe that the proposed rule change will impose any burden on intramarket competition that is not necessary in furtherance of the purposes of the Act because the proposed tiered fee structure will apply equally to all similarly situated Users that choose to use Dedicated Cores. As discussed above, Dedicated Cores are optional and Users may choose to utilize Dedicated Cores, or not, based on their views of the additional benefits and added value provided by utilizing a Dedicated Core. The Exchange believes the proposed fees will be assessed proportionately to the potential value or benefit received by Users with a greater number of Dedicated Cores and notes that Users may determine at any time to cease using Dedicated Cores. As discussed, Users can also continue to access the Exchange through shared CPU Cores at no additional cost. Finally, all Users will be entitled to two Dedicated Cores at no additional cost.

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

See e.g., Securities Exchange Act Release No. 68342 (December 3, 2012), 77 FR 73096 (December 7, 2012) (SR-CBOE-2012-114).and Securities Exchange Act Release No. 66082 (January 3, 2012), 77 FR 1101 (January 9, 2012) (SR-C2-2011-041).

Participants have numerous alternative venues that they may participate on, including 15 other equities exchanges, as well as off-exchange venues, where comparable 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. Further, as described above, Nasdaq also already provides a similar offering.²⁸

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." 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 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

See The Nasdaq Stock Market, Equity 7 Pricing Schedule, Section 115(g)(3), Dedicated Ouch Port Infrastructure.

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

dealers'....".³⁰ 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.

Item 5. 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.

Item 6. Extension of Time Period for Commission Action Not applicable.

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

- (a) The proposed rule change is filed for immediate effectiveness pursuant to Section 19(b)(3)(A) of the Act^{31} and Rule 19b-4(f)(2)³² thereunder.
- (b) The Exchange designates that the proposed rule change establishes or changes a due, fee, or other charge imposed by the Exchange, which renders the proposed rule change effective upon filing with the Securities and Exchange Commission (the "Commission"). At any time within 60 days of the filing of this 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

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)).

³¹ 15 U.S.C. 78s(b)(3)(A).

³² 17 CFR 240.19b-4(f)(2).

Commission takes such action, the Commission will institute proceedings to determine whether the proposed rule change should be approved or disapproved.

- (c) Not applicable.
- (d) Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

Item 11. Exhibits

- Exhibit 1. Completed Notice of Proposed Rule Change for publication in the Federal Register.
- Exhibit 5. Proposed rule text.

EXHIBIT 1

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34- ; File No. SR-CboeBZX-2025-092]

[Insert date]

Self-Regulatory Organizations; Cboe BZX Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Relating to Amend its Fees Schedule

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 [insert date], 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. <u>Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change</u>

The Exchange proposes to amend its fee schedule to adopt fees for Dedicated Cores. 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 (http://markets.cboe.com/us/equities/regulation/rule_filings/BZX/), at the Exchange's Office of the Secretary, and at the Commission's Public Reference Room.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

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

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. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory</u> <u>Basis for, the Proposed Rule Change</u>

1. <u>Purpose</u>

The Exchange proposes to amend its fee schedule to adopt fees for Dedicated Cores.³

By way of background, the Exchange recently began to allow Users⁴ to assign a Single Binary Order Entry ("BOE") logical order entry port⁵ to a single dedicated Central Processing Unit (CPU Core) ("Dedicated Core"). Historically, CPU Cores had been

The Exchange initially introduced pricing for Dedicated Cores on June 10, 2024 (SR-CboeBZX-2024-054). On August 1, 2024, the Exchange withdrew that filing and submitted SR-CboeBZX-2024-075. On business date September 30, 2024, the Exchange withdrew that filing and submitted SR-CboeBZX-2024-094. On November 26, 2024, the Exchange withdrew that filing and submitted this SR-CboeBZX-2024-122. On January 24, 2025, the Exchange withdrew that filing and submitted SR-CboeBZX-2025-009. On March 12, 2025, the Exchange withdrew that filing and submitted SR-CboeBZX-2025-041. On May 7, 2025, the Exchange withdrew that filing and submitted SR-CboeBZX-2025-064. On July 2, 2025, the Exchange withdrew that filing and submitted SR-CboeBZX-2025-085. On July 16, 2025, the Exchange withdrew that filing and submitted this filing.

A User may be either a Member or Sponsored Participant. The term "Member" shall mean any registered broker or dealer that has been admitted to membership in the Exchange, limited liability company or other organization which is a registered broker or dealer pursuant to Section 15 of the Act, and which has been approved by the Exchange. A Sponsored Participant may be a Member or non-Member of the Exchange whose direct electronic access to the Exchange is authorized by a Sponsoring Member subject to certain conditions. See Exchange Rule 11.3.

Users may currently connect to the Exchange using a logical port available through an application programming interface ("API"), such as the Binary Order Entry ("BOE") protocol. A BOE logical order entry port is used for order entry.

shared by logical order entry ports (i.e., multiple logical ports from multiple firms may connect to a single CPU Core). Use of Dedicated Cores however, can provide reduced latency, enhanced throughput, and improved performance since a firm using a Dedicated Core is utilizing the full processing power of a CPU Core instead of sharing that power with other firms. This offering is completely voluntary and is available to all Users that wish to purchase Dedicated Cores. Users may utilize BOE logical order entry ports on shared CPU Cores, either in lieu of, or in addition to, their use of Dedicated Core(s). As such, Users are able to operate across a mix of shared and dedicated CPU Cores which the Exchange believes provides additional risk and capacity management. Further, Dedicated Cores are not required nor necessary to participate on the Exchange and as such Users may opt not to use Dedicated Cores at all.

The Exchange proposes to assess the following monthly fees for Users that wish to use Dedicated Cores and adopt a maximum limit. First, the Exchange proposes to provide up to two Dedicated Cores to all Users who wish to use Dedicated Cores, at no additional cost. In the event that a User voluntarily chooses to use more than two Dedicated Cores, only then would the Exchange assess the following fees: \$650 per Dedicated Core for 3-15 Dedicated Cores; \$850 per Dedicated Core for 16 – 30 Dedicated Cores; and \$1,050 per Dedicated Core for 31 or more Dedicated Cores. The proposed fees are progressive and the Exchange proposes to include the following example in the Fees Schedule to provide clarity as to how the fees will be applied. Particularly, the Exchange will provide the following example: if a User were to purchase 16 Dedicated Cores, it will be charged a total of \$9,300 per month (\$0 * 2) + (\$650 * 13) + (\$850 * 1). The Exchange also proposes to make clear in the Fees Schedule that the

monthly fees are assessed and applied in their entirety and are not prorated. The Exchange notes the current standard fees assessed for BOE Logical Ports, whether used with Dedicated or shared CPU cores, will remain applicable and unchanged.⁶

Since the Exchange currently has a finite amount of physical space in its data centers in which its servers (and therefore corresponding CPU Cores) are located, the Exchange also proposes to prescribe a maximum limit on the number of Dedicated Cores that Users may purchase each month. The purpose of establishing these limits is to manage the allotment of Dedicated Cores in a fair manner and to prevent the Exchange from being required to expend large amounts of limited resources in order to provide an unlimited number of Dedicated Cores. The Exchange previously established a limit for Members of a maximum number of 60 Dedicated Cores and Sponsoring Members a limit of a maximum number of 25 Dedicated Cores for each of their Sponsored Access relationships. The Exchange has since been able to procure additional physical space in its third-party data century as well as additional servers with CPU Cores and also has a better understanding of User demand relative to its available space and available Dedicated Cores since the initial launch of Dedicated Cores. After seeing increased User demand, the Exchange proposed to increase the cap and provided that Members will be limited to a maximum number of 80 Dedicated Cores and Sponsoring Members will be limited to a maximum number of 35 Dedicated Cores for each of their Sponsored Access relationships. 8 The Exchange noted at that time that it would continue monitoring

The Exchange currently assesses \$550 per port per month. Port fees will also continue to be assessed on the first two Dedicated Cores that Users receive at no additional cost. <u>See</u> Cboe BZX Equities Fee Schedule.

⁷ <u>See</u> Securities Exchange Act Release No. 100395 (June 21, 2024), 89 FR 53687 (June 27, 2024) (SR-CboeBZX-2024-054).

⁸ See Securities Exchange Act Release No. 101302 (October 10, 2024), 89 FR 83727 (October 17,

Dedicated Core interest by all Users and allotment availability with the goal of increasing these limits to meet Users' needs if and when the demand is there and/or the Exchange is able to accommodate additional Dedicated Cores. Since then, the Exchange has determined that it is able to accommodate an increased cap relative to current demand. As such, the Exchange proposed to increase the cap to 120 Dedicated Cores for Members, effective December 1, 2024. Sponsoring Members will continue to be limited to a maximum of 35 Dedicated Cores for each of their Sponsored Access relationships. 10

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. ¹¹ Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)¹² requirements that the rules of an exchange be designed to prevent

^{2024) (}SR-CboeBZX-2024-094).

The prescribed maximum quantity of Dedicated Cores for Members applies regardless of whether that Member purchases the Dedicated Cores directly from the Exchange and/or through a Service Bureau. In a Service Bureau relationship, a customer allows its MPID to be used on the ports of a technology provider, or Service Bureau. One MPID may be allowed on several different Service Bureaus.

The fee tier(s) applicable to Sponsoring Members are determined on a per Sponsored Access relationship basis and not on the combined total of Dedicated Cores across Sponsored Users. For example, under the proposed changes, a Sponsoring Member that has three Sponsored Access relationships is entitled to a total of 105 Dedicated Cores for those 3 Sponsored Access relationships but would be assessed fees separately based on the 35 Dedicated Cores for each Sponsored User (instead of combined total of 105 Dedicated Cores). For example, a Sponsoring Member with 3 Sponsored Access relationships would pay \$30,450 per month if each Sponsored Access relationship purchased the maximum 35 Dedicated Cores. More specifically, the Sponsoring Member would be provided 2 Dedicated Cores at no additional cost for each Sponsored User under Tier 1 (total of 6 Dedicated Cores at no additional cost) and provided an additional 8 Dedicated Cores at \$650 each for each Sponsored User, 5 Dedicated Cores at \$850 each for each Sponsored User and 20 Dedicated Cores at \$1,050 each for each Sponsored User (combined total of 99 additional Dedicated Cores).

¹⁵ U.S.C. 78f(b).

¹⁵ U.S.C. 78f(b)(5).

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)¹³ 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)¹⁴ 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 proposal is reasonable because the Exchange is offering *all* User who voluntarily choose to utilize Dedicated Cores up to two Dedicated Cores at no additional cost. Notably, as of the beginning of May, of the Members that currently maintain Dedicated Cores, 23% maintain only 1 or 2 Dedicated Cores and therefore pay no additional fees. ¹⁵ The Exchange believes the proposed fees are reasonable because Dedicated Cores provide a valuable service in that it can provide reduced latency, enhanced throughput, and improved performance compared to use of a shared CPU Core since a firm using a Dedicated Core is utilizing the full processing power of a CPU Core. The Exchange also emphasizes however, that the use of Dedicated

¹³ Id.

¹⁵ U.S.C. 78f(b)(4).

The Exchange notes that its numbers only include Members since it does not have the same level of insight into customer segments for Sponsored Access.

Cores is not necessary for trading and as noted above, is entirely optional. Users can also continue to access the Exchange through shared CPU Cores at no additional cost. Indeed, as of the beginning of May, only 36% of the Exchange's Members currently use Dedicated Cores and as noted above, of that 36%, only 23% take 1 or 2 Dedicated Cores at no additional cost. Depending on a firm's specific business needs, the proposal enables Users to choose to use Dedicated Cores in lieu of, or in addition to, shared CPU Cores (or as emphasized, not use Dedicated Cores at all). If a User finds little benefit in having Dedicated Cores based on its business model and trading strategies, or determines Dedicated Cores are not cost-efficient for its needs or does not provide sufficient value to the firm, such User may continue its use of the shared CPU Cores, unchanged. The Exchange is not aware of any specific reason (operational or otherwise) why a firm would not partake in the use of the one to two free Dedicated Cores the Exchange offers. Indeed the Exchange does not believe that the set up a firm would undertake to use free Dedicated Cores offered by the Exchange is prohibitively difficult or burdensome; ultimately, whether or not a firm avails itself of the free Dedicated Cores is a business decision, and some firms may decide that the impact that Dedicated Cores may have is simply not beneficial or necessary to how that firm operates. The Exchange also has no plans to eliminate shared CPU Cores nor to require Users to purchase Dedicated Cores.

The Exchange has seen general interest in Dedicated Cores from a variety of market participants, with varying size and business models. Such market participants include proprietary trading firms (who tend to be more latency sensitive), as well as sell-side market participants and buy-side market participants (who tend to be less latency sensitive). For background, proprietary trading firms utilize their own capital to trade

without taking outside money from clients. Due to the nature of their respective businesses, the Exchange has classified proprietary trading firms as latency sensitive, and other groups, such as buy-side hedge funds, sell-side banks and sell-side non-banks (such as agency brokers) as non-latency sensitive. Proprietary trading firms' strategies may range from, market making, to relative value trading and arbitrage- these all rely on profiting from general market activity and, generally, requires faster entry and exit into trades and positions making proprietary trading firms more latency sensitive than other market segments. Buy-side hedge funds, banks and agency brokers are not as latency sensitive as, generally, the strategy for hedge funds is based on overall long-term positioning in the market, and banks and agency brokers may profit from commissions of customer order flow; both are generally strategies that are not reliant on speed to the same extent proprietary trading firms are. Further, Users have various reasons for obtaining Dedicated Cores. Some Users for example, may be seeking to further reduce latency or increase execution determinism, whereas others may use Dedicated Cores as a general risk mitigation by siloing their respective activity. For example, by using the Dedicated Core(s) to silo its respective activity, a firm may be able to mitigate risk during periods of heightened volatility as the firm will not need to compete for a shared resource (i.e., the shared core). Of further note, as of the beginning of May, only 64% of Members that are propriety trading firms (who again, generally tend to be more latency sensitive) utilize Dedicated Cores, and of that 64%, 25% are only utilizing the 1 to 2 free Dedicated Cores available to all Users. As mentioned above, some non-latency sensitive firms have chosen to also adopt Dedicated Cores. As of the beginning of May, 21% of Members that

are not latency sensitive utilize Dedicated Cores, and of that 21%, 20% are only utilizing the 1 to 2 free Dedicated Cores available to all Users.

The lack of universal, or even widespread, adoption by all such users therefore demonstrates that purchasing Dedicated Cores is not effectively a requirement to compete for any one type of market participant, including latency sensitive market participants. Instead, Dedicated Cores are an optional and voluntary connectivity offering, which market participants are free to choose whether or not to utilize based on whether they meet their unique business needs. Moreover, the Exchange has received overwhelming positive feedback and support for Dedicated Cores from the firms that have chosen to utilize these in furtherance of their respective needs, with some Users even noting that they have moved more of their order flow to the Exchange and its affiliated equities exchanges (the "Equities Exchanges") as they have noticed both better fills and greater consistency of order execution at the Equities Exchanges. This demonstrates that despite any incurred costs for Users that choose to purchase Dedicated Cores, it is ultimately a net win for them as they benefit from better execution. The Exchange believes it also demonstrates that Users find the proposed fees to be both reasonable and have benefited from purchasing or, are alternatively benefiting from the proposed one or two free Dedicated Cores available at no additional cost. The Exchange believes this is shown by both the level of demand for Dedicated Cores and the feedback from market participants that have used the Dedicated Cores for its unique business needs, including as described above. The Exchange also believes it's notable that no negative comment letters in connection with the proposed pricing have been received since the Exchange first filed proposed fees for Dedicated Cores back on June 10, 2024. Additionally, as noted earlier,

Users can (and many have) decide that utilizing even a free Dedicated Core is not needed for their business. The Exchange also notes it has not received any feedback for Users that raise concerns over the barrier to entry to use Dedicated Cores, including notably the free Dedicated Cores- nor is the Exchange aware of any reason why a firm would ultimately choose not to use the free Dedicated Cores, other than it is not necessary for its business. Ultimately, this is a business decision that each User must make and is best suited to determine and will ultimately depend on the priorities and strategies of that User's respective business needs.

The Exchange also notes that at least one other exchange also has a comparable offering. ¹⁶ The Nasdaq Stock Market, LLC ("Nasdaq"), introduced the Dedicated Ouch Port Infrastructure in 2014¹⁷ which allows a member firm to assign up to 30 of its OUCH ports to a dedicated server infrastructure for its exclusive use. ¹⁸ The Dedicated OUCH server handles only the subscribing member firm's message traffic sent through their ports on the Dedicated OUCH to Nasdaq's system. ¹⁹ Similarly, as previously described, a Dedicated Core only handles that subscribing firm's messaging activity. Nasdaq notes that with its Dedicated OUCH offering, member firms can develop a tailored solution by controlling their message traffic in order to optimize their trading strategies. ²⁰ As described above with Dedicated Cores, one of the benefits is greater execution

See The Nasdaq Stock Market, Equity 7 Pricing Schedule, Section 115(g)(3), Dedicated Ouch Port Infrastructure.

See Securities Exchange Act Release No. 70693 (October 16, 2013), 78 FR 62761 (October 22, 2013) (SR-NASDAQ-2013-131).

See supra note 15.

See Securities Exchange Act Release No. 70036 (July 25, 2013), 78 FR 45993 (July 30, 2013) (SR-NASDAQ-2013-097).

²⁰ Id.

Dedicated Core, similar to the existing Nasdaq Dedicated OUCH offering. In addition to using Dedicated Cores and Dedicated OUCH for the purpose of greater execution determinism, firms may also use either offering for greater risk mitigation as, with either offering, the subscribing firm only needs to take their specific messaging traffic into account. Nasdaq notes as well that its Dedicated OUCH offering is wholly optional and therefore member firms are not compelled to subscribe and that its offering is procompetitive as it adds an additional connectivity option available to Nasdaq members. Similar to the Dedicated OUCH offering, the Exchange has noted that no User is required to purchase or to use the two free Dedicated Cores offered to all Users.

Despite these similarities, there are some differences. Specifically, with the Nasdaq OUCH offering, a member firm would need to purchase an entire server, of which, 30 OUCH ports could be utilized on the Dedicated OUCH server—a participant may purchase up to four Dedicated OUCH servers based on its needs. ²² In contrast, the Exchange's offering allows for a purchase by cores (as opposed to an entire server), allowing a participant to more efficiently scale its business by purchasing only the number of cores that it needs. Ultimately, the Exchange's offering is more akin to a service offering while the Nasdaq offering is more akin to an infrastructure offering (and as such, the pricing structure does differ)- both offerings better enable a firm to utilize the full processing power of a CPU Core.

²¹ Id.

²² See

https://nasdaqtrader.com/Trader.aspx?id=OUCH#:~:text=Each%20server%20can%20house%20up%20to%20a%20maximum,Nasdaq%20Market%20Sales%20at%20%2B1%20800%20846%200477.

A Dedicated OUCH Port Infrastructure subscription is available to a member firm for a fee of \$5,000 per month, which is in addition to the standard fees assessed for each OUCH port. A one-time installation fee of \$5,000 is assessed to subscribers for each Dedicated OUCH Port Server subscription. ²³In contrast, the Exchange offers 1-2 Dedicated Cores at no cost, making this widely available to any participant who may find a benefit from using this offering. Additionally, by the Exchange not charging an installation fee upfront, participants are able to try the offering at no cost, by receiving up to two Dedicated Cores at no cost to the User. The Exchange's model allows for widespread participation by all who wish to use Dedicated Cores – the steep initial cost of Nasdaq's model of spending, at a minimum, \$10,000 for the first month requires a heavy investment, which in the case of smaller participants, may not be feasible. In contrast, the Exchange's model of providing up to two Dedicated Cores at no cost, allows participants to easily utilize this service if they believe it is helpful for their business needs. Moreover, the Exchange's service offering also provides more Users with more modest CPU capacity needs a zero-cost option, as well as the ability to buy only as many Dedicated Cores that they need, whereas Nasdaq's Dedicated OUCH offering requires a User to buy all cores offered on a single server (even if a firm does not have the corresponding full amount of 30 ports), with no discounted or fee waiver for the first two cores, as well as no ability to buy fewer cores than necessary.

Lastly, the Exchange emphasizes that order processing itself is not affected by the introduction of Dedicated Cores. No relevant changes are intended to the matching engine, which is, and remains, the main component of the Exchange's infrastructure

See The Nasdaq Stock Market Rulebook, Equity 7 Pricing Schedule.

being responsible for the actual processing of orders. While Users of Dedicated Cores may notice a latency reduction, this is an inherent byproduct of introducing improved technology. ²⁴

The Exchange also believes that the proposed Dedicated Core 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 Dedicated Cores will be subject to the same proposed tiered fee schedule. Moreover, all Users are entitled to up to 2 Dedicated Cores at no additional cost and, as previously discussed, as of the beginning of May, 23% of all Members that take Dedicated Cores (including both latency sensitive and non-latency sensitive Members) take only 1 or 2 Dedicated Cores at no additional cost. The Exchange believes the proposed ascending fee structure is also reasonable, equitable and not unfairly discriminatory as it is designed so that firms that use a higher allotment of the Exchange's finite number of Dedicated Cores pay higher rates, rather than placing that burden on market participants that have more modest needs who will have the flexibility of obtaining Dedicated Cores at lower price points in the lower tiers. As such, the proposed fees do not favor certain categories of market participants in a manner that would impose a burden on competition; rather, the ascending fee structure reflects the (finite) resources consumed by the various needs of market participants that is, the lowest Dedicated Core consuming Users pay the least, and highest Dedicated Core consuming Users pay the most. The Exchange believes that such pricing further

Moreover, there has been a longstanding history of exchanges providing enhanced technology where the latency reduction that follows is a natural result. For example, other exchanges may offer a variety of co-location services where subscribers of these services may benefit from lower latency based on the specific offering they choose based on their business needs. See e.g., The Nasdaq Stock Market General 8 Connectivity, Section 1 Co-Location Services (demonstrating a range of cabinet offerings).

creates a lower barrier to entry for all Users, making this service widely available to all who deem it helpful for their business, including those with more modest needs. Other exchanges similarly assess higher fees to those that consume more Exchange resources, including the Exchange on its options platform. ²⁵ Moreover, those consuming more Dedicated Cores do so if they find a benefit in having higher quantities of Dedicated Cores based on their respective business needs. The proposed tier structure is also designed to encourage firms to manage their needs in a fair manner and to prevent the Exchange from being required to expend large amounts of limited resources in order to provide an additional number of Dedicated Cores or put the Exchange in a position that it cannot accommodate demand. Moreover, as discussed above and in more detail below, the Exchange cannot currently offer an unlimited number of Dedicated Cores due in part to physical space constraints in the third-party data center. The Exchange believes the proposed ascending fee structure is therefore another appropriate means, in conjunction with an established cap, to manage this finite resource and ensure the resource is apportioned more fairly.

The Exchange believes it is reasonable to limit the number of Dedicated Cores

Users can purchase because the Exchange has a finite amount of space in its third-party

data centers to accommodate CPU cores, including Dedicated Cores. The Exchange must

also take into account timing and cost considerations in procuring additional Dedicated

Cores and related hardware such as servers, switches, optics and cables, as well as the

readiness of the Exchange's data center space to accommodate additional Dedicated

See e.g., Cboe U.S. Options Fee Schedule, BZX Options, Options Logical Port Fees, Ports with Bulk Quoting Capabilities.

Cores in the Exchange's respective Order Handler Cabinets. ²⁶ Moreover, procuring data center space has grown to be more challenging than it was five years ago with the increased demand for data center space. For example, the U.S. colocation data center market has doubled in size in just four years. In addition to the Exchange's rollout of Dedicated Cores, the Exchange is mindful of its other business areas and the need to continue to be mindful of its existing, external restraints in procuring additional space in this area. The Exchange has, and will continue to, monitor market participant demand and space availability and endeavor to adjust the limit if and when the Exchange is able to acquire additional space and power within the third-party data centers and/or additional CPU Cores to accommodate additional Dedicated Cores.²⁷ The Exchange monitors its capacity and data center space and thus is in the best place to determine these limits and modify them as appropriate in response to changes to this capacity and space, as well as market demand. For example, the Exchange's affiliate Cboe EDGA Exchange, Inc. has increased the prescribed maximum limit three times since the launch of Dedicated Cores on its exchange on February 26, 2024 as a result of evaluating the demand relative to Dedicated Cores availability. 28 The proposed increased limits continue to apply uniformly to similarly situated market participants (i.e., all Members are subject to the same limit and all Sponsored Participants are subject to the same limit, respectively). The

The Exchange notes that it cannot currently convert shared CPU cores into Dedicated Cores.

As of the beginning of May, the Exchange noted that only one User that has Dedicated Cores is at or near the maximum limits. As of the beginning of May, the average number of Dedicated Cores used for the Exchange is 23.

See Securities Exchange Act Release No. 99983 (April 17, 2024), 89 FR 30418 (April 23, 2024) (SR-CboeEDGA-2024-014) Securities Exchange Act Release No. 100300 (June 10, 2024), 89 FR 50653 (June 14, 2024) (SR-CboeEDGA-2024-020); and Securities Exchange Act Release No. 100736 (August 21, 2024), 89 FR 67696 (August 15, 2024) (SR-CboeEDGA-2024-032).

Exchange believes it's not unfairly discriminatory to provide for different limits for different types of Users. For example, the Exchange believes it's not unfairly discriminatory to provide for an initial lower limit to be allocated for Sponsored Participants because unlike Members, Sponsored Participants are able to access the Exchange without paying a Membership Fee. Members also have more regulatory obligations and risk that Sponsored Participants do not. For example, while Sponsored Participants must agree to comply with the Rules of the Exchange, it is the Sponsoring Member of that Sponsored Participant that remains ultimately responsible for all orders entered on or through the Exchange by that Sponsored Participant. The industry also has a history of applying fees differently to Members as compared to Sponsored Participants.²⁹ Lastly, the Exchange believes its proposed maximum limits, and distinction between Members and Sponsored Participants, is another appropriate means to help the Exchange manage its allotment of Dedicated Cores and better ensure this finite resource is apportioned fairly.

B. <u>Self-Regulatory Organization's Statement on Burden on Competition</u>

The Exchange does not believe that the proposed rule change will impose any burden on intramarket competition that is not necessary in furtherance of the purposes of the Act because the proposed tiered fee structure will apply equally to all similarly situated Users that choose to use Dedicated Cores. As discussed above, Dedicated Cores are optional and Users may choose to utilize Dedicated Cores, or not, based on their views of the additional benefits and added value provided by utilizing a Dedicated Core.

See e.g., Securities Exchange Act Release No. 68342 (December 3, 2012), 77 FR 73096 (December 7, 2012) (SR-CBOE-2012-114).and Securities Exchange Act Release No. 66082 (January 3, 2012), 77 FR 1101 (January 9, 2012) (SR-C2-2011-041).

The Exchange believes the proposed fees will be assessed proportionately to the potential value or benefit received by Users with a greater number of Dedicated Cores and notes that Users may determine at any time to cease using Dedicated Cores. As discussed, Users can also continue to access the Exchange through shared CPU Cores at no additional cost. Finally, all Users will be entitled to two Dedicated Cores at no additional cost.

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 15 other equities exchanges, as well as off-exchange venues, where comparable 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. Further, as described above, Nasdaq also already provides a similar offering.³⁰

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

See The Nasdaq Stock Market, Equity 7 Pricing Schedule, Section 115(g)(3), Dedicated Ouch Port Infrastructure.

in promoting market competition in its broader forms that are most important to investors and listed companies."³¹ 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 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'....".³² 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. <u>Self-Regulatory Organization's Statement on Comments on the Proposed</u> <u>Rule Change Received from Members, Participants, or Others</u>

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

III. <u>Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action</u>

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A) of the Act³³ and paragraph (f) of Rule 19b-4³⁴ thereunder. At any time within 60 days of

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

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)).

³³ 15 U.S.C. 78s(b)(3)(A).

³⁴ 17 CFR 240.19b-4(f).

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:

Electronic Comments:

- Use the Commission's internet comment form (https://www.sec.gov/rules/sro.shtml); or
- Send an email to <u>rule-comments@sec.gov</u>. Please include file number
 SR-CboeBZX-2025-XXX 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-XXX. 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-XXX 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.³⁵

Sherry R. Haywood,

Assistant Secretary.

EXHIBIT 5

(additions are underlined; deletions are [bracketed])

* * * * *

Cboe U.S. Equities Fee Schedules

BZX Equities

Effective July [8]<u>16</u>, 2025

* * * * *

Logical Port Fees:

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Dedicated Cores:

TIER	<u>QUANTITY</u>	FEE PER DEDICATED CORE
1	1- 2 Dedicated Cores	<u>\$0/month</u>
2	3 - 15 Dedicated Cores	\$650/month
3	16 – 30 Dedicated Cores	<u>\$850/month</u>
4	31 or more Dedicated Cores	\$1,050/month

Note: Members will be limited to 120 Dedicated Cores. Sponsoring Members will be limited to 35 Dedicated Cores for each of their Sponsored Access relationships. Dedicated Core Fees are progressive. For example, a firm that chooses to purchase 16 Dedicated Cores will be assessed a total monthly fee of \$9,300 (i.e., \$0 x 2 Dedicated Cores, \$650 x 13 Dedicated Cores, and \$850 x 1 Dedicated Core). The monthly fees are assessed and applied in their entirety and are not prorated.

Physical Connectivity Fees:

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