Cboe

February 4, 2021

Via Electronic Submission

Vanessa Countryman
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549-1090

Re: Release No. 34-89424; File No. SR-CboeBYX-2020-021

Dear Ms. Countryman:

Cboe BYX Exchange, Inc. (the "Exchange") appreciates the opportunity to respond to comments submitted to the Securities and Exchange Commission ("Commission") on the above-referenced proposed rule change (the "Proposal"), which is designed to introduce an innovative mechanism for the trading of U.S. equity securities in Periodic Auctions that would be conducted throughout the trading day when the Exchange has received matching auctionable buy and sell orders to participate in such auctions. The Exchange believes that Periodic Auctions would be a valuable mechanism for market participants and investors, including those trading in thinly-traded and other securities that may currently suffer from diminished market quality in the public markets. The Commission received comments on the Proposal from three commenters, the FIA Principal Traders Group ("FIA PTG"),[1] Securities Industry and Financial Markets Association ("SIFMA"),[2]

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1 See Letter from Joanna Mallers, Secretary, FIA to Vanessa Countryman, Secretary, Commission, dated August 25, 2020.

2 See Letter from Ellen Greene, Managing Director, Equities & Options Market Structure, SIFMA to Vanessa Countryman, Secretary, Commission, dated December 17, 2020.

and BMO Capital Markets ("BMO").[3] While FIA PTG urged the Commission to disapprove the Proposal, the two other commenters, SIFMA and BMO, generally applauded the Exchange for its innovation, which they believe may improve the market for thinly-traded securities, and suggested a handful of revisions to the Proposal that they contend would address certain concerns outlined in their respective comments. For the reasons discussed in this letter and the filing, the Exchange believes that its Proposal is appropriately designed to improve market quality and enhance trading in thinly-traded and other securities, and should therefore be approved by the Commission as proposed. We respond to the points made by each of the commenters in detail below.

Innovation, Complexity, & Potential "Unintended Consequences"

SIFMA writes that the Proposal could result in "unintended consequences" – *i.e.*, unforeseen, unspecified harms – that could negatively impact trading on the Exchange. In a somewhat similar vein, FIA PTG writes that the Proposal would introduce unneeded "complexity" to the U.S. equities market that could, theoretically, result in "unintended consequences and costs." Neither commenter addresses with any specificity why they believe that there may be unintended consequences associated with the Proposal, or what exactly those unintended consequences could be. Rather, their contention appears to be that any significant innovation in the public markets could potentially cause harm in ways that they may not be able to anticipate, and therefore have

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Prior to that letter, SIFMA also submitted a comment letter asking for additional details about the proposed operation of Periodic Auctions. See Letter from Ellen Greene, Managing Director, Equities & Options Market Structure, SIFMA to Vanessa Countryman, Secretary, Commission, dated August 28, 2020. The Exchange believes that the examples and other details included in Amendments No. 1 and 2, and the FAQs that the Exchange published on this topic, are responsive to that request. As a result, the Exchange is not separately responding to those comments in this letter.

3 See Letter from Joe Wald and Ray Ross, Managing Directors and Co-Heads of Electronic Trading, BMO to Vanessa Countryman, Secretary, Commission, dated December 22, 2020.

not been able to identify in their comments. FIA PTG contends that the potential for such vague "unintended consequences" should be fatal to the Proposal, and therefore asks the Commission to disapprove it on that basis instead of permitting continued innovation in the market. SIFMA, meanwhile, acknowledges the potential benefits of the Proposal for the national market system for U.S. equity securities, and therefore instead requests that changes should be made to the Proposal to minimize the potential that this proposed innovation could result in some unidentified harm. Simply put, the Exchange Act does not restrict the ability for a national securities exchange to implement innovations designed to improve market quality in the securities that we trade on the basis that those innovations are novel have not been tried before by other venues.[4] Indeed, if this were the applicable standard under Section 19(b) of the Exchange Act, there would be very limited opportunity for exchanges to innovate in ways that allow us to compete effectively with other exchanges or off-exchange venues. Innovation must be promoted in the public markets. In fact, innovation is precisely what the Commission has requested of us in its Statement on Market Structure Innovation for Thinly Traded Securities.[5] Thus, we disagree wholeheartedly with FIA PTG's limited view of innovation in the public markets. In addition, while SIFMA has requested that the Exchange make certain revisions to the innovations we have proposed on the basis that those changes would address their concerns about "unintended consequences," for the reasons discussed herein we do not believe that such changes are necessary or appropriate.[6]

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4 The potential benefits of the Proposal are outlined in detail in the filing, and may include market quality enhancements in thinly-traded and other securities.

5 See Securities Exchange Act Release No. 87327 (October 17, 2019), 84 FR 56956 (October 24, 2019) (File No. S7-18-19).

6 We address some of SIFMA's specific suggested revisions to the Proposal in the sections below, as well as similar suggestions by BMO.

Allowing Continuous Book Orders to Opt Out of Periodic Auctions

Both SIFMA and BMO suggest that the Exchange should revise its Proposal to allow Continuous Book Orders to "opt out" of participation in Periodic Auctions. As proposed, Continuous Book Orders entered on the Exchange would be limited to participating in the eventual execution of a Periodic Auction at the end of the 100 millisecond Periodic Auction Period. Such Continuous Book Orders: (1) would not initiate any Periodic Auctions; (2) would not be considered when determining the Periodic Auction Book Price and associated size included in the Auction Message disseminated during the course of a Periodic Auction; and (3) would remain executable on the Continuous Book for the full duration of any Periodic Auction. The Exchange continues to believe that this approach is reasonable and beneficial to market participants and investors as it would allow Users that enter such orders to receive executions when possible, including with the potential for those orders to receive price improvement. The suggestion by the commenters to allow Continuous Book Orders to opt out of Periodic Auction executions presumably comes from a misunderstanding about the manner in which Continuous Book Orders would be executed in Periodic Auctions. Since neither commenter explains why they believe that Continuous Book Orders could be disadvantaged by a Periodic Auction execution, the Exchange can only speculate as to what exactly they mean. However, regardless of what they mean, the Exchange believes that the execution of Continuous Book Orders in a Periodic Auction would actually work to the *benefit* of such orders due to the potential to receive price improvement.

A Continuous Book Order that is executed in a Periodic Auction would always trade at a price that is at least as good, and in many cases better than, the price that it would obtain in an execution on the Continuous Book. Under the Exchange's rules, Continuous Book Orders resting on the Continuous Book are executed at their posted prices.[7] For example, a limit order posted to the Continuous Book at its limit price would trade with an incoming marketable contra-side order at that price, regardless of whether the incoming order was willing to trade at a price that would offer price improvement to the resting order. By contrast, a Continuous Book Order would have the opportunity to receive price improvement in a Periodic Auction that is executed at the calculated market clearing price. That is, the order could be: (1) executed in a Periodic Auction at the price at which it is posted to the Continuous Order Book, *e.g.*, the order's limit price or pegged price; (2) executed in a Periodic Auction with price improvement compared to its posted price; or (3) not executed in a Periodic Auction because the Periodic Auction Price is worse than the order's posted price. If a User is concerned that its Continuous Book Orders could be executed in Periodic Auctions at an unfair price, including as a result of unspecified "gaming" as the commenters speculate, it would be no worse off than if the it were to trade with an immediate-or-cancel order in the Continuous Book. In fact, since Periodic Auctions are a price forming auction, a market participant that attempted to engage in speculated "gaming" would incur additional risks if trading in a Periodic Auction, where it may have to trade with such orders at an improved price rather than trading immediately with such orders on the Continuous Book at the order's posted price. Thus, there would be no reason for market participants to use the Periodic Auction mechanism to attempt to trade with Continuous Book Orders at unfair prices as the Periodic Auction mechanism includes additional protections for orders that are not generally present for trading in the continuous market.

Nevertheless, as a self-regulatory organization ("SRO") registered with the Commission pursuant to Section 6 of the Exchange Act, the Exchange takes its regulatory obligations seriously, and has taken steps to detect and respond appropriately to misconduct or disruptive activity on its

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[7] See BYX Rule 11.13(a)(4)(A),(B).

markets, including potential manipulation of Periodic Auctions. Indeed, Supplementary Material .04 to Proposed Rule 11.25 explicitly addresses the Exchange's authority with respect to member conduct in such auctions. As discussed in that provision, (1) Periodic Auction Orders must be entered with the intent to participate in Periodic Auctions; and (2) a pattern or practice of submitting orders for the purpose of disrupting or manipulating Periodic Auctions, including entering and immediately cancelling Periodic Auction Orders, will be deemed conduct inconsistent with just and equitable principles of trade. As an SRO, the Exchange will conduct surveillance to ensure that Users do not inappropriately enter Periodic Auction Orders for impermissible purposes, such as to gain information about Periodic Auction Orders that are resting on the Periodic Auction Book, or otherwise disrupting or manipulating Periodic Auctions. Members that engage in behavior that is inconsistent with Supplementary Material .04, or any other rule governing their conduct on the Exchange, would be subject to potential disciplinary action by the Exchange.

Finally, the decision to post orders to the Exchange's Continuous Book rests solely with the User entering the order. There are no rules or regulations that require market participants to post Continuous Book Orders on the Exchange or any other national securities exchange if the firm is concerned that doing so may not provide the best experience for them or their customers. The Exchange currently accounts for less than two percent of U.S. equity market share, and market participants are free to direct their order flow to other exchanges or off-exchange venues if they do not believe that it is beneficial to post Continuous Book Orders on BYX. For the reasons discussed above and in the filing, the Exchange believes that posting Continuous Book Orders on BYX would be *enhanced* by the Proposal due to the opportunity for such orders to receive price improvement beyond their posted prices when executed in a Periodic Auction, as well as the increased execution opportunities that Periodic Auctions may provide. Nevertheless, consistent with a broker-dealer's duty of best execution, firms can and should evaluate the performance of the Exchange, including its proposed Periodic Auctions to determine for themselves whether and how to trade on BYX, including: (1) whether to enter Periodic Auction Only Orders or Periodic Auction Eligible Orders that may initiate Periodic Auctions; and (2) whether to enter Continuous Book Orders that may trade in the eventual execution of such Periodic Auctions.

Suggestion to Initially Limit Periodic Auctions to Thinly-Traded Securities

SIFMA also requests that the Exchange initially limit Periodic Auctions to thinly-traded securities, and then potentially expand to other securities at a later date based on its experience with this mechanism. The Exchange does not believe that this suggestion would be beneficial to market participants and investors, and certainly no provision of the Exchange Act requires a national securities exchange to limit novel or innovative functionality to any particular subset of national market system ("NMS") stocks. We certainly agree with the commenter that the Proposal may be particularly beneficial in thinly-traded securities. However, as articulated in the filing, the Exchange also believes that Periodic Auctions would be broadly beneficial to trading in a number of other securities, including those that suffer from diminished market quality for reasons other than being thinly-traded. Moreover, the Exchange understands, based on the experience of other national securities exchanges that have implemented trading mechanisms that are limited to a particular subset of NMS stocks, that a number of market participants that transact in NMS stocks do not employ differentiated routing logic for different symbols.[8] As a result, limiting the Proposal to thinly-traded securities may cause those market participants to avoid incorporating Periodic

[8] See New York Stock Exchange LLC Rule 124 ("Midday Auction"). The Exchange understands, based on conversations with market participants, that one of the reasons the Midday Auction has not been successful in attracting interest from customers is that this auction is limited to a subset of lower-volume securities. The Exchange believes it is likely to face similar difficulties if it limited Periodic Auctions to thinly-traded securities.

Auctions into their routing logic altogether, *i.e.*, for both thinly-traded and other securities. This would both unnecessarily limit the ability of those, potentially less sophisticated, market participants from reaping the benefits of the Proposal, and may impact the ability of the Exchange to achieve the critical mass necessary to make this a successful offering. Thus, we do not believe that the Proposal should be restricted to a subset of NMS stocks as suggested by the commenter.

Price Forming Periodic Auctions vs. a Midpoint Execution

BMO instead suggests that the Exchange should revise its Proposal to execute orders at the midpoint of the national best bid or offer ("NBBO"). Although the Exchange appreciates the commenters feedback, we believe that our Periodic Auction Proposal is appropriately designed to provide a price forming auction mechanism that would facilitate price discovery in thinly-traded and other securities. Midpoint executions can certainly be valuable to market participants and investors, and as outlined in the filing, the Exchange's affiliate, Cboe Europe, executes about 85% of value traded in its periodic auctions at the midpoint. However, the Exchange believes that it is important to offer a price forming auction process that is designed to execute orders at a price that balances supply and demand in securities traded in Periodic Auctions, whether or not that price is the midpoint of the NBBO. This is particularly the case for thinly-traded and high-priced securities that often trade with wide spreads, and where a midpoint execution may not reflect the most accurate representation of the value of a particular security. Indeed, the public price discovery process plays an important role in the proper functioning of any market, and the Exchange does not believe that is necessary or desirable to limit the ability of Periodic Auctions to perform this important function. Further, market participants that wish to receive midpoint executions already have the opportunity to do so through the use of midpoint pegged orders and similar order types or mechanisms offered by a wide range of trading venues, including the Exchange.[9] The Exchange therefore believes that facilitating price discovery through a price forming auction is consistent with the needs of market participants and investors. Revising the Proposal to instead cross orders at the midpoint of the NBBO would unnecessarily limit the benefits that the Exchange is seeking to provide through the introduction of Periodic Auctions, and that the Commission has sought through its Statement on Market Structure Innovation for Thinly Traded Securities.

Purported Potential for "Information Leakage"

BMO also contends that the Proposal could result in "information leakage" when the execution of Continuous Book Orders is disseminated on the Exchange's proprietary market data feeds, due to the fact that a market participant could use this information to determine whether there was a buy or sell imbalance in a Periodic Auction.[10] We disagree with commenter's characterization of required and important post-trade transparency as a form of improper information leakage. Of course, the Exchange would disseminate information about executions in Periodic Auctions through both the securities information processors ("SIPs") and its proprietary market data feeds, as it does with the execution of any order traded on the Exchange. Practically, for Periodic Auctions, this would entail a single "bulk print" indicating the number of shares executed in the auction and the price at which those shares are executed.[11] Since Continuous Book

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9 See e.g. BYX Rule 11.9(c)(9).

10 BMO also asks for additional information about fee codes that could be implemented for Periodic Auctions. We are not sure how the commenter's question about fee codes relates to its point about information leakage, and since the Proposal does not address fees any consideration of such fee codes would be premature. The Exchange intends to separate file fees for Periodic Auctions after any Commission approval of the Proposal, and the commenter will have the opportunity provide feedback at that time if it has concerns.

11 As is the case for other auctions conducted by the Exchange and its affiliated U.S. equities exchanges, the execution information included on the Exchange's proprietary market data feeds would indicate that the execution is an auction execution.

Orders may be executed in a Periodic Auction, the number of shares indicated by that bulk print would include any Continuous Book Orders that were executed in the auction. However, this kind of post-trade transparency cannot reasonably be deemed "information leakage" in any relevant sense of those words. Moreover, the commenter's specific complaint about signaling a potential buy or sell imbalance when Continuous Book Orders are included in that execution misses the fact that: (1) the Commission has approved the dissemination of actual imbalance information in other auctions for U.S. equity securities due to the value of that information in informing public price discovery;[12] (2) the Periodic Auction Price at which orders are executed in a Periodic Auction would also be reported on each executed transaction, rending any additional information that could be inferred about a potential imbalance in a completed auction meaningless; and (3) Periodic Auctions are actually designed to perform an important price discovery function, which is facilitated by post-trade transparency about the execution of orders in the auction. We reject the commenter's implicit assumption that price discovery is somehow harmful to investors.

System Performance and Latency

BMO also asks questions about the potential latency that could be incurred on the Continuous Book as a result of the proposed introduction of Periodic Auctions, and how any additional latency could impact trading in the continuous market.[13] For the reasons discussed below, the Exchange believes that Periodic Auctions can be offered alongside continuous trading without causing any undue latency that would negative impact trading on the Continuous Book. As explained in the filing, Exchange has conducted rigorous testing of its system for conducting

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12 See e.g. Nasdaq Rule 4752(a)(2); Nasdaq Rule 4754(a)(7).

13 BMO also asks for additional information about the limited circumstances where the Exchange would "throttle" the initiation of Periodic Auctions. The Exchange intends to include such information in an amendment to the Proposal.

Periodic Auctions, and based on the results of that testing, the Exchange does not believe that the proposed introduction of Periodic Auctions would have any meaningful impact on its ability to continue to offer continuous trading alongside its proposed Periodic Auction product. The Exchange's testing included both an analysis of system performance related to Periodic Auctions in expected market conditions as well as additional "stress testing" that included scenarios that are well beyond what the Exchange expects to happen in a production environment. The results of that testing show that the Exchange is more than capable of offering a Periodic Auction product that would not inappropriately interfere with trading on the Continuous Book. Indeed, based on its analysis, the Exchange believes that any additional latency that may be experienced on the Continuous Book would be minimal, and both: (1) within the range of latencies experienced when the Exchange conducts other resource consumptive tasks today, such as the re-pricing of pegged orders; and (2) so small as to not present any regulatory concerns under either Rule 602 of Regulation NMS ("Quote Rule") or Rule 611 of Regulation NMS ("Order Protection Rule").[14]

Lack of Support for "True Minimum" Instruction

Finally, BMO suggests that the Exchange should revise its Proposal to allow orders that include a "true minimum" instruction to participate in Periodic Auctions. The "true minimum" instruction was introduced by the Exchange in 2017 to allow Users trading on the Continuous Book to enter orders with a minimum size condition that must be met by a single contra-side order, instead of one or more contra-side orders.[15] Although the Exchange continues to believe that this instruction is valuable for trading on the Continuous Book, the use of this instruction would

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14 The Exchange will continue to monitor system performance and latency after the proposed introduction of Periodic Auctions to ensure that it is able to process both Periodic Auctions and Continuous Book Orders efficiently and without undue latency.

15 See Securities Exchange Act Release No. 81806 (October 3, 2017), 82 FR 47047 (October 10, 2017) (SR-BatsBYX-2017-24).

unnecessarily complicate the execution of Periodic Auctions. Indeed, because of the complications involved in supporting minimum quantity instructions in an auction mechanism, all minimum quantity orders, *i.e.*, not only those with a "true minimum" instruction, are excluded from the Exchange's opening process for securities traded pursuant to unlisted trading privileges.[16] As described in detail in the filing, the Exchange believes that a minimum quantity instruction would be valuable to market participants and investors that trade in Periodic Auctions, and has therefore determined to support that functionality in its Proposal. However, the "true minimum" instruction, in particular, poses additional complications in a trading environment where multiple orders on each side of the market are executed together at a single market clearing price. As a result, and as described in the filing, the Exchange has not proposed to support this instruction in Periodic Auctions. No provision of the Exchange Act requires that the Exchange make any particular order instruction available to customers, or to allow the use of all order instructions that it has determined to offer in each and every trading mechanism that is offers to its members.

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In sum, the Proposal is designed to encourage fair, orderly, and efficient markets in securities traded on the Exchange, including but not limited to thinly-traded securities. Although commenters, including two commenters that support the Exchange's proposed innovation in this area, may desire a handful of suggested changes to the Proposal, the Exchange believes that the Proposal is consistent with the objectives of the Exchange Act and the Commission's call for innovation in its Statement on Market Structure Innovation for Thinly Traded Securities. Further, the Exchange believes that such innovation is necessary to ensure that the public markets continue to serve the needs of investors. Periodic Auctions are responsive to the Commission's request for

16 See BYX Rule 11.23(a)(2).

innovation, and are designed to offer important benefits for the trading of U.S. equity securities, as addressed in the filing as well as by commenters. The Proposal should therefore be approved.

Sincerely,

/s/ Adrian Griffiths

Adrian Griffiths
Assistant General Counsel