8011-01p SECURITIES AND EXCHANGE COMMISSION (Release No. 34-98304; File No. SR-CBOE-2023-044)

September 6, 2023

Self-Regulatory Organizations; Cboe Exchange, Inc.; Notice of Filing of a Proposed Rule Change to Adopt a Quote Protection Timer

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule

19b-4 thereunder,² notice is hereby given that on August 30, 2023, Cboe Exchange, Inc.

("Exchange") filed with the Securities and Exchange Commission ("Commission") the proposed

rule change as described in Items I and II 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</u> Change

Cboe Exchange, Inc. (the "Exchange" or "Cboe Options") proposes to amend Rule 5.32.

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://www.cboe.com/AboutCBOE/CBOELegalRegulatoryHome.aspx), at the Exchange's Office

of the Secretary, and at the Commission's Public Reference Room.

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

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

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 Basis</u> for, the Proposed Rule Change

1. <u>Purpose</u>

The Exchange proposes to amend Rule 5.32 to adopt a passive quote protection mechanism. The options market is driven by Market-Maker quotes, and thus Market-Maker quotes are critical to provide liquidity to the market and contribute to price discovery for investors. If Market-Makers do not have sufficient time to refresh their resting quotes (the primary source of liquidity for customers in the market) in response to market updates before executing against incoming interest that has incorporated those market updates, this increased risk of execution at stale prices may cause Market-Makers to widen their quotes to the detriment of investors or otherwise withhold liquidity. This reduced liquidity may reduce execution opportunities or cause executions to occur at worse prices for customers. Further, Market-Makers must comply with various obligations, including to provide continuous electronic quotes and to update quotes in response to market conditions.³ It takes time for Market-Makers to update quotes in series in their appointed classes, which may not take effect until after faster market participants have updated orders. The Exchange believes it is appropriate to provide Market-Maker quotes with a reasonable amount of protection to allow them to execute at prices reflective of market updates given not only the Exchange-imposed requirements to provide and updates such quotes but also the resources Market-Makers expend to comply with those requirements.

See Rule 5.51.

Market-Maker quotes are based generally on pricing models that rely on various factors, including the price of the underlying security and that security's volatility. As these variables change, a Market-Maker's pricing model automatically will enter updates to a number of its bids and offers. Additionally, a Market-Maker's system may also automatically enter orders in response to changes in those variables as part of their market-making activity, such as hedging. As a result, there can be a multitude of instances in which the bids and offers of multiple Market-Makers attempting to update their quotes and submit orders in response to market changes inadvertently interact with each other, which can lead to significant risk and exposure. This may occur, for example, when one Market-Maker's price update system is faster than systems used by other Market-Makers. In this respect, a Market-Maker's system that updates options prices microseconds, or even nanoseconds, faster than another Market-Maker's system may lock or cross its bids (offers) against the other Market-Maker's offers (bids) every time its bid (offer) adjusts to the offer (bid) of the second Market-Maker even if the second Market-Maker's system was also in the process of updating that offer (bid).

For example, suppose three Market-Makers for class XYZ have the following displayed markets:

Market-Maker A: (10) 10.00 – 10.20 (10)

Market-Maker B: (5) 10.05 - 10.20 (5)

Market-Maker C: (5) 9.95 – 10.15 (5)

Each of the Market-Maker's systems identify an increase in the price of stock XYZ, which causes those systems to send updated quotes. However, Market-Maker A, as a result of its own technological investment, has the fastest system, which received the updated price of stock XYZ three microseconds before the systems of the other two Market-Makers, and thus sent its updated

quotes to the Exchange three microseconds before the systems of the other two Market-Makers. Market-Maker a sent a revised two-sided market of (10) 10.20 – 10.40 (10) based on the updated price of XYZ. Because the quotes for Market-Maker A's updated market reached the Exchange before the updated markets of Market-Makers B and C, Market-Maker A's bid will execute against Market-Maker C's offer of 10.15 and Market-Maker B's offer of 10.20, which offers were based on a lower stock price. Market-Maker B's and C's updated markets of (5) 10.25 – 10.40 (5) and (5) 10.15 – 10.35 (5) reached the Exchange after this execution, despite those Market-Makers no longer being interested in selling at the price of 10.15 or 10.20. Market-Maker A likely submitted its updated market to display liquidity available for customer prices at an updated price, rather than remove liquidity from other liquidity providers at outdated prices. This could happen contemporaneously in a large number of series within the class, such that instead of locking one quote, Market-Maker A may lock 20 of Market-Maker B's and Market-Maker C's quotes. This may expose each Market-Maker to significant risk due to these unintended executions and prevent orders intended to provide liquidity in the Book from doing so.

The Exchange understands Market-Makers primarily use bulk message quotes to input and update quote prices for purposes of providing liquidity, as bulk messages allow Market-Makers to update efficiently quotes in multiple series using a single message. To protect these quotes — Market-Makers' primary liquidity source — from inadvertent executions as well as executions at stale prices due to technological disparities between Market-Maker systems, the Exchange adopted the functionality in current Rules 5.6(c)(3) and 5.32(c)(6), which prevents executions of incoming Market-Maker interest against resting Market-Maker interest. The purpose of this functionality is to provide resting Market-Maker quotes with time to update before execution so that executions occur at prices based on then-current market, which the Exchange believes encourages Market-Makers to

provide competitive markets on the Exchange. Specifically, Rule 5.32(c)(6) provides that the System cancels or rejects a Cancel Back⁴ Book Only⁵ bulk message bid (offer) or order bid (offer) (or unexecuted portion) submitted by a Market-Maker with an appointment in the class through a bulk port if it would execute against or lock a resting offer (bid) with a Capacity of M. In other words, a Cancel Back Book Only Market-Maker quote or order submitted through a bulk port will be rejected if it would execute against resting Market-Maker interest. Additionally, pursuant to Rule 5.32(b), the System adjusts the price of a Price Adjust (i.e., an order designated Price Adjust or not designated as Cancel Back) Book Only bulk message quote submitted through a bulk port if, at the time of entry, would lock or cross a resting order or quote with Capacity M.⁶ In other words, a Price Adjust Book Only Market-Maker quote or order submitted through a bulk port will rest on the Book at one increment away from a resting order or quote with Capacity M. This functionality is designed to protect resting Market-Maker quotes from executions at potentially stale prices due to technology disparities (1) rather than the intention of Market-Maker quote and order updates to trade against resting Market-Maker quotes (and thus eliminate displayed liquidity) and (2) against incoming Market-Maker orders (that may be submitted for the purpose of providing liquidity or to trade for other Market-Maker purposes, such as hedging) with prices that have incorporated market updates.

⁴ A "Cancel Back" order is an order (including a bulk message) designated to not be subject to the price adjust process pursuant to Rule 5.32 (as described below) that the System cancels or rejects if displaying the order on the Book would create a locked or crossed market or if the order cannot otherwise be executed or displayed in the Book at its limit price. See Rule 5.6(c) (definition of "Cancel Back").

⁵ A "Book Only" order is an order the System ranks and executes pursuant to Rule 5.32, subjects to the price adjust process pursuant to Rule 5.32, or cancels, as applicable (in accordance with User instructions), without routing away to another exchange. <u>See</u> Rule 5.6(c) (definition of "Book Only").

⁶ Rule 5.32(b) describes additional price adjust scenarios, but these scenarios are not relevant to the proposed rule change.

The protection in Rule 5.32(c)(6) specifically prevents incoming appointed Market-Maker interest (which may be Book Only and thus otherwise eligible for execution against resting interest on the Book) from executing against resting Market-Maker interest. To further protect liquidity of Market-Makers in appointed classes (which liquidity is subject to quoting obligations, as noted above), Rule 5.6(c)(3) provides that bulk messages used by Market-Makers in non-appointed classes may be Post Only only, which would prevent executions of these incoming quotes against resting interest (including resting appointed Market-Maker interest) in those classes.

This current functionality also recognizes that resting Market-Maker interest needs protection from orders (in addition to quotes) of all users, including non-Market-Makers, as orders submitted through bulk ports by Users other than appointed Market-Makers may also only be Post Only, which again would prevent executions of these incoming orders against resting interest (including resting appointed Market-Maker interest). Given the primary purpose of bulk ports is to allow Market-Makers and other users to provide liquidity to the Book, the Exchange adopted functionality to prevent executions of interest submitted through bulk ports against resting Market-Maker interest due to technological disparities (as demonstrated in the example above to protect the primary liquidity source to the Exchange.

While this current functionality protects resting Market-Maker interest from execution at stale prices against incoming Market-Maker and non-Market-Maker interest submitted through bulk ports, resting Market-Maker interest remains unprotected from Market-Maker orders that may be submitted through non-bulk ports. As noted above, Market-Makers may submit orders for other market-making purposes, such as hedging, which orders can be generated from the same systems generating bulk message quotes. As a result, resting Market-Maker interest remains subject to risk of execution at stale prices against incoming Market-Maker non-bulk port orders due to

technological disparities. Given the critical role Market-Makers play in the options market, the Exchange believes it is imperative to have the ability to protect Market-Makers' resting quotes from execution at stale prices against incoming Market-Maker interest resulting from technological disparities between Market-Makers. The Exchange believes it should be able to extend this protection to incoming interest from Market-Makers, regardless of the type of port through which it was submitted, as it can expose Market-Makers to the same level of risk. Ultimately, this exposure may negatively impact liquidity to the detriment of the entire market. Unlike quotes and orders submitted through bulk ports, the primary purpose of which is generally to rest on the Book and provide liquidity, it is likely the intention of orders submitted through non-bulk ports to execute against the resting interest (including Market-Maker quotes). As a result, the Exchange believes it is important to balance the need to protect resting Market-Maker quotes from executions at stale prices with the need to provide opportunities for this incoming interest to execute against those quotes.

The proposed rule change proposes to adopt a quote protection timer ("QPT") to provide the Exchange with the ability to provide Market-Maker quotes with this additional protection. The purpose of QPT is to provide Market-Makers with opportunities to update the prices of their resting quotes prior to execution against aggressing non-bulk port incoming Market-Maker interest while still providing that incoming interest with the opportunity to execute against resting liquidity. Specifically, the Exchange proposes to adopt Rule 5.32(h), which provides the Exchange with the ability to determine on a class basis to activate a QPT. In a class in which the Exchange has activated the QPT, if an incoming order (including an incoming complex order legging into the Book pursuant to Rule 5.33(g), but excluding paired orders, orders (or unexecuted portions) that

routed to another exchange(s), and orders routed from PAR) enters the Book⁷ in that class with Capacity M that a User submitted through a non-bulk port (the "initial aggressor order") and that is marketable against a resting bulk message quote (except for a quote offer a price equal to the minimum increment for the class)⁸ with Capacity M (the "initial protected quote") at the time the initial aggressor order enters the Book, the initial aggressor order executes against any resting orders and quotes with a Capacity other than M at the same price as the initial protected quote.⁹ After that, as set forth in proposed Rule 5.32(h)(2), except for a non-ISO IOC order for which the Trading Permit Holder ("TPH") opts out of QPT (in which case the System cancels any portion of the order not executed pursuant to proposed subparagraph (1)),¹⁰ the System initiates the QPT,¹¹ the start time

⁷ This includes Immediate-or-Cancel ("IOC") orders and Intermarket Sweep Orders ("ISOs"). See Rule 5.6(c). Contingent orders (i.e., stop, stop-limit, market-on-close, and limit-on-close) are excluded from the QPT (except for market-on-close and limit-on-close orders submitted to the Exchange within the specified amount of time set by the Exchange pursuant to Rule 5.6(d), as they would just be market or limit orders at that point), as by definition these orders are not executable upon entry (they become executable once the applicable contingency is satisfied), so it is unnecessary to prevent from immediate execution against resting Market-Maker quotes. The Exchange believes the proposed exclusions are appropriate, as they would by definition provide resting quotes with time to update before potential execution. For example, paired orders would go through an auction (such as pursuant to Rule 5.37 or 5.38 (the automated improvement mechanism for simple and complex orders)), during which Market-Maker quotes could update before they would potentially execute against those orders after the auction. Similarly, if an order routes away to another exchange because that exchange has better prices available than those on the Exchange, by the time any portion of that order comes back to the Exchange for execution against the Book, any resting Market-Maker quotes could have been updated before executing against that returned order. Likewise, if an order routes from PAR for electronic execution, it would have first been handled by a person on the trading floor after entry and before execution against interest in the Book, giving quotes sufficient time for update before potential execution against that order.

⁸ The Exchange believes this exclusion is appropriate, as there would be no price at which an incoming bid could adjust to and rest during the quote protection period if the resting offer is equal to the minimum increment for the class. For example, if the minimum increment for a class is \$0.05, and the market is \$0 – \$0.05 on the Exchange, if an incoming order is priced at \$0.05, as further described below, during the quote protection period, the price of the order is adjusted to one increment below the offer to prevent a locked market. However, that would make the adjusted price of the incoming order \$0, which is not a permissible price for an order.

⁹ See proposed Rule 5.32(h)(1).

¹⁰ The Exchange believes it is appropriate to permit TPHs to opt out of QPT for their non-ISO IOC orders (and just have them execute against any resting interest with a Capacity other than M, cancelling any remainder) because it is consistent with the IOC instruction, pursuant to which a user desires execution in whole or in part as soon as the System receives it. <u>See</u> Rule 5.6(d) (definition of IOC time-in-force instruction).

¹¹ The Exchange determines the length of the timer in microseconds on a class basis, which may not exceed five milliseconds. The Exchange believes this flexibility is reasonable so it can apply a timer length that

of which is the time when the initial aggressor order enters (or a complex order¹² Legs into) the Book (the "quote protection period"), provided if there is an ongoing QPT in every leg of a complex order that Legs into the Book, the length of the QPT for the complex order equals the longest remaining time of the leg QPTs.¹³

The Exchange believes it is reasonable to permit the Exchange to determine whether to activate QPT on a class basis to address market structure differences that apply to different classes. This is consistent with other Exchange functionality, such as auctions, which the Exchange may activate on a class basis.¹⁴ For example, in classes in which there is high retail customer order volume, the Exchange believes Market-Makers may be willing to accept additional execution risk for the additional opportunities to execute against a significant number of customer orders, which may ultimately offset any stale-priced executions against faster-acting professional customers. To the contrary, in low volume classes or classes comprised mostly of professional investor volume, the execution risk is greater as there are fewer potential executions against customers to offset the risk. Additionally, in classes with smaller minimum increments, the execution risk is higher because Market-Maker quote updates may be more granular and thus more frequent. Therefore, in a non-penny class, a "stale" execution price may be wider than it might be in a penny class and thus still within a Market-Maker's pricing parameters and risk profile. The Exchange notes it does not

appropriately reflects market structure differences among classes, as discussed above regarding why it is appropriate to provide the Exchange with flexibility to determine whether to apply QPT on a class basis. The Exchange has this same flexibility for other Exchange functionality, such as auction timers. See, e.g., Rule 5.37(c)(3) (providing the Exchange with flexibility to determine the length of an AIM auction period on a class basis).

¹² The Exchange understands complex orders may similarly cause executions against protected quotes due to technical disparities in the same manner as simple orders.

¹³ The Exchange believes this is appropriate, as the resting quotes in each leg of the complex order that are intended to be protected by this proposed functionality will be subject to the full length of the quote protection period before the legs of the complex order in this scenario can execute against them.

¹⁴ <u>See, e.g.</u>, Rule 5.37(a)(1) (permitting the Exchange to determine in which classes orders may be submitted into an automated improvement mechanism ("AIM") auction for potential price improvement).

believe this class flexibility is necessary for its current protection functionality (which applies to all classes), as the Exchange understands Market-Makers primarily use bulk port functionality to provide liquidity and satisfy their quoting obligations. As there are Market-Makers appointed to all classes trading on the Exchange, the Exchange believes it is appropriate to prevent this interest (orders and bulk messages) submitted through bulk ports in all classes from executing against resting Market-Maker interest, as much of the incoming interest was likely submitted to rest on the Book (and satisfy quoting obligations to provide liquidity to the market) rather than execute upon entry.

The Exchange also believes limiting the proposed rule change to orders of Market-Makers (Capacity M) is appropriate because it is consistent with current and prior functionality, which protected resting Market-Maker interest from incoming Market-Maker interest.¹⁵ As noted above, Market-Maker systems may automatically generate order and quote updates in response to market changes. The Exchange believes resting Market-Maker interest should be protected from stale execution against all incoming Market-Maker interest generated by those same systems, regardless of the type of port through which the interest is submitted.

Pursuant to proposed Rule 5.32(h)(3), during the quote protection period, neither the initial aggressor order (or unexecuted portion) nor any other incoming marketable orders with Capacity M received during the quote protection period (together with the initial aggressor order, the "aggressor orders") may execute against the protected quote or any other contra-side bulk message quotes with Capacity M that enter the Book (together with the initial protected quote, the "protected quotes"),

¹⁵ The Exchange notes current functionality also prevents execution of orders with Capacities other than M against resting Market-Maker quotes. <u>See</u> Rule 5.5(c)(3) (requiring users other than appointed Market-Makers to submit orders through bulk ports as Post Only, which cannot execute upon entry against resting interest). If the Securities and Exchange Commission ("Commission") approves the proposed rule change, the Exchange may determine to submit a separate rule filing to propose to extend QPT to other Capacities.

and the System ranks (in time priority) and displays the aggressor orders at one minimum price variation below (above) the price of the displayed protected offer (bid).¹⁶ In other words, during the quote protection period, no aggressor orders may execute against protected quotes resting in the Book. Therefore, all aggressor orders in a series that are entered during an ongoing quote protection period are similarly prevented from executing against any protected quote (whether the initial protected quote or any protected quote in that series that is entered during the quote protection period and rests on the Book). Additionally, by having incoming aggressor orders "join" the initial aggressor order and incoming protected quotes "join" the initial protected quotes, a series with protected quotes will be subject to a full quote protection period for the protected quotes in that series.

The TPH that submitted any aggressor order during the quote protection period, or the Market-Maker that submitted any protected quote during the quote protection period, may update the price of its order or quote, as applicable; however, those orders and quotes remain firm at their displayed prices in accordance with Rule 5.59 until updated. Therefore, aggressor orders and protected quotes may continue to execute at their resting prices (which is an adjusted price with respect to aggressor orders, as described above) against incoming interest. This provides other interest that enters the Book during the quote protection period with potential execution opportunities. Specifically:

an incoming order with a Capacity other than M ("non-aggressor order") executes against
resting contra-side interest at its displayed price in accordance with the allocation algorithm
applicable to the class;

¹⁶ This is similar to the Exchange's Price Adjust functionality (see Rule 5.32(b)), which prevents the Exchange from disseminating a locked or crossed market.

- an incoming aggressor order executes against resting non-protected quote contra-side interest at its adjusted price in accordance with the allocation algorithm applicable to the class; and
- an incoming contra-side order or quote executes against resting aggressor and non-aggressor orders at their displayed prices in accordance with the allocation algorithm applicable to the class.

If (a) for simple orders, there are no more protected quotes at the initial prices of any priceadjusted aggressor orders, the System unadjusts the prices of the aggressor buy (sell) orders to one minimum price variation below (above) the next lowest (highest) priced protected quote (to their limit prices); or (b) for complex orders, the SBO (SBB) increases (decreases), the System unadjusts the prices of the aggressor buy (sell) complex orders to one minimum variation below (above) the then-current SBO (SBB) (to their limit prices).

Proposed Rule 5.32(h)(4) provides at the conclusion of the quote protection period, the System unadjusts the prices of the aggressor orders (or unexecuted portions) to their initial prices, which then execute (in time priority) against any remaining marketable contra-side interest, including the protected quotes, in accordance with the allocation algorithm applicable to the class¹⁷; and any unexecuted portions of aggressor orders rest on the Book and unexecuted portions of protected quotes remain on the Book.¹⁸

The Exchange believes the proposed rule change to delay execution of resting Market-Maker quotes against incoming aggressor Market-Maker interest is appropriate, rather than prevention of execution (as occurs in current functionality described above), because as noted

¹⁷ <u>See</u> Rule 5.33(a).

¹⁸ If the market closes or the Exchange halts trading in the affected series prior to the conclusion of the quote protection period, the QPT concludes without execution.

above, unlike interest submitted through bulk ports (the primary purpose of which is to provide liquidity on the Book), the primary purpose of orders submitted through non-bulk ports is to execute against interest resting on the Book.¹⁹ Therefore, the Exchange believes it is important to provide this incoming interest with execution opportunities, after a slight delay, to provide Market-Makers with opportunities to effect their quote updates. Additionally, execution of bulk messages (which may only be submitted through bulk ports) exposes Market-Makers to increased risk compared to order execution. For example, the System will not determine whether a Market-Maker's risk monitor mechanism²⁰ thresholds have been exceeded until all quotes within a bulk message have been processed, unlike orders, which may result in execution in only one series before the System determines whether those thresholds have been exceeded. The Exchange believes the proposed rule change will close a gap that currently exposes Market-Maker liquidity resting on the Book to executions at potentially stale prices due to technology disparities against the orders submitted by Market-Makers through non-bulk ports. The quote protection timer will provide a balance between protecting resting Market-Maker quotes in order to maintain liquidity and providing incoming Market-Maker interest with execution opportunities.

2. <u>Statutory Basis</u>

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

¹⁹ It is possible some liquidity providers, including Market-Makers, are submitting orders through non-bulk ports for the provision of liquidity, but the Exchange believes this represents a small portion of non-bulk port order flow.

²⁰ <u>See</u> Rule 5.34(c)(4), pursuant to which a user's (including a Market-Maker's) interest may be cancelled after that user's risk limits have been exceeded. As a result, quotes in a bulk message will complete executions before determination of whether a user's risk limits have been exceeded. This makes execution risk of bulk message greater than an order, which only has a bid or offer for one series.

Exchange and, in particular, the requirements of Section 6(b) of the Act.²¹ Specifically, the Exchange believes the proposed rule change is consistent with the Section $6(b)(5)^{22}$ 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 $6(b)(5)^{23}$ requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

In particular, the Exchange believes the proposed rule change will promote just and equitable principles of trade, remove impediments to and perfect the mechanism of a national market system, and protect investors. The proposed rule change is intended to prevent incoming Market-Maker orders submitted through non-bulk ports from immediately executing against resting Market-Maker interest at potentially stale prices due to technological disparities between Market-Makers. The Exchange believes the proposed functionality will reduce execution of resting Market-Maker interest at prices that do not reflect the then-current market, which executions may impede certain liquidity providers' ability to competitively price their bids and offers. Specifically, this increased risk of execution at stale prices may cause Market-Makers to widen their quotes or otherwise withhold liquidity to the detriment of investors. The Exchange expects the proposed rule change to increase liquidity and enhance competition in the market,

²¹ 15 U.S.C. 78f(b).

²² 15 U.S.C. 78f(b)(5).

²³ <u>Id.</u>

because Market-Makers may be able to quote more aggressively with less concern about exposure to execution risk due to technological disparities in their quoting systems compared to other market participants' order entry systems. As a result, the Exchange believes this protection for resting Market-Maker interest, and resulting increased liquidity and competition, would ultimately remove impediments to the market and benefit all investors.

Given the critical role Market-Makers play in the options market, the Exchange believes it is imperative to have the ability to protect Market-Makers' resting quotes from execution at stale prices against incoming Market-Maker interest due to technological disparities between Market-Makers. The Exchange believes it should be able to extend this protection to incoming Market-Maker interest from non-bulk ports, as technological disparities between Market-Makers can expose Market-Makers to the same level of risk regardless of which type of port Market-Makers submit interest. Ultimately, this exposure to risk from may negatively impact liquidity to the detriment of the entire market. Unlike quotes and orders submitted through bulk ports, the primary purpose of which is generally to rest on the Book and provide liquidity, it is likely the intention of orders submitted through non-bulk ports to execute against the resting interest (including Market-Maker quotes). As a result, the Exchange believes it is important to balance the need to protect resting Market-Maker quotes from executions at stale prices with the need to provide opportunities for this incoming interest to execute against those quotes. The Exchange believes the proposed rule change to slightly delay execution of certain aggressing interest provides an equitable balance between the need to protect resting Market-Maker interest and provide incoming interest with execution opportunities.

The Exchange believes the proposed rule change is not designed to permit unfair discrimination by providing the Exchange with the ability to provide Market-Maker quotes with

additional protection. The options market is driven by Market-Maker quotes, and thus Market-Maker quotes are critical to provide liquidity to the market and contribute to price discovery for investors. If Market-Makers do not have sufficient time to refresh their resting quotes (the primary source of liquidity for customers in the market) in response to market updates before executing against incoming interest that has incorporated those market updates, this increased risk of execution at stale prices may cause Market-Makers to widen their quotes to the detriment of investors or otherwise withhold liquidity. This reduced liquidity may reduce execution opportunities or cause executions to occur at worse prices for customers. Further, Market-Makers must comply with various obligations, including to provide continuous electronic quotes and to update quotes in response to market conditions.²⁴ It takes time for Market-Makers to update quotes in series in their appointed classes, which may not take effect until after faster market participants have updated orders. The Exchange believes it is appropriate to provide Market-Maker quotes with a reasonable amount of protection (as the proposed rule change would provide) to allow them to execute at prices reflective of market updates given the Market-Makers' need to comply with these obligations and the resources they expend to comply with these obligations.²⁵ As described above, the protected quotes and aggressor orders will remain firm during the quote protection period, and executions will continue during that period.

Further, the Exchange believes the proposed rule change to provide the Exchange with flexibility to determine whether to enable QPT on a class basis, and in such classes to provide the Exchange with flexibility to determine the length of the quote protection period, is not designed to permit unfair discrimination. The Exchange believes this flexibility is appropriate to address market

²⁴ <u>See</u> Rule 5.51.

²⁵ <u>See id.</u>

structure differences, including differences among market participants and activity levels, within different classes, which flexibility the Exchange has with respect to other functionality, such as auctions.²⁶ For example, in classes in which there is high retail customer order volume, the Exchange believes Market-Makers may be willing to accept additional execution risk for the additional opportunities to execute against a significant number of customer orders, which may ultimately offset any stale-priced executions against faster-acting professional customers. To the contrary, in low volume classes or classes comprised mostly of professional investor volume, the execution risk is greater as there are fewer potential executions against customers to offset the risk. Additionally, in classes with smaller minimum increments, the execution risk is higher because Market-Maker quote updates may be more granular and thus more frequent. Therefore, in a nonpenny class, a "stale" execution price may be wider than it might be in a penny class. The Exchange notes it does not believe this class flexibility is necessary for its current protection functionality (which applies to all classes), as the Exchange understands Market-Makers primarily use bulk port functionality to provide liquidity and satisfy their quoting obligations. As there are Market-Makers appointed to all classes trading on the Exchange, the Exchange believes it is appropriate to prevent this interest (orders and bulk messages) submitted through bulk ports in all classes from executing against resting Market-Maker interest, as much of the incoming interest was likely submitted to rest on the Book (and satisfy quoting obligations to provide liquidity to the market) rather than execute upon entry.

The Exchange also believes limiting the proposed rule change to orders of Market-Makers (Capacity M) is appropriate because it is consistent with current and prior functionality, which

 $[\]frac{26}{26}$ <u>See, e.g.</u>, Rule 5.37(a)(1) (permitting the Exchange to determine in which classes orders may be submitted into an AIM auction for potential price improvement) and (c)(3) (permitting the Exchange to determine the length of the AIM auction period on a class basis).

protected resting Market-Maker interest from incoming Market-Maker interest.²⁷ As noted above, Market-Maker systems may automatically generate order and quote updates in response to market changes. The Exchange believes resting Market-Maker interest should be protected from stale execution against all incoming Market-Maker interest generated by those same systems, regardless of the type of port through which the interest is submitted. Therefore, the Exchange believes the proposed rule change to close this current gap exposing resting Market-Maker interest to execution risk against incoming Market-Maker interest submitted through non-bulk ports due to technological disparities will remove impediments to and perfect the mechanism of a free and open market and a national market system, and protect investors and the public interest.

The Exchange notes the underlying purpose of this proposed rule change, which is to provide resting Market-Maker quotes with time to update in response to market condition changes, is the same as the primary purpose of functionality and previously available on the Exchange.²⁸ The Exchange believes the proposed rule change to delay execution of resting Market-Maker quotes against incoming aggressor interest is appropriate, rather than prevention of execution (as occurs in current functionality described above), because as noted above, unlike interest submitted through bulk ports (the primary purpose of which is to provide liquidity on the Book), the primary purpose of orders submitted through non-bulk ports is to execute against interest resting on the Book.²⁹

²⁷ The Exchange notes current functionality also prevents execution of orders with Capacities other than M against resting Market-Maker quotes. <u>See</u> Rule 5.5(c)(3) (requiring users other than appointed Market-Makers to submit orders through bulk ports as Post Only, which cannot execute upon entry against resting interest). If the Securities and Exchange Commission ("Commission") approves the proposed rule change, the Exchange may determine to submit a separate rule filing to propose to extend QPT to other Capacities.

See Rules 5.5(c)(3) and 5.32(c)(6); see also Securities Exchange Act Release Nos. 86374 (July 15, 2019), 84 FR 34963 (July 19, 2019) (SR-CBOE-2019-033) (adoption of current Rules 5.5(c)(3) and 5.32(c)(6)); and 51822 (June 10, 2005), 70 FR 35321 (June 17, 2005) (SR-CBOE-2004-87) (adoption of former Cboe Rule 6.45(c)).

²⁹ It is possible some liquidity providers, including Market-Makers, are submitting orders through non-bulk ports for the provision of liquidity, but the Exchange believes this represents a small portion of non-bulk port order flow.

Therefore, the Exchange believes it is important to provide this incoming interest with execution opportunities, after a slight delay, to provide Market-Makers with opportunities to effect their quote updates. Additionally, execution of bulk messages (which may only be submitted through bulk ports) exposes Market-Makers to increased risk compared to order execution. For example, the System will not determine whether a Market-Maker's risk monitor mechanism³⁰ thresholds have been exceeded until all quotes within a bulk message have been processed, unlike orders, which may result in execution in only one series before the System determines whether those thresholds have been exceeded. The Exchange believes the proposed rule change will close a gap that currently exposes Market-Maker liquidity resting on the Book to executions at potentially stale prices due to technology disparities against Market-Maker orders submitted through non-bulk ports. The quote protection timer will provide a balance between protecting resting Market-Maker quotes in order to maintain liquidity and providing incoming interest with execution opportunities.

The proposed temporary adjustment of aggressor order prices will further perfect the mechanism of a free and open market and national market system, as it will prevent the display of a locked or crossed market consistent with the Linkage Plan.³¹ This proposed handling of these orders is also consistent with the Exchange's current Price Adjust functionality.³²

As noted above, the options market is driven by Market-Maker quotes, and thus Market-Maker quotes are critical to provide liquidity to the market and contribute to price discovery for investors. The proposed functionality is designed to permit the Exchange to provide Market-

³⁰ <u>See</u> Rule 5.34(c)(4), pursuant to which a user's (including a Market-Maker's) interest may be cancelled after that user's risk limits have been exceeded. As a result, quotes in a bulk message will complete executions before determination of whether a user's risk limits have been exceeded. This makes execution risk of bulk message greater than an order, which only has a bid or offer for one series.

³¹ <u>See</u> Rule 5.66.

³² <u>See</u> Rule 5.32(g).

Makers with further protection against executions at potentially stale prices due to technology disparities while still providing incoming Market-Maker orders submitted through non-bulk ports with execution opportunities. The Exchange believes the proposed enhanced functionality will permit liquidity providers to more efficiently enter and update bids and offers. This may cause Market-Makers to quote tighter and deeper markets, which will increase liquidity and enhance competition to the ultimate benefit of all market participants.

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 competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange does not believe the proposed rule change will impose any burden on intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act, because it will apply in the same manner to all incoming Market-Maker orders in non-bulk ports. The primary purpose of the proposed rule change is to permit the Exchange to provide additional protection to resting Market-Maker quotes from executions against incoming Market-Maker interest at potentially stale prices before they have the opportunity to update in response to market condition changes. The Exchange believes it is reasonable to provide additional protection to Market-Makers given their unique and critical role in the options market and the various obligations that Market-Makers must satisfy, as discussed above. Additionally, as noted above, the proposed functionality supplements similar functionality currently available on the Exchange, which similarly protects resting Market-Maker interest against executions at potentially stale prices.³³ The Exchange does not believe the proposed flexibility to apply QPT on a class basis, or determine the length of the timer on a class basis, will impose any burden on

³³ <u>See</u> Rule 5.32(c)(6).

intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act, as such flexibility is reasonable to address market structure differences among classes, as discussed above.

The Exchange does not believe the proposed rule change will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act, because it applies solely to the timing of executions against resting Market-Maker quotes on the Exchange. As noted above, the proposed rule change is consistent with the Linkage Plan.³⁴

Additionally, the Exchange believes the proposed rule change will relieve any burden on, or otherwise promote, competition. As discussed above, the Exchange believe the proposed rule change may encourage the provision of more aggressive liquidity, which may result in more trading opportunities and tighter spreads, which contributes to price discovery. This may improve overall market quality and enhance competition on the Exchange.

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

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

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the Exchange consents, the Commission shall: (a) by order approve or disapprove such proposed rule change, or (b) institute proceedings to determine whether the proposed rule change should be disapproved.

³⁴ <u>See</u> Rule 5.66.

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 (<u>https://www.sec.gov/rules/sro.shtml</u>); or
- Send an email to <u>rule-comments@sec.gov</u>. Please include file number SR-CBOE-2023-044 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-CBOE-2023-044. 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 (<u>https://www.sec.gov/rules/sro.shtml</u>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with 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-CBOE-2023-044 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.

³⁵ 17 CFR 200.30-3(a)(12).