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SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
Form 19b-4

File No.* SR - 2021 - * 020
Amendment No. (req. for Amendments *) 1

Filing by Cboe Exchange, Inc.

Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934

Initial *	Amendment *	Withdrawal	Section 19(b)(2) *	Section 19(b)(3)(A) *	Section 19(b)(3)(B) *
☐	☑	☐	☑	☐	☐

Rule
19b-4(f)(1) 19b-4(f)(4)
19b-4(f)(2) 19b-4(f)(5)
19b-4(f)(3) 19b-4(f)(6)

Pilot ☐

Extension of Time Period for Commission Action * ☐

Date Expires *

Notice of proposed change pursuant to the Payment, Clearing, and Settlement Act of 2010

Section 806(e)(1) * ☐

Section 806(e)(2) * ☐

Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934

Section 3C(b)(2) * ☐

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 *).

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 * Laura G. Last Name * Dickman
Title * VP, Associate General Counsel
E-mail * [redacted]
Telephone * [redacted] Fax

Signature

Pursuant to the requirements of the Securities Exchange Act of 1934,

has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.

Date 07/08/2021

By Laura G. Dickman

(Name *)

(Title *)

VP, Associate General Counsel

[redacted]

NOTE: Clicking the button at right will digitally sign and lock this form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.

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

Form 19b-4 Information * Add Remove View	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	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 Advance Notice by Clearing Agencies * Add Remove View	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, security-based swap submission, or advance notice 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 Add Remove View Exhibit Sent As Paper Document ☐	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.
Exhibit 3 - Form, Report, or Questionnaire Add Remove View Exhibit Sent As Paper Document ☐	Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change.
Exhibit 4 - Marked Copies Add Remove View	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	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 Add Remove View	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. Text of the Proposed Rule Change

(a) Cboe Exchange, Inc. (the "Exchange" or "Cboe Options") proposes to adopt Rule 6.10. The Exchange initially submitted this rule filing SR-CBOE-2021-020 to the Securities and Exchange Commission (the "Commission") on March 24, 2021 (the "Initial Rule Filing"). Amendment No. 1 (1) narrows the scope of the proposed rule change to SPX options and closing positions, (2) expands the scope of the proposed rule change to all Trading Permit Holders, (3) adds certain participation requirements to further limit the proposed compression service to legitimate compression purposes, (4) adds further detail regarding the proposed compression service, and (5) adds additional justification for the proposed rule change. This Amendment No. 1 supersedes the Initial Rule Filing and replaces it in its entirety. The text of the proposed rule change is provided in Exhibit 5.

(b) Not applicable.

(c) Not applicable.

Item 2. Procedures of the Self-Regulatory Organization

(a) The Exchange's President (or designee) pursuant to delegated authority approved the proposed rule change on June 11, 2021.

(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 Laura G. Dickman, (312) 786-7572, Cboe Exchange, Inc., 400 South LaSalle, Chicago, Illinois 60605.

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 adopt Rule 6.10 to provide Trading Permit Holders ("TPHs") with an additional voluntary compression tool that will permit them to more efficiently compress their index option portfolios in order to reduce the required capital attributable to their portfolios while maintaining their risk exposure. The Exchange understands capital requirements and the limited amount of capital available from clearing firms have inadvertently interfered with liquidity providers' (Market-Makers, in particular) ability to provide liquidity to the market. The Exchange has made certain tools available that TPHs can use to compress the notional size of their portfolios to reduce the capital attributable to those portfolios and free up capital to put back into the market. For example, the Exchange may make compression orders available to TPHs, which orders enable TPHs (after submitting compression position lists to the Exchange) to execute orders in S&P 500 Index ("SPX") options without exposure on the Exchange to reduce the aggregate capital attributable to those positions (subject to certain requirements).[1] Additionally, TPHs may transfer positions in exchange-listed options off the Exchange if the transfer does not result in a change in ownership and reduces the risk-weighted assets ("RWA") associated with those positions.[2]

The Exchange believes compression continues to be an important tool to enable TPHs, and Market-Makers in particular, to efficiently manage the size of and risk exposure in their portfolios and the amount of capital that must be maintained by them

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1 <u>See</u> Rule 5.6(c).

2 <u>See</u> Rule 6.8.

and their Clearing TPHs ("CTPHs") in connection with those portfolios. As a result, the Exchange regularly reviews its compression tools and evaluates potential enhancements to those tools. The Exchange believes that permitting TPHs to execute offsetting SPX options positions without exposure using compression orders and to effect off-floor RWA transfers of exchange-listed options has had a beneficial effect on liquidity in the market without adversely affecting the quality of the options market. The Exchange has determined that a combination of elements of these two tools would increase the efficiency of compression for TPHs, and thus would permit TPHs, and Market-Makers in particular, to provide additional liquidity to the market. Therefore, the Exchange proposes, notwithstanding Rule 5.12,[3] to make available to TPHs a multilateral compression service for SPX options, pursuant to which a TPH may close SPX options positions to reduce capital attributable to its portfolio.[4]

Rule 15c3-1 (Net Capital Requirements for Brokers or Dealers) ("Net Capital Rules") requires that every registered broker-dealer, including every Market-Maker, maintain certain specified minimum levels of capital. The Net Capital Rules are designed to protect securities customers, counterparties, and creditors by requiring that broker-dealers always have sufficient liquid resources on hand to meet their financial obligations. Notably, hedged positions, including offsetting futures and options contract

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3 Rule 5.12 generally requires transactions in listed options to occur on a national securities exchange unless an exception applies. Transactions effected pursuant to proposed Rule 6.10 would be such an exception.

4 This is the same purpose as other currently available compression tools, such as compression orders. <u>See</u> Rule 5.6(c) (definition of compression orders). Rule 11.6 requires each Market-Maker to maintain net capital sufficient to comply with the requirements of Securities and Exchange Act (the "Act") Rule 15c3-1. 17 CFR §240.15c3-1. Additionally, Market-Makers must comply with capital requirements imposed by their CTPHs or the Options Clearing Corporation ("OCC") (if the Market-Maker is also a CTPH).

positions, result in certain net capital requirement reductions under the Net Capital Rules.[5]

The Exchange believes capital requirements are important to the stability and integrity of the options markets by ensuring market participants maintain adequate levels of liquidity. However, the Exchange understands there is limited capital available across the options industry to cover their open positions, which may be impeding the ability of liquidity providers to provide liquidity to the market. Firms generally have a limited amount of capital available to cover their options positions. Additionally, CTPHs impose limits on the amount of capital they make available to the firms for which they clear. The Exchange notes there are few clearing banks, and even fewer that clear for options Market-Makers, which limits the overall capital that may be attributable to options Market-Makers. Increased clearing of over-the-counter products, such as swaps, by these same clearing banks means there is a risk of less available clearing bandwidth for listed options, even with the expected adoption of SA-CCR (as defined and discussed below). CTPHs are also subject to global capital requirements that may further reduce capital available to liquidity providers with respect to the U.S. options markets. Therefore, the more capital that is required to cover open positions in a market participant's portfolio, the less capital that participant has available to put back into the market to facilitate customer order executions.

TPHs accumulate cleared positions (particularly in options with larger notional values) that are subject to the Net Capital Requirements and those of their clearing firms

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5 In addition, the Net Capital Rules permit various offsets under which a percentage of an option position's gain at any one valuation point is allowed to offset another position's loss at the same valuation point (e.g. vertical spreads).

and thus the capital ratios with which those firms need to comply. Liquidity providers, in particular, may accumulate a significant number of positions in connection with their role to provide liquidity to options market books and accommodate customer orders. This accumulation is often augmented during times of market volatility, as liquidity providers attempt to accommodate an increased number of customer orders across an increased number of strikes listed to reflect the quickly changing market. In such times, Market-Makers may need to stream quotes in an increased number of strikes in response to customer demand. Additionally, brokers take on additional positions in order to fill an increased number of their customers' orders and then open other positions to offset some of the risk associated with those customer positions. The Exchange understands most of these positions will be hedged, which reduces the overall risk associated with their portfolios. However, open interest still carries some level of operational risk that the firms must use resources to monitor and address on their balance sheets.

For example, generally when market volatility increases (*i.e.*, if the value of the VIX Index (which measures the expected volatility of the S&P 500 Index) increases), the level of the S&P 500 Index generally decreases. In response to the change in index level, customers generally demand the listing of additional strikes to reflect that index level change. Market-Makers open additional positions after they populate these strikes with quotes to provide liquidity against which orders of the customers demanding those strikes may execute. Separately, Market-Makers may open other positions through executions with other market participants to hedge these transactions. Similarly, brokers may provide liquidity to facilitate customer orders across these additional strikes and then open other positions to hedge the positions they opened for their customers. After volatility levels come down (and the S&P 500 Index likely increases), the additional positions (which are generally comprised of a larger number of contracts in the aggregate than during non-volatile times) the Market-Makers accumulated during the market volatility remain in their portfolios, in addition to all other outstanding positions. As the S&P 500 Index continues to increase, those positions grow more out-of-the-money and thus less valuable and in minimal demand in the market, often to the point where those positions have de minimis impact on profit or loss, and closure of those positions would have little to no impact on the risk exposure of a portfolio, but they may still have a significant capital impact due to their notional size. As many of these positions may have little value, it is potentially difficult and uneconomical for Market-Makers to close those positions in the market. Therefore, they often retain those positions until they expire, which requires ongoing capital and risk management.

The Exchange believes certain requirements within the U.S. bank capital regime magnify the need for compression. All OCC clearing members (and thus all CTPHs) are subject to the Net Capital Rules. However, a subset of clearing members are subsidiaries of U.S. bank holding companies, which, due to their affiliations with their parent U.S. bank holding companies, must comply with additional bank regulatory capital requirements pursuant to rulemaking required under the Dodd-Frank Wall Street Reform and Consumer Protection Act.[6] Pursuant to this mandate, the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation approved a comprehensive regulatory capital framework

[6] H.R. 4173 (amending section 3(a) of the Securities Exchange Act of 1934 (the "Act") (15 U.S.C. § 78c(a))).

for subsidiaries of U.S. bank holding company clearing firms ("Bank Capital Rules").[7] Generally, these rules imposed higher minimum capital requirements, more restrictive capital eligibility standards, and higher asset risk weights than were previously mandated for clearing members that are subsidiaries of U.S. bank holding companies under the Net Capital Rules. Furthermore, these rules do not permit deductions for hedged securities or offsetting options positions.[8] Rather, capital charges under these standards are based on the aggregate notional value of short positions regardless of offsets. As a result, CTPHs generally must hold substantially more bank regulatory capital than would otherwise be required under the Net Capital Rules.[9] The impact of these regulatory capital rules is compounded in the SPX options markets due to their large notional value and the potentially significant number of open index options positions given the large trading volume of SPX options.

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7 12 CFR §50; 79 FR 61440 (Liquidity Coverage Ratio: Liquidity Risk Measurement Standards).

8 The Exchange has observed that many options strategies, including relatively simple strategies often used by retail customers and more sophisticated strategies used by Market-Makers and institutions, are risk-limited strategies or options spread strategies that employ offsets or hedges to achieve certain investment outcomes. Such strategies typically involve the purchase and sale of multiple options (and may be coupled with purchases or sales of the underlying assets), executed simultaneously as part of the same strategy. In many cases, the potential market exposure of these strategies is limited and defined. Whereas regulatory capital requirements have historically reflected the risk-limited nature of carrying offsetting positions, these positions may now be subject to large regulatory capital requirements. Various factors, including administration costs; transaction fees; and limited market demand or counterparty interest, however, discourage market participants from closing these positions even though many market participants likely would prefer to close the positions rather than carry them to expiration.

9 See Letter from Cboe, New York Stock Exchange, and Nasdaq, Inc., to the Honorable Randal Quarles, Vice Chair for Supervision of the Board of Governors of the Federal Reserve System, March 18, 2020.

The Exchange believes Bank Capital Rules inadvertently caused certain inefficiencies with respect to the use of capital and undermined the critical role that liquidity providers, including Market-Makers, play in the options market by limiting the amount of capital CTPHs can allocate to clearing member transactions. Specifically, the Exchange understands these rules have caused, and may continue to cause, CTPHs to impose stricter position limits on their clearing members. These stricter position limits may impact the liquidity TPHs, particularly Market-Makers (who participate on a significant portion of SPX option trades on the Exchange), might supply in the options market, which impact may be heightened when markets are volatile. This impact may be compounded when a CTPH has multiple Market-Maker client accounts, each having largely risk-neutral portfolio holdings.[10]

In November 2019, bank regulatory agencies approved a rulemaking requiring banks to replace the Current Exposure Method ("CEM") with the Standardized Approach to Counterparty Credit Risk ("SA-CCR") by January 1, 2022. The Exchange believes CEM's primary flaws arise from the methodology's insensitivity to actual risk. For example, CEM does not account for the delta (i.e., market sensitivity) of an option position or fully recognize the offsetting of positions with opposite economic exposures. The Exchange believes implementation of SA-CCR will help correct many of CEM's flaws by incorporating risk-sensitive principles, such as delta weighting options positions and more beneficial netting of derivative contracts that have economically meaningful relationships. This means that SA-CCR, when implemented, will be less punitive to

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10 Customers – including several Market-Makers – continue to express to the Exchange that these rules could hamper their ability to provide consistent liquidity in the index options markets and have inquired about the ability engage in multilateral compression, as they are able to do for their futures positions.

CTPHs (and the market participants for which they clear options positions) than CEM as it relates to options positions. Some CTPHs have implemented SA-CCR, while others have not and continue to use CEM. While implementation by all CTPHs of SA-CCR will be a positive step toward freeing up liquidity provider capital, the Exchange believes implementation by all CTPHs of SA-CCR will not eliminate TPHs need for compression.

The ability of liquidity providers to regularly compress these types of positions would free up their balance sheets and enable them to provide more meaningful liquidity to the market, particularly during times of volatility when the market needs this liquidity most. A multilateral compression service will provide liquidity providers with a regular and efficient way to clear their balance sheets of nearly worthless positions and put the capital otherwise necessary to remain in their accounts to cover those positions back into the markets to facilitate execution of customer orders. The Exchange believes this additional liquidity may result in tighter spreads and more execution opportunities, which benefits all investors. Therefore, even when all banks have implemented SA-CCR, the Exchange believes compression will continue to be a valuable tool for TPHs.[11]

As noted above, the Exchange currently offers its TPHs tools they may use to reduce the regulatory requirements attributable to their portfolios, which the Exchange

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11 The Exchange notes at least one other market offers certain of its members a multilateral compression tool for competitive products. See Chicago Mercantile Exchange, Inc. ("CME") Rule 857, the purpose of which is to provide market participants and their clearing members with capital relief in listed equities options without materially changing the risk exposure of a given participant's portfolio. See *CME Equity Options Compression Overview*, *at* https://www.cmegroup.com/trading/equity-index/cme-equity-options-compression-overview.html; see also *Portfolio Compression in Centrally Cleared Markets*, Optiver (May 27, 2021), *available at* https://www.optiver.com/insights/news-articles/portfolio-compression-in-centrally-cleared-markets/ (describes ongoing benefits of compression services).

believes has had a beneficial effect on the capital requirements of CTPHs' parent companies without adversely affecting the quality of the options market.[12] The proposed rule change is a further enhancement to the set of compression tools the Exchange currently offers, combining certain features of those tools.

To participate in the proposed compression service, pursuant to proposed Rule 6.10(a), a TPH must request access to the compression service from the Exchange. After it receives access, the TPH must participate in and successfully complete a test of the compression service in a manner determined by the Exchange, which test will include the submission of a position list with an Exchange-specified minimum number of risk constraints and the receipt and processing of a compression proposal. All TPHs that request access to the compression service will be subject to the same certification process. The Exchange will require a TPH to re-test if it declines two consecutive individual proposals (as defined below), subject to mitigating circumstances (e.g., system issues or unusual market conditions). A compression transaction may only occur if all compression participants approve (as further discussed below). As described below, compression participants must input at least one risk constraint they define so that compression transactions occur within parameters they set to be consistent with their own risk models. The Exchange believes this flexibility will make it less likely for a compression participant to decline an individual proposal. The Exchange expects that consecutive declines by a compression participant would more likely be a result of a system issue, and the recertification process will allow the Exchange or that compression

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12 See, e.g., Rules 5.6(c) (definition of compression orders) and 5.32, 5.33, and 5.88 (describing how compression orders may execute), and 6.8 (describing permissible off-floor RWA transfers).

participant to make any appropriate system updates to correct the issue. The Exchange also believes this certification process (and re-certification requirement upon consecutive declines) will encourage TPHs interested in compressing their positions to commit the necessary resources to participate in the compression service so that all compression participants may benefit from the service.

Pursuant to proposed Rule 6.10(b), in a manner and format and within an Exchange-established time period that ends following the market close of Regular Trading Hours ("RTH")[13] on Exchange-specified days, of which the Exchange will provide reasonable and sufficient advanced notice, a TPH ("compression participant") may submit into an Exchange system a list of open SPX option positions it would like to close ("position lists").[14] A compression participant must include the following information on a position list submission:

(1) the amount of capital reduction associated with each closing position (with the amount of capital in a measurement unit of the compression participant's choosing) included on a position list submitted to the Exchange;

(2) the theoretical value of each position (with the value amount calculated in a manner of the compression participant's choosing);

(3) the maximum cost the compression participant is willing to accept to compress positions included on the position list (in the aggregate)[15];

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13 Currently, the RTH trading session closes at 4:15 p.m. Eastern time for most index options. See Rule 5.1(b)(2).

14 The Exchange intends to launch the compression service in accordance with the timeline set forth in its Cboe Compression Service User Manual, *available at* Cboe Compression Service User Manual.

15 The cost of a compression transaction is the contract-weighted difference between the compression price and the compression participant-provided theoretical value.

(4) the maximum cost per unit of capital reduction the compression participant is willing to accept; and

(5) at least one risk constraint (as defined by the compression participant) the compression participant wants applied to any compression proposal.[16] Each risk constraint must include a minimum (which must be less than or equal to zero) and maximum (which must be greater than or equal to zero) value.

The compression service rejects a position list submission if any position does not include an associated capital value amount, a theoretical value, or at least one risk constraint, if any risk constraint does not include a minimum and maximum value (or if the maximum is less than zero or the minimum is greater than zero), or if the position list does not include a maximum total cost or maximum cost per unit of capital reduction.

Market participants measure capital using various industry standards, which provide them with the ability to select the most appropriate measurement unit for their organizations and risk management practices. Market participants also have their own methods to calculate theoretical values of options. Therefore, the Exchange believes it is reasonable to permit TPHs to provide capital amounts associated with and theoretical values of their positions using the measurement unit and value, respectively, they generally use. A compression participant must also include the maximum cost it is willing to accept to compress positions on the position list in the aggregate) so that the aggregate difference between the compression price and compression participant's theoretical value of compressed positions within an individual proposal is not greater than that maximum cost. Similarly, a compression participant must also include the maximum

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[16] A compression participant has the option to define and input additional risk constraints in its position list.

cost per unit of capital reduction it is willing to accept so that it receives sufficient benefit for each compression transaction.[17] These requirements are designed to make it more likely that compression participants will accept proposals to engage in compression transactions.

Additionally, the Exchange believes the requirement to include at least one risk constraint is reasonable, as it further increases the likelihood a compression participant will accept the compression proposal (and thus that compression transactions will occur, as further described below). If a position list included no risk constraints, the Exchange believes that may indicate a compression participant would accept any compression proposal, which is not practicable and not consistent with the need for compression. Each risk constraint must include a minimum and maximum value (with the maximum being greater than or equal to the minimum). For example, a compression participant may constrain the net cost of a compression portfolio compared to its specified values or constrain the net delta by expiration that would result from a compression proposal. Permitting compression participants to input these constraints will allow compression participants to effect compression of their portfolios in a manner consistent with their own risk management practices and achieve the goals they seek from the compression service. The Exchange believes providing compression participants with this flexibility,

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[17] For example, suppose a compression participant indicated it is willing to accept a total cost of $1,000,000 for compression transactions. Without a maximum cost per unit of capital reduction benefit, the compression participant may receive a very small benefit depending on the compression proposal. While the compression participant may be willing to accept a cost of $1,000,000 to receive $2,000,000 in capital reduction, it may not be willing to accept a cost of $1,000,000 to receive $100,000 in capital reduction. The Exchange believes this requirement will increase the likelihood that a compression proposal will give a compression participant enough “bang for its buck.”

as well as requiring them to include a range of values they are willing to accept, will increase the likelihood that compression participants will accept their individual proposals and thus permit compression transactions to occur.

The Exchange understands that the restrictiveness of a compression participant's constraints may impact the number of positions on its position list that are ultimately compressed. Tighter constraints will more narrowly constrain the risk properties of the positions to be compressed while looser constraints may allow for a larger number of positions to be compressed. The Exchange believes any potential benefits of loosening constraints to try to compress more positions would be minimal. Looser constraints may be inconsistent with the participant's risk management practices and cause compression transactions to not be as risk neutral or to be at higher costs for that participant compared to what they would have been had the participant not artificially loosened the constraints. As a result, this would increase the likelihood of declining the compression proposal. By loosening a constraint, a compression participant takes on risk that a position will be compressed at a value outside of the range that would cause compression to be risk neutral. Additionally, because the compression service maximizes capital reduction in the aggregate across all compression participants (and because there is no priority or pro-rata allocation, as further discussed below) and looser constraints, while increasing the chances a position will be compressed, there is no guarantee the position is compressed.

The Exchange intends to offer the compression service with sufficient frequency to permit TPHs to respond to intra-month reviews of regulatory capital necessary for their positions by clearing firms.[18] The proposed flexibility will permit the Exchange to adjust

[18] The Exchange intends to initially offer the compression service twice a month.

the frequency (with sufficient notice) of availability of the compression service if the Exchange deems such frequency to be more appropriate, such as in response to market conditions. The proposed flexibility is also consistent with the currently flexibility regarding the availability of compression orders.[19] The Exchange is committed to providing compression participants with sufficient time to submit position lists. The Exchange also believes permitting position lists to be submitted following the market close of RTH is appropriate, as it will allow compression participants to assess their positions and risk profiles when they are not changing due to new trading activity.

The proposed process regarding the submission of position lists is similar to the current process for submitting compression position lists in connection with the submission of compression orders. Currently, prior to submitting compression orders, TPHs must submit lists of open SPX options positions they would like to close using compression orders.[20] The proposed compression service will similarly require TPHs to submit lists of open SPX option positions they would like to close. Therefore, the Exchange believes the proposed requirements for use of the compression service, particularly the requirement to include the amount of capital associated with each position and the certification process, which demonstrate a TPH's willingness to commit resources to use the compression service, are reasonable, as they will create additional controls to limit use of the compression service to legitimate compression purposes.

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[19] See Rule 5.6(c).

[20] Unlike the proposed compression service, TPHs may open positions using compression orders.

Currently, compression orders are limited to SPX options, as such options have a large notional value and represent the most volume executed on the Exchange.[21] Off-floor RWA transfers may occur in any exchange-listed option; however, transfers of multiply listed equity options are subject to the rules of all options exchanges that list those options, and thus would only be permissible if all other options exchanges permitted such off-floor transfers. The Exchange believes it is appropriate to initially offer the compression service for SPX options given their large notional value (currently over $400,000 per option) and the significant number of outstanding positions resulting from high trading volumes.[22] The large notional size of SPX options compounds the need for compression, as it causes open SPX options positions to generally require larger amount of capital while they remain open. Clearing firms may request that TPHs reduce their SPX positions, and the proposed rule change will provide TPHs with an efficient mechanism to do so with respect to their SPX positions.

Pursuant to proposed paragraph (c), the Exchange will create a compression proposal by conducting an automated matching process to determine which positions among the compression participants can offset. Specifically, promptly following the position list submission deadline set forth in proposed paragraph (b), an Exchange automated process will match offsetting positions (in an anonymized manner) of compression participants that submitted position lists. This automated process generates possible outcomes of how portions of or entire compression positions may be matched

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21 See Rules 5.6(c) (definition of compression order).

22 The Exchange may consider to further expand the compression service beyond SPX options and would submit a separate rule filing in the event it determined to do so. The Exchange notes the off-floor compression of equity options, which are multiply listed, would be subject to the rules of other options exchanges.

against portions of or entire offsetting positions of other compression participants. The process then identifies the outcome that would result in the maximum aggregate capital reduction (measuring capital reduction using an objective standard, including normalization[23] of compression participant-provided values in the positions lists if appropriate) among all compression participants. The resulting group of offsetting position matches among the compression participants on an anonymous basis constitutes the "compression proposal."

Because the process is automated, it does not consider the identities of the compression participants and instead objectively optimizes the aggregate capital reduction when creating a compression proposal. When generating possible outcomes, the process incorporates all positions included on position lists from all compression participants that were submitted and accepted and considers each position individually. Outcomes may result in none of, a portion of, or an entire position being matched. When generating possible outcomes, the process matches offsetting positions on an anonymous basis. No compression participant receives any priority and positions are not matched on a time or pro-rata basis or based on the aggregate sizes of position lists.[24] If multiple

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23 If the Exchange observes significant disparities in the capital reduction measurements submitted by compression participants, the Exchange may modify the objective measurement standard the automated process uses to maximum aggregate capital reduction by normalizing (or scaling) values for the same positions in an objective manner to reduce the likelihood that a compression participant attempts to receive a larger share of a compression transaction by inputting a larger capital value.

24 When the compression service is pairing offsetting positions (or portions of positions) for a specific potential outcome, it is not considering the total positions that a specific compression participant would ultimately offset as part of that outcome. Because the goal of the compression service is to maximize aggregate capital reduction, the compression service is not attempting to proportionately compress each compression participant's positions based on the sizes of their

outcomes would result in the same maximum aggregate capital reduction, the compression service randomly picks one of those outcomes.[25] While this process may result in a larger portion (on a proportionate basis) of one compression participant's positions being compressed compared to another compression participant, the Exchange believes the proposed matching process is fair and reasonable given its anonymous nature and random selection of outcomes in the event of "ties." The Exchange's goal of offering the compression service is to maximize additional liquidity that TPHs may have available to bring to the Exchange, which additional liquidity may lead to tighter spreads and additional execution opportunities for all investors. The Exchange believes having the compression proposal be comprised of the outcome that results in the maximum aggregate capital reduction is consistent with that goal and thus will maximize the benefit for investors.

Offsetting positions will be matched at the "compression price" for that option. The Exchange will programmatically determine the "compression price," which will generally be the price of the option as close as possible to the midpoint of the national best bid or offer ("NBBO") at the close of trading or the daily marking time,[26] subject to

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position list submissions. The Exchange believes attempting to proportionately compress positions may significantly reduce the number of positions for all compression participants that are able to be compressed in the compression service.

25 See proposed Rule 6.10(c)(1).

26 Prices at the daily marking time (4:00 p.m. Eastern time for SPX options) is generally used at OCC when calculating margin requirements and, the Exchange understands, by firms within their risk models. However, it is possible firms may submit position lists with capital values based on prices at the close of trading (4:15 p.m. Eastern time for SPX options). The proposed flexibility permits the Exchange to consider this factor and update the compression price calculation accordingly so that the compression price better aligns with compression participants' expectations.

adjustment using generally accepted volatility and options pricing models in the event of wide markets, market volatility, or other unusual circumstances. The Exchange determination of the compression price does not consider the theoretical values provided by the compression participants in their position lists. Additionally, compression participants have no knowledge prior to their submission of positions files of what the compression price will ultimately be. The compression price may be in $0.01 increments.

A compression proposal must be consistent with all risk constraints set by the compression participants when submitting their position lists. As discussed above, compression participants may submit risk constraints consistent with their risk models. Creating proposals that satisfy a compression participant's risk constraints makes it more likely that the compression participant will accept its individual proposal (and thus more likely that compression transactions may be effected).

In a manner and format and at least 10 minutes before the deadline set forth in proposed paragraph (d) (determined by the Exchange), of which the Exchange will provide reasonable and sufficient advanced notice, the Exchange will notify each compression participant of the portion of the compression proposal that is comprised of that participant's list of individual matched positions ("individual proposal"). The Exchange believes this will provide compression participants with sufficient time to review their individual proposals prior to determining whether to accept them.

This proposed process is similar to the Exchange's provision of individual position files to TPHs with respect to compression orders. Because compression transactions effected through the compression service will be single leg, a compression proposal will not consist of multi-leg positions as the current position files provided by the Exchange with respect to compression orders.[27] Additionally, like the position files the Exchange provides to TPHs with respect to compression orders, the proposed compression service will identify for which positions from a compression participant's position list there is offsetting size from another compression participant.[28] Unlike compression orders, a compression proposal will not identify the compression participants that will be the contra-parties to compression transactions. This information is currently provided for compression orders, as TPHs need to seek out contra-parties to submit compression orders. However, the compression service enhances this process by doing this on behalf of TPHs, thus reducing this burden on TPHs and eliminating the need to identify counterparties in the compression proposal.

The compression proposal will include a compression price for each position (which, like the compression price of compression orders, may be in $0.01 increments).[29] The Exchange calculates this value using substantially similar pricing models that it understands other market participants use when pricing options. The Exchange currently disseminates indicative values for certain classes at the end of the trading day using the

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27 See Rule 5.6(c).

28 Id.

29 TPHs submit compression orders with the price of execution (which is subject to certain pricing requirements). See id. Compression orders may also currently be executed in pennies. Because many series the Exchange expects TPHs will attempt to close will be out-of-the-money, and essentially worthless, TPHs may not otherwise close positions in these series if a higher minimum increment causes the price to be too much higher than the option's value. The Exchange believes it is reasonable to permit these orders to be entered and executed in penny increments to provide flexibility that will enable TPHs to encourage participation in the compression service and maximize the reduction in capital attributable to their positions.

method, which the Exchange understands market participants currently use for various purposes including risk management purposes.[30] The Exchange believes its programmatically determined compression price using generally accepted volatility and options pricing models and available pricing information will provide compression participants with a reasonable value at which to effect their compression transactions.

The Exchange believes the proposed matching process enhances the process currently available with respect to compression orders, as it calculates for TPHs the positions that may be offset by positions of multiple other TPHs that could maximize compression results. Today, if a TPH receives a position file regarding other TPHs that have offsetting size, they must all then coordinate to submit various orders for unexposed execution to achieve the same results. The proposed process more efficiently identifies the different parties with contra-side interest against which a TPH may execute its positions for compression purposes. As a result, the proposed process reduces the burden on TPH of finding other TPHs with offsetting size they are willing trade when they attempt to compress their portfolios. The Exchange believes the compression service supports the Exchange's primary function of bringing together purchasers and sellers of options.[31] The Exchange believes compression to be a valuable service to provide to TPHs, as compression enhances liquidity in the marketplace, which may lead to more liquidity and competition and tighter spreads, which ultimately benefits the entire market.

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[30] See Rule 4.17 (pursuant to which the Exchange currently disseminates indicates values for various options (including most index options the Exchange lists for trading)). The Exchange also uses similar values in certain circumstances when evaluating obvious errors that occur on the Exchange. See Rule 6.5, Interpretation and Policy .08.

[31] See 15 U.S.C. 78c(a)(1) (which defines an "exchange" as an organization that constitutes, maintains, or provides a marketplace or facilities for bringing together purchases and sellers of securities).

Like the current position files the Exchange provides to TPHs in connection with compression orders, compression proposals generated by the Exchange pursuant to the proposed compression service are provided to TPHs for informational purposes only. A TPH can choose to take no action once it receives a compression proposal. Individual TPHs will continue to determine whether to submit position lists to the compression service and whether to accept or decline compression proposals (and thus whether to effect the compression transactions with the compression proposals). As further described below, whether a TPH chooses to accept its individual proposal and effect the compression transactions described therein is solely within the discretion of the TPH. The Exchange's provision of the individual proposals that comprise a compression proposal does not constitute advice, guidance, a commitment to trade, an execution, or a recommendation to trade, as is the case today for compression orders.

Proposed paragraph (d) describes the conclusion of the compression process, including how compression transactions may be effected. Specifically, each compression participant for which a compression proposal includes at least one offsetting position match[32] must notify the Exchange in the Exchange-designated form and manner no later than the Exchange-established deadline (which will be at least two minutes prior to the time by which the Exchange must submit matched trades to OCC pursuant to Rule 6.4)[33] of whether the compression participant approves its individual proposal. The Exchange

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32 It is possible that the automated matching process described in proposed paragraph (c) will not find for a compression participant any offsetting positions of other compression participants. In that case, the compression participant with no offsetting position matches needs to take no action.

33 Rule 6.4 requires the Exchange, on each business day at or prior to a time prescribed by OCC (which time is currently 5:30 p.m. Eastern time) to submit to OCC a report of each CTPH trade matched in accordance with the Exchange's Rules.

believes this will provide compression participants with sufficient time to review their individual proposals and determine whether to accept them, while also providing the Exchange with sufficient time to submit compression transactions to OCC in accordance with OCC's reporting procedures for matched trades. If all compression participants approve their individual proposals (which together comprise the full compression proposal), then the Exchange effects the transactions comprising the compression proposal at the specified compression prices. If any compression participant for which a compression proposal includes at least one offsetting position match declines its individual proposal (or does not respond to the Exchange by the deadline), then no compression transactions are effected. In other words, whether a TPH effects any compression transactions (at the specified compression prices) set forth in the compression proposal is solely within the discretion of TPH. If a TPH evaluates a compression proposal and determines it is not in its interest to effect the transactions as set forth in the proposal, then no compression transactions are effected. Because the compression proposal only achieves its goals of maximized compression if all compression participants approve of the proposal, it requires unanimous approval. As is the case for any transaction effected on the Exchange, all counterparties must agree to the transaction.

Following any unanimous approval of a compression proposal (*i.e.*, all compression participants approve their individual proposals), the Exchange (a) distributes to each compression participant the information regarding the completed compression transactions within their individual proposals (which information will also be available to CTPHs) and to OCC for processing and (b) disseminates the information regarding each compression transaction effected.[34] The Exchange believes it is appropriate to share the results of any compression transactions with the Clearing Trading Permit Holders of the compression participants, as the impacted positions will ultimately be held within the clearing accounts of these CTPHs. Additionally, CTPHs have an interest in the open interest of the TPHs for which they perform clearing services, because CTPHs impose capital restrictions on these TPHs based on their open interest.[35] In addition, the Exchange believes it will benefit the market to disseminate information for compression trades as it does for all other transactions so that all market participants have knowledge of compression transactions that occur and have knowledge of any changes to open interest in the applicable products. Compression transactions are effected within the accounts of the compression participants and occur in accordance with OCC Rules (as is the case with other off-floor transfers). Compression transactions may be subject to applicable laws, rules, and regulations, including rules of other self-regulatory organizations.[36]

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[34] The Exchange will disseminate compression transaction information to OPRA. The Exchange has completed system work to apply an indicator to such information and is working with OPRA so that OPRA is able to incorporate that indicator. While the Exchange expects OPRA to complete its work to do so in 2021, the Exchange understands the indicator may not be available upon implementation of the compression service, currently planned for July 2021 (subject to Commission approval of this proposed rule change).

[35] It is for similar reasons that CTPHs may currently submit compression-position lists to the Exchange in connection with the submission of compression orders. See Rule 5.6(c).

[36] Post-trade positions are held in accounts at the OCC. Therefore, any post-trade activity that occurs would be effected within those accounts. The Exchange has held multiple discussions with the OCC regarding the compression service, and the OCC has indicated its ability to accommodate any effected compression transactions. Any compression transactions will be subject to all applicable recordkeeping requirements applicable to TPHs under the Act and the rules and regulations thereunder, such as Rule 17a-3 and 17a-4.

The primary difference between the compression service and compression orders is that the compression transactions TPHs decide to effect will occur off-floor after trading hours. Effecting compression transactions after the close of trading will provide TPHs with several benefits, including certainty regarding positions they may want to compress (as positions may change regularly throughout the trading day) and not having to interrupt their provision of liquidity during the trading day to engage in risk management. Additionally, this will permit TPHs to not divert resources during the trading day from providing liquidity to the market to effecting transactions for risk management purposes. Currently, compression orders may be effected without exposure on the Exchange, which is similar to the proposed compression transactions. The proposed compression service eliminates the step of needing to bring orders that will not be exposed to the Exchange. As the primary purpose of the proposed compression transactions is to compress the notional size of TPHs' portfolios so that they may provide additional liquidity into the market (rather than, for example, obtain price improvement), the Exchange believes the benefits of exposure and execution on an exchange are not applicable to compression transactions. Additionally, because the Exchange will disseminate compression transaction information, the compression service will provide transparency to the market regarding compression transactions. The Exchange currently permits transfers of SPX option positions (which may net against each other) to occur off the Exchange for similar reasons.[37]

[37] See Rule 6.8.

To demonstrate how the Exchange will conduct its multilateral compression service, suppose three Market-Makers submit to the Exchange the following position lists:

MM1

Class	**Expiry**	**Strike**	**Put/Call**	**Quantity**
SPX	2020-12-24	3700	C	300
SPX	2020-12-24	3700	P	-100
SPX	2020-12-24	3800	C	-100
SPX	2020-12-24	3800	P	-50

MM2

Class	**Expiry**	**Strike**	**Put/Call**	**Quantity**
SPX	2020-12-24	3700	C	-50
SPX	2020-12-24	3700	P	50
SPX	2020-12-24	3800	C	50
SPX	2020-12-24	3800	P	750

MM3

Class	**Expiry**	**Strike**	**Put/Call**	**Quantity**
SPX	2020-12-24	3700	C	-25
SPX	2020-12-24	3700	P	50
SPX	2020-12-24	3800	C	0
SPX	2020-12-24	3800	P	-25

In total, across the four series, MM1 submitted 550 contracts for compression, MM2 submitted 900 contracts for compression, and MM3 submitted 100 contracts for compression. For purposes of this example, no Market-Maker included additional parameters to be considered in the compression matching process. The Exchange's automated matching process evaluates these positions (on an anonymized basis) to maximize the number of positions among the three Market-Makers that can be compressed, which results in the following trade matches:

MM1

Class	Expiry	Strike	Put/Call	Trade Quantity	Contra	Compression Price
SPX	2020-12-24	3700	C	-50	MM2	1.00
SPX	2020-12-24	3700	C	-25	MM3	1.00
SPX	2020-12-24	3700	P	50	MM2	1.00
SPX	2020-12-24	3700	P	50	MM3	1.00
SPX	2020-12-24	3800	C	50	MM2	0.50
SPX	2020-12-24	3800	P	50	MM2	1.50

MM2

Class	Expiry	Strike	Put/Call	Trade Quantity	Contra	Compression Price
SPX	2020-12-24	3700	C	50	MM1	1.00
SPX	2020-12-24	3700	P	-50	MM1	1.00
SPX	2020-12-24	3800	C	-50	MM1	0.50
SPX	2020-12-24	3800	P	-50	MM1	1.50
SPX	2020-12-24	3800	P	-25	MM3	1.50

MM3

Class	Expiry	Strike	Put/Call	Trade Quantity	Contra	Compression Price
SPX	2020-12-24	3700	C	25	MM1	1.00
SPX	2020-12-24	3700	P	-50	MM1	1.00
SPX	2020-12-24	3800	P	25	MM2	1.50

In total, if all three Market-Makers approved of this compression proposal, MM1 would compress 275 contracts, MM2 would compress 225 contracts, and MM3 would compress 100 contracts, for a total of 600 contracts among all three Market-Makers, representing nearly 40% of the 1,550 total contracts submitted by the three Market-Makers. With a notional value of nearly $400,000 per SPX contract, this compression would permit these Market-Makers to eliminate positions from their accounts that equate to a significant reduction in necessary capital to be maintained in those accounts, which the Market-Makers could instead put back into the market.[38]

The Exchange believes the proposed compression service will provide TPHs with an additional tool to reduce regulatory capital attributable to their portfolios in accordance with their businesses and risk management practices. The Exchange understands from customers, and Market-Makers in particular, there continues to be a significant need to reduce regulatory capital attributable to their open interest based on then-current market conditions. The need for compression is particularly true during times of extreme volatility, such as the recent historic levels of market volatility, which can make providing liquidity in index options immensely more challenging when market participants need liquidity the most. The Exchange believes the ability of TPHs to compress their portfolios helps reduce the risk of market dislocation, especially during periods of increased volume and volatility, as they can continue providing liquidity during such times (which may increase the regulatory capital attributed to their portfolios) because they will know that they can subsequently reduce their open positions (and concomitant regulatory capital).

As noted above, because some CTPHs carrying these are bank-owned broker/dealers, those CTPHs are subject to Bank Capital Rules, which result in these additional punitive capital requirements being passed on to their Market-Maker clients.[39]

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38 The Exchange notes each TPH would retain any uncompressed positions. Each TPH would have the option to resubmit these uncompressed positions on a new position list at the times permitted by the Exchange to potentially be part of a different compression proposal. Additionally, if any of the TPHs declined this compression proposal, the TPHs could similarly resubmit new position lists if they so choose (subject to the requirement to recertify).

39 See Letter from Cboe, New York Stock Exchange, and Nasdaq, Inc., to the Honorable Randal Quarles, Vice Chair for Supervision of the Board of Governors of the Federal Reserve System, March 18, 2020.

The Exchange believes implementation of SA-CCR by all CTPHs will not eliminate the need for TPHs to engage in the compression of their portfolios, as previously discussed. TPHs regularly avail themselves of compression orders, in which they use the information provided in the Exchange-provided position lists to identify potential counterparties that similarly need to close index option open interest. Additionally, certain TPHs avail themselves of off-floor RWA transfers across their own accounts to similarly achieve this purpose. The proposed compression transactions will be able to occur in numerous options as part of multilateral transactions effected at a single time, which will permit TPHs' to compress their portfolios more efficiently than they can using current compression tools. The proposed compression service streamlines current compression tools, which the Exchange believes will permit TPHs to reduce more efficiently any potential negative impact on the market-making community that has resulted from bank regulatory capital requirements. The Exchange expects the proposed compression service will provide TPHs with an additional avenue to free up much needed capital, which will benefit the entire market and all investors.

The decisions to request access to the compression service, to submit a position list on the Exchange-specified days, and to accept an individual proposal (and thus effect a compression transaction at the compression price) lie with a compression participant. By permitting compression participants to define their own constraints, inputting as few or as many constraints (with a required minimum of one) as they want with specified ranges, the Exchange believes the proposed rule change will make it more likely a compression participant will accept an individual proposal (and thus more likely that compression transactions may be effected).

The Exchange is currently offering TPHs the opportunity to participate in tests of the compression service and intends to make the compression service available in late July 2021, subject to Commission approval of this proposed rule change.[40]

(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.[41] Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[42] 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)[43] 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 remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, protect investors and the public interest because it seeks

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40 See Cboe Options Exchange Notice C2021061803, *available at* Schedule Update – Cboe Compression Service Multilateral Compression Functionality.

41 15 U.S.C. 78f(b).

42 15 U.S.C. 78f(b)(5).

43 Id.

to further mitigate the potentially negative effects of overall limits on available capital on liquidity, as magnified by Bank Capital Requirements, in the SPX market. As described above, the Exchange believes the limited number of clearing firms that clear listed options, in addition to other products, who are subject to global capital regimes may be reducing the amount of capital available for liquidity providers in the U.S. options markets. Even with the implementation of SA-CCR by all bank-owned clearing firms, which the Exchange believes is a positive step given SA-CCR's incorporation of risk-sensitive principles, the Exchange believes the overall limit on available capital may continue to impede efficient use of capital and undermine the critical liquidity role that liquidity providers play in the SPX market by limiting the amount of capital CTPHs allocate to clearing member transactions.

Specifically, the Exchange understands there is limited capital available across the options industry to cover their open positions, which may be impeding the ability of liquidity providers to provide liquidity to the market. Firms generally have a limited amount of capital available to cover their options positions. Additionally, CTPHs impose limits on the amount of capital they make available to the firms for which they clear. The Exchange notes there are few clearing banks, and even fewer that clear for options Market-Makers, which limits the overall capital that may be attributable to options Market-Makers. Increased clearing of over-the-counter products, such as swaps, by these same clearing banks means there is a risk of less available clearing bandwidth for listed options, even with the expected adoption of SA-CCR. CTPHs are also subject to global capital requirements that may further reduce capital available to liquidity providers with respect to the U.S. options markets. Therefore, the more capital that is required to cover open positions in a market participant's portfolio, the less capital that participant has available to put back into the market to facilitate customer order executions. In turn, this could force Market-Makers to reduce the size of their quotes and other liquidity providers to reduce orders they may facilitate for customers and result in reduced liquidity in the market. The Exchange believes that providing TPHs, and Market-Makers in particular, with a more efficient mechanism to reduce regulatory capital attributable to their portfolios will permit TPHs to contribute to the availability of liquidity in the index options market and help ensure that these markets retain their competitive balance. The Exchange believes that the proposed rule would serve to protect investors by helping maintain a consistent continued depth of liquidity, particularly in volatile market conditions when liquidity is needed the most by investors.

The proposed rule change will provide liquidity providers with the ability to close a larger number of SPX positions and more efficiently reduce regulatory capital attributable to their open interest in SPX options as part of a multilateral matching process. Current compression tools require TPHs to identify counterparties against which to execute compression volume as part of multiple transactions or limit how positions may be transferred off-exchange. The proposed compression process is a streamlined version of the process used for compression orders, with two main differences (some of which incorporate elements of off-floor RWA transfers). First, the compression service would eliminate the burden on TPHs to identify potentially multiple counterparties to effect compression transactions that would achieve the compression goals of all compression transaction parties. The Exchange understands that TPHs generally submit compression-list positions with the goal of identifying other TPHs with offsetting positions that will enable them to submit compression orders. While the Exchange provides TPHs that submit compression-list positions with a list of positions for which there is offsetting size and the identities of the TPHs with that offsetting size, TPHs must still seek each other out to determine how to offset as much as possible among each other to achieve their compression goals, and then submit various crossing orders to do so. The proposed compression service eliminates this step, as the Exchange's automated process will match offsetting size among multiple compression participants as a single step. With respect to the proposed compression service, the Exchange would be bringing together purchases and sellers of index options for the purpose of compression who ultimately decide into which transactions they will or will not enter, which is consistent with its role as an exchange under the Exchange Act.[44]

Second, unlike compression orders, compression transactions effected through the proposed compression service would occur off-exchange and outside of Regular Trading Hours. Compression orders are executed on the Exchange but are not exposed before execution. The Exchange recognizes the numerous benefits of executing options transactions occur on an exchange, including price transparency, potential price improvement, and a clearing guarantee. However, the Exchange believes exposure and execution of compression transactions on the Exchange would have minimal benefits.[45] When TPHs previously exposed compression orders to the trading floor, the Exchange observed that market participants generally deferred their allocations to permit a clean

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44 See 15 U.S.C. 78c(a)(1) (which defines an "exchange" as an organization that constitutes, maintains, or provides a marketplace or facilities for bringing together purchases and sellers of securities).

45 Because compression transactions will be effected within clearing accounts at the OCC, any compression transactions will continue have a clearing guarantee.

cross. Because orders that were executed in compression forums on the trading floor were generally not broken up, and because the purpose of these trades is unrelated to profits and losses (making the price at which the transaction is executed relatively unimportant like competitive trades), the Exchange believes it is appropriate to not require exposure of these orders in an electronic or open outcry setting. Compression orders are currently not exposed on the Exchange for the same purpose.[46] The Exchange believes that TPHs understand the benefits that compression may bring to liquidity on the Exchange to the benefit of all market participants, which benefit the Exchange believes is greater than the benefit of exposing compression transactions prior to execution.

The Exchange believes the benefits of permitting compression transactions to occur off the exchange exceed any benefits that may result from executing these orders on the Exchange and any potential costs resulting from executing these orders off the Exchange. The Exchange notes that the benefits of on-exchange representation of an order generally flow to that order, which include the potential of price improvement for the order and to locate liquidity against which to execute the order. The compression service, however, will have located the necessary liquidity to offset the positions a TPH is seeking to close (or open) as part of compression, as that is necessary given the nature of these transactions. Additionally, compression transactions have a narrow scope and are intended to achieve a limited purpose. The compression service is not intended to be a competitive trading tool. The Exchange understands TPHs have no need for price discovery or improvement for compression transactions, as the purpose of the transfer is to reduce capital requirements attributable to a market participants' positions. Unlike

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46 See Rules 5.32, 5.33, and 5.88.

trades on an exchange, the price at which a compression transaction occurs is a secondary concern for the participants – the resulting reduction in capital attributable a TPH's portfolio is the critical part of compression. The Exchange will disseminate transaction information for all effected compression transactions to OPRA, so there will be transparency to the public regarding the prices and sizes of compression transactions.[47] Because compression transactions will be effected off-exchange and not during the trading day, they will not be subject to an NBBO or customer priority like compression orders. However, the prices of these transactions must be executed at a programmatically determined price based on the NBBO at the close of trading or the daily marking time and uses generally accepted volatility and options pricing models, which the Exchange believes will result in compression transactions being executed at reasonable market prices. The Exchange notes other off-floor transfers effected for compression purposes are not required to occur at prices at or within the then-prevailing NBBO or better than any resting Priority Customer orders.[48] The proposed rule change is narrow in scope, as it is limited to index options and to transactions executed for the purpose of reducing required regulatory capital, which the Exchange believes makes permitting compression transactions to occur off the floor appropriate and important to support the provision of liquidity in the listed options market.

As described above, liquidity providers accumulate a significant number of positions to accommodate executions of customer orders, which activity increases during

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[47] As noted above, the Exchange has completed system work to apply an indicator to such information and is working with OPRA so that OPRA is able to incorporate that indicator. While the Exchange expects OPRA to complete its work to do so in 2021, the Exchange understands the indicator may not be available upon implementation of the compression service.

[48] See Rule 6.8.

times of market volatility. Over time, many of these positions have little to no value to the market (as they are no longer in demand based on then-current market conditions) or on a firm's balance sheet, and closure of these positions would often have little to no impact on the risk exposure of the firm's portfolio. However, maintenance of these positions requires ongoing risk management and capital. Due to the proposed price transparency and limited scope of the proposed compression service, the Exchange believes permitting compression transactions to occur off-Exchange will have a de minimis negative impact on the market. The Exchange believes, however, that the benefits of the compression service, including reduced operational risk and additional capital to provide liquidity to the market (which may result in tighter spreads and increased execution opportunities), will far outweigh any such de minimis costs.

The Exchange has designed the proposed compression service in manner it believes will limit its use to compression, as the Exchange wants to encourage market participants to continue to bring SPX volume to the Exchange when that volume is for competitive trading purposes. For example, compression transactions will occur at a programmatically determined price (and thus not at prices determined by compression participants). This provides an additional control to limit the use of the compression service to legitimate compression purposes, as the lack of control over price would risk the transaction may occur at a not profitable price. Additionally, if a TPH sought to seek to close a position for profit rather than compression, the Exchange believes it is unlikely another TPH would also seek to close that position by taking the other side at an unprofitable level. The Exchange expects TPHs would generally be looking to close that position on the open market since their risk models would not identify it as a candidate for compression, and thus the TPH would not receive execution for that position. The Exchange also believes the certification process and the requirement to input at least one risk constraint will limit participation to TPHs willing to spend the time and resources to incorporate the compression service into their risk management tools.

The Exchange also believes it is reasonable to limit the proposed compression service to SPX options, as such options have a large notional value and represent the most volume executed on the Exchange. This is consistent with compression orders, which are currently limited to SPX options.[49] Off-floor RWA transfers may occur in any exchange-listed option; however, transfers of multiply listed equity options are subject to the rules of all options exchanges that list those options, and thus would only be permissible if all other options exchanges permitted such off-floor transfers. Given the high notional value associated with SPX option contracts and the large volume of SPX transactions (and thus the resulting significant number of outstanding SPX positions), the Exchange believes TPH could benefit the most from compressing SPX options within their portfolio. The large notional size of SPX options compounds the negative impact capacity limits on available capital, which is heightened by Bank Capital Rules.

The proposed flexibility with respect to when the Exchange will accept and make available lists of positions TPHs would like to compress will permit the Exchange to react to market conditions and facilitate TPHs' reduction of index option open interest in response to volatility as necessary.[50] The Exchange intends to make the compression service available with sufficient frequency to permit TPHs to effect compression

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49 See Rules 5.6(c) (definition of compression order).

50 This flexibility is consistent with the Exchange's current flexibility regarding the availability of compression orders.

transactions in accordance with their own needs (as long as they previously submitted the applicable positions to the Exchange in advance), as well as to address intra-month position reviews by their CTPHs. The Exchange believes this enhanced compression process will allow TPHs to more efficiently reduce the necessary regulatory capital associated with their options positions and permit them to provide more liquidity in the market. This additional liquidity may result in tighter spreads and more execution opportunities, which benefits all investors, particularly in volatile markets.

The Exchange further believes the proposed rule change is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers. The compression service will be available to all TPHs with open SPX interest. While the proposed rule change is directed at Market-Makers, all TPHs may participate in the compression service in the same manner as long as all criteria of the proposed rule are satisfied. Use of the compression service is completely voluntary and within the discretion of a TPH. Additionally, the decisions to request access to the compression service, to submit a position list on the Exchange-specified days, and to accept an individual proposal (and thus effect a compression transaction at the compression price) lie with a compression participant. Compression participants will be able to define their own constraints and input as few or as many constraints (with a required minimum of one) as they want with specified ranges, which the Exchange believes will make it more likely a compression participant will accept an individual proposal (and thus more likely that compression transactions may be effected).

The Exchange believes the proposed matching process is fair and reasonable given its anonymous nature and random selection of outcomes in the event of "ties." The

Exchange's goal of offering the compression service is to maximize additional liquidity that TPHs may have available to bring to the Exchange, which additional liquidity may lead to tighter spreads and additional execution opportunities for all investors. The Exchange believes having the compression proposal be comprised of the outcome that results in the maximum aggregate capital reduction is consistent with that goal and thus will maximize the benefit for investors. The Exchange believes attempting to proportionately compress positions may significantly reduce the number of positions that are able to be compressed in the compression service and thus minimize the ultimate benefit to investors of infusing more capital into the market.

It is critical that TPHs be able to efficiently manage capital and margin requirements so that they continuously have sufficient capital available to provide to the markets, which benefits all market participants. The Exchange believes all market participants understand and respect the need of TPHs to reduce capital attributable to their positions in accordance with capital reviews performed by CTPHs as efficiently as possible, including through the use of compression, as market participants understand that freed up capital ultimately comes back into the market, possibly resulting in tighter spreads and additional execution opportunities for them. TPHs regularly avail themselves of compression orders, in which they use the information provided in the Exchange-provided position lists to identify potential counterparties that similarly need to close index option open interest. Additionally, certain TPHs avail themselves of off-floor RWA transfers across their own accounts to similarly achieve this purpose. The Exchange believes the proposed rule change is narrowly tailored for the specific purpose of facilitating the ability of TPHs to alleviate the negative effects of limited availability of capital on SPX options that have large notional values. The proposed compression process will permit multilateral transactions in numerous options to be effected at a single time, which will permit TPHs' to compress their portfolios more efficiently than they can using current compression tools. The proposed compression service streamlines current compression tools, which the Exchange believes will permit TPHs to reduce more efficiently any potential negative impact on the liquidity providing community that due to capital capacity limits, which was compounded by Bank Capital Requirements. The Exchange expects the proposed compression service will provide TPHs with an additional avenue to free up much needed capital, which will benefit the entire market and all investors. The Exchange believes the proposed rule change will protect investors by providing a more seamless execution of compression transactions and thus facilitate a more efficient way for liquidity providers to meet their capital requirements, which will protect investors as a result of the continued depth of liquidity in the index options market. Continuous increased liquidity in the options market may provide more trading opportunities and tighter spreads, providing for robust markets for all market participants.

Item 4. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The purpose of the proposed rule change is to alleviate the negative impact of bank capital requirements on options market liquidity providers.[51] The proposed compression service is not intended to be a competitive trading tool.

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[51] See Letter from Cboe, New York Stock Exchange, and Nasdaq, Inc., to the Honorable Randal Quarles, Vice Chair for Supervision of the Board of Governors of the Federal Reserve System, March 18, 2020.

The Exchange does not believe the proposed rule change will impose any burden on intramarket competition, as use of the compression service is voluntary and will be available to all TPHs with open SPX interest. All TPHs will be subject to the same certification process. While the proposed rule change is directed at Market-Makers, all TPHs may participate in the compression service in the same manner as long as all criteria of the proposed rule are satisfied. Use of the compression service is completely voluntary and within the discretion of a TPH. The decisions to request access to the compression service, to submit a position list on the Exchange-specified days, and to accept an individual proposal (and thus effect a compression transaction at the compression price) lie with a compression participant. By permitting compression participants to define their own constraints, inputting as few or as many constraints (with a required minimum of one) as they want with specified ranges, the Exchange believes the proposed rule change will make it more likely a compression participant will accept an individual proposal (and thus more likely that compression transactions may be effected). As discussed above, the proposed rule change would reduce the burden on TPHs to compress the size of their portfolios compared to currently available compression tools. The Exchange believes the certification requirement (including the need to recertify following two consecutive declines of individual proposals) and other position list requirements are reasonable, as they are objective requirements the Exchange will apply in the same manner to all TPHs. Given that the proposed compression transactions may only occur if all parties agree to a compression proposal, the Exchange wants to ensure that compression participants are those willing to put the resources into creating position lists and engage in the compression transactions in order to encourage participation, as well as make it more likely all compression participants will accept compression proposals.[52] The Exchange believes the proposed rule change will benefit all market participants, as the resulting compression transactions will result in the ability of TPHs to provide additional liquidity, which may result in tighter spreads and increased execution opportunities, to the SPX options market. The Exchange notes that all TPHs will continue to have the opportunity to compress positions using the other compression tools the Exchange makes available.

The Exchange also believes it is reasonable to limit the proposed compression service to SPX options, as such options have a large notional value and represent the most volume executed on the Exchange. This is consistent with compression orders, which are currently limited to SPX options.[53]

The Exchange does not believe the proposed rule change will impose any burden on intermarket competition, as it will apply only to SPX options that are currently listed for trading only on the Exchange. The proposed rule change is intended create a more efficient effective mechanism for market participants to reduce regulatory capital attributable to all index options in their portfolios. When attempting to compress positions, TPHs are not seeking price improvement but rather looking to free up capital that will permit them to continue to provide liquidity to the market in their appointed classes, and thus is not intended to have a competitive impact. Because compression transaction information will be disseminated, all market participants will have access to the same information regarding compression transactions as they do to all other

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52 CME currently limits participants in its compression service to those that satisfy certain eligibility criteria.

53 See Rules 5.6(c) (definition of compression order).

transaction information that occurs on the Exchange. The compression service is intended and designed to have a limited purpose, which is to relieve the burden on liquidity providers in the options market by reducing the capital requirements attributable to their open positions. As a result, TPHs may be able to increase liquidity they provide to the market, which liquidity may result in increased execution opportunities and tighter spreads to the benefit of all market participants.

As noted above, the proposed multilateral compression service is substantially similar to one CME offers for the compression of futures positions.[54]

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

The Exchange does not consent to an extension of the time period for Securities and Exchange Commission (the "Commission") action on the proposed rule change specified in Section 19(b)(2) of the Act.[55]

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) Not applicable.

(b) Not applicable.

(c) Not applicable.

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54 See CME Rule 857.

55 15 U.S.C. 78s(b)(2).

(d) This Amendment No. 1 is filed for accelerated effectiveness pursuant to Section 19(b)(2) of the Act.[56] The Exchange requests that the Commission approve Amendment No. 1 on an accelerated basis pursuant to Section 19(b)(2) of the Act so that it may be operative as soon as practicable. Amendment No. 1 narrows the scope of the compression service to SPX options, which is consistent with compression orders the Exchange currently offers. Amendment No. 1 further narrows the scope of the compression service to closing positions, which is consistent with the Initial Rule Filing statement that the Exchange intended to launch the compression service for closing positions only. Additionally, Amendment No. 1 expands the availability of the compression service to all TPHs. Amendment No. 1 also adds certain requirements to the compression service the Exchange believes will further limit use of the compression service to legitimate compression purposes. And finally, Amendment No. 1 adds detail regarding and justification for the proposed compression purposes. Ultimately, Amendment No. 1 makes no substantive changes to the compression service functionality, and thus the Exchange believes a further public comment period is not required.

As described above, liquidity providers accumulate a significant number of positions to accommodate executions of customer orders, which activity increases during times of market volatility. Over time, many of these positions have little to no value to the market (as they are no longer in demand based on then-current market conditions) or on a firm's balance sheet, and closure of these positions would often have little to no impact on the risk exposure of the firm's portfolio. However, maintenance of these positions requires ongoing risk management and capital. The Exchange believes the benefits of allowing market

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56 15 U.S.C. 78s(b)(2).

participants to compress these positions, including reduced operational risk and additional capital to provide liquidity to the market, far outweigh any de minimis costs of permitting compression transactions to occur off the Exchange, particularly given the price transparency and limited use of the compression service. Accelerated approval of this Amendment No. 1 will permit the Exchange to begin offering TPHs the compression service as soon as possible, which the Exchange believes will allow them to provide additional liquidity to the market to the benefit of all investors.

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

The proposed rule change is not based on a rule either of another self-regulatory organization or of the Commission. However, as noted above, the proposed multilateral compression service is substantially similar to one CME offers for the compression of futures positions.[57]

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.

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[57] See CME Rule 857.

EXHIBIT 1

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34- ; File No. SR-CBOE-2021-020]

[Insert date]

Self-Regulatory Organizations; Cboe Exchange, Inc.; Notice of Filing of a Proposed Rule Change to Adopt Rule 6.10

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 Exchange, Inc. (the "Exchange" or "Cboe Options") filed with the Securities and Exchange Commission (the "Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

Cboe Exchange, Inc. (the "Exchange" or "Cboe Options") proposes to adopt Rule 6.10. 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. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received

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

2 17 CFR 240.19b-4.

on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

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

1. Purpose

The Exchange proposes to adopt Rule 6.10 to provide Trading Permit Holders ("TPHs") with an additional voluntary compression tool that will permit them to more efficiently compress their index option portfolios in order to reduce the required capital attributable to their portfolios while maintaining their risk exposure. The Exchange understands capital requirements and the limited amount of capital available from clearing firms have inadvertently interfered with liquidity providers' (Market-Makers, in particular) ability to provide liquidity to the market. The Exchange has made certain tools available that TPHs can use to compress the notional size of their portfolios to reduce the capital attributable to those portfolios and free up capital to put back into the market. For example, the Exchange may make compression orders available to TPHs, which orders enable TPHs (after submitting compression position lists to the Exchange) to execute orders in S&P 500 Index ("SPX") options without exposure on the Exchange to reduce the aggregate capital attributable to those positions (subject to certain requirements).[3] Additionally, TPHs may transfer positions in exchange-listed options off the Exchange if the transfer does not result in a change in ownership and reduces the risk-weighted assets ("RWA") associated with those positions.[4]

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[3] See Rule 5.6(c).

[4] See Rule 6.8.

The Exchange believes compression continues to be an important tool to enable TPHs, and Market-Makers in particular, to efficiently manage the size of and risk exposure in their portfolios and the amount of capital that must be maintained by them and their Clearing TPHs ("CTPHs") in connection with those portfolios. As a result, the Exchange regularly reviews its compression tools and evaluates potential enhancements to those tools. The Exchange believes that permitting TPHs to execute offsetting SPX options positions without exposure using compression orders and to effect off-floor RWA transfers of exchange-listed options has had a beneficial effect on liquidity in the market without adversely affecting the quality of the options market. The Exchange has determined that a combination of elements of these two tools would increase the efficiency of compression for TPHs, and thus would permit TPHs, and Market-Makers in particular, to provide additional liquidity to the market. Therefore, the Exchange proposes, notwithstanding Rule 5.12,[5] to make available to TPHs a multilateral compression service for SPX options, pursuant to which a TPH may close SPX options positions to reduce capital attributable to its portfolio.[6]

Rule 15c3-1 (Net Capital Requirements for Brokers or Dealers) ("Net Capital Rules") requires that every registered broker-dealer, including every Market-Maker, maintain certain specified minimum levels of capital. The Net Capital Rules are designed

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5 Rule 5.12 generally requires transactions in listed options to occur on a national securities exchange unless an exception applies. Transactions effected pursuant to proposed Rule 6.10 would be such an exception.

6 This is the same purpose as other currently available compression tools, such as compression orders. See Rule 5.6(c) (definition of compression orders). Rule 11.6 requires each Market-Maker to maintain net capital sufficient to comply with the requirements of Securities and Exchange Act (the "Act") Rule 15c3-1. 17 CFR §240.15c3-1. Additionally, Market-Makers must comply with capital requirements imposed by their CTPHs or the Options Clearing Corporation ("OCC") (if the Market-Maker is also a CTPH).

to protect securities customers, counterparties, and creditors by requiring that broker-dealers always have sufficient liquid resources on hand to meet their financial obligations. Notably, hedged positions, including offsetting futures and options contract positions, result in certain net capital requirement reductions under the Net Capital Rules.[7]

The Exchange believes capital requirements are important to the stability and integrity of the options markets by ensuring market participants maintain adequate levels of liquidity. However, the Exchange understands there is limited capital available across the options industry to cover their open positions, which may be impeding the ability of liquidity providers to provide liquidity to the market. Firms generally have a limited amount of capital available to cover their options positions. Additionally, CTPHs impose limits on the amount of capital they make available to the firms for which they clear. The Exchange notes there are few clearing banks, and even fewer that clear for options Market-Makers, which limits the overall capital that may be attributable to options Market-Makers. Increased clearing of over-the-counter products, such as swaps, by these same clearing banks means there is a risk of less available clearing bandwidth for listed options, even with the expected adoption of SA-CCR (as defined and discussed below). CTPHs are also subject to global capital requirements that may further reduce capital available to liquidity providers with respect to the U.S. options markets. Therefore, the more capital that is required to cover open positions in a market participant's portfolio,

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[7] In addition, the Net Capital Rules permit various offsets under which a percentage of an option position's gain at any one valuation point is allowed to offset another position's loss at the same valuation point (e.g. vertical spreads).

the less capital that participant has available to put back into the market to facilitate customer order executions.

TPHs accumulate cleared positions (particularly in options with larger notional values) that are subject to the Net Capital Requirements and those of their clearing firms and thus the capital ratios with which those firms need to comply. Liquidity providers, in particular, may accumulate a significant number of positions in connection with their role to provide liquidity to options market books and accommodate customer orders. This accumulation is often augmented during times of market volatility, as liquidity providers attempt to accommodate an increased number of customer orders across an increased number of strikes listed to reflect the quickly changing market. In such times, Market-Makers may need to stream quotes in an increased number of strikes in response to customer demand. Additionally, brokers take on additional positions in order to fill an increased number of their customers' orders and then open other positions to offset some of the risk associated with those customer positions. The Exchange understands most of these positions will be hedged, which reduces the overall risk associated with their portfolios. However, open interest still carries some level of operational risk that the firms must use resources to monitor and address on their balance sheets.

For example, generally when market volatility increases (*i.e.*, if the value of the VIX Index (which measures the expected volatility of the S&P 500 Index) increases), the level of the S&P 500 Index generally decreases. In response to the change in index level, customers generally demand the listing of additional strikes to reflect that index level change. Market-Makers open additional positions after they populate these strikes with quotes to provide liquidity against which orders of the customers demanding those strikes may execute. Separately, Market-Makers may open other positions through executions with other market participants to hedge these transactions. Similarly, brokers may provide liquidity to facilitate customer orders across these additional strikes and then open other positions to hedge the positions they opened for their customers. After volatility levels come down (and the S&P 500 Index likely increases), the additional positions (which are generally comprised of a larger number of contracts in the aggregate than during non-volatile times) the Market-Makers accumulated during the market volatility remain in their portfolios, in addition to all other outstanding positions. As the S&P 500 Index continues to increase, those positions grow more out-of-the-money and thus less valuable and in minimal demand in the market, often to the point where those positions have de minimis impact on profit or loss, and closure of those positions would have little to no impact on the risk exposure of a portfolio, but they may still have a significant capital impact due to their notional size. As many of these positions may have little value, it is potentially difficult and uneconomical for Market-Makers to close those positions in the market. Therefore, they often retain those positions until they expire, which requires ongoing capital and risk management.

The Exchange believes certain requirements within the U.S. bank capital regime magnify the need for compression. All OCC clearing members (and thus all CTPHs) are subject to the Net Capital Rules. However, a subset of clearing members are subsidiaries of U.S. bank holding companies, which, due to their affiliations with their parent U.S. bank holding companies, must comply with additional bank regulatory capital requirements pursuant to rulemaking required under the Dodd-Frank Wall Street Reform and Consumer Protection Act.[8] Pursuant to this mandate, the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation approved a comprehensive regulatory capital framework for subsidiaries of U.S. bank holding company clearing firms ("Bank Capital Rules").[9] Generally, these rules imposed higher minimum capital requirements, more restrictive capital eligibility standards, and higher asset risk weights than were previously mandated for clearing members that are subsidiaries of U.S. bank holding companies under the Net Capital Rules. Furthermore, these rules do not permit deductions for hedged securities or offsetting options positions.[10] Rather, capital charges under these standards are based on the aggregate notional value of short positions regardless of offsets. As a result, CTPHs generally must hold substantially more bank regulatory capital than would otherwise be required under the Net Capital Rules.[11] The impact of these regulatory capital rules is

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8 H.R. 4173 (amending section 3(a) of the Securities Exchange Act of 1934 (the "Act") (15 U.S.C. § 78c(a))).

9 12 CFR §50; 79 FR 61440 (Liquidity Coverage Ratio: Liquidity Risk Measurement Standards).

10 The Exchange has observed that many options strategies, including relatively simple strategies often used by retail customers and more sophisticated strategies used by Market-Makers and institutions, are risk-limited strategies or options spread strategies that employ offsets or hedges to achieve certain investment outcomes. Such strategies typically involve the purchase and sale of multiple options (and may be coupled with purchases or sales of the underlying assets), executed simultaneously as part of the same strategy. In many cases, the potential market exposure of these strategies is limited and defined. Whereas regulatory capital requirements have historically reflected the risk-limited nature of carrying offsetting positions, these positions may now be subject to large regulatory capital requirements. Various factors, including administration costs; transaction fees; and limited market demand or counterparty interest, however, discourage market participants from closing these positions even though many market participants likely would prefer to close the positions rather than carry them to expiration.

11 See Letter from Cboe, New York Stock Exchange, and Nasdaq, Inc., to the Honorable Randal Quarles, Vice Chair for Supervision of the Board of Governors

compounded in the SPX options markets due to their large notional value and the potentially significant number of open index options positions given the large trading volume of SPX options.

The Exchange believes Bank Capital Rules inadvertently caused certain inefficiencies with respect to the use of capital and undermined the critical role that liquidity providers, including Market-Makers, play in the options market by limiting the amount of capital CTPHs can allocate to clearing member transactions. Specifically, the Exchange understands these rules have caused, and may continue to cause, CTPHs to impose stricter position limits on their clearing members. These stricter position limits may impact the liquidity TPHs, particularly Market-Makers (who participate on a significant portion of SPX option trades on the Exchange), might supply in the options market, which impact may be heightened when markets are volatile. This impact may be compounded when a CTPH has multiple Market-Maker client accounts, each having largely risk-neutral portfolio holdings.[12]

In November 2019, bank regulatory agencies approved a rulemaking requiring banks to replace the Current Exposure Method ("CEM") with the Standardized Approach to Counterparty Credit Risk ("SA-CCR") by January 1, 2022. The Exchange believes CEM's primary flaws arise from the methodology's insensitivity to actual risk. For example, CEM does not account for the delta (i.e., market sensitivity) of an option position or fully recognize the offsetting of positions with opposite economic exposures.

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of the Federal Reserve System, March 18, 2020.

12 Customers – including several Market-Makers – continue to express to the Exchange that these rules could hamper their ability to provide consistent liquidity in the index options markets and have inquired about the ability engage in multilateral compression, as they are able to do for their futures positions.

The Exchange believes implementation of SA-CCR will help correct many of CEM's flaws by incorporating risk-sensitive principles, such as delta weighting options positions and more beneficial netting of derivative contracts that have economically meaningful relationships. This means that SA-CCR, when implemented, will be less punitive to CTPHs (and the market participants for which they clear options positions) than CEM as it relates to options positions. Some CTPHs have implemented SA-CCR, while others have not and continue to use CEM. While implementation by all CTPHs of SA-CCR will be a positive step toward freeing up liquidity provider capital, the Exchange believes implementation by all CTPHs of SA-CCR will not eliminate TPHs need for compression.

The ability of liquidity providers to regularly compress these types of positions would free up their balance sheets and enable them to provide more meaningful liquidity to the market, particularly during times of volatility when the market needs this liquidity most. A multilateral compression service will provide liquidity providers with a regular and efficient way to clear their balance sheets of nearly worthless positions and put the capital otherwise necessary to remain in their accounts to cover those positions back into the markets to facilitate execution of customer orders. The Exchange believes this additional liquidity may result in tighter spreads and more execution opportunities, which benefits all investors. Therefore, even when all banks have implemented SA-CCR, the Exchange believes compression will continue to be a valuable tool for TPHs.[13]

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[13] The Exchange notes at least one other market offers certain of its members a multilateral compression tool for competitive products. See Chicago Mercantile Exchange, Inc. ("CME") Rule 857, the purpose of which is to provide market participants and their clearing members with capital relief in listed equities options without materially changing the risk exposure of a given participant's portfolio. See *CME Equity Options Compression Overview*, *at* https://www.cmegroup.com/trading/equity-index/cme-equity-options-

As noted above, the Exchange currently offers its TPHs tools they may use to reduce the regulatory requirements attributable to their portfolios, which the Exchange believes has had a beneficial effect on the capital requirements of CTPHs' parent companies without adversely affecting the quality of the options market.[14] The proposed rule change is a further enhancement to the set of compression tools the Exchange currently offers, combining certain features of those tools.

To participate in the proposed compression service, pursuant to proposed Rule 6.10(a), a TPH must request access to the compression service from the Exchange. After it receives access, the TPH must participate in and successfully complete a test of the compression service in a manner determined by the Exchange, which test will include the submission of a position list with an Exchange-specified minimum number of risk constraints and the receipt and processing of a compression proposal. All TPHs that request access to the compression service will be subject to the same certification process. The Exchange will require a TPH to re-test if it declines two consecutive individual proposals (as defined below), subject to mitigating circumstances (e.g., system issues or unusual market conditions). A compression transaction may only occur if all compression participants approve (as further discussed below). As described below, compression participants must input at least one risk constraint they define so that compression transactions occur within parameters they set to be consistent with their own

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compression-overview.html; see also *Portfolio Compression in Centrally Cleared Markets*, Optiver (May 27, 2021), *available at* https://www.optiver.com/insights/news-articles/portfolio-compression-in-centrally-cleared-markets/ (describes ongoing benefits of compression services).

14 See, e.g., Rules 5.6(c) (definition of compression orders) and 5.32, 5.33, and 5.88 (describing how compression orders may execute), and 6.8 (describing permissible off-floor RWA transfers).

risk models. The Exchange believes this flexibility will make it less likely for a compression participant to decline an individual proposal. The Exchange expects that consecutive declines by a compression participant would more likely be a result of a system issue, and the recertification process will allow the Exchange or that compression participant to make any appropriate system updates to correct the issue. The Exchange also believes this certification process (and re-certification requirement upon consecutive declines) will encourage TPHs interested in compressing their positions to commit the necessary resources to participate in the compression service so that all compression participants may benefit from the service.

Pursuant to proposed Rule 6.10(b), in a manner and format and within an Exchange-established time period that ends following the market close of Regular Trading Hours ("RTH")[15] on Exchange-specified days, of which the Exchange will provide reasonable and sufficient advanced notice, a TPH ("compression participant") may submit into an Exchange system a list of open SPX option positions it would like to close ("position lists").[16] A compression participant must include the following information on a position list submission:

(1) the amount of capital reduction associated with each closing position (with the amount of capital in a measurement unit of the compression participant's choosing) included on a position list submitted to the Exchange;

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15 Currently, the RTH trading session closes at 4:15 p.m. Eastern time for most index options. See Rule 5.1(b)(2).

16 The Exchange intends to launch the compression service in accordance with the timeline set forth in its Cboe Compression Service User Manual, *available at* Cboe Compression Service User Manual.

(2) the theoretical value of each position (with the value amount calculated in a manner of the compression participant's choosing);

(3) the maximum cost the compression participant is willing to accept to compress positions included on the position list (in the aggregate)[17];

(4) the maximum cost per unit of capital reduction the compression participant is willing to accept; and

(5) at least one risk constraint (as defined by the compression participant) the compression participant wants applied to any compression proposal.[18] Each risk constraint must include a minimum (which must be less than or equal to zero) and maximum (which must be greater than or equal to zero) value.

The compression service rejects a position list submission if any position does not include an associated capital value amount, a theoretical value, or at least one risk constraint, if any risk constraint does not include a minimum and maximum value (or if the maximum is less than zero or the minimum is greater than zero), or if the position list does not include a maximum total cost or maximum cost per unit of capital reduction.

Market participants measure capital using various industry standards, which provide them with the ability to select the most appropriate measurement unit for their organizations and risk management practices. Market participants also have their own methods to calculate theoretical values of options. Therefore, the Exchange believes it is reasonable to permit TPHs to provide capital amounts associated with and theoretical values of their positions using the measurement unit and value, respectively, they

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17 The cost of a compression transaction is the contract-weighted difference between the compression price and the compression participant-provided theoretical value.

18 A compression participant has the option to define and input additional risk constraints in its position list.

generally use. A compression participant must also include the maximum cost it is willing to accept to compress positions on the position list in the aggregate) so that the aggregate difference between the compression price and compression participant's theoretical value of compressed positions within an individual proposal is not greater than that maximum cost. Similarly, a compression participant must also include the maximum cost per unit of capital reduction it is willing to accept so that it receives sufficient benefit for each compression transaction.[19] These requirements are designed to make it more likely that compression participants will accept proposals to engage in compression transactions.

Additionally, the Exchange believes the requirement to include at least one risk constraint is reasonable, as it further increases the likelihood a compression participant will accept the compression proposal (and thus that compression transactions will occur, as further described below). If a position list included no risk constraints, the Exchange believes that may indicate a compression participant would accept any compression proposal, which is not practicable and not consistent with the need for compression. Each risk constraint must include a minimum and maximum value (with the maximum being greater than or equal to the minimum). For example, a compression participant may constrain the net cost of a compression portfolio compared to its specified values or

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[19] For example, suppose a compression participant indicated it is willing to accept a total cost of $1,000,000 for compression transactions. Without a maximum cost per unit of capital reduction benefit, the compression participant may receive a very small benefit depending on the compression proposal. While the compression participant may be willing to accept a cost of $1,000,000 to receive $2,000,000 in capital reduction, it may not be willing to accept a cost of $1,000,000 to receive $100,000 in capital reduction. The Exchange believes this requirement will increase the likelihood that a compression proposal will give a compression participant enough "bang for its buck."

constrain the net delta by expiration that would result from a compression proposal. Permitting compression participants to input these constraints will allow compression participants to effect compression of their portfolios in a manner consistent with their own risk management practices and achieve the goals they seek from the compression service. The Exchange believes providing compression participants with this flexibility, as well as requiring them to include a range of values they are willing to accept, will increase the likelihood that compression participants will accept their individual proposals and thus permit compression transactions to occur.

The Exchange understands that the restrictiveness of a compression participant's constraints may impact the number of positions on its position list that are ultimately compressed. Tighter constraints will more narrowly constrain the risk properties of the positions to be compressed while looser constraints may allow for a larger number of positions to be compressed. The Exchange believes any potential benefits of loosening constraints to try to compress more positions would be minimal. Looser constraints may be inconsistent with the participant's risk management practices and cause compression transactions to not be as risk neutral or to be at higher costs for that participant compared to what they would have been had the participant not artificially loosened the constraints. As a result, this would increase the likelihood of declining the compression proposal. By loosening a constraint, a compression participant takes on risk that a position will be compressed at a value outside of the range that would cause compression to be risk neutral. Additionally, because the compression service maximizes capital reduction in the aggregate across all compression participants (and because there is no priority or pro-rata allocation, as further discussed below) and looser constraints, while increasing the chances a position will be compressed, there is no guarantee the position is compressed.

The Exchange intends to offer the compression service with sufficient frequency to permit TPHs to respond to intra-month reviews of regulatory capital necessary for their positions by clearing firms.[20] The proposed flexibility will permit the Exchange to adjust the frequency (with sufficient notice) of availability of the compression service if the Exchange deems such frequency to be more appropriate, such as in response to market conditions. The proposed flexibility is also consistent with the currently flexibility regarding the availability of compression orders.[21] The Exchange is committed to providing compression participants with sufficient time to submit position lists. The Exchange also believes permitting position lists to be submitted following the market close of RTH is appropriate, as it will allow compression participants to assess their positions and risk profiles when they are not changing due to new trading activity.

The proposed process regarding the submission of position lists is similar to the current process for submitting compression position lists in connection with the submission of compression orders. Currently, prior to submitting compression orders, TPHs must submit lists of open SPX options positions they would like to close using compression orders.[22] The proposed compression service will similarly require TPHs to submit lists of open SPX option positions they would like to close. Therefore, the Exchange believes the proposed requirements for use of the compression service,

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[20] The Exchange intends to initially offer the compression service twice a month.

[21] See Rule 5.6(c).

[22] Unlike the proposed compression service, TPHs may open positions using compression orders.

particularly the requirement to include the amount of capital associated with each position and the certification process, which demonstrate a TPH's willingness to commit resources to use the compression service, are reasonable, as they will create additional controls to limit use of the compression service to legitimate compression purposes.

Currently, compression orders are limited to SPX options, as such options have a large notional value and represent the most volume executed on the Exchange.[23] Off-floor RWA transfers may occur in any exchange-listed option; however, transfers of multiply listed equity options are subject to the rules of all options exchanges that list those options, and thus would only be permissible if all other options exchanges permitted such off-floor transfers. The Exchange believes it is appropriate to initially offer the compression service for SPX options given their large notional value (currently over $400,000 per option) and the significant number of outstanding positions resulting from high trading volumes.[24] The large notional size of SPX options compounds the need for compression, as it causes open SPX options positions to generally require larger amount of capital while they remain open. Clearing firms may request that TPHs reduce their SPX positions, and the proposed rule change will provide TPHs with an efficient mechanism to do so with respect to their SPX positions.

Pursuant to proposed paragraph (c), the Exchange will create a compression proposal by conducting an automated matching process to determine which positions among the compression participants can offset. Specifically, promptly following the

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[23] See Rules 5.6(c) (definition of compression order).

[24] The Exchange may consider to further expand the compression service beyond SPX options and would submit a separate rule filing in the event it determined to do so. The Exchange notes the off-floor compression of equity options, which are multiply listed, would be subject to the rules of other options exchanges.

position list submission deadline set forth in proposed paragraph (b), an Exchange automated process will match offsetting positions (in an anonymized manner) of compression participants that submitted position lists. This automated process generates possible outcomes of how portions of or entire compression positions may be matched against portions of or entire offsetting positions of other compression participants. The process then identifies the outcome that would result in the maximum aggregate capital reduction (measuring capital reduction using an objective standard, including normalization[25] of compression participant-provided values in the positions lists if appropriate) among all compression participants. The resulting group of offsetting position matches among the compression participants on an anonymous basis constitutes the "compression proposal."

Because the process is automated, it does not consider the identities of the compression participants and instead objectively optimizes the aggregate capital reduction when creating a compression proposal. When generating possible outcomes, the process incorporates all positions included on position lists from all compression participants that were submitted and accepted and considers each position individually. Outcomes may result in none of, a portion of, or an entire position being matched. When generating possible outcomes, the process matches offsetting positions on an anonymous basis. No compression participant receives any priority and positions are not matched on

[25] If the Exchange observes significant disparities in the capital reduction measurements submitted by compression participants, the Exchange may modify the objective measurement standard the automated process uses to maximum aggregate capital reduction by normalizing (or scaling) values for the same positions in an objective manner to reduce the likelihood that a compression participant attempts to receive a larger share of a compression transaction by inputting a larger capital value.

a time or pro-rata basis or based on the aggregate sizes of position lists.[26] If multiple outcomes would result in the same maximum aggregate capital reduction, the compression service randomly picks one of those outcomes.[27] While this process may result in a larger portion (on a proportionate basis) of one compression participant's positions being compressed compared to another compression participant, the Exchange believes the proposed matching process is fair and reasonable given its anonymous nature and random selection of outcomes in the event of "ties." The Exchange's goal of offering the compression service is to maximize additional liquidity that TPHs may have available to bring to the Exchange, which additional liquidity may lead to tighter spreads and additional execution opportunities for all investors. The Exchange believes having the compression proposal be comprised of the outcome that results in the maximum aggregate capital reduction is consistent with that goal and thus will maximize the benefit for investors.

Offsetting positions will be matched at the "compression price" for that option. The Exchange will programmatically determine the "compression price," which will generally be the price of the option as close as possible to the midpoint of the national

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26 When the compression service is pairing offsetting positions (or portions of positions) for a specific potential outcome, it is not considering the total positions that a specific compression participant would ultimately offset as part of that outcome. Because the goal of the compression service is to maximize aggregate capital reduction, the compression service is not attempting to proportionately compress each compression participant's positions based on the sizes of their position list submissions. The Exchange believes attempting to proportionately compress positions may significantly reduce the number of positions for all compression participants that are able to be compressed in the compression service.

27 See proposed Rule 6.10(c)(1).

best bid or offer ("NBBO") at the close of trading or the daily marking time,[28] subject to adjustment using generally accepted volatility and options pricing models in the event of wide markets, market volatility, or other unusual circumstances. The Exchange determination of the compression price does not consider the theoretical values provided by the compression participants in their position lists. Additionally, compression participants have no knowledge prior to their submission of positions files of what the compression price will ultimately be. The compression price may be in $0.01 increments.

A compression proposal must be consistent with all risk constraints set by the compression participants when submitting their position lists. As discussed above, compression participants may submit risk constraints consistent with their risk models. Creating proposals that satisfy a compression participant's risk constraints makes it more likely that the compression participant will accept its individual proposal (and thus more likely that compression transactions may be effected).

In a manner and format and at least 10 minutes before the deadline set forth in proposed paragraph (d) (determined by the Exchange), of which the Exchange will provide reasonable and sufficient advanced notice, the Exchange will notify each compression participant of the portion of the compression proposal that is comprised of that participant's list of individual matched positions ("individual proposal"). The

[28] Prices at the daily marking time (4:00 p.m. Eastern time for SPX options) is generally used at OCC when calculating margin requirements and, the Exchange understands, by firms within their risk models. However, it is possible firms may submit position lists with capital values based on prices at the close of trading (4:15 p.m. Eastern time for SPX options). The proposed flexibility permits the Exchange to consider this factor and update the compression price calculation accordingly so that the compression price better aligns with compression participants' expectations.

Exchange believes this will provide compression participants with sufficient time to review their individual proposals prior to determining whether to accept them.

This proposed process is similar to the Exchange's provision of individual position files to TPHs with respect to compression orders. Because compression transactions effected through the compression service will be single leg, a compression proposal will not consist of multi-leg positions as the current position files provided by the Exchange with respect to compression orders.[29] Additionally, like the position files the Exchange provides to TPHs with respect to compression orders, the proposed compression service will identify for which positions from a compression participant's position list there is offsetting size from another compression participant.[30] Unlike compression orders, a compression proposal will not identify the compression participants that will be the contra-parties to compression transactions. This information is currently provided for compression orders, as TPHs need to seek out contra-parties to submit compression orders. However, the compression service enhances this process by doing this on behalf of TPHs, thus reducing this burden on TPHs and eliminating the need to identify counterparties in the compression proposal.

The compression proposal will include a compression price for each position (which, like the compression price of compression orders, may be in $0.01 increments).[31]

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[29] See Rule 5.6(c).

[30] Id.

[31] TPHs submit compression orders with the price of execution (which is subject to certain pricing requirements). See id. Compression orders may also currently be executed in pennies. Because many series the Exchange expects TPHs will attempt to close will be out-of-the-money, and essentially worthless, TPHs may not otherwise close positions in these series if a higher minimum increment causes the price to be too much higher than the option's value. The Exchange believes it is reasonable to permit these orders to be entered and executed in

The Exchange calculates this value using substantially similar pricing models that it understands other market participants use when pricing options. The Exchange currently disseminates indicative values for certain classes at the end of the trading day using the method, which the Exchange understands market participants currently use for various purposes including risk management purposes.[32] The Exchange believes its programmatically determined compression price using generally accepted volatility and options pricing models and available pricing information will provide compression participants with a reasonable value at which to effect their compression transactions.

The Exchange believes the proposed matching process enhances the process currently available with respect to compression orders, as it calculates for TPHs the positions that may be offset by positions of multiple other TPHs that could maximize compression results. Today, if a TPH receives a position file regarding other TPHs that have offsetting size, they must all then coordinate to submit various orders for unexposed execution to achieve the same results. The proposed process more efficiently identifies the different parties with contra-side interest against which a TPH may execute its positions for compression purposes. As a result, the proposed process reduces the burden on TPH of finding other TPHs with offsetting size they are willing trade when they attempt to compress their portfolios. The Exchange believes the compression service supports the Exchange's primary function of bringing together purchasers and sellers of

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penny increments to provide flexibility that will enable TPHs to encourage participation in the compression service and maximize the reduction in capital attributable to their positions.

32 See Rule 4.17 (pursuant to which the Exchange currently disseminates indicates values for various options (including most index options the Exchange lists for trading)). The Exchange also uses similar values in certain circumstances when evaluating obvious errors that occur on the Exchange. See Rule 6.5, Interpretation and Policy .08.

options.[33] The Exchange believes compression to be a valuable service to provide to TPHs, as compression enhances liquidity in the marketplace, which may lead to more liquidity and competition and tighter spreads, which ultimately benefits the entire market.

Like the current position files the Exchange provides to TPHs in connection with compression orders, compression proposals generated by the Exchange pursuant to the proposed compression service are provided to TPHs for informational purposes only. A TPH can choose to take no action once it receives a compression proposal. Individual TPHs will continue to determine whether to submit position lists to the compression service and whether to accept or decline compression proposals (and thus whether to effect the compression transactions with the compression proposals). As further described below, whether a TPH chooses to accept its individual proposal and effect the compression transactions described therein is solely within the discretion of the TPH. The Exchange's provision of the individual proposals that comprise a compression proposal does not constitute advice, guidance, a commitment to trade, an execution, or a recommendation to trade, as is the case today for compression orders.

Proposed paragraph (d) describes the conclusion of the compression process, including how compression transactions may be effected. Specifically, each compression participant for which a compression proposal includes at least one offsetting position match[34] must notify the Exchange in the Exchange-designated form and manner no later

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[33] See 15 U.S.C. 78c(a)(1) (which defines an "exchange" as an organization that constitutes, maintains, or provides a marketplace or facilities for bringing together purchases and sellers of securities).

[34] It is possible that the automated matching process described in proposed paragraph (c) will not find for a compression participant any offsetting positions of other compression participants. In that case, the compression participant with no offsetting position matches needs to take no action.

than the Exchange-established deadline (which will be at least two minutes prior to the time by which the Exchange must submit matched trades to OCC pursuant to Rule 6.4)[35] of whether the compression participant approves its individual proposal. The Exchange believes this will provide compression participants with sufficient time to review their individual proposals and determine whether to accept them, while also providing the Exchange with sufficient time to submit compression transactions to OCC in accordance with OCC's reporting procedures for matched trades. If all compression participants approve their individual proposals (which together comprise the full compression proposal), then the Exchange effects the transactions comprising the compression proposal at the specified compression prices. If any compression participant for which a compression proposal includes at least one offsetting position match declines its individual proposal (or does not respond to the Exchange by the deadline), then no compression transactions are effected. In other words, whether a TPH effects any compression transactions (at the specified compression prices) set forth in the compression proposal is solely within the discretion of TPH. If a TPH evaluates a compression proposal and determines it is not in its interest to effect the transactions as set forth in the proposal, then no compression transactions are effected. Because the compression proposal only achieves its goals of maximized compression if all compression participants approve of the proposal, it requires unanimous approval. As is the case for any transaction effected on the Exchange, all counterparties must agree to the transaction.

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[35] Rule 6.4 requires the Exchange, on each business day at or prior to a time prescribed by OCC (which time is currently 5:30 p.m. Eastern time) to submit to OCC a report of each CTPH trade matched in accordance with the Exchange's Rules.

Following any unanimous approval of a compression proposal (*i.e.*, all compression participants approve their individual proposals), the Exchange (a) distributes to each compression participant the information regarding the completed compression transactions within their individual proposals (which information will also be available to CTPHs) and to OCC for processing and (b) disseminates the information regarding each compression transaction effected.[36] The Exchange believes it is appropriate to share the results of any compression transactions with the Clearing Trading Permit Holders of the compression participants, as the impacted positions will ultimately be held within the clearing accounts of these CTPHs. Additionally, CTPHs have an interest in the open interest of the TPHs for which they perform clearing services, because CTPHs impose capital restrictions on these TPHs based on their open interest.[37] In addition, the Exchange believes it will benefit the market to disseminate information for compression trades as it does for all other transactions so that all market participants have knowledge of compression transactions that occur and have knowledge of any changes to open interest in the applicable products. Compression transactions are effected within the accounts of the compression participants and occur in accordance with OCC Rules (as is the case with other off-floor transfers). Compression transactions may be subject to

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36 The Exchange will disseminate compression transaction information to OPRA. The Exchange has completed system work to apply an indicator to such information and is working with OPRA so that OPRA is able to incorporate that indicator. While the Exchange expects OPRA to complete its work to do so in 2021, the Exchange understands the indicator may not be available upon implementation of the compression service, currently planned for July 2021 (subject to Commission approval of this proposed rule change).

37 It is for similar reasons that CTPHs may currently submit compression-position lists to the Exchange in connection with the submission of compression orders. <u>See</u> Rule 5.6(c).

applicable laws, rules, and regulations, including rules of other self-regulatory organizations.[38]

The primary difference between the compression service and compression orders is that the compression transactions TPHs decide to effect will occur off-floor after trading hours. Effecting compression transactions after the close of trading will provide TPHs with several benefits, including certainty regarding positions they may want to compress (as positions may change regularly throughout the trading day) and not having to interrupt their provision of liquidity during the trading day to engage in risk management. Additionally, this will permit TPHs to not divert resources during the trading day from providing liquidity to the market to effecting transactions for risk management purposes. Currently, compression orders may be effected without exposure on the Exchange, which is similar to the proposed compression transactions. The proposed compression service eliminates the step of needing to bring orders that will not be exposed to the Exchange. As the primary purpose of the proposed compression transactions is to compress the notional size of TPHs' portfolios so that they may provide additional liquidity into the market (rather than, for example, obtain price improvement), the Exchange believes the benefits of exposure and execution on an exchange are not applicable to compression transactions. Additionally, because the Exchange will disseminate compression transaction information, the compression service will provide

[38] Post-trade positions are held in accounts at the OCC. Therefore, any post-trade activity that occurs would be effected within those accounts. The Exchange has held multiple discussions with the OCC regarding the compression service, and the OCC has indicated its ability to accommodate any effected compression transactions. Any compression transactions will be subject to all applicable recordkeeping requirements applicable to TPHs under the Act and the rules and regulations thereunder, such as Rule 17a-3 and 17a-4.

transparency to the market regarding compression transactions. The Exchange currently permits transfers of SPX option positions (which may net against each other) to occur off the Exchange for similar reasons.[39]

To demonstrate how the Exchange will conduct its multilateral compression service, suppose three Market-Makers submit to the Exchange the following position lists:

MM1

Class	**Expiry**	**Strike**	**Put/Call**	**Quantity**
SPX	2020-12-24	3700	C	300
SPX	2020-12-24	3700	P	-100
SPX	2020-12-24	3800	C	-100
SPX	2020-12-24	3800	P	-50

MM2

Class	**Expiry**	**Strike**	**Put/Call**	**Quantity**
SPX	2020-12-24	3700	C	-50
SPX	2020-12-24	3700	P	50
SPX	2020-12-24	3800	C	50
SPX	2020-12-24	3800	P	750

MM3

Class	**Expiry**	**Strike**	**Put/Call**	**Quantity**
SPX	2020-12-24	3700	C	-25
SPX	2020-12-24	3700	P	50
SPX	2020-12-24	3800	C	0
SPX	2020-12-24	3800	P	-25

In total, across the four series, MM1 submitted 550 contracts for compression, MM2 submitted 900 contracts for compression, and MM3 submitted 100 contracts for compression. For purposes of this example, no Market-Maker included additional parameters to be considered in the compression matching process. The Exchange's

[39] See Rule 6.8.

automated matching process evaluates these positions (on an anonymized basis) to maximize the number of positions among the three Market-Makers that can be compressed, which results in the following trade matches:

MM1

Class	Expiry	Strike	Put/Call	Trade Quantity	Contra	Compression Price
SPX	2020-12-24	3700	C	-50	MM2	1.00
SPX	2020-12-24	3700	C	-25	MM3	1.00
SPX	2020-12-24	3700	P	50	MM2	1.00
SPX	2020-12-24	3700	P	50	MM3	1.00
SPX	2020-12-24	3800	C	50	MM2	0.50
SPX	2020-12-24	3800	P	50	MM2	1.50

MM2

Class	Expiry	Strike	Put/Call	Trade Quantity	Contra	Compression Price
SPX	2020-12-24	3700	C	50	MM1	1.00
SPX	2020-12-24	3700	P	-50	MM1	1.00
SPX	2020-12-24	3800	C	-50	MM1	0.50
SPX	2020-12-24	3800	P	-50	MM1	1.50
SPX	2020-12-24	3800	P	-25	MM3	1.50

MM3

Class	Expiry	Strike	Put/Call	Trade Quantity	Contra	Compression Price
SPX	2020-12-24	3700	C	25	MM1	1.00
SPX	2020-12-24	3700	P	-50	MM1	1.00
SPX	2020-12-24	3800	P	25	MM2	1.50

In total, if all three Market-Makers approved of this compression proposal, MM1 would compress 275 contracts, MM2 would compress 225 contracts, and MM3 would compress 100 contracts, for a total of 600 contracts among all three Market-Makers, representing nearly 40% of the 1,550 total contracts submitted by the three Market-Makers. With a notional value of nearly $400,000 per SPX contract, this compression would permit these

Market-Makers to eliminate positions from their accounts that equate to a significant reduction in necessary capital to be maintained in those accounts, which the Market-Makers could instead put back into the market.[40]

The Exchange believes the proposed compression service will provide TPHs with an additional tool to reduce regulatory capital attributable to their portfolios in accordance with their businesses and risk management practices. The Exchange understands from customers, and Market-Makers in particular, there continues to be a significant need to reduce regulatory capital attributable to their open interest based on then-current market conditions. The need for compression is particularly true during times of extreme volatility, such as the recent historic levels of market volatility, which can make providing liquidity in index options immensely more challenging when market participants need liquidity the most. The Exchange believes the ability of TPHs to compress their portfolios helps reduce the risk of market dislocation, especially during periods of increased volume and volatility, as they can continue providing liquidity during such times (which may increase the regulatory capital attributed to their portfolios) because they will know that they can subsequently reduce their open positions (and concomitant regulatory capital).

As noted above, because some CTPHs carrying these are bank-owned broker/dealers, those CTPHs are subject to Bank Capital Rules, which result in these additional punitive capital requirements being passed on to their Market-Maker clients.[41]

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40 The Exchange notes each TPH would retain any uncompressed positions. Each TPH would have the option to resubmit these uncompressed positions on a new position list at the times permitted by the Exchange to potentially be part of a different compression proposal. Additionally, if any of the TPHs declined this compression proposal, the TPHs could similarly resubmit new position lists if they so choose (subject to the requirement to recertify).

41 See Letter from Cboe, New York Stock Exchange, and Nasdaq, Inc., to the

The Exchange believes implementation of SA-CCR by all CTPHs will not eliminate the need for TPHs to engage in the compression of their portfolios, as previously discussed. TPHs regularly avail themselves of compression orders, in which they use the information provided in the Exchange-provided position lists to identify potential counterparties that similarly need to close index option open interest. Additionally, certain TPHs avail themselves of off-floor RWA transfers across their own accounts to similarly achieve this purpose. The proposed compression transactions will be able to occur in numerous options as part of multilateral transactions effected at a single time, which will permit TPHs' to compress their portfolios more efficiently than they can using current compression tools. The proposed compression service streamlines current compression tools, which the Exchange believes will permit TPHs to reduce more efficiently any potential negative impact on the market-making community that has resulted from bank regulatory capital requirements. The Exchange expects the proposed compression service will provide TPHs with an additional avenue to free up much needed capital, which will benefit the entire market and all investors.

The decisions to request access to the compression service, to submit a position list on the Exchange-specified days, and to accept an individual proposal (and thus effect a compression transaction at the compression price) lie with a compression participant. By permitting compression participants to define their own constraints, inputting as few or as many constraints (with a required minimum of one) as they want with specified ranges, the Exchange believes the proposed rule change will make it more likely a

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Honorable Randal Quarles, Vice Chair for Supervision of the Board of Governors of the Federal Reserve System, March 18, 2020.

compression participant will accept an individual proposal (and thus more likely that compression transactions may be effected).

The Exchange is currently offering TPHs the opportunity to participate in tests of the compression service and intends to make the compression service available in late July 2021, subject to Commission approval of this proposed rule change.[42]

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.[43] Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[44] 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)[45] requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

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42 See Cboe Options Exchange Notice C2021061803, *available at* Schedule Update – Cboe Compression Service Multilateral Compression Functionality.

43 15 U.S.C. 78f(b).

44 15 U.S.C. 78f(b)(5).

45 Id.

In particular, the Exchange believes the proposed rule change will remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, protect investors and the public interest because it seeks to further mitigate the potentially negative effects of overall limits on available capital on liquidity, as magnified by Bank Capital Requirements, in the SPX market. As described above, the Exchange believes the limited number of clearing firms that clear listed options, in addition to other products, who are subject to global capital regimes may be reducing the amount of capital available for liquidity providers in the U.S. options markets. Even with the implementation of SA-CCR by all bank-owned clearing firms, which the Exchange believes is a positive step given SA-CCR's incorporation of risk-sensitive principles, the Exchange believes the overall limit on available capital may continue to impede efficient use of capital and undermine the critical liquidity role that liquidity providers play in the SPX market by limiting the amount of capital CTPHs allocate to clearing member transactions.

Specifically, the Exchange understands there is limited capital available across the options industry to cover their open positions, which may be impeding the ability of liquidity providers to provide liquidity to the market. Firms generally have a limited amount of capital available to cover their options positions. Additionally, CTPHs impose limits on the amount of capital they make available to the firms for which they clear. The Exchange notes there are few clearing banks, and even fewer that clear for options Market-Makers, which limits the overall capital that may be attributable to options Market-Makers. Increased clearing of over-the-counter products, such as swaps, by these same clearing banks means there is a risk of less available clearing bandwidth for listed options, even with the expected adoption of SA-CCR. CTPHs are also subject to global capital requirements that may further reduce capital available to liquidity providers with respect to the U.S. options markets. Therefore, the more capital that is required to cover open positions in a market participant's portfolio, the less capital that participant has available to put back into the market to facilitate customer order executions. In turn, this could force Market-Makers to reduce the size of their quotes and other liquidity providers to reduce orders they may facilitate for customers and result in reduced liquidity in the market. The Exchange believes that providing TPHs, and Market-Makers in particular, with a more efficient mechanism to reduce regulatory capital attributable to their portfolios will permit TPHs to contribute to the availability of liquidity in the index options market and help ensure that these markets retain their competitive balance. The Exchange believes that the proposed rule would serve to protect investors by helping maintain a consistent continued depth of liquidity, particularly in volatile market conditions when liquidity is needed the most by investors.

The proposed rule change will provide liquidity providers with the ability to close a larger number of SPX positions and more efficiently reduce regulatory capital attributable to their open interest in SPX options as part of a multilateral matching process. Current compression tools require TPHs to identify counterparties against which to execute compression volume as part of multiple transactions or limit how positions may be transferred off-exchange. The proposed compression process is a streamlined version of the process used for compression orders, with two main differences (some of which incorporate elements of off-floor RWA transfers). First, the compression service would eliminate the burden on TPHs to identify potentially multiple counterparties to effect compression transactions that would achieve the compression goals of all compression transaction parties. The Exchange understands that TPHs generally submit compression-list positions with the goal of identifying other TPHs with offsetting positions that will enable them to submit compression orders. While the Exchange provides TPHs that submit compression-list positions with a list of positions for which there is offsetting size and the identities of the TPHs with that offsetting size, TPHs must still seek each other out to determine how to offset as much as possible among each other to achieve their compression goals, and then submit various crossing orders to do so. The proposed compression service eliminates this step, as the Exchange's automated process will match offsetting size among multiple compression participants as a single step. With respect to the proposed compression service, the Exchange would be bringing together purchases and sellers of index options for the purpose of compression who ultimately decide into which transactions they will or will not enter, which is consistent with its role as an exchange under the Exchange Act.[46]

Second, unlike compression orders, compression transactions effected through the proposed compression service would occur off-exchange and outside of Regular Trading Hours. Compression orders are executed on the Exchange but are not exposed before execution. The Exchange recognizes the numerous benefits of executing options transactions occur on an exchange, including price transparency, potential price improvement, and a clearing guarantee. However, the Exchange believes exposure and

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[46] See 15 U.S.C. 78c(a)(1) (which defines an "exchange" as an organization that constitutes, maintains, or provides a marketplace or facilities for bringing together purchases and sellers of securities).

execution of compression transactions on the Exchange would have minimal benefits.[47] When TPHs previously exposed compression orders to the trading floor, the Exchange observed that market participants generally deferred their allocations to permit a clean cross. Because orders that were executed in compression forums on the trading floor were generally not broken up, and because the purpose of these trades is unrelated to profits and losses (making the price at which the transaction is executed relatively unimportant like competitive trades), the Exchange believes it is appropriate to not require exposure of these orders in an electronic or open outcry setting. Compression orders are currently not exposed on the Exchange for the same purpose.[48] The Exchange believes that TPHs understand the benefits that compression may bring to liquidity on the Exchange to the benefit of all market participants, which benefit the Exchange believes is greater than the benefit of exposing compression transactions prior to execution.

The Exchange believes the benefits of permitting compression transactions to occur off the exchange exceed any benefits that may result from executing these orders on the Exchange and any potential costs resulting from executing these orders off the Exchange. The Exchange notes that the benefits of on-exchange representation of an order generally flow to that order, which include the potential of price improvement for the order and to locate liquidity against which to execute the order. The compression service, however, will have located the necessary liquidity to offset the positions a TPH is seeking to close (or open) as part of compression, as that is necessary given the nature of these transactions. Additionally, compression transactions have a narrow scope and are

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47 Because compression transactions will be effected within clearing accounts at the OCC, any compression transactions will continue have a clearing guarantee.

48 See Rules 5.32, 5.33, and 5.88.

intended to achieve a limited purpose. The compression service is not intended to be a competitive trading tool. The Exchange understands TPHs have no need for price discovery or improvement for compression transactions, as the purpose of the transfer is to reduce capital requirements attributable to a market participants' positions. Unlike trades on an exchange, the price at which a compression transaction occurs is a secondary concern for the participants – the resulting reduction in capital attributable a TPH's portfolio is the critical part of compression. The Exchange will disseminate transaction information for all effected compression transactions to OPRA, so there will be transparency to the public regarding the prices and sizes of compression transactions.[49] Because compression transactions will be effected off-exchange and not during the trading day, they will not be subject to an NBBO or customer priority like compression orders. However, the prices of these transactions must be executed at a programmatically determined price based on the NBBO at the close of trading or the daily marking time and uses generally accepted volatility and options pricing models, which the Exchange believes will result in compression transactions being executed at reasonable market prices. The Exchange notes other off-floor transfers effected for compression purposes are not required to occur at prices at or within the then-prevailing NBBO or better than any resting Priority Customer orders.[50] The proposed rule change is narrow in scope, as it is limited to index options and to transactions executed for the purpose of reducing required regulatory capital, which the Exchange believes makes permitting compression

[49] As noted above, the Exchange has completed system work to apply an indicator to such information and is working with OPRA so that OPRA is able to incorporate that indicator. While the Exchange expects OPRA to complete its work to do so in 2021, the Exchange understands the indicator may not be available upon implementation of the compression service.

[50] See Rule 6.8.

transactions to occur off the floor appropriate and important to support the provision of liquidity in the listed options market.

As described above, liquidity providers accumulate a significant number of positions to accommodate executions of customer orders, which activity increases during times of market volatility. Over time, many of these positions have little to no value to the market (as they are no longer in demand based on then-current market conditions) or on a firm's balance sheet, and closure of these positions would often have little to no impact on the risk exposure of the firm's portfolio. However, maintenance of these positions requires ongoing risk management and capital. Due to the proposed price transparency and limited scope of the proposed compression service, the Exchange believes permitting compression transactions to occur off-Exchange will have a de minimis negative impact on the market. The Exchange believes, however, that the benefits of the compression service, including reduced operational risk and additional capital to provide liquidity to the market (which may result in tighter spreads and increased execution opportunities), will far outweigh any such de minimis costs.

The Exchange has designed the proposed compression service in manner it believes will limit its use to compression, as the Exchange wants to encourage market participants to continue to bring SPX volume to the Exchange when that volume is for competitive trading purposes. For example, compression transactions will occur at a programmatically determined price (and thus not at prices determined by compression participants). This provides an additional control to limit the use of the compression service to legitimate compression purposes, as the lack of control over price would risk the transaction may occur at a not profitable price. Additionally, if a TPH sought to seek to close a position for profit rather than compression, the Exchange believes it is unlikely another TPH would also seek to close that position by taking the other side at an unprofitable level. The Exchange expects TPHs would generally be looking to close that position on the open market since their risk models would not identify it as a candidate for compression, and thus the TPH would not receive execution for that position. The Exchange also believes the certification process and the requirement to input at least one risk constraint will limit participation to TPHs willing to spend the time and resources to incorporate the compression service into their risk management tools.

The Exchange also believes it is reasonable to limit the proposed compression service to SPX options, as such options have a large notional value and represent the most volume executed on the Exchange. This is consistent with compression orders, which are currently limited to SPX options.[51] Off-floor RWA transfers may occur in any exchange-listed option; however, transfers of multiply listed equity options are subject to the rules of all options exchanges that list those options, and thus would only be permissible if all other options exchanges permitted such off-floor transfers. Given the high notional value associated with SPX option contracts and the large volume of SPX transactions (and thus the resulting significant number of outstanding SPX positions), the Exchange believes TPH could benefit the most from compressing SPX options within their portfolio. The large notional size of SPX options compounds the negative impact capacity limits on available capital, which is heightened by Bank Capital Rules.

The proposed flexibility with respect to when the Exchange will accept and make available lists of positions TPHs would like to compress will permit the Exchange to

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[51] See Rules 5.6(c) (definition of compression order).

react to market conditions and facilitate TPHs' reduction of index option open interest in response to volatility as necessary.[52] The Exchange intends to make the compression service available with sufficient frequency to permit TPHs to effect compression transactions in accordance with their own needs (as long as they previously submitted the applicable positions to the Exchange in advance), as well as to address intra-month position reviews by their CTPHs. The Exchange believes this enhanced compression process will allow TPHs to more efficiently reduce the necessary regulatory capital associated with their options positions and permit them to provide more liquidity in the market. This additional liquidity may result in tighter spreads and more execution opportunities, which benefits all investors, particularly in volatile markets.

The Exchange further believes the proposed rule change is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers. The compression service will be available to all TPHs with open SPX interest. While the proposed rule change is directed at Market-Makers, all TPHs may participate in the compression service in the same manner as long as all criteria of the proposed rule are satisfied. Use of the compression service is completely voluntary and within the discretion of a TPH. Additionally, the decisions to request access to the compression service, to submit a position list on the Exchange-specified days, and to accept an individual proposal (and thus effect a compression transaction at the compression price) lie with a compression participant. Compression participants will be able to define their own constraints and input as few or as many constraints (with a required minimum of one) as they want with specified ranges, which the Exchange believes will make it more likely a compression

52 This flexibility is consistent with the Exchange's current flexibility regarding the availability of compression orders.

participant will accept an individual proposal (and thus more likely that compression transactions may be effected).

The Exchange believes the proposed matching process is fair and reasonable given its anonymous nature and random selection of outcomes in the event of "ties." The Exchange's goal of offering the compression service is to maximize additional liquidity that TPHs may have available to bring to the Exchange, which additional liquidity may lead to tighter spreads and additional execution opportunities for all investors. The Exchange believes having the compression proposal be comprised of the outcome that results in the maximum aggregate capital reduction is consistent with that goal and thus will maximize the benefit for investors. The Exchange believes attempting to proportionately compress positions may significantly reduce the number of positions that are able to be compressed in the compression service and thus minimize the ultimate benefit to investors of infusing more capital into the market.

It is critical that TPHs be able to efficiently manage capital and margin requirements so that they continuously have sufficient capital available to provide to the markets, which benefits all market participants. The Exchange believes all market participants understand and respect the need of TPHs to reduce capital attributable to their positions in accordance with capital reviews performed by CTPHs as efficiently as possible, including through the use of compression, as market participants understand that freed up capital ultimately comes back into the market, possibly resulting in tighter spreads and additional execution opportunities for them. TPHs regularly avail themselves of compression orders, in which they use the information provided in the Exchange-provided position lists to identify potential counterparties that similarly need to close index option open interest. Additionally, certain TPHs avail themselves of off-floor RWA transfers across their own accounts to similarly achieve this purpose. The Exchange believes the proposed rule change is narrowly tailored for the specific purpose of facilitating the ability of TPHs to alleviate the negative effects of limited availability of capital on SPX options that have large notional values. The proposed compression process will permit multilateral transactions in numerous options to be effected at a single time, which will permit TPHs' to compress their portfolios more efficiently than they can using current compression tools. The proposed compression service streamlines current compression tools, which the Exchange believes will permit TPHs to reduce more efficiently any potential negative impact on the liquidity providing community that due to capital capacity limits, which was compounded by Bank Capital Requirements. The Exchange expects the proposed compression service will provide TPHs with an additional avenue to free up much needed capital, which will benefit the entire market and all investors. The Exchange believes the proposed rule change will protect investors by providing a more seamless execution of compression transactions and thus facilitate a more efficient way for liquidity providers to meet their capital requirements, which will protect investors as a result of the continued depth of liquidity in the index options market. Continuous increased liquidity in the options market may provide more trading opportunities and tighter spreads, providing for robust markets for all market participants.

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

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The purpose of the proposed rule change is to alleviate the negative impact of bank capital requirements on options market liquidity providers.[53] The proposed compression service is not intended to be a competitive trading tool.

The Exchange does not believe the proposed rule change will impose any burden on intramarket competition, as use of the compression service is voluntary and will be available to all TPHs with open SPX interest. All TPHs will be subject to the same certification process. While the proposed rule change is directed at Market-Makers, all TPHs may participate in the compression service in the same manner as long as all criteria of the proposed rule are satisfied. Use of the compression service is completely voluntary and within the discretion of a TPH. The decisions to request access to the compression service, to submit a position list on the Exchange-specified days, and to accept an individual proposal (and thus effect a compression transaction at the compression price) lie with a compression participant. By permitting compression participants to define their own constraints, inputting as few or as many constraints (with a required minimum of one) as they want with specified ranges, the Exchange believes the proposed rule change will make it more likely a compression participant will accept an individual proposal (and thus more likely that compression transactions may be effected). As discussed above, the proposed rule change would reduce the burden on TPHs to compress the size of their portfolios compared to currently available compression tools. The Exchange believes the certification requirement (including the need to recertify following two consecutive declines of individual proposals) and other position list requirements are reasonable, as they are objective requirements the Exchange

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53 See Letter from Cboe, New York Stock Exchange, and Nasdaq, Inc., to the Honorable Randal Quarles, Vice Chair for Supervision of the Board of Governors of the Federal Reserve System, March 18, 2020.

will apply in the same manner to all TPHs. Given that the proposed compression transactions may only occur if all parties agree to a compression proposal, the Exchange wants to ensure that compression participants are those willing to put the resources into creating position lists and engage in the compression transactions in order to encourage participation, as well as make it more likely all compression participants will accept compression proposals.[54] The Exchange believes the proposed rule change will benefit all market participants, as the resulting compression transactions will result in the ability of TPHs to provide additional liquidity, which may result in tighter spreads and increased execution opportunities, to the SPX options market. The Exchange notes that all TPHs will continue to have the opportunity to compress positions using the other compression tools the Exchange makes available.

The Exchange also believes it is reasonable to limit the proposed compression service to SPX options, as such options have a large notional value and represent the most volume executed on the Exchange. This is consistent with compression orders, which are currently limited to SPX options.[55]

The Exchange does not believe the proposed rule change will impose any burden on intermarket competition, as it will apply only to SPX options that are currently listed for trading only on the Exchange. The proposed rule change is intended create a more efficient effective mechanism for market participants to reduce regulatory capital attributable to all index options in their portfolios. When attempting to compress positions, TPHs are not seeking price improvement but rather looking to free up capital

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[54] CME currently limits participants in its compression service to those that satisfy certain eligibility criteria.

[55] See Rules 5.6(c) (definition of compression order).

that will permit them to continue to provide liquidity to the market in their appointed classes, and thus is not intended to have a competitive impact. Because compression transaction information will be disseminated, all market participants will have access to the same information regarding compression transactions as they do to all other transaction information that occurs on the Exchange. The compression service is intended and designed to have a limited purpose, which is to relieve the burden on liquidity providers in the options market by reducing the capital requirements attributable to their open positions. As a result, TPHs may be able to increase liquidity they provide to the market, which liquidity may result in increased execution opportunities and tighter spreads to the benefit of all market participants.

As noted above, the proposed multilateral compression service is substantially similar to one CME offers for the compression of futures positions.[56]

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

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

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

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period up to 90 days (i) as the Commission may designate 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 will:

A. by order approve or disapprove such proposed rule change, or

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[56] See CME Rule 857.

B. institute proceedings to determine whether the proposed rule change should be 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 (http://www.sec.gov/rules/sro.shtml); or
- Send an e-mail to rule-comments@sec.gov. Please include File Number SR-CBOE-2021-020 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-2021-020. This file number should be included on the subject line if e-mail 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 (http://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, D.C. 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-CBOE-2021-020 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[57]

Secretary

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[57] 17 CFR 200.30-3(a)(12).

EXHIBIT 4

Additions set forth in the proposed rule text of original SR-CBOE-2021-020 are underlined and deletions set forth in the proposed rule text of original SR-CBOE-2021-020 are bracketed. Additions being made pursuant to Amendment No. 1 to SR-CBOE-2021-020 are double underlined and deletions are struck-through.

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Rules of Cboe Exchange, Inc.

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Rule 6.10. Multilateral Compression Service

Notwithstanding Rule 5.12, the Exchange may make available to ~~Market Makers~~ TPHs a multilateral compression service for ~~certain index~~ SPX options ~~identified by the Exchange~~, pursuant to which a ~~Market Maker~~ TPH may close ~~or open positions in options listed on the Exchange~~ SPX option positions to reduce regulatory capital attributable to its portfolio.

(a) *Certification.* To participate in the compression service, a TPH must request access to the compression service from the Exchange. After it receives access, the TPH must participate in and successfully complete a test of the compression service in a manner determined by the Exchange, which test will include the submission of a position list with an Exchange-specified minimum number of risk constraints and the receipt and processing of a compression proposal. The Exchange will require a TPH to re-test if it declines two consecutive individual proposals (as defined below), subject to mitigating circumstances (e.g., system issues or unusual market conditions).

(~~a~~b) *Position List Submission.* In a manner and format and ~~at times determined by the Exchange~~ within an Exchange-established time period that ends following the market close of Regular Trading Hours on Exchange-specified days, of which the Exchange will provide reasonable and sufficient advanced notice, a ~~Market Maker~~ TPH ("compression participant") may submit into an Exchange system a list of open ~~index~~ SPX option positions it would like to close ~~and, if it chooses, index option positions it would like to open to replace any of those closing positions~~ ("position lists"). A compression participant must include the following information on a position list submission:

> (1) ~~A compression participant must include~~ the amount of capital reduction ~~(increase)~~ associated with each closing ~~(opening)~~ position (with the amount of capital in a measurement unit of the compression participant's choosing) included on a position list submitted to the Exchange;~~.~~
>
> (2) ~~The positions included in the position list must in the aggregate reduce regulatory capital attributable to those positions.~~ the theoretical value of each position (with the value amount calculated in a manner of the compression participant's choosing);

(3) the maximum cost the compression participant is willing to accept to compress positions included on the position list (in the aggregate) (the cost of a compression transaction is the contract-weighted difference between the compression price and the compression participant-provided theoretical value);

(4) the maximum cost per unit of capital reduction the compression participant is willing to accept; and

(~~3~~5) ~~A compression participant may define and input optional risk constraints on its position list that it~~ at least one risk constraint (as defined by the compression participant) the compression participant wants applied to any compression proposal. Each risk constraint must include a minimum (which must be less than or equal to zero) and maximum (which must be greater than or equal to zero) value.

The compression service rejects a position list submission if any position does not include an associated capital value amount, a theoretical value, or at least one risk constraint, if any risk constraint does not include a minimum and maximum value (or if the maximum is less than zero or the minimum is greater than zero), or if the position list submission does not include a maximum total cost or a maximum cost per unit of capital reduction.

(~~b~~c) *Compression Proposal.* Promptly following the position list submission deadline set forth in paragraph (b)~~At a time after the market close of RTH on days the Exchange accepts position lists pursuant to paragraph (a)~~, an Exchange automated process will match offsetting positions (in an anonymized manner) of compression participants that submitted position lists.

(1) This automated process generates possible outcomes of how portions of or entire compression positions may be matched against portions of or entire offsetting positions of other compression participants in a manner consistent with all risk constraints set by ~~matches offsetting positions on the position lists of compression participants to maximize the aggregate capital reduction among~~ the compression participants. The process then identifies the outcome that would result in the maximum aggregate capital reduction (measuring capital reduction using an objective standard, including normalization of compression participant-provided values in the position lists if appropriate) among all compression participants. The resulting group of offsetting position matches among the compression participants on an anonymous basis constitutes the "compression proposal."

(A) Outcomes may result in none of, a portion of, or an entire position being matched.

(B) When generating a possible outcome, the process matches individual positions on an anonymous basis.

(C) No compression participant receives any priority. Positions are not matched on a time or pro-rata basis or based on the aggregate sizes of position lists.

(D) If multiple outcomes would result in the same maximum aggregate capital reduction, the compression service randomly picks one of those outcomes.

(2) Offsetting positions are matched at the "compression price~~.~~" for that option. The Exchange programmatically determines the "compression price," which is generally the price of the option as close as possible to the midpoint of the NBBO at the close of the trading day or the daily marking time, subject to adjustment using generally accepted volatility and options pricing models in the event of wide markets, market volatility, or other unusual circumstances ~~and considering the NBBO at the close of the trading day, the market prices at the daily marking time, and the theoretical values provided by the compression participants in their position lists~~. The Exchange determination of the compression price does not consider the theoretical values provided by the compression participants in their position lists, and compression participants have no knowledge prior to their submission of positions files of what the compression price will ultimately be. The compression price may be in $0.01 increments.

(3) A compression proposal must be consistent with all risk constraints set by the compression~~al~~ participants when submitting their position lists.

(4) In a manner and format and at a time~~s~~ at least 10 minutes before the deadline set forth in paragraph (d) (determined by the Exchange), of which the Exchange will provide reasonable and sufficient advanced notice, the Exchange notifies each compression participant of the portion of the compression proposal that is comprised of that participant's list of individual matched positions ("individual proposal").

(~~e~~d) *Compression Transactions.* Each compression participant for which a compression proposal includes at least one offsetting position match must notify the Exchange in the Exchange-designated form and manner no later than the Exchange-established deadline (which will be at least two minutes prior to the time by which the Exchange must submit matched trades to the Clearing Corporation pursuant to Rule 6.4) of whether the compression participant approves ~~the compression~~ its individual proposal. If all compression participants approve ~~the compression~~ their individual proposals (which together comprise the full compression proposal), then the Exchange effects the transactions comprising the compression proposal at the specified compression prices. If any compression participant for which a compression proposal includes at least one offsetting position match declines its individual proposal (or does not respond to the Exchange by the deadline), then no compression transactions are effected.

(1) Following any unanimous approval of a compression proposal (i.e., all compression participants approve their individual proposals), the Exchange (A) distributes to each compression participant the information regarding the completed ~~package to the compression participants~~ compression transactions within their individual proposals (which information will also be available to Clearing Trading Permit Holders) and to the Clearing Corporation for processing and (B) disseminates the information regarding each compression transaction effected.

(2) Compression transactions are effected within the accounts of the compression participants and occur in accordance with the Rules of the Clearing Corporation.

(3) Compression transactions may be subject to applicable laws, rules, and regulations, including rules of other self-regulatory organizations.

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EXHIBIT 5

(additions are underlined; deletions are [bracketed])

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Rules of Cboe Exchange, Inc.

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Rule 6.10. Multilateral Compression Service

Notwithstanding Rule 5.12, the Exchange may make available to TPHs a multilateral compression service for SPX options, pursuant to which a TPH may close SPX option positions to reduce regulatory capital attributable to its portfolio.

(a) *Certification.* To participate in the compression service, a TPH must request access to the compression service from the Exchange. After it receives access, the TPH must participate in and successfully complete a test of the compression service in a manner determined by the Exchange, which test will include the submission of a position list with an Exchange-specified minimum number of risk constraints and the receipt and processing of a compression proposal. The Exchange will require a TPH to re-test if it declines two consecutive individual proposals (as defined below), subject to mitigating circumstances (e.g., system issues or unusual market conditions).

(b) *Position List Submission.* In a manner and format and within an Exchange-established time period that ends following the market close of Regular Trading Hours on Exchange-specified days, of which the Exchange will provide reasonable and sufficient advanced notice, a TPH ("compression participant") may submit into an Exchange system a list of open SPX option positions it would like to close ("position lists"). A compression participant must include the following information on a position list submission:

(1) the amount of capital reduction associated with each closing position (with the amount of capital in a measurement unit of the compression participant's choosing) included on a position list submitted to the Exchange;

(2) the theoretical value of each position (with the value amount calculated in a manner of the compression participant's choosing);

(3) the maximum cost the compression participant is willing to accept to compress positions included on the position list (in the aggregate) (the cost of a compression transaction is the contract-weighted difference between the compression price and the compression participant-provided theoretical value);

(4) the maximum cost per unit of capital reduction the compression participant is willing to accept; and

(5) at least one risk constraint (as defined by the compression participant) the compression participant wants applied to any compression proposal. Each risk constraint must include a

minimum (which must be less than or equal to zero) and maximum (which must be greater than or equal to zero) value.

The compression service rejects a position list submission if any position does not include an associated capital value amount, a theoretical value, or at least one risk constraint, if any risk constraint does not include a minimum and maximum value (or if the maximum is less than zero or the minimum is greater than zero), or if the position list submission does not include a maximum total cost or a maximum cost per unit of capital reduction.

(c) *Compression Proposal.* Promptly following the position list submission deadline set forth in paragraph (b), an Exchange automated process will match offsetting positions (in an anonymized manner) of compression participants that submitted position lists.

(1) This automated process generates possible outcomes of how portions of or entire compression positions may be matched against portions of or entire offsetting positions of other compression participants in a manner consistent with all risk constraints set by the compression participants. The process then identifies the outcome that would result in the maximum aggregate capital reduction (measuring capital reduction using an objective standard, including normalization of compression participant-provided values in the position lists if appropriate) among all compression participants. The resulting group of offsetting position matches among the compression participants on an anonymous basis constitutes the "compression proposal."

(A) Outcomes may result in none of, a portion of, or an entire position being matched.

(B) When generating a possible outcome, the process matches individual positions on an anonymous basis.

(C) No compression participant receives any priority. Positions are not matched on a time or pro-rata basis or based on the aggregate sizes of position lists.

(D) If multiple outcomes would result in the same maximum aggregate capital reduction, the compression service randomly picks one of those outcomes.

(2) Offsetting positions are matched at the "compression price" for that option. The Exchange programmatically determines the "compression price," which is generally the price of the option as close as possible to the midpoint of the NBBO at the close of the trading day or the daily marking time, subject to adjustment using generally accepted volatility and options pricing models in the event of wide markets, market volatility, or other unusual circumstances. The Exchange determination of the compression price does not consider the theoretical values provided by the compression participants in their position lists, and compression participants have no knowledge prior to their submission of positions files of what the compression price will ultimately be. The compression price may be in $0.01 increments.

(3) A compression proposal must be consistent with all risk constraints set by the compression participants when submitting their position lists.

(4) In a manner and format and at a time at least 10 minutes before the deadline set forth in paragraph (d) (determined by the Exchange), of which the Exchange will provide reasonable and sufficient advanced notice, the Exchange notifies each compression participant of the portion of the compression proposal that is comprised of that participant's list of individual matched positions ("individual proposal").

(d) *Compression Transactions*. Each compression participant for which a compression proposal includes at least one offsetting position match must notify the Exchange in the Exchange-designated form and manner no later than the Exchange-established deadline (which will be at least two minutes prior to the time by which the Exchange must submit matched trades to the Clearing Corporation pursuant to Rule 6.4) of whether the compression participant approves its individual proposal. If all compression participants approve their individual proposals (which together comprise the full compression proposal), then the Exchange effects the transactions comprising the compression proposal at the specified compression prices. If any compression participant for which a compression proposal includes at least one offsetting position match declines its individual proposal (or does not respond to the Exchange by the deadline), then no compression transactions are effected.

(1) Following any unanimous approval of a compression proposal (i.e., all compression participants approve their individual proposals), the Exchange (A) distributes to each compression participant the information regarding the completed compression transactions within their individual proposals (which information will also be available to Clearing Trading Permit Holders) and to the Clearing Corporation for processing and (B) disseminates the information regarding each compression transaction effected.

(2) Compression transactions are effected within the accounts of the compression participants and occur in accordance with the Rules of the Clearing Corporation.

(3) Compression transactions may be subject to applicable laws, rules, and regulations, including rules of other self-regulatory organizations.

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