



8011-01
SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-82658; File No. SR-OCC-2017-007)

February 7, 2018

Self-Regulatory Organizations; The Options Clearing Corporation; Order Approving Proposed Rule Change Related to The Options Clearing Corporation's Margin Policy

I. Introduction

On December 11, 2017, the Options Clearing Corporation ("OCC") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹ and Rule 19b-4 thereunder,² proposed rule change SR-OCC-2017-007. On December 18, 2017, OCC filed Amendment No. 1 to the proposed rule change.³ The proposed rule change, as modified by Amendment No. 1, was published for comment in the Federal Register on December 26, 2017.⁴ The Commission did not receive any comments on the proposed rule change. This order approves the proposed rule change.

II. Description of the Proposed Rule Change

A. Background

As stated in the Notice, OCC filed the proposed rule change to formalize and update its Margin Policy, which describes OCC's approach for collecting margin and managing the credit exposure presented by its Clearing Members to ensure that the

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ In Amendment No. 1, OCC modified a portion of its Margin Policy to: (i) state that OCC's Board of Directors ("Board") is ultimately responsible for annual review and approval of the Policy, and (ii) correctly cite provisions in OCC's Rules governing its stock loan program. OCC did not propose any other changes in Amendment No. 1.

⁴ Securities Exchange Act Release No. 82355 (Dec. 19, 2017), 82 FR 61060 (Dec. 26, 2017) (SR-OCC-2017-007) ("Notice").

manner in which its margin methodologies are governed and implemented complies with Section 17A of the Act⁵ and Rule 17Ad-22(e)(6) thereunder.⁶ OCC stated that the Margin Policy is part of a broader framework used by OCC to promote compliance with Rule 17Ad-22(e)(6), including OCC's By-Laws, Rules, and other policies that are designed to support the resiliency of OCC by ensuring that it appropriately sizes margin to market risks.⁷

The Margin Policy describes: (1) the treatment of the various types of positions held by Clearing Members in connection with margin calculations, (2) OCC's cross-margin programs with other clearing agencies, (3) the treatment of collateral included in margin calculations, (4) the model assumptions and market data OCC uses as inputs for its margin calculation methodologies, (5) OCC's margin calculation methodologies, (6) protocols surrounding OCC's exercise of margin calls and adjustments, and (7) daily backtesting and model validation that OCC conducts to measure performance of its margin methodologies. Each aspect of the Margin Policy is summarized below.

B. The Proposed Change to OCC's Margin Policy

1. Treatment of Various Types of Positions

The Margin Policy describes how OCC treats the various types of positions it accepts from different types of market participants. OCC utilizes multiple types of Clearing Member accounts in order to comply with the relevant customer protection and

⁵ 15 U.S.C. 78q-1.

⁶ See Notice at 61061 (citing 17 CFR 240.17Ad-22(e)(6)).

⁷ See id. at 61061 (citing CCA Adopting Release, 81 FR 70786, 70812 (Oct. 13, 2016)), (explaining that the requirements of Rule 17Ad-22(e)(6) "further support the resiliency of a covered clearing agency by requiring the covered clearing agency to have policies and procedures that are designed to appropriately size . . . margin to market risks").

segregation requirements of the Commission and the Commodity Futures Trading Commission. For example, OCC segregates and excludes long securities options positions from its margin requirement calculation under the assumption that such positions are fully paid and pose no additional risk to OCC. According to OCC, accounting for different types of products in different types of accounts allows OCC to set margin requirements commensurate with the actual risks presented by these positions.

2. Cross-Margining

OCC maintains cross-margin programs with other clearinghouses and treats positions in index options, options on centrally cleared fund shares, and futures and options on futures held as part of one of the programs as if they were held within a single account at OCC.⁸ According to OCC, its Margin Policy allows OCC to take these cross-margining agreements into consideration to establish a risk-based margin system that appropriately measures its credit exposure and portfolio effects across products.

3. Collateral

To mitigate its credit risk exposure, OCC generally requires Clearing Members to deposit collateral as margin with respect to each account type on the morning following the trade date. The Margin Policy provides a general description of how the use of deposits in lieu of margin and collateral in margins may affect margin calculations.⁹ For example, the Margin Policy states that OCC permits Clearing Members to make deposits in lieu of margin, which enables them to meet their margin requirements for securities

⁸ See id.

⁹ See id. at 61061–62.

options by posting escrow deposits of acceptable collateral or specific deposits of the underlying security.¹⁰

OCC's Margin Policy also describes OCC's "collateral in margins" program.¹¹ Under this program, OCC computes margin requirements based on a combination of a Clearing Member's open positions in cleared contracts and any deposits of eligible collateral, while also incorporating scenarios that could exacerbate or mitigate risk exposure based upon the collateral type deposited. OCC states that the Margin Policy's recognition of risk interactions between open positions and clearing member collateral takes into account portfolio effects across products for the measurement of credit risk.¹²

4. Model Assumptions, Sensitivity Analyses and Market Data

The Margin Policy states that all of OCC's critical margin model assumptions should be consistent with OCC's default management assumptions. To ensure that OCC complies with this requirement, the Margin Policy provides for a monthly sensitivity analysis and review of its parameters and assumptions for business backtesting, the results of which are reported to OCC's Model Risk Working Group, and may be escalated to OCC's Management Committee.

The Margin Policy also requires OCC to take measures to ensure the quality and completeness of its market data, including the use of redundant sources for market data and pricing system infrastructure. The Margin Policy requires OCC to prioritize the quality and reliability of data when selecting vendors, and to protect its ability to obtain

¹⁰ See Notice at 61061-62.

¹¹ See id. at 61062.

¹² See id.

data in a variety of market conditions. OCC states that it protects the integrity of the data it receives by monitoring for delays, errors, or interruptions in the receipt or availability of price data. Further, the Margin Policy prescribes procedures for using alternative data, including settlement prices provided by a primary exchange or other data sources where final settlement values are not available from the listing exchange. The Margin Policy also states that OCC utilizes sound valuation models, system edit checks, and automated and manual controls with any price data it obtains.¹³ Where OCC does not receive pricing information on a daily basis for a product, the Margin Policy states that OCC relies on modeled prices as a substitute for the daily price.¹⁴

5. Margin Methodology

OCC's Margin Policy includes a description of OCC's System for Theoretical Analysis and Numerical Simulations ("STANS"), which is its margin methodology for all positions it margins on a net basis.¹⁵ STANS is a risk-based methodology that is designed to produce a margin requirement that exceeds OCC's minimum regulatory obligations through the use of an Expected Shortfall methodology ("ES"), which is effectively a weighted average of tail losses beyond the 99% Value-at-Risk ("VaR") level. OCC states that STANS may produce significant variations in the ES in Clearing Member Accounts. Under its current approach, OCC relies upon the expert judgment of its staff to identify whether the variation demonstrates that STANS is not functioning as expected, but has no set variance level which would trigger further review.

¹³ See Notice at 61062.

¹⁴ See id. at 61062–63.

¹⁵ See id. at 61063.

Under the proposed change, OCC would implement a new 5% tolerance for standard error in STANS, such that if the five percent threshold is reached, OCC must investigate further whether STANS is appropriately measuring the risk presented by a Clearing Member's account.

The Margin Policy also explains how STANS calculates margin by utilizing Monte Carlo simulations of portfolio values at a two-day risk horizon based on the behavior of various risk factors affecting: (i) values at a two-day risk horizon, and (ii) values of Clearing Member accounts, including implied volatility surfaces of options for all equity and index risk factors.¹⁶ OCC states that this two-day risk horizon is consistent with the STANS assumption of a two-day liquidation period for all positions margined on a net basis and is based on a thorough analysis of market conditions and the risks associated with the products OCC clears.¹⁷

The Margin Policy also provides for the daily evaluation of the market data that supports STANS and a monthly recalibration to ensure that it accounts for market conditions over the past month. This includes the use of "scale factors" to account for daily changes in market volatility between monthly recalibrations. Further, the Margin Policy has the ability to use alternatives to STANS for certain product accounts, including the ability to apply add-on charges and surcharges for certain Clearing Members who present higher risk levels, as well as the use of Standard Portfolio Analysis of Risk margin methodology ("SPAN") for certain segregated futures accounts. According to OCC, these procedures are designed to ensure that OCC complies with the requirement that its risk

¹⁶ See Notice at 61063.

¹⁷ See id.

based margin system calculates margin on a portfolio level and sets initial margin requirements that meet “an established single-tail confidence level of at least 99 percent” with respect to each portfolio’s distribution of future exposure.

6. Margin Calls and Adjustments

The Margin Policy describes OCC’s process for daily calculation and collection of margin requirements, as well as making intraday margin calls and adjustments. Pursuant to the Margin Policy, OCC issues margin calls during standard trading hours when unrealized losses exceeding 50% of an account’s total risk charges are observed for that account based on start-of-day positions. The Margin Policy specifies the timing of such calls, price minimums, exceptions, and the necessary approvals that must be obtained. The Margin Policy also states that additional margin adjustments may be performed as the need arises following approval by an officer of OCC.¹⁸

7. Backtesting and Model Validation

The Margin Policy requires OCC to conduct daily backtesting for each margin account and to analyze in detail all accounts exhibiting losses in excess of calculated margin requirements. OCC states that any exceedances under the Margin Policy are required to be reported at least monthly and evaluated through OCC’s governance process for model risk management, as well as an annual evaluation by OCC’s independent Model Validation Group (“MVG”) of the overall performance of STANS and its associated models. The results of this annual MVG evaluation and any recommendations would then be presented to the OCC Board’s Risk Committee.

¹⁸ See Notice at 61064.

III. Discussion and Commission Findings

Section 19(b)(2)(C) of the Act¹⁹ directs the Commission to approve a proposed rule change of a self-regulatory organization if it finds that such proposed rule change is consistent with the requirements of the Act and rules and regulations thereunder applicable to such organization. The Commission finds that the proposal is consistent with Section 17A(b)(3)(F) of the Act²⁰ and Rule 17Ad-22(e)(6)²¹ thereunder, as described in detail below.

A. Consistency with Section 17A(b)(3)(F) of the Act

Section 17A(b)(3)(F) of the Act²² requires, among other things, that the rules of a clearing agency be designed to assure the safeguarding of securities and funds which are in its custody or control or for which it is responsible, and, in general, to protect investors and the public interest. As described above, the Margin Policy provides a framework for managing the credit exposure presented to OCC by its Clearing Members through the calculation and collection of margin. That framework includes: (1) the treatment of the various types of positions held by Clearing Members in connection with margin calculations, (2) OCC's cross-margin programs with other clearing agencies, (3) the treatment of collateral included in margin calculations, (4) the model assumptions and market data OCC uses as inputs for its margin calculation methodologies, (5) OCC's margin calculation methodologies, (6) protocols surrounding OCC's exercise of margin calls and adjustments, and (7) daily backtesting and model validation that OCC conducts to measure performance of its margin methodologies.

¹⁹ 15 U.S.C. 78s(b)(2)(C).

²⁰ 15 U.S.C. 78q-1(b)(3)(F).

²¹ 17 CFR 240.17Ad-22(e)(6).

²² 15 U.S.C. 78q-1(b)(3)(F).

These matters, in turn, directly relate to OCC's ability to accurately risk manage Clearing Member portfolios by calculating and collecting an appropriate amount of collateral. The Commission believes that the proposed Margin Policy is designed to help ensure that OCC's margin methodology calculates and collects margin sufficient to mitigate OCC's credit exposure to a Clearing Member default. The Commission also believes that accurate calculation of margin is necessary to help ensure that OCC is able to risk manage the default of a Clearing Member without recourse to the assets of non-defaulting Clearing Members, which supports the safeguarding of securities and funds in OCC's custody or control. The Commission further believes that calculating and collecting sufficient margin would permit OCC to continue to perform its duties as a clearing agency after a default without disruption to non-defaulting market participants, thereby protecting investors and the public interest. Accordingly, the Commission finds that the proposed Margin Policy is designed to promote the accurate clearance and settlement of securities transactions, and is therefore consistent with Section 17A(b)(3)(F) of the Act.²³

B. Consistency with Rule 17Ad-22(e)(6)

Rule 17Ad-22(e)(6) generally requires each covered clearing agency that provides central counterparty services to establish, implement, maintain, and enforce policies and procedures reasonably designed to, among other things, cover its credit exposures to its participants through the establishment of a risk-based margin system that meets certain standards.²⁴

1. Rule 17Ad-22(e)(6)(i)

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Id.

²⁴

17 CFR 240.17Ad-22(e)(6).

Rule 17Ad-22(e)(6)(i) generally requires a covered clearing agency to establish a risk-based margin system that considers and produces margin levels commensurate with the risks and particular attributes of each relevant product, portfolio, and market.²⁵ The Commission believes that the Margin Policy describes and formalizes OCC's approach for collecting margin and managing the credit exposures of each of its Clearing Members to set margin requirements commensurate with the actual risks presented. The Margin Policy allows OCC to take into account the different types of products across different types of accounts, including the use of its existing STANS methodology to address the particular attributes and risk factors of the products being margined, using cross-margining agreements with other clearinghouses, excluding fully collateralized positions from its margin requirement, and permitting the use of deposits in lieu of margin and collateral in margins to incentivize Clearing Members to post collateral that reduces OCC's exposures in cleared contracts. Therefore, the Commission believes that the Margin Policy is consistent with Rule 17Ad-22(e)(6)(i).

2. Rule 17Ad-22(e)(6)(ii)

Rule 17Ad-22(e)(6)(ii) generally requires a covered clearing agency to establish a risk-based margin system that collects margin at least daily and have the operational capacity to make intraday margin calls.²⁶ The Margin Policy describes the process for calculating and collecting margin on a daily basis, and for making intraday margin calls and adjustments, as needed. The Margin Policy further specifies the timing of such calls, price minimums that must be collected, the process for allowing exceptions, and the necessary approvals that must be obtained. Therefore, the Commission believes that the Margin Policy establishes a process to collect

²⁵ 17 CFR 240.17Ad-22(e)(6)(i).

²⁶ 17 CFR 240.17Ad-22(e)(6)(ii).

margin daily and make intraday margin calls, and finds, therefore, that it is consistent with Rule 17Ad-22(e)(6)(ii).

3. Rule 17Ad-22(e)(6)(iii)

Rule 17Ad-22(e)(6)(iii) generally requires a covered clearing agency to establish a risk-based margin system that calculates margin sufficient to cover its potential future exposure to participants,²⁷ which the Commission defines as the maximum exposure estimated to occur at a future point in time with an established single-tailed confidence level of at least 99%.²⁸ The Margin Policy states that OCC uses STANS to estimate ES, the weighted average of tail losses beyond the 99% VaR level, with a 5% tolerance to calculate margin with respect to each portfolio's distribution of future exposure. The Margin Policy further describes OCC's assumptions with respect to a two-day liquidation period that covers potential future exposure between the last margin collection and close-out of a position should there be Clearing Member default. Therefore, the Commission believes that the Margin Policy is intended to facilitate OCC's calculation of margin amounts sufficient to cover potential future exposure to participants, and, therefore, that the Margin Policy is consistent with Rule 17Ad-22(e)(6)(iii).

4. Rule 17Ad-22(e)(6)(iv)

Rule 17Ad-22(e)(6)(iv) generally requires a covered clearing agency to establish a risk-based margin system that uses "reliable sources of timely price data" and use "procedures and sound valuation models for addressing circumstances in which pricing data are not readily

²⁷ 17 CFR 240.17Ad-22(e)(6)(iii).

²⁸ See Standards for Covered Clearing Agencies, 81 FR 70786, 70817 (Oct. 13, 2016) (citing 17 CFR 240.17Ad-22(a)(14)).

available or reliable.”²⁹ The Margin Policy describes the measures OCC is required to take to ensure the quality and completeness of market data it acquires, including the use of redundant sources of market data, prioritizing the quality and reliability of data, and to prioritize the ability of vendors to provide data during market stress. The Margin Policy also requires OCC to use sound valuation models, system checks, and automated and manual controls for data it obtains, and to use primary exchange prices and alternatives, including modeling, in instances when data is not available or reliable. The Commission finds that the Margin Policy requires OCC to use reliable sources of timely price data, and describes procedures to address circumstances where such data is not readily available or reliable. Therefore, the Commission finds that the Margin Policy is consistent with Rule 17Ad-22(e)(6)(iv).

5. Rule 17Ad-22(e)(6)(v)

Rule 17Ad-22(e)(6)(v) generally requires a covered clearing agency to establish a risk-based margin system that uses an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products.³⁰ The Commission believes that the Margin Policy takes into account the risks and particular attributes of different products in different accounts and portfolios to permit OCC to set margin commensurate with the actual risks that the product presents to OCC. The Commission also believes that the use of cross-margining agreements, as described in the Margin Policy, allows OCC to set margins based upon the particular credit exposure and portfolio effects across products. The Commission further believes that the Margin Policy’s allowance for offsets and exclusions for deposits in lieu of margin and collateral in margins permits OCC to set margin

²⁹ 17 CFR 240.17Ad-22(e)(6)(iv).

³⁰ 17 CFR 240.17Ad-22(e)(6)(v).

based upon the actual credit exposure to its Clearing Members. Accordingly, the Commission finds that the Margin Policy allows OCC to measure credit exposure in a manner that accounts for product risk factors and portfolio effects across products, and finds, therefore, that it is consistent with Rule 17Ad-22(e)(6)(v).

6. Rule 17Ad-22(e)(6)(vi)

Rule 17Ad-22(e)(6)(vi) generally requires a covered clearing agency to establish a risk-based margin system that is monitored by management on an ongoing basis and is regularly reviewed, tested, and verified.³¹ The Commission finds that the Margin Policy requires the MVG to perform an independent evaluation of the overall performance of OCC's margin model, and present its findings and recommendations to OCC's Board on at least an annual basis. The Margin Policy further requires OCC to conduct daily backtesting for each margin account and to analyze in detail all accounts that exhibit losses in excess of calculated margin. The Margin Policy also requires that any such exceedances be reported at least monthly and be evaluated through OCC's governance processes. The Commission believes that the Margin Policy establishes a process for ongoing monitoring, review, testing, and verification, and finds, therefore, that it is consistent with Rule 17Ad-22(e)(6)(vi).

7. Rule 17Ad-22(e)(6)(vii)

Rule 17Ad-22(e)(6)(vii) generally requires a covered clearing agency to establish policies and procedures designed to perform model validation for its credit risk models not less than annually or more frequently as may be contemplated by the covered clearing agency's risk management framework.³² The Commission finds that the Margin Policy requires an

³¹ 17 CFR 240.17Ad-22(e)(6)(vi).

³² 17 CFR 240.17Ad-22(e)(6)(vii).

independent review of OCC's risk model be conducted at least annually by MVG, who then presents its findings and recommendations to the Risk Committee of OCC's Board. The Commission believes that the Margin Policy establishes policies and procedures to perform model validation not less than annually, and finds, therefore, that it is consistent with Rule 17Ad-22(e)(6)(vii).

IV. Conclusion

On the basis of the foregoing, the Commission finds that the Margin Policy is consistent with the requirements of the Act, and in particular, with the requirements of Section 17A of the Act³³ and Rule 17Ad-22(e)(6) thereunder.

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Act,³⁴ that the proposed rule change (SR-OCC-2017-007) be, and it hereby is, approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated Authority.³⁵

Eduardo A. Aleman
Assistant Secretary

³³ In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

³⁴ 15 U.S.C. 78s(b)(2).

³⁵ 17 CFR 200.30-3(a)(12).

