January 11, 2018

VIA ELECTRONIC MAIL
Christopher J. Kirkpatrick
Office of the Secretariat
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, DC 20581

Re: Rule Filing SR-OCC-2017-007 Rule Certification

Dear Secretary Kirkpatrick:

Pursuant to Section 5c(c)(1) of the Commodity Exchange Act, as amended ("Act"), and Commodity Futures Trading Commission ("CFTC") Regulation 40.6, enclosed is a copy of the above-referenced rule filing submitted by The Options Clearing Corporation ("OCC"). The date of implementation of the rule is at least 10 business days following receipt of the rule filing by the CFTC or the date the proposed rule is approved by the Securities and Exchange Commission ("SEC") or otherwise becomes effective under the Securities Exchange Act of 1934 (the "Exchange Act"). This rule filing, as subsequently amended, has been submitted to the SEC under the Exchange Act.[1]

OCC has requested confidential treatment for Exhibit 5 to SR-OCC-2017-007, the Margin Policy, contained in pages 52-65 of the enclosed initial filing and for Exhibit 4 to Amendment No. 1 to SR-OCC-2017-007, contained in pages 6-19 of the enclosed Amendment No. 1.

In conformity with the requirements of Regulation 40.6(a)(7), OCC states the following:

Explanation and Analysis

The proposed change by OCC would formalize and update OCC's Margin Policy, which describes OCC's approach for collecting margin and managing the credit exposure presented by its Clearing Members. The Margin Policy is included as confidential Exhibit 5 of the filing. The policy is being submitted without marking to improve readability as it is being submitted in its entirety as new rule text.

[1] Attached please find OCC's submission to the SEC, including subsequently filed Amendment No. 1.

The proposed rule change does not require any changes to the text of OCC's By-Laws or Rules. All terms with initial capitalization that are not otherwise defined herein have the same meaning as set forth in the OCC By-Laws and Rules.[2]

Margin Policy

The purpose of the Margin Policy is to describe OCC's approach for collecting margin and managing the credit exposure presented by its Clearing Members. The Margin Policy describes, in general: (i) the treatment of the various types of positions held by Clearing Members in connection with margin calculations; (ii) OCC's cross-margin programs with other clearing agencies; (iii) the treatment of collateral included in margin calculations; (iv) the model assumptions and market data OCC uses as inputs for its margin calculation methodologies; (v) OCC's margin calculation methodologies; (vi) protocols surrounding OCC's exercise of margin calls and adjustments; and (vii) daily back-testing and model validation that OCC conducts to measure performance of its margin methodologies. The Margin Policy is part of a broader framework, including OCC's By-Laws, Rules and other policies, that is designed to support the resiliency of OCC by ensuring that it appropriately sizes margin to market risks. The key substantive aspects of the Margin Policy are described in greater detail below.

Treatment of Various Types of Positions

The Margin Policy describes the treatment of various types of positions, originating from different types of market participants, in connection with OCC's calculation of margin requirements. As specified in OCC's By-Laws, OCC utilizes different types of Clearing Member accounts in order to maintain compliance with the relevant Customer protection and segregation requirements of the SEC and the CFTC, which affects how margin is calculated because of different assumptions regarding how such accounts or positions would be liquidated in the event of a Clearing Member default. Taking into account these different types of products in different types of accounts, with different Clearing Member liquidation scenarios, enables OCC to set margin requirements commensurate with the actual risks presented by these positions.

One category of positions addressed in the Margin Policy is long securities options positions. Under the Margin Policy, these positions are segregated from a Clearing Member's other positions under the assumption that such positions are fully paid and pose no additional risk to OCC, and the Margin Policy explains that a Clearing Member's segregated long positions are not included as part of its margin calculation. In addition, Clearing Members' customer segregated futures accounts are margined separately from Clearing Members' securities and/or proprietary accounts, and margin for these accounts is calculated on a gross basis by computing margin requirements for each customer account independently, and then aggregating the individual margin calculations to calculate the gross margin required from the Clearing Member.

[2] OCC's By-Laws and Rules can be found on OCC's public website: http://optionsclearing.com/about/publications/bylaws.jsp.

The Margin Policy further notes that OCC also computes the margin requirements for customer segregated futures accounts on a net basis and holds the greater of the net or gross margin requirement.

As described in the Margin Policy, stock loan/borrow positions are included as long/short stock positions in margin calculations on a net basis and may be offset against other positions held in an account. However, while OCC includes these positions in its risk calculations, it does not include the net asset value of these positions in its margin requirement calculations, which allows OCC to maintain financial resources in a manner that is consistent with the manner in which such positions would be liquidated during a Clearing Member default. In the event of such a default, OCC would instruct the non-defaulting Clearing Member to buy in or sell out of the position, with OCC compensating the Clearing Member for any difference between last mark and the closeout price.

Cross-Margining

The Margin Policy addresses the cross-margin programs that OCC maintains with other clearinghouses, which affects the calculation of margin with respect to positions in certain index options, options on centrally cleared fund shares, and futures and options on futures held as part of one of the programs, because positions are treated as if they were held within a single account at OCC.

Collateral

To mitigate 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. Collateral management is generally governed by OCC's Collateral Risk Management Policy, but the Margin Policy does provide a general description of how the use of deposits in lieu of margin and collateral in margins may affect margin calculations.

The Margin Policy describes that OCC permits Clearing Members to make deposits in lieu of margin, which enable them to meet their margin requirements for securities options by posting escrow or specific deposits, *i.e.*, typically customer securities that have been fully paid and that represent the securities deliverable upon assignment of a short option or a deposit of acceptable collateral equal to the underlying value or aggregate exercise price of the option being covered, depending on the type of option. Because these short positions are fully collateralized, the Margin Policy specifies that OCC does not include deposits in lieu of margin when calculating margin requirements.

The Margin Policy also indicates that OCC's margin methodology takes into account certain forms of posted margin when calculating a Clearing Member's margin requirement, a practice OCC refers to as "collateral in margins." OCC computes margin requirements based on a combination of open positions in cleared contracts and any deposits of collateral eligible for inclusion in OCC's margin methodologies, *e.g.*, stocks, exchange-traded fund securities and

eligible government securities. OCC's margin methodologies also incorporate scenarios that could exacerbate or mitigate risk exposure as a result of the collateral type deposited into its margin requirement calculations, thereby mitigating risk by creating an incentive for Clearing Members to deposit collateral that hedges their exposures in cleared contracts.

Model Assumptions, Sensitivity Analyses and Market Data

The Margin Policy has historically specified that OCC performs: (i) daily backtesting of each Clearing Member Account, (ii) daily backtesting of OCC's margin methodology and (iii) monthly review of the assumptions used in performing the backtesting. The Margin Policy has also specified that all critical margin model assumptions should be consistent with OCC's default management assumptions. OCC performed the aforementioned backtesting in order to monitor whether the margin methodology is functioning as intended and appropriately captures the risks that OCC's Clearing Members present to it.

The proposed Margin Policy would establish additional monthly reviews of its margin methodology. First, the Margin Policy would specify that key model parameters and assumptions are also subject to a monthly, or more frequently when market conditions warrant, sensitivity analysis. In identifying which parameters and assumptions should be subject to this sensitivity analysis, OCC surveyed relevant industry guidance on the appropriate parameters and assumptions to first include in the sensitivity analysis. OCC plans to increase the number of assumptions and parameters included in the sensitivity analysis on an iterative basis as the process becomes more mature. Second, the Margin Policy would specify that OCC performs a monthly review of its parameters for business backtesting. OCC determined that all parameters contained in its margin methodology should be included in this monthly parameter review, and has identified all of these. The Margin Policy would also specify that this sensitivity analysis and parameter review would make use of both actual and hypothetical portfolios.

The proposed Margin Policy would specify that the results of all such analyses are reported no less frequently than monthly to OCC's Model Risk Working Group, which then may escalate any issues to OCC's Management Committee.

The Margin Policy describes how OCC obtains the market data that it uses to value Clearing Members' portfolios and collateral deposits, perform mark-to-market calculations, support expiration processing, generate theoretical values for margin and Clearing Fund calculations, and support customer-level margin calculations. The Margin Policy requires OCC to take measures to ensure the quality and completeness of any market data it acquires. Primary among these measures is the use of redundant sources for market data and pricing system infrastructure and, when selecting vendors, prioritizing the quality and reliability of a data provider's service and its ability to provide data in a variety of market conditions, including periods of market stress.

The Margin Policy explains how, in order to ensure the integrity of this data, OCC monitors for delays in its receipt of price data and overall system health, as well as erroneous

price data or interruptions in pricing data availability. The Margin Policy specifies that, in certain cases, OCC may be obligated to use settlement prices that are provided directly by the listing exchange[3] and prescribes procedures for utilizing alternative data sources where a final settlement value is not available from the listing exchange.

The Margin Policy also specifies that OCC utilizes sound valuation models, such as price-editing and smoothing,[4] as well as system edit checks, and automated and manual controls with any price data it obtains. Where OCC does not receive pricing information on a daily basis for a product, the Margin Policy specifies that OCC would rely on modeled prices.

Margin Methodology

OCC's Margin Policy contains a description of OCC's System for Theoretical Analysis and Numerical Simulations ("STANS"), its margin methodology for all positions it margins on a net basis. STANS is a risk-based methodology that is designed to produce a margin requirement that exceeds OCC's minimum regulatory obligations. OCC achieves this 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.

As a statistical methodology that relies on randomized Monte Carlo simulations to generate ES estimates, STANS will produce slightly different ES estimates when Monte Carlo simulations are performed on each Clearing Member account; OCC refers to such variance in ES estimates as the "standard error." However, significant variations in ES estimates among Clearing Member accounts may also signify other issues, such as underlying issues with STANS or its appropriateness for estimating ES for a particular Clearing Member account. Previously, OCC has relied on the expert judgment of its staff and undefined, qualitative factors to identify whether STANS may not be functioning as expected. After performing statistical analysis on the size of the standard error, and at what level an observed error is greater than the standard error at a statistically significant level, the proposed Margin Policy would state that the tolerance for the standard error of a typical, or median, Clearing Member account ES measurement in STANS is 5%.[5] This tolerance would define a statistical error threshold above which OCC must investigate whether STANS is appropriately measuring a Clearing Member's account.

Furthermore, any margin requirement calculated by STANS is on a "portfolio" basis,

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[3] In such a case, the listing exchange transmits price files to OCC, and the data is then processed by OCC systems and manually validated.

[4] "Smoothing" is a process OCC uses to calculate final prices, volatility measures, delta values and vega values for securities and futures options. The purpose of smoothing is to minimize arbitrage opportunities while producing final prices that remain within the bid-ask spread provided to OCC by the market.

[5] This use of a 5% ES error tolerance is a proposed enhancement to OCC's existing margin policies and procedures.

which inherently reflects offsets between products within each portfolio.

The Margin Policy also describes how STANS utilizes Monte Carlo simulations of portfolio values at a two-day risk horizon, based on the behavior of various risk factors affecting values of Clearing Member accounts, including implied volatility surfaces of options for all equity and index risk factors. These risk factors are relevant to the products in a Clearing Member's portfolio and are critical drivers of the inherent exposure OCC has to its Clearing Members' portfolios. Including them in STANS therefore enhances the robustness of OCC's margin resources and incentivizes Clearing Members to be aware of the risks in their portfolios and mitigate those risks to avoid higher margin requirements.

For purposes of calculating margin requirements, STANS assumes a two-day liquidation period for all positions margined on a net basis. The Margin Policy explains that this assumption is based on a thorough analysis of market conditions and the risks associated with the products OCC clears. OCC's assumed two-day liquidation period is so tailored to establish a risk-based margin system requirement that covers potential future exposure to Clearing Members in the interval between the last margin collection and the close-out of a Clearing Member's positions should it default. This assumption allows OCC to maintain consistency with the timeframes required to facilitate the hedging or close-out of a position, which OCC would employ under its default management procedures.

The Margin Policy describes other aspects of STANS, such as the use of 500 business days of "look-back" historical data, where available, in its econometric models and the incorporation of multiple stress tests components into STANS that are designed to identify increases in OCC's exposure that may arise from atypical market movements.

The Margin Policy provides for daily evaluation of the market data that supports STANS' econometric models and monthly recalibration of STANS to ensure that it accounts for changes to market conditions over the past month. These recalibrations incorporate a long-run historical volatility estimate, which serves as a minimum volatility value during periods of low market volatility, reducing procyclicality in OCC's margin estimates by not allowing margin rates to drop below a certain long-run measure of market volatility. The Margin Policy also provides that on a daily basis OCC utilizes a "scale factor" to account for daily changes in market volatility that may occur between monthly recalibrations. In some instances, products less dependent on the monthly recalibration process – such as Treasury and volatility contracts – may have their econometric models recalibrated on a daily basis.

The Margin Policy provides for the use of alternatives to STANS for certain products or accounts. For example, OCC has the ability to apply add-on charges to cover Stock Loan position exposures arising from Clearing Member specific preferences and surcharges for certain Clearing Members with higher risk levels. Furthermore, the Margin Policy explains that OCC utilizes the Standard Portfolio Analysis of Risk margin methodology ("SPAN"), instead of STANS, to compute gross margin for the segregated futures customer accounts of Clearing Members. SPAN is a market simulation-based VaR system that assesses risk on a portfolio basis

for a wide variety of financial instruments. SPAN uses "scan ranges" that estimate price movements based on historical volatility data of specific products, which are in turn used to estimate movements in affected portfolios. "Scan ranges" also serve as minimum estimates of portfolio volatility in times of low market volatility to guard against the effects of procyclicality, and are regularly monitored and recalibrated by OCC's Pricing & Margins team. A description of SPAN is provided in the Margin Policy. Like STANS, SPAN is intended establish a risk-based margin system that calculates margins on a portfolio level and sets initial margin requirements that meet "an established single-tailed confidence level of at least 99 percent" with respect to each portfolio's distribution of future exposure. The Margin Policy indicates that OCC will also calculate a segregated futures customers account's net margin requirement under STANS, and that if the STANS-calculated requirement exceeds the SPAN-calculated requirement, an add-on is applied to the Clearing Member's account so that the Clearing Member is effectively required to meet the greater of the gross SPAN or two-day net STANS requirement.

Margin Calls and Adjustments

The Margin Policy provides for OCC calculating and collecting margin requirements on a daily basis, as well as making intraday margin calls and adjustments.

As described in the Margin Policy, OCC issues margin calls during standard trading hours within a timeframe established in OCC's procedures, when unrealized losses[6] exceeding 50% of an account's total risk charges are observed for that account, based on start-of-day positions. Intraday margin calls are also subject to a minimum value established in OCC's procedures, and must be approved by a Vice President or above. The Margin Policy describes the process by which margin calls may be deferred and evaluated and for execution of a margin call outside of the time frame described above.

The Margin Policy provides for certain exceptions to the above intraday margin call time frame. For instance, in the case of extended trading hours ("ETH"), OCC may issue a margin call prior to 9:00 AM Central Time when (1) unrealized losses observed for an account, based on new ETH positions, exceed 25% of that account's total risk charges and (2) the overall Clearing Member portfolio is also experiencing losses. ETH margin calls are limited to price changes in ETH-eligible products, and similarly remain subject to a minimum value established in OCC's procedures and must be approved by a Vice President or above. In the case of bank holidays, margin calls may be issued against Clearing Members on the day prior to the bank holiday when it coincides with a day one or more of OCC's markets are open for trading.

The Margin Policy indicates that additional margin adjustments may be performed as the need arises and following approval by an officer of OCC.

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[6] This excludes accounts holding only collateral positions or long option positions where the account's net asset value could never become negative.

Back-Testing and Model Validation

OCC's Margin Policy provides that OCC conducts daily back-tests for each margin account, analyzing in detail all accounts exhibiting losses in excess of calculated margin requirements. To the extent the results of these back-tests reflect losses in excess of the aggregate ES and stress test add-on charges required for a Clearing Member's account, the test result will be classified as an "exceedance," and all such exceedances will be reported no less frequently than monthly and evaluated through OCC's governance process for model risk management.

The Margin Policy states that OCC's Model Validation Group ("MVG"), an independent group with a separate reporting line from model developers, is responsible for evaluating the overall performance of STANS and its associated models on at least an annual basis. MVG presents its findings and recommendations to the Risk Committee of OCC's Board.

OCC reviewed the derivatives clearing organization ("DCO") core principles ("Core Principles") as set forth in the Act. During this review, OCC identified the following Core Principles as potentially being impacted:

Financial Resources. OCC believes that implementing the proposed rule change will be consistent with Core Principle B, which requires generally that each DCO have adequate financial, operational and managerial resources to discharge its responsibilities as a DCO.[7] Rule 39.11 further implements Core Principle B by requiring OCC to meet its financial obligations to its clearing members notwithstanding a default by the clearing member creating the largest financial exposure to OCC in extreme but plausible market conditions,[8] and by stating that margin collected by a DCO may be used to meet such obligations.[9] The proposed Margin Policy would establish a framework by which OCC may collect and value margin for such purposes, specifically covering: (i) the treatment of the various types of positions held by Clearing Members in connection with margin calculations, (ii) OCC's cross-margin programs with other clearing agencies, (iii) the treatment of collateral included in margin calculations, (iv) the model assumptions and market data OCC uses as inputs for its margin calculation methodologies, (v) OCC's margin calculation methodologies, (vi) protocols surrounding OCC's exercise of margin calls and adjustments, and (vii) daily back-testing and model validation that OCC conducts to measure performance of its margin methodologies. In this regard, the proposed changes would further OCC's compliance with Core Principle B.

Risk Management. OCC believes that implementing the proposed rule change will be consistent with the Core Principle D, which specifically requires that the margin required from each member and participant of a DCO be sufficient to cover potential exposures in normal

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[7] 7 U.S.C. 7a-1(c)(2)(B).

[8] 17 C.F.R. 39.11(a)(1).

[9] 17 C.F.R. 39.11(b)(1)(i).

market conditions.[10] Rule 39.13(g) further implements Core Principle D by detailing how a DCO should establish, operate and review its margin requirements and methodology.[11] The proposed Margin Policy would establish, in part, how OCC: (i) sets initial margin requirements using risk-based parameters and models that are reviewed on a regular basis, (ii) establishes margin requirements and coverage in a way that complies with Rule 39.13, (iii) performs independent validation of its margin models, (iv) implements portfolio margining, (v) uses accurate and reliable pricing data, (vi) performs daily review of its margin requirements, (vii) performs daily and monthly back-testing, (viii) sets clearing members' customer margin requirements, (ix) establishes deadlines for margin payments from clearing members, (x) identifies which types of assets it will accept as collateral, (xi) identifies the valuation methods it uses to value assets posted as margin, (xii) identifies how it applies haircuts in valuing assets it accepts as margin collateral, and (xiii) identifies how it applies concentration limits to the types of assets posted as margin. In this regard, the proposed changes would further OCC's compliance with Core Principle D.

Opposing Views

No opposing views were expressed related to the rule amendments.

Notice of Pending Rule Certification

OCC hereby certifies that notice of this rule filing has been be given to Clearing Members of OCC in compliance with Regulation 40.6(a)(2) by posting a copy of the submission on OCC's website concurrently with the filing of this submission.

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[10] 7 U.S.C. 7a-1(c)(2)(D).

[11] 17 C.F.R. 39.13(g).

Certification

OCC hereby certifies that the rule set forth at Item 1 of the enclosed filing (and Amendment No. 1 thereto) complies with the Act and the CFTC's regulations thereunder.

Should you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely,

Justin W. Byrne
Vice President, Regulatory Filings

Enclosure

OMB APPROVAL	
OMB Number:	3235-0045
Estimated average burden hours per response............38	

Required fields are shown with yellow backgrounds and asterisks.

Page 1 of * 65

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

File No.* SR - 2017 - * 007
Amendment No. (req. for Amendments *)

Filing by Options Clearing Corporation

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) *
☑	☐	☐	☑	☐	☐

Pilot	Extension of Time Period for Commission Action *	Date Expires *
☐	☐	

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)

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 *).

Proposed rule change by The Options Clearing Corporation concerning its Margin Policy.

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 *	Justin	Last Name *	Byrne
Title *	Vice President, Regulatory Filings		
E-mail *	jbyrne@theocc.com		
Telephone *	(202) 971-7238	Fax	(312) 322-6280

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 12/11/2017

By Justin W. Byrne

(Name *)

(Title *)

Vice President, Regulatory Filings

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.

Justin Byrne, jbyrne@theocc.com

Required fields are shown with yellow backgrounds and asterisks.

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

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.

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 19b-4

Proposed Rule Change
by

THE OPTIONS CLEARING CORPORATION

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

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

This proposed rule change by The Options Clearing Corporation ("OCC") would formalize and update OCC's Margin Policy in connection with requirements applicable to OCC under Rule 17Ad-22(e)(6), which generally requires a covered clearing agency to have 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 meeting certain standards.[1] The Margin Policy is included as confidential Exhibit 5 of the filing. The policy is being submitted without marking to improve readability as it is being submitted in its entirety as new rule text.

The proposed rule change does not require any changes to the text of OCC's By-Laws or Rules. All terms with initial capitalization that are not otherwise defined herein have the same meaning as set forth in the OCC By-Laws and Rules.[2]

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

The proposed rule change was approved for filing with the Commission by OCC's Board of Directors ("Board") at meetings held on February 24, 2017 and May 2, 2017.

Questions should be addressed to Justin Byrne, Vice President, Regulatory Filings, at (202) 971-7238.

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[1] 17 CFR 240.17Ad-22(e)(6).

[2] OCC's By-Laws and Rules can be found on OCC's public website: http://optionsclearing.com/about/publications/bylaws.jsp.

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

A. Purpose

Background

On September 28, 2016 the Commission adopted amendments to Rule 17Ad-22[3] and added new Rule 17Ab2-2[4] pursuant to Section 17A of the Securities Exchange Act of 1934 (the "Act")[5] and the Payment, Clearing, and Settlement Supervision Act of 2010 ("Clearing Supervision Act")[6] to establish enhanced standards for the operation and governance of those clearing agencies registered with the Commission that meet the definition of a "covered clearing agency," as defined by Rule 17Ad-22(a)(5)[7] (collectively, the new and amended rules are herein referred to as "CCA" rules). The CCA rules require that a covered clearing agency, among other things: "establish, implement, maintain and enforce written policies and procedures reasonably designed to . . . [c]over . . . its credit exposures to its participants by establishing a risk-based margin system" that satisfies certain criteria, including that it produces margin levels commensurate with the risks of particular products, collects margin at least daily, collects margin sufficient to cover exposure between the last margin collection and position closeout, uses

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3 17 CFR 240.17Ad-22.

4 17 CFR 240.17Ab2-2.

5 15 U.S.C. 78q-1.

6 12 U.S.C. 5461 et seq.

7 17 CFR 240.17Ad-22(a)(5).

reliable pricing sources, appropriately measures credit exposure and regularly reviews, tests and verifies its margin methodology.[8]

OCC is defined as a covered clearing agency under the CCA rules, and therefore is subject to the requirements of the CCA rules, including Rule 17Ad-22(e)(6).[9] Accordingly, OCC proposes to formalize its Margin Policy, as described below, to describe its approach for collecting margin and managing the credit exposures presented by its Clearing Members.

Margin Policy

The purpose of the Margin Policy is to describe OCC's approach for collecting margin and managing the credit exposure presented by its Clearing Members, so as to ensure that its margin methodologies are governed and implemented in a manner that is compliant with Rule 17Ad-22(e)(6).[10] The Margin Policy describes, in general: (i) the treatment of the various types of positions held by Clearing Members in connection with margin calculations; (ii) OCC's cross-margin programs with other clearing agencies; (iii) the treatment of collateral included in margin calculations; (iv) the model assumptions and market data OCC uses as inputs for its margin calculation methodologies; (v) OCC's margin calculation methodologies; (vi) protocols surrounding OCC's exercise of margin calls and adjustments; and (vii) daily back-testing and model validation that OCC conducts to measure performance of its margin methodologies.

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[8] 17 CFR 240.17Ad-22(e)(6).

[9] Id.

[10] Id.

The Margin Policy is designed to reflect OCC's efforts to provide for robust internal controls and governance surrounding its margin methodologies and promote compliance with the CCA rules, in particular Rule 17Ad-22(e)(6),[11] as informed by the Commission in the adopting release for the CCA rules.[12] The Margin Policy is part of a broader framework, including OCC's By-Laws, Rules and other policies, that is designed to support the resiliency of OCC by ensuring that it appropriately sizes margin to market risks.[13] The key substantive aspects of the Margin Policy, and how they foster compliance with the requirements of the CCA rules, are described in greater detail below.

Treatment of Various Types of Positions

The Margin Policy describes the treatment of various types of positions, originating from different types of market participants, in connection with OCC's calculation of margin requirements. As specified in OCC's By-Laws, OCC utilizes different types of Clearing Member accounts in order to maintain compliance with the relevant Customer protection and segregation requirements of the Commission and the Commodity Futures Trading Commission ("CFTC"), which affects how margin is calculated because of different assumptions regarding how such accounts or positions would be liquidated in the event of a Clearing Member default.

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[11] Id.

[12] Securities Exchange Act Release No. 78961 (September 28, 2016), 81 FR 70786 (October 13, 2016) ("CCA Adopting Release").

[13] CCA Adopting Release, supra note 12 at 70812 (noting 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.").

Taking into account these different types of products in different types of accounts, with different Clearing Member liquidation scenarios, enables OCC to set margin requirements commensurate with the actual risks presented by these positions and further its compliance with the requirements in Rule 17Ad-22(e)(6)(i) and (v), which require that a covered clearing agency's policies and procedures be reasonably designed to establish a risk-based margin system that takes into account the "risks and particular attributes of each relevant product, portfolio, and market" and use "an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products."[14]

One category of positions addressed in the Margin Policy is long securities options positions. Under the Margin Policy, these positions are segregated from a Clearing Member's other positions under the assumption that such positions are fully paid and pose no additional risk to OCC, and the Margin Policy explains that a Clearing Member's segregated long positions are not included as part of its margin calculation. In addition, Clearing Members' customer segregated futures accounts are margined separately from Clearing Members' securities and/or proprietary accounts, and margin for these accounts is calculated on a gross basis by computing margin requirements for each customer account independently, and then aggregating the individual margin calculations to calculate the gross margin required from the Clearing Member. The Margin Policy further notes that OCC also computes the margin requirements for customer segregated futures accounts on a net basis and holds the greater of the net or gross margin

[14] 17 CFR 240.17Ad-22(e)(6)(i) and (v).

requirement.

As described in the Margin Policy, stock loan/borrow positions are included as long/short stock positions in margin calculations on a net basis and may be offset against other positions held in an account. However, while OCC includes these positions in its risk calculations, it does not include the net asset value of these positions in its margin requirement calculations, which allows OCC to maintain financial resources in a manner that is consistent with the manner in which such positions would be liquidated during a Clearing Member default. In the event of such a default, OCC would instruct the non-defaulting Clearing Member to buy in or sell out of the position, with OCC compensating the Clearing Member for any difference between last mark and the closeout price.

Cross-Margining

The Margin Policy addresses the cross-margin programs that OCC maintains with other clearinghouses, which affects the calculation of margin with respect to positions in certain index options, options on centrally cleared fund shares, and futures and options on futures held as part of one of the programs, because positions are treated as if they were held within a single account at OCC. Under Rule 17Ad-22(e)(6)(v) a covered clearing agency's policies and procedures must be reasonably designed to establish a risk-based margin system that uses appropriate margin methods for measuring "credit exposure . . . and portfolio effects across products,"[15] which the CCA Adopting Release expressly states should take into consideration cross-margining

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[15] 17 CFR 240.17Ad-22(e)(6)(v).

arrangements with other clearinghouses.[16] The Margin Policy's allowance for offsets in required margin when calculating requirements for cross-margin products furthers compliance with this CCA rule.

Collateral

To mitigate 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. Collateral management is generally governed by OCC's Collateral Risk Management Policy, but the Margin Policy does provide a general description of how the use of deposits in lieu of margin and collateral in margins may affect margin calculations. This furthers the purpose of Rules 17Ad-22(e)(6)(i) and (v) in that incorporating these elements enables OCC to set margin requirements commensurate with its actual credit exposure to its Clearing Members.[17]

The Margin Policy describes that OCC permits Clearing Members to make deposits in lieu of margin, which enable them to meet their margin requirements for securities options by posting escrow or specific deposits, *i.e.*, typically customer securities that have been fully paid and that represent the securities deliverable upon assignment of a short option or a deposit of acceptable collateral equal to the underlying value or aggregate exercise price of the option being covered, depending on the type of option. Because these short positions are fully collateralized, the Margin Policy specifies that OCC does not include deposits in lieu of margin when

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[16] CCA Adopting Release, supra note 12, at 70819.

[17] 17 CFR 240.17Ad-22(e)(6)(i) and (v).

calculating margin requirements.

The Margin Policy also indicates that OCC's margin methodology takes into account certain forms of posted margin when calculating a Clearing Member's margin requirement, a practice OCC refers to as "collateral in margins." OCC computes margin requirements based on a combination of open positions in cleared contracts and any deposits of collateral eligible for inclusion in OCC's margin methodologies, *e.g.*, stocks, exchange-traded fund securities and eligible government securities. OCC's margin methodologies also incorporate scenarios that could exacerbate or mitigate risk exposure as a result of the collateral type deposited into its margin requirement calculations, thereby mitigating risk by creating an incentive for Clearing Members to deposit collateral that hedges their exposures in cleared contracts. The Margin Policy's recognition of the risk interactions between these open positions and collateral deposited as margin is consistent with the requirement of Rule 17Ad-22(e)(6)(v) that a covered clearing agency's policies and procedures be reasonably designed to establish a risk-based margin system that takes into account "portfolio effects across products" when measuring credit exposure.[18]

Model Assumptions, Sensitivity Analyses and Market Data

The Margin Policy has historically specified that OCC performs: (i) daily backtesting of each Clearing Member Account, (ii) daily backtesting of OCC's margin methodology and (iii) monthly review of the assumptions used in performing the backtesting. The Margin Policy has also specified that all critical margin model assumptions should be consistent with OCC's default

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[18] 17 CFR 240.17Ad-22(e)(6)(v).

management assumptions. OCC performed the aforementioned backtesting in order to monitor whether the margin methodology is functioning as intended and appropriately captures the risks that OCC's Clearing Members present to it.

With the adoption of the CCA rules, and to enhance OCC's monitoring of its margin methodology, the proposed Margin Policy would establish additional monthly reviews of its margin methodology. First, the Margin Policy would specify that key model parameters and assumptions are also subject to a monthly, or more frequently when market conditions warrant, sensitivity analysis. In identifying which parameters and assumptions should be subject to this sensitivity analysis, OCC surveyed relevant industry guidance on the appropriate parameters and assumptions to first include in the sensitivity analysis. OCC plans to increase the number of assumptions and parameters included in the sensitivity analysis on an iterative basis as the process becomes more mature. Second, the Margin Policy would specify that OCC performs a monthly review of its parameters for business backtesting. OCC determined that all parameters contained in its margin methodology should be included in this monthly parameter review, and has identified all of these. The Margin Policy would also specify that this sensitivity analysis and parameter review would make use of both actual and hypothetical portfolios. These additions to the Margin Policy are designed to be consistent with Rules 17Ad-22(e)(6)(vi)(B) and (C), which require that policies and procedures of a covered clearing agency be reasonably designed to establish a risk-based margin system that incorporates monthly, or more frequent,

sensitivity analyses and review of its parameters and assumptions for backtesting.[19]

The proposed Margin Policy would specify that the results of all such analyses are reported no less frequently than monthly to OCC's Model Risk Working Group, which then may escalate any issues to OCC's Management Committee. This reporting requirement is designed to be consistent with Rule 17Ad-22(e)(6)(vi)(D), which requires policies and procedures of a covered clearing agency to be reasonably designed to establish a risk-based margin system under which such analyses are reported to the covered clearing agency's "appropriate decision maker," who may use "these results to evaluate the adequacy of and adjust its margin methodology, model parameters, and any other relevant aspects of its credit risk framework."[20]

The Margin Policy describes how OCC obtains the market data that it uses to value Clearing Members' portfolios and collateral deposits, perform mark-to-market calculations, support expiration processing, generate theoretical values for margin and Clearing Fund calculations, and support customer-level margin calculations. Rule 17Ad-22(e)(6)(iv) requires that a covered clearing agency's policies and procedures be reasonably designed to establish a risk-based margin system that uses "reliable sources of timely price data" and uses "procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable."[21] In compliance with this requirement, the Margin Policy requires OCC to take measures to ensure the quality and completeness of any market data it acquires. Primary

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[19] 17 CFR 240.17Ad-22(e)(6)(v)(B) and (C).

[20] 17 CFR 240.17Ad-22(e)(6)(v)(D).

[21] 17 CFR 240.17Ad-22(e)(6)(iv).

among these measures is the use of redundant sources for market data and pricing system infrastructure and, when selecting vendors, prioritizing the quality and reliability of a data provider's service and its ability to provide data in a variety of market conditions, including periods of market stress. This aspect of the Margin Policy is specifically responsive to the Commission's statement in the CCA Adopting Release that a covered clearing agency should consider the ability of the vendor to provide data in a variety of market conditions, including periods of market stress and not just based on cost alone.[22]

The Margin Policy explains how, in order to ensure the integrity of this data, OCC monitors for delays in its receipt of price data and overall system health, as well as erroneous price data or interruptions in pricing data availability. The Margin Policy specifies that, in certain cases, OCC may be obligated to use settlement prices that are provided directly by the listing exchange[23] and prescribes procedures for utilizing alternative data sources where a final settlement value is not available from the listing exchange.

The Margin Policy also specifies that OCC utilizes sound valuation models, such as price-editing and smoothing,[24] as well as system edit checks, and automated and manual controls

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22 CCA Adopting Release, supra note 12, at 70819.

23 In such a case, the listing exchange transmits price files to OCC, and the data is then processed by OCC systems and manually validated.

24 "Smoothing" is a process OCC uses to calculate final prices, volatility measures, delta values and vega values for securities and futures options. The purpose of smoothing is to minimize arbitrage opportunities while producing final prices that remain within the bid-ask spread provided to OCC by the market.

with any price data it obtains. Where OCC does not receive pricing information on a daily basis for a product, the Margin Policy specifies that OCC would rely on modeled prices. These requirements are designed to facilitate OCC's compliance with the Rule 17Ad-22(e)(6)(iv) requirement to maintain policies reasonably designed to establish a risk-based margin system that addresses "circumstances in which pricing data are not readily available or reliable."[25]

Margin Methodology

OCC's Margin Policy contains a description of OCC's System for Theoretical Analysis and Numerical Simulations ("STANS"), its margin methodology for all positions it margins on a net basis. As required in Rule 17Ad-22(e)(6), STANS is a risk-based methodology that is designed to produce a margin requirement that exceeds OCC's minimum regulatory obligations. OCC achieves this 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.

As a statistical methodology that relies on randomized Monte Carlo simulations to generate ES estimates, STANS will produce slightly different ES estimates when Monte Carlo simulations are performed on each Clearing Member account; OCC refers to such variance in ES estimates as the "standard error." However, significant variations in ES estimates among Clearing Member accounts may also signify other issues, such as underlying issues with STANS or its appropriateness for estimating ES for a particular Clearing Member account. Previously, OCC has relied on the expert judgment of its staff and undefined, qualitative factors to identify

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25 17 CFR 240.17Ad-22(e)(6)(iv).

whether STANS may not be functioning as expected. After performing statistical analysis on the size of the standard error, and at what level an observed error is greater than the standard error at a statistically significant level, the proposed Margin Policy would state that the tolerance for the standard error of a typical, or median, Clearing Member account ES measurement in STANS is 5%.[26] This tolerance would define a statistical error threshold above which OCC must investigate whether STANS is appropriately measuring a Clearing Member's account.

Furthermore, any margin requirement calculated by STANS is on a "portfolio" basis, which inherently reflects offsets between products within each portfolio. This is intended to meet the Rule 17Ad-22(e)(6)(iii) requirement, as explained in the CCA Adopting Release, that a covered clearing agency's policies and procedures be reasonably designed to establish a risk-based margin system that calculates margin on a portfolio level and set 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.[27]

The Margin Policy also describes how STANS utilizes Monte Carlo simulations of portfolio values at a two-day risk horizon, based on the behavior of various risk factors affecting values of Clearing Member accounts, including implied volatility surfaces of options for all equity and index risk factors. These risk factors are relevant to the products in a Clearing Member's portfolio and are critical drivers of the inherent exposure OCC has to its Clearing

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[26] This use of a 5% ES error tolerance is a proposed enhancement to OCC's existing margin policies and procedures.

[27] CCA Adopting Release, supra note 12, at 70819; 17 CFR 240.17Ad-22(e)(6)(iii).

Members' portfolios. Including them in STANS therefore enhances the robustness of OCC's margin resources and incentivizes Clearing Members to be aware of the risks in their portfolios and mitigate those risks to avoid higher margin requirements. The use of risk factors is intended to comply with Rule 17Ad-22(e)(6)(v), which requires that a covered clearing agency's policies and procedures be reasonably designed 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."[28]

For purposes of calculating margin requirements, STANS assumes a two-day liquidation period for all positions margined on a net basis. The Margin Policy explains that this assumption is based on a thorough analysis of market conditions and the risks associated with the products OCC clears. As the Commission noted in the CCA Adopting Release, the assumed liquidation period in a margin model should be tailored to the market conditions and the risks of the products being cleared.[29] OCC's assumed two-day liquidation period is so tailored, and the Margin Policy is designed to enable OCC to comply with Rule 17Ad-22(e)(6)(iii), under which a covered clearing agency's policies and procedures must be reasonably designed to establish a risk-based margin system requirement that covers potential future exposure to Clearing Members in the interval between the last margin collection and the close-out of a Clearing Member's

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[28] 17 CFR 240.17Ad-22(e)(6)(v).

[29] CCA Adopting Release, supra note 12, at 70818 (". . . liquidation periods generally should be tailored to the market conditions and risks of the products being cleared.").

positions should it default.[30] This assumption allows OCC to maintain consistency with the timeframes required to facilitate the hedging or close-out of a position, which OCC would employ under its default management procedures.

The Margin Policy describes other aspects of STANS that are designed to address the particular attributes and risk factors of the products being margined, as is consistent with Rule 17Ad-22(e)(6)(i) and (v).[31] This includes the use of 500 business days of “look-back” historical data, where available, in its econometric models and the incorporation of multiple stress tests components into STANS that are designed to identify increases in OCC’s exposure that may arise from atypical market movements.

The Margin Policy provides for daily evaluation of the market data that supports STANS’ econometric models and monthly recalibration of STANS to ensure that it accounts for changes to market conditions over the past month. These recalibrations incorporate a long-run historical volatility estimate, which serves as a minimum volatility value during periods of low market volatility, reducing procyclicality in OCC’s margin estimates by not allowing margin rates to drop below a certain long-run measure of market volatility. The Margin Policy also provides that on a daily basis OCC utilizes a “scale factor” to account for daily changes in market volatility that may occur between monthly recalibrations. In some instances, products less dependent on the monthly recalibration process – such as Treasury and volatility contracts – may

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[30] 17 CFR 240.17Ad-22(e)(6)(iii).

[31] 17 CFR 240.17Ad-22(e)(6)(i) and (v).

have their econometric models recalibrated on a daily basis.

The Margin Policy provides for the use of alternatives to STANS for certain products or accounts. For example, OCC has the ability to apply add-on charges to cover Stock Loan position exposures arising from Clearing Member specific preferences and surcharges for certain Clearing Members with higher risk levels. Furthermore, the Margin Policy explains that OCC utilizes the Standard Portfolio Analysis of Risk margin methodology ("SPAN"), instead of STANS, to compute gross margin for the segregated futures customer accounts of Clearing Members. SPAN is a market simulation-based VaR system that assesses risk on a portfolio basis for a wide variety of financial instruments. SPAN uses "scan ranges" that estimate price movements based on historical volatility data of specific products, which are in turn used to estimate movements in affected portfolios. "Scan ranges" also serve as minimum estimates of portfolio volatility in times of low market volatility to guard against the effects of procyclicality, and are regularly monitored and recalibrated by OCC's Pricing & Margins team. A description of SPAN is provided in the Margin Policy. Like STANS, SPAN is intended to comply with Rule 17Ad-22(e)(6), including the Rule 17Ad-22(e)(6)(iii) requirement that a covered clearing agency's policies and procedures be reasonably designed to establish a risk-based margin system that calculates margins on a portfolio level and sets initial margin requirements that meet "an established single-tailed confidence level of at least 99 percent" with respect to each portfolio's distribution of future exposure.[32] The Margin Policy indicates that OCC will also calculate a

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[32] CCA Adopting Release, supra note 12, at 70819; 17 CFR 240.17Ad-22(e)(6)(iii).

segregated futures customers account's net margin requirement under STANS, and that if the STANS-calculated requirement exceeds the SPAN-calculated requirement, an add-on is applied to the Clearing Member's account so that the Clearing Member is effectively required to meet the greater of the gross SPAN or two-day net STANS requirement.

Margin Calls and Adjustments

The Margin Policy provides for OCC calculating and collecting margin requirements on a daily basis, as well as making intraday margin calls and adjustments. This is consistent with Rule 17Ad-22(e)(6)(ii), under which a covered clearing agency must maintain policies and procedures reasonably designed to establish a risk-based margin system that "collects margin . . . at least daily" and includes "the authority and operational capacity to make intraday margin calls in defined circumstances."[33]

As described in the Margin Policy, OCC issues margin calls during standard trading hours within a timeframe established in OCC's procedures, when unrealized losses[34] exceeding 50% of an account's total risk charges are observed for that account, based on start-of-day positions. Intraday margin calls are also subject to a minimum value established in OCC's procedures, and must be approved by a Vice President or above. The Margin Policy describes the process by which margin calls may be deferred and evaluated and for execution of a margin call outside of the time frame described above.

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[33] 17 CFR 240.17Ad-22(e)(6)(ii).

[34] This excludes accounts holding only collateral positions or long option positions where the account's net asset value could never become negative.

The Margin Policy provides for certain exceptions to the above intraday margin call time frame. For instance, in the case of extended trading hours ("ETH"), OCC may issue a margin call prior to 9:00 AM Central Time when (1) unrealized losses observed for an account, based on new ETH positions, exceed 25% of that account's total risk charges and (2) the overall Clearing Member portfolio is also experiencing losses. ETH margin calls are limited to price changes in ETH-eligible products, and similarly remain subject to a minimum value established in OCC's procedures and must be approved by a Vice President or above. In the case of bank holidays, margin calls may be issued against Clearing Members on the day prior to the bank holiday when it coincides with a day one or more of OCC's markets are open for trading.

The Margin Policy indicates that additional margin adjustments may be performed as the need arises and following approval by an officer of OCC.

Back-Testing and Model Validation

OCC's Margin Policy provides that OCC conducts daily back-tests for each margin account, analyzing in detail all accounts exhibiting losses in excess of calculated margin requirements. This is intended to comply with Rule 17Ad-22(e)(6)(vi)(A), which calls for back-tests of the margin model at least daily, "using standard predetermined parameters and assumptions."[35] To the extent the results of these back-tests reflect losses in excess of the aggregate ES and stress test add-on charges required for a Clearing Member's account, the test result will be classified as an "exceedance," and all such exceedances will be reported no less

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[35] 17 CFR 240.17Ad-22(e)(6)(vi)(A).

frequently than monthly and evaluated through OCC's governance process for model risk management.

The Margin Policy states that OCC's Model Validation Group ("MVG"), an independent group with a separate reporting line from model developers, is responsible for evaluating the overall performance of STANS and its associated models on at least an annual basis. This aspect of the policy is intended to comply with Rule 17Ad-22(e)(6)(vii), under which a covered clearing agency's policies and procedures must be reasonably designed to establish a risk-based margin system that requires "a model validation for the covered clearing agency's margin system and related models to be performed not less than annually" or more frequently as may be contemplated by the agency's risk management framework.[36] MVG presents its findings and recommendations to the Risk Committee of OCC's Board.

B. Statutory Basis

Section 17A(b)(3)(F) of the Act[37] 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. Through each of its respective sections, the Margin Policy provides a framework for managing margin and credit exposure presented by OCC's Clearing Members. To manage these exposures, the Margin Policy establishes the manner in which OCC requires Clearing

[36] 17 CFR 240.17Ad-22(e)(6)(vii).

[37] 15 U.S.C. 78q-1(b)(3)(F).

Members to deposit margin to assure performance and to mitigate their credit exposures if a Clearing Member defaults. The Margin Policy also describes the types of positions OCC will use in making margin calculations, how OCC will manage margin risk arising from its cross-margining program, key assumptions of OCC's margin methodologies, OCC's margin methodologies, how OCC administers margin calls on both daily and intraday bases, and how OCC monitors and reports on the performance of its margin systems. The Margin Policy's promotion of each aforementioned activity ultimately inures to the protection of investors and the public interest, as well as the safeguarding of securities and funds in OCC's custody or control[38] in a manner consistent with Section 17A(b)(3)(F) of the Act.[39]

OCC also believes that the Margin Policy is consistent with the requirements of Rule 17Ad-22(e)(6), as detailed above.[40] For example, the Margin Policy is reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that meets the minimum regulatory requirements in: collecting margin on a daily or intraday basis at levels commensurate with the risks and particular attributes of each relevant product, portfolio and market, as is consistent with Rules 17Ad-22(e)(6)(i), (ii) and (v);[41] calculating margin

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[38] These activities, in turn, help ensure that OCC remains capable of continuing its operations and services in a manner that promotes the prompt and accurate clearance and settlement of securities transactions.

[39] 15 U.S.C. 78q-1(b)(3)(F).

[40] See supra notes 10-18, 19-22, 25, 27-33, 35 and 36 and accompanying text.

[41] See supra notes 14, 31 and 33 and accompanying text.

requirements sufficient to cover potential future exposures to a defaulting Clearing Member during the interval between last margin collection and closeout, as is consistent with Rule 17Ad-22(e)(6)(iii);[42] using reliable sources of timely price data and sound valuation models and procedures when data is unavailable, as is consistent with Rule 17Ad-(22)(e)(6)(iv);[43] using appropriate methods for measuring credit exposures that account for relevant product risk factors and portfolio effects across products, as is consistent with Rules 17Ad-22(e)(6)(i) and (v);[44] and conducting daily backtests of its margin models, conducting sensitivity analyses of the underlying parameters and assumptions monthly, or more frequently, and engaging in model validation not less frequently than annually, as is consistent with Rules 17Ad-22(e)(vi) and (vii).[45]

The proposed rule change is not inconsistent with the existing rules of OCC, including any other rules proposed to be amended.

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

Section 17A(b)(3)(I) of the Act[46] requires that the rules of a clearing agency not impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. OCC does not believe that the proposed rule change would impact or impose any burden on

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[42] See supra note 30 and accompanying text.

[43] See supra notes 21 and 25 and accompanying text.

[44] See supra notes 14, 15, 18 and 28 and accompanying text.

[45] See supra notes 35 and 36 and accompanying text.

[46] 15 U.S.C. 78q-1(b)(3)(I).

competition. The proposed rule change sets forth the framework surrounding OCC's margin methodologies. The Margin Policy primarily describes OCC's existing policies and practices with respect to margin, much of which is also addressed in OCC's By-Laws and Rules. All Clearing Members are subject to the same methodologies for determining their margin requirements, dictated by the overall risk to OCC presented by the positions in their respective portfolios. Consequently, no Clearing Member is provided a competitive advantage over any other Clearing Member. Further, the Margin Policy does not affect Clearing Members' access to OCC's services or impose any direct burdens on Clearing Members. Accordingly, the proposed rule change would not unfairly inhibit access to OCC's services or disadvantage or favor any particular user in relationship to another user.

For the foregoing reasons, OCC believes that the proposed rule change is in the public interest, would be consistent with the requirements of the Act applicable to clearing agencies, and would not impact or impose a burden on competition.

Item 5. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants or Others

Written comments were not and are not intended to be solicited with respect to the proposed rule change and none have been received.

Item 6. Extension of Time Period for Commission Action

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

Item 11. Exhibits

Exhibit 1A. Completed Notice of Proposed Rule Change for publication in the Federal Register.

Exhibit 5. Margin Policy. [REDACTED]

CONFIDENTIAL TREATMENT IS REQUESTED FOR EXHIBIT 5

PURSUANT TO SEC RULE 24b-2

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, The Options Clearing Corporation has caused this filing to be signed on its behalf by the undersigned hereunto duly authorized.

THE OPTIONS CLEARING CORPORATION

By:____________________________________
Justin W. Byrne
Vice President, Regulatory Filings

EXHIBIT 1A

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-[_______________]; File No. SR-OCC-2017-007)

December __, 2017

Self-Regulatory Organizations; The Options Clearing Corporation; Notice of Filing of Proposed Rule Change Related to The Options Clearing Corporation's Margin Policy

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),[1] and Rule 19b-4 thereunder,[2] notice is hereby given that on December 11, 2017, The Options Clearing Corporation ("OCC") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared primarily by OCC. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Clearing Agency's Statement of the Terms of Substance of the Proposed Rule Change

The purpose of the proposed rule change is to formalize and update OCC's Margin Policy in connection with requirements applicable to OCC under Rule 17Ad-22(e)(6), which generally requires a covered clearing agency to have 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 meeting certain standards.[3] The Margin Policy is included as confidential Exhibit 5 of the filing. The

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

2 17 CFR 240.19b-4.

3 17 CFR 240.17Ad-22(e)(6).

policy is being submitted without marking to improve readability as it is being submitted in its entirety as new rule text.

The proposed rule change does not require any changes to the text of OCC's By-Laws or Rules. All terms with initial capitalization that are not otherwise defined herein have the same meaning as set forth in the OCC By-Laws and Rules.[4]

II. Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, OCC included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. OCC has prepared summaries, set forth in sections (A), (B), and (C) below, of the most significant aspects of these statements.

(A) Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

(1) Purpose

Background

On September 28, 2016 the Commission adopted amendments to Rule 17Ad-22[5] and added new Rule 17Ab2-2[6] pursuant to Section 17A of the Act[7] and the Payment, Clearing, and Settlement Supervision Act of 2010 ("Clearing Supervision Act")[8] to

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4 OCC's By-Laws and Rules can be found on OCC's public website: http://optionsclearing.com/about/publications/bylaws.jsp.

5 17 CFR 240.17Ad-22.

6 17 CFR 240.17Ab2-2.

7 15 U.S.C. 78q-1.

8 12 U.S.C. 5461 et seq.

establish enhanced standards for the operation and governance of those clearing agencies registered with the Commission that meet the definition of a "covered clearing agency," as defined by Rule 17Ad-22(a)(5)[9] (collectively, the new and amended rules are herein referred to as "CCA" rules). The CCA rules require that a covered clearing agency, among other things: "establish, implement, maintain and enforce written policies and procedures reasonably designed to . . . [c]over . . . its credit exposures to its participants by establishing a risk-based margin system" that satisfies certain criteria, including that it produces margin levels commensurate with the risks of particular products, collects margin at least daily, collects margin sufficient to cover exposure between the last margin collection and position closeout, uses reliable pricing sources, appropriately measures credit exposure and regularly reviews, tests and verifies its margin methodology.[10]

OCC is defined as a covered clearing agency under the CCA rules, and therefore is subject to the requirements of the CCA rules, including Rule 17Ad-22(e)(6).[11] Accordingly, OCC proposes to formalize its Margin Policy, as described below, to describe its approach for collecting margin and managing the credit exposures presented by its Clearing Members.

<u>Margin Policy</u>

The purpose of the Margin Policy is to describe OCC's approach for collecting margin and managing the credit exposure presented by its Clearing Members, so as to ensure that its margin methodologies are governed and implemented in a manner that is

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9 17 CFR 240.17Ad-22(a)(5).

10 17 CFR 240.17Ad-22(e)(6).

11 <u>Id.</u>

compliant with Rule 17Ad-22(e)(6).[12] The Margin Policy describes, in general: (i) the treatment of the various types of positions held by Clearing Members in connection with margin calculations; (ii) OCC's cross-margin programs with other clearing agencies; (iii) the treatment of collateral included in margin calculations; (iv) the model assumptions and market data OCC uses as inputs for its margin calculation methodologies; (v) OCC's margin calculation methodologies; (vi) protocols surrounding OCC's exercise of margin calls and adjustments; and (vii) daily back-testing and model validation that OCC conducts to measure performance of its margin methodologies.

The Margin Policy is designed to reflect OCC's efforts to provide for robust internal controls and governance surrounding its margin methodologies and promote compliance with the CCA rules, in particular Rule 17Ad-22(e)(6),[13] as informed by the Commission in the adopting release for the CCA rules.[14] The Margin Policy is part of a broader framework, including OCC's By-Laws, Rules and other policies, that is designed to support the resiliency of OCC by ensuring that it appropriately sizes margin to market risks.[15] The key substantive aspects of the Margin Policy, and how they foster compliance with the requirements of the CCA rules, are described in greater detail below.

Treatment of Various Types of Positions

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12 Id.

13 Id.

14 Securities Exchange Act Release No. 78961 (September 28, 2016), 81 FR 70786 (October 13, 2016) ("CCA Adopting Release").

15 CCA Adopting Release, supra note 14 at 70812 (noting 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.").

The Margin Policy describes the treatment of various types of positions, originating from different types of market participants, in connection with OCC's calculation of margin requirements. As specified in OCC's By-Laws, OCC utilizes different types of Clearing Member accounts in order to maintain compliance with the relevant Customer protection and segregation requirements of the Commission and the Commodity Futures Trading Commission ("CFTC"), which affects how margin is calculated because of different assumptions regarding how such accounts or positions would be liquidated in the event of a Clearing Member default. Taking into account these different types of products in different types of accounts, with different Clearing Member liquidation scenarios, enables OCC to set margin requirements commensurate with the actual risks presented by these positions and further its compliance with the requirements in Rule 17Ad-22(e)(6)(i) and (v), which require that a covered clearing agency's policies and procedures be reasonably designed to establish a risk-based margin system that takes into account the "risks and particular attributes of each relevant product, portfolio, and market" and use "an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products."[16]

One category of positions addressed in the Margin Policy is long securities options positions. Under the Margin Policy, these positions are segregated from a Clearing Member's other positions under the assumption that such positions are fully paid and pose no additional risk to OCC, and the Margin Policy explains that a Clearing Member's segregated long positions are not included as part of its margin calculation. In addition, Clearing Members' customer segregated futures accounts are margined

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[16] 17 CFR 240.17Ad-22(e)(6)(i) and (v).

separately from Clearing Members' securities and/or proprietary accounts, and margin for these accounts is calculated on a gross basis by computing margin requirements for each customer account independently, and then aggregating the individual margin calculations to calculate the gross margin required from the Clearing Member. The Margin Policy further notes that OCC also computes the margin requirements for customer segregated futures accounts on a net basis and holds the greater of the net or gross margin requirement.

As described in the Margin Policy, stock loan/borrow positions are included as long/short stock positions in margin calculations on a net basis and may be offset against other positions held in an account. However, while OCC includes these positions in its risk calculations, it does not include the net asset value of these positions in its margin requirement calculations, which allows OCC to maintain financial resources in a manner that is consistent with the manner in which such positions would be liquidated during a Clearing Member default. In the event of such a default, OCC would instruct the non-defaulting Clearing Member to buy in or sell out of the position, with OCC compensating the Clearing Member for any difference between last mark and the closeout price.

Cross-Margining

The Margin Policy addresses the cross-margin programs that OCC maintains with other clearinghouses, which affects the calculation of margin with respect to positions in certain index options, options on centrally cleared fund shares, and futures and options on futures held as part of one of the programs, because positions are treated as if they were held within a single account at OCC. Under Rule 17Ad-22(e)(6)(v) a covered clearing agency's policies and procedures must be reasonably designed to establish a risk-based

margin system that uses appropriate margin methods for measuring "credit exposure . . . and portfolio effects across products,"[17] which the CCA Adopting Release expressly states should take into consideration cross-margining arrangements with other clearinghouses.[18] The Margin Policy's allowance for offsets in required margin when calculating requirements for cross-margin products furthers compliance with this CCA rule.

Collateral

To mitigate 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. Collateral management is generally governed by OCC's Collateral Risk Management Policy, but the Margin Policy does provide a general description of how the use of deposits in lieu of margin and collateral in margins may affect margin calculations. This furthers the purpose of Rules 17Ad-22(e)(6)(i) and (v) in that incorporating these elements enables OCC to set margin requirements commensurate with its actual credit exposure to its Clearing Members.[19]

The Margin Policy describes that OCC permits Clearing Members to make deposits in lieu of margin, which enable them to meet their margin requirements for securities options by posting escrow or specific deposits, *i.e.*, typically customer securities that have been fully paid and that represent the securities deliverable upon assignment of a short option or a deposit of acceptable collateral equal to the underlying

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[17] 17 CFR 240.17Ad-22(e)(6)(v).

[18] CCA Adopting Release, supra note 14, at 70819.

[19] 17 CFR 240.17Ad-22(e)(6)(i) and (v).

value or aggregate exercise price of the option being covered, depending on the type of option. Because these short positions are fully collateralized, the Margin Policy specifies that OCC does not include deposits in lieu of margin when calculating margin requirements.

The Margin Policy also indicates that OCC's margin methodology takes into account certain forms of posted margin when calculating a Clearing Member's margin requirement, a practice OCC refers to as "collateral in margins." OCC computes margin requirements based on a combination of open positions in cleared contracts and any deposits of collateral eligible for inclusion in OCC's margin methodologies, *e.g.*, stocks, exchange-traded fund securities and eligible government securities. OCC's margin methodologies also incorporate scenarios that could exacerbate or mitigate risk exposure as a result of the collateral type deposited into its margin requirement calculations, thereby mitigating risk by creating an incentive for Clearing Members to deposit collateral that hedges their exposures in cleared contracts. The Margin Policy's recognition of the risk interactions between these open positions and collateral deposited as margin is consistent with the requirement of Rule 17Ad-22(e)(6)(v) that a covered clearing agency's policies and procedures be reasonably designed to establish a risk-based margin system that takes into account "portfolio effects across products" when measuring credit exposure.[20]

Model Assumptions, Sensitivity Analyses and Market Data

The Margin Policy has historically specified that OCC performs: (i) daily backtesting of each Clearing Member Account, (ii) daily backtesting of OCC's margin

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[20] 17 CFR 240.17Ad-22(e)(6)(v).

methodology and (iii) monthly review of the assumptions used in performing the backtesting. The Margin Policy has also specified that all critical margin model assumptions should be consistent with OCC's default management assumptions. OCC performed the aforementioned backtesting in order to monitor whether the margin methodology is functioning as intended and appropriately captures the risks that OCC's Clearing Members present to it.

With the adoption of the CCA rules, and to enhance OCC's monitoring of its margin methodology, the proposed Margin Policy would establish additional monthly reviews of its margin methodology. First, the Margin Policy would specify that key model parameters and assumptions are also subject to a monthly, or more frequently when market conditions warrant, sensitivity analysis. In identifying which parameters and assumptions should be subject to this sensitivity analysis, OCC surveyed relevant industry guidance on the appropriate parameters and assumptions to first include in the sensitivity analysis. OCC plans to increase the number of assumptions and parameters included in the sensitivity analysis on an iterative basis as the process becomes more mature. Second, the Margin Policy would specify that OCC performs a monthly review of its parameters for business backtesting. OCC determined that all parameters contained in its margin methodology should be included in this monthly parameter review, and has identified all of these. The Margin Policy would also specify that this sensitivity analysis and parameter review would make use of both actual and hypothetical portfolios. These additions to the Margin Policy are designed to be consistent with Rules 17Ad-22(e)(6)(vi)(B) and (C), which require that policies and procedures of a covered clearing agency be reasonably designed to establish a risk-based margin system that incorporates

monthly, or more frequent, sensitivity analyses and review of its parameters and assumptions for backtesting.[21]

The proposed Margin Policy would specify that the results of all such analyses are reported no less frequently than monthly to OCC's Model Risk Working Group, which then may escalate any issues to OCC's Management Committee. This reporting requirement is designed to be consistent with Rule 17Ad-22(e)(6)(vi)(D), which requires policies and procedures of a covered clearing agency to be reasonably designed to establish a risk-based margin system under which such analyses are reported to the covered clearing agency's "appropriate decision maker," who may use "these results to evaluate the adequacy of and adjust its margin methodology, model parameters, and any other relevant aspects of its credit risk framework."[22]

The Margin Policy describes how OCC obtains the market data that it uses to value Clearing Members' portfolios and collateral deposits, perform mark-to-market calculations, support expiration processing, generate theoretical values for margin and Clearing Fund calculations, and support customer-level margin calculations. Rule 17Ad-22(e)(6)(iv) requires that a covered clearing agency's policies and procedures be reasonably designed to establish a risk-based margin system that uses "reliable sources of timely price data" and uses "procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable."[23] In compliance with this requirement, the Margin Policy requires OCC to take measures to

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[21] 17 CFR 240.17Ad-22(e)(6)(v)(B) and (C).

[22] 17 CFR 240.17Ad-22(e)(6)(v)(D).

[23] 17 CFR 240.17Ad-22(e)(6)(iv).

ensure the quality and completeness of any market data it acquires. Primary among these measures is the use of redundant sources for market data and pricing system infrastructure and, when selecting vendors, prioritizing the quality and reliability of a data provider's service and its ability to provide data in a variety of market conditions, including periods of market stress. This aspect of the Margin Policy is specifically responsive to the Commission's statement in the CCA Adopting Release that a covered clearing agency should consider the ability of the vendor to provide data in a variety of market conditions, including periods of market stress and not just based on cost alone.[24]

The Margin Policy explains how, in order to ensure the integrity of this data, OCC monitors for delays in its receipt of price data and overall system health, as well as erroneous price data or interruptions in pricing data availability. The Margin Policy specifies that, in certain cases, OCC may be obligated to use settlement prices that are provided directly by the listing exchange[25] and prescribes procedures for utilizing alternative data sources where a final settlement value is not available from the listing exchange.

The Margin Policy also specifies that OCC utilizes sound valuation models, such as price-editing and smoothing,[26] as well as system edit checks, and automated and manual controls with any price data it obtains. Where OCC does not receive pricing

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[24] CCA Adopting Release, supra note 14, at 70819.

[25] In such a case, the listing exchange transmits price files to OCC, and the data is then processed by OCC systems and manually validated.

[26] "Smoothing" is a process OCC uses to calculate final prices, volatility measures, delta values and vega values for securities and futures options. The purpose of smoothing is to minimize arbitrage opportunities while producing final prices that remain within the bid-ask spread provided to OCC by the market.

information on a daily basis for a product, the Margin Policy specifies that OCC would rely on modeled prices. These requirements are designed to facilitate OCC's compliance with the Rule 17Ad-22(e)(6)(iv) requirement to maintain policies reasonably designed to establish a risk-based margin system that addresses "circumstances in which pricing data are not readily available or reliable."[27]

Margin Methodology

OCC's Margin Policy contains a description of OCC's System for Theoretical Analysis and Numerical Simulations ("STANS"), its margin methodology for all positions it margins on a net basis. As required in Rule 17Ad-22(e)(6), STANS is a risk-based methodology that is designed to produce a margin requirement that exceeds OCC's minimum regulatory obligations. OCC achieves this 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.

As a statistical methodology that relies on randomized Monte Carlo simulations to generate ES estimates, STANS will produce slightly different ES estimates when Monte Carlo simulations are performed on each Clearing Member account; OCC refers to such variance in ES estimates as the "standard error." However, significant variations in ES estimates among Clearing Member accounts may also signify other issues, such as underlying issues with STANS or its appropriateness for estimating ES for a particular Clearing Member account. Previously, OCC has relied on the expert judgment of its staff and undefined, qualitative factors to identify whether STANS may not be functioning as expected. After performing statistical analysis on the size of the standard error, and at

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[27] 17 CFR 240.17Ad-22(e)(6)(iv).

what level an observed error is greater than the standard error at a statistically significant level, the proposed Margin Policy would state that the tolerance for the standard error of a typical, or median, Clearing Member account ES measurement in STANS is 5%.[28] This tolerance would define a statistical error threshold above which OCC must investigate whether STANS is appropriately measuring a Clearing Member's account.

Furthermore, any margin requirement calculated by STANS is on a "portfolio" basis, which inherently reflects offsets between products within each portfolio. This is intended to meet the Rule 17Ad-22(e)(6)(iii) requirement, as explained in the CCA Adopting Release, that a covered clearing agency's policies and procedures be reasonably designed to establish a risk-based margin system that calculates margin on a portfolio level and set 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.[29]

The Margin Policy also describes how STANS utilizes Monte Carlo simulations of portfolio values at a two-day risk horizon, based on the behavior of various risk factors affecting values of Clearing Member accounts, including implied volatility surfaces of options for all equity and index risk factors. These risk factors are relevant to the products in a Clearing Member's portfolio and are critical drivers of the inherent exposure OCC has to its Clearing Members' portfolios. Including them in STANS therefore enhances the robustness of OCC's margin resources and incentivizes Clearing

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[28] This use of a 5% ES error tolerance is a proposed enhancement to OCC's existing margin policies and procedures.

[29] CCA Adopting Release, supra note 14, at 70819; 17 CFR 240.17Ad-22(e)(6)(iii).

Members to be aware of the risks in their portfolios and mitigate those risks to avoid higher margin requirements. The use of risk factors is intended to comply with Rule 17Ad-22(e)(6)(v), which requires that a covered clearing agency's policies and procedures be reasonably designed 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]

For purposes of calculating margin requirements, STANS assumes a two-day liquidation period for all positions margined on a net basis. The Margin Policy explains that this assumption is based on a thorough analysis of market conditions and the risks associated with the products OCC clears. As the Commission noted in the CCA Adopting Release, the assumed liquidation period in a margin model should be tailored to the market conditions and the risks of the products being cleared.[31] OCC's assumed two-day liquidation period is so tailored, and the Margin Policy is designed to enable OCC to comply with Rule 17Ad-22(e)(6)(iii), under which a covered clearing agency's policies and procedures must be reasonably designed to establish a risk-based margin system requirement that covers potential future exposure to Clearing Members in the interval between the last margin collection and the close-out of a Clearing Member's positions should it default.[32] This assumption allows OCC to maintain consistency with the

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[30] 17 CFR 240.17Ad-22(e)(6)(v).

[31] CCA Adopting Release, supra note 14, at 70818 (". . . liquidation periods generally should be tailored to the market conditions and risks of the products being cleared.").

[32] 17 CFR 240.17Ad-22(e)(6)(iii).

timeframes required to facilitate the hedging or close-out of a position, which OCC would employ under its default management procedures.

The Margin Policy describes other aspects of STANS that are designed to address the particular attributes and risk factors of the products being margined, as is consistent with Rule 17Ad-22(e)(6)(i) and (v).[33] This includes the use of 500 business days of "look-back" historical data, where available, in its econometric models and the incorporation of multiple stress tests components into STANS that are designed to identify increases in OCC's exposure that may arise from atypical market movements.

The Margin Policy provides for daily evaluation of the market data that supports STANS' econometric models and monthly recalibration of STANS to ensure that it accounts for changes to market conditions over the past month. These recalibrations incorporate a long-run historical volatility estimate, which serves as a minimum volatility value during periods of low market volatility, reducing procyclicality in OCC's margin estimates by not allowing margin rates to drop below a certain long-run measure of market volatility. The Margin Policy also provides that on a daily basis OCC utilizes a "scale factor" to account for daily changes in market volatility that may occur between monthly recalibrations. In some instances, products less dependent on the monthly recalibration process – such as Treasury and volatility contracts – may have their econometric models recalibrated on a daily basis.

The Margin Policy provides for the use of alternatives to STANS for certain products or accounts. For example, OCC has the ability to apply add-on charges to cover Stock Loan position exposures arising from Clearing Member specific preferences and

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[33] 17 CFR 240.17Ad-22(e)(6)(i) and (v).

surcharges for certain Clearing Members with higher risk levels. Furthermore, the Margin Policy explains that OCC utilizes the Standard Portfolio Analysis of Risk margin methodology ("SPAN"), instead of STANS, to compute gross margin for the segregated futures customer accounts of Clearing Members. SPAN is a market simulation-based VaR system that assesses risk on a portfolio basis for a wide variety of financial instruments. SPAN uses "scan ranges" that estimate price movements based on historical volatility data of specific products, which are in turn used to estimate movements in affected portfolios. "Scan ranges" also serve as minimum estimates of portfolio volatility in times of low market volatility to guard against the effects of procyclicality, and are regularly monitored and recalibrated by OCC's Pricing & Margins team. A description of SPAN is provided in the Margin Policy. Like STANS, SPAN is intended to comply with Rule 17Ad-22(e)(6), including the Rule 17Ad-22(e)(6)(iii) requirement that a covered clearing agency's policies and procedures be reasonably designed to establish a risk-based margin system that calculates margins on a portfolio level and sets initial margin requirements that meet "an established single-tailed confidence level of at least 99 percent" with respect to each portfolio's distribution of future exposure.[34] The Margin Policy indicates that OCC will also calculate a segregated futures customers account's net margin requirement under STANS, and that if the STANS-calculated requirement exceeds the SPAN-calculated requirement, an add-on is applied to the Clearing Member's account so that the Clearing Member is effectively required to meet the greater of the gross SPAN or two-day net STANS requirement.

Margin Calls and Adjustments

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[34] CCA Adopting Release, supra note 14, at 70819; 17 CFR 240.17Ad-22(e)(6)(iii).

The Margin Policy provides for OCC calculating and collecting margin requirements on a daily basis, as well as making intraday margin calls and adjustments. This is consistent with Rule 17Ad-22(e)(6)(ii), under which a covered clearing agency must maintain policies and procedures reasonably designed to establish a risk-based margin system that "collects margin . . . at least daily" and includes "the authority and operational capacity to make intraday margin calls in defined circumstances."[35]

As described in the Margin Policy, OCC issues margin calls during standard trading hours within a timeframe established in OCC's procedures, when unrealized losses[36] exceeding 50% of an account's total risk charges are observed for that account, based on start-of-day positions. Intraday margin calls are also subject to a minimum value established in OCC's procedures, and must be approved by a Vice President or above. The Margin Policy describes the process by which margin calls may be deferred and evaluated and for execution of a margin call outside of the time frame described above.

The Margin Policy provides for certain exceptions to the above intraday margin call time frame. For instance, in the case of extended trading hours ("ETH"), OCC may issue a margin call prior to 9:00 AM Central Time when (1) unrealized losses observed for an account, based on new ETH positions, exceed 25% of that account's total risk charges and (2) the overall Clearing Member portfolio is also experiencing losses. ETH margin calls are limited to price changes in ETH-eligible products, and similarly remain

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[35] 17 CFR 240.17Ad-22(e)(6)(ii).

[36] This excludes accounts holding only collateral positions or long option positions where the account's net asset value could never become negative.

subject to a minimum value established in OCC's procedures and must be approved by a Vice President or above. In the case of bank holidays, margin calls may be issued against Clearing Members on the day prior to the bank holiday when it coincides with a day one or more of OCC's markets are open for trading.

The Margin Policy indicates that additional margin adjustments may be performed as the need arises and following approval by an officer of OCC.

Back-Testing and Model Validation

OCC's Margin Policy provides that OCC conducts daily back-tests for each margin account, analyzing in detail all accounts exhibiting losses in excess of calculated margin requirements. This is intended to comply with Rule 17Ad-22(e)(6)(vi)(A), which calls for back-tests of the margin model at least daily, "using standard predetermined parameters and assumptions."[37] To the extent the results of these back-tests reflect losses in excess of the aggregate ES and stress test add-on charges required for a Clearing Member's account, the test result will be classified as an "exceedance," and all such exceedances will be reported no less frequently than monthly and evaluated through OCC's governance process for model risk management.

The Margin Policy states that OCC's Model Validation Group ("MVG"), an independent group with a separate reporting line from model developers, is responsible for evaluating the overall performance of STANS and its associated models on at least an annual basis. This aspect of the policy is intended to comply with Rule 17Ad-22(e)(6)(vii), under which a covered clearing agency's policies and procedures must be reasonably designed to establish a risk-based margin system that requires "a model

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[37] 17 CFR 240.17Ad-22(e)(6)(vi)(A).

validation for the covered clearing agency's margin system and related models to be performed not less than annually" or more frequently as may be contemplated by the agency's risk management framework.[38] MVG presents its findings and recommendations to the Risk Committee of OCC's Board.

(2) Statutory Basis

Section 17A(b)(3)(F) of the Act[39] 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. Through each of its respective sections, the Margin Policy provides a framework for managing margin and credit exposure presented by OCC's Clearing Members. To manage these exposures, the Margin Policy establishes the manner in which OCC requires Clearing Members to deposit margin to assure performance and to mitigate their credit exposures if a Clearing Member defaults. The Margin Policy also describes the types of positions OCC will use in making margin calculations, how OCC will manage margin risk arising from its cross-margining program, key assumptions of OCC's margin methodologies, OCC's margin methodologies, how OCC administers margin calls on both daily and intraday bases, and how OCC monitors and reports on the performance of its margin systems. The Margin Policy's promotion of each aforementioned activity ultimately inures to the protection of investors and the public interest, as well as the safeguarding of securities and funds in

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38 17 CFR 240.17Ad-22(e)(6)(vii).

39 15 U.S.C. 78q-1(b)(3)(F).

OCC's custody or control[40] in a manner consistent with Section 17A(b)(3)(F) of the Act.[41]

OCC also believes that the Margin Policy is consistent with the requirements of Rule 17Ad-22(e)(6), as detailed above.[42] For example, the Margin Policy is reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that meets the minimum regulatory requirements in: collecting margin on a daily or intraday basis at levels commensurate with the risks and particular attributes of each relevant product, portfolio and market, as is consistent with Rules 17Ad-22(e)(6)(i), (ii) and (v);[43] calculating margin requirements sufficient to cover potential future exposures to a defaulting Clearing Member during the interval between last margin collection and closeout, as is consistent with Rule 17Ad-22(e)(6)(iii);[44] using reliable sources of timely price data and sound valuation models and procedures when data is unavailable, as is consistent with Rule 17Ad-(22)(e)(6)(iv);[45] using appropriate methods for measuring credit exposures that account for relevant product risk factors and portfolio effects across products, as is consistent with Rules 17Ad-22(e)(6)(i) and (v);[46] and conducting daily backtests of its margin models, conducting sensitivity analyses of the

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[40] These activities, in turn, help ensure that OCC remains capable of continuing its operations and services in a manner that promotes the prompt and accurate clearance and settlement of securities transactions.

[41] 15 U.S.C. 78q-1(b)(3)(F).

[42] See supra notes 12-20, 21-24, 27, 29-35, 37 and 38 and accompanying text.

[43] See supra notes 16, 33 and 35 and accompanying text.

[44] See supra note 32 and accompanying text.

[45] See supra notes 23 and 27 and accompanying text.

[46] See supra notes 16, 17, 20 and 30 and accompanying text.

underlying parameters and assumptions monthly, or more frequently, and engaging in model validation not less frequently than annually, as is consistent with Rules 17Ad-22(e)(vi) and (vii).[47]

The proposed rule change is not inconsistent with the existing rules of OCC, including any other rules proposed to be amended.

(B) Clearing Agency's Statement on Burden on Competition

Section 17A(b)(3)(I) of the Act[48] requires that the rules of a clearing agency not impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. OCC does not believe that the proposed rule change would impact or impose any burden on competition. The proposed rule change sets forth the framework surrounding OCC's margin methodologies. The Margin Policy primarily describes OCC's existing policies and practices with respect to margin, much of which is also addressed in OCC's By-Laws and Rules. All Clearing Members are subject to the same methodologies for determining their margin requirements, dictated by the overall risk to OCC presented by the positions in their respective portfolios. Consequently, no Clearing Member is provided a competitive advantage over any other Clearing Member. Further, the Margin Policy does not affect Clearing Members' access to OCC's services or impose any direct burdens on Clearing Members. Accordingly, the proposed rule change would not unfairly inhibit access to OCC's services or disadvantage or favor any particular user in relationship to another user.

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[47] See supra notes 37 and 38 and accompanying text.

[48] 15 U.S.C. 78q-1(b)(3)(I).

For the foregoing reasons, OCC believes that the proposed rule change is in the public interest, would be consistent with the requirements of the Act applicable to clearing agencies, and would not impact or impose a burden on competition.

(C) Clearing Agency's Statement on Comments on the Proposed Rule Change Received from Members, Participants or Others

Written comments on the proposed rule change were not and are not intended to be solicited with respect to the proposed rule change and none have been received.

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 self- regulatory organization consents, the Commission will:

(A) by order approve or disapprove the proposed rule change, or

(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-OCC-2017-007 on the subject line.

Paper Comments:

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-OCC-2017-007. 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, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of OCC and on OCC's website at https://www.theocc.com/about/publications/bylaws.jsp.

All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly.

All submissions should refer to File Number SR-OCC-2017-007 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.[49]

Robert W. Errett
Deputy Secretary

Action as set forth recommended herein APPROVED pursuant to authority delegated by the Commission under Public Law 87-592.

For: Division of Trading and Markets

By:______________________________

Print Name:_______________________

Date:____________________________

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49 17 CFR 200.30-3(a)(12).

OMB APPROVAL
OMB Number: 3235-0045 Estimated average burden hours per response............38

Required fields are shown with yellow backgrounds and asterisks.

Page 1 of * 19

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

File No.* SR - 2017 - * 007
Amendment No. (req. for Amendments *) 1

Filing by Options Clearing Corporation

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 * Justin
Last Name * Byrne
Title * Vice President, Regulatory Filings
E-mail * jbyrne@theocc.com
Telephone * (202) 971-7238
Fax (312) 322-6280

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 12/18/2017

By Justin W. Byrne
(Name *)

(Title *)
Vice President, Regulatory Filings

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.

Justin Byrne, jbyrne@theocc.com

Required fields are shown with yellow backgrounds and asterisks.

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

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.

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 19b-4

Proposed Rule Change

by

THE OPTIONS CLEARING CORPORATION

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

The Options Clearing Corporation ("OCC") hereby submits this partial amendment, constituting Amendment No. 1, to its proposed rule change SR-OCC-2017-007, in which OCC proposes to formalize and update OCC's Margin Policy ("Policy") in connection with requirements applicable to OCC under Rule 17Ad-22(e)(6)[1] ("Initial Filing"). OCC is filing this partial amendment to: (i) correct the summary box found on page one of the Policy (page 52 of the Initial Filing) to state that OCC's Board of Directors ("Board") is ultimately responsible for annual review and approval of the Policy, and (ii) correct citations on page three of the Policy (pages 53 and 54 of the Initial Filing) that cite provisions in OCC's Rules governing its stock loan program.

Under the Initial Filing, the Policy would state that both the Risk Committee of the Board and the Board are responsible for annual review and approval of the Policy. Though the Risk Committee of the Board is responsible for reviewing and recommending that the Board approve the Policy, OCC's governing documents require that the Board have ultimate responsibility for reviewing and approving the Policy. Accordingly, OCC proposes to amend the summary box on page one of the Policy (page 52 of the Initial Filing) to state that the Board solely, rather than along with the Risk Committee, maintains responsibility for annual review and approval of the Policy.

Under the Initial Filing, the Policy would also cite OCC Rule 1107 in describing OCC's powers related to non-defaulting Clearing Members in the event a stock loan Clearing Member defaults. Though Rule 1107 covers general OCC's powers in the event of a Clearing Member default, Rules 2211 and 2211A more specifically cover OCC's powers regarding stock loan positions in the event of a Clearing Member default. Accordingly, OCC proposes to update the rule citations on page three of the Policy (pages 53 and 54 of the Initial Filing) from Rule 1107 to Rules 2211 and 2211A.

A marked copy of the changes to the rule text proposed in this amendment against the version of the rule text in the Initial Filing is attached as confidential Exhibit 4.

The partial amendment would not change the purpose of or statutory basis for the proposed rule change. All other representations in the Initial Filing remain as stated therein and no other changes are being made.

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[1] 17 CFR 240.17Ad-22(e)(6).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, The Options Clearing Corporation has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.

THE OPTIONS CLEARING CORPORATION

By:______________________________________
Justin W. Byrne
Vice President, Regulatory Filings