# SECURITIES AND EXCHANGE COMMISSION (Release No. 34-69723; File No. SR-OCC-2013-08)

June 10, 2013

Self-Regulatory Organizations; The Options Clearing Corporation; Notice of Filing of Proposed Rule Change to Reflect Enhancements in OCC's System for Theoretical Analysis and Numerical Simulations as Applied to Longer-Tenor Options

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")<sup>1</sup> and

Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on May 30, 2013, The Options

Clearing Corporation ("OCC") filed with the Securities and Exchange Commission

("Commission") the proposed rule change as described in Items I and II below, which

Items have been prepared by the clearing agency.<sup>3</sup> The Commission is publishing this

notice to solicit comments on the proposed rule change from interested persons.

I. <u>Clearing Agency's Statement of the Terms of Substance of the Proposed Rule</u> <u>Change</u>

The proposed rule change would provide for enhancements in OCC's margin model for longer-tenor options (*i.e.*, those options with at least three years of residual

tenor) and would reflect those enhancements in the description of OCC's margin model

in OCC's Rules.

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>&</sup>lt;sup>3</sup> OCC also filed the proposed rule change as an advance notice under Section 806(e)(1) of Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act entitled the Payment, Clearing, and Settlement Supervision Act of 2010 ("Clearing Supervision Act"). 12 U.S.C. 5465(e)(1). <u>See</u> SR-OCC-2013-803.

# II. <u>Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the</u> <u>Proposed Rule Change</u>

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 such statements.<sup>4</sup>

# (A) <u>Clearing Agency's Statement of the Purpose of, and Statutory Basis for,</u> <u>the Proposed Rule Change</u>

The purpose of this proposed rule change is to provide for enhancements in OCC's margin model for longer-tenor options (*i.e.*, those options with at least three years of residual tenor) and to reflect those enhancements in the description of OCC's margin model in OCC's Rules. OCC also proposes to make changes to the description of OCC's margin model to clarify that description.

## 1. Background

On August 30, 2012, OCC submitted a rule change with respect to OCC's

proposal to clear certain over-the-counter options on the S&P 500 Index ("OTC

Options").<sup>5</sup> The OTC Options Rule Filing, as amended, added a statement appearing

before Section 6 of Article XVII of OCC's By-Laws that "THE BY-LAWS IN THIS

# SECTION (OTC INDEX OPTIONS) ARE INOPERATIVE UNTIL FURTHER

<sup>&</sup>lt;sup>4</sup> The Commission has modified the text of the summaries prepared by OCC.

<sup>&</sup>lt;sup>5</sup> See Release No. 34-67835; File No. SR-OCC-2012-14 ("OTC Options Rule Filing"); published September 18, 2012 at 77 Fed. Reg. 57602. SR-OCC-2012-14 replaced SR-OCC-2011-19, which was withdrawn on March 9, 2012. The OTC Options Rule Filing was subsequently amended to add a statement to Section 6 of Article XVII of OCC's By-Laws providing that the OTC Index Options By-Laws were to be inoperative until further notice by OCC. See File No. SR-OCC-2012-14 Amendment No.1.

NOTICE BY THE CORPORATION" to clarify that OCC would not commence clearing OTC Options until the changes being made to OCC's margin model for longer-tenor options, as provided in this rule change, were put in place, notwithstanding whether the OTC Options Rule Filing had already been approved. OCC is now proposing to remove this statement from Section 6, which will allow OCC to commence clearing of OTC Options on the S&P 500 Index.

Additional information concerning OCC's proposal to clear OTC Options is included in the OTC Options Rule Filing. As described in the OTC Options Rule Filing, OCC intends to use its STANS margin system to calculate margin requirements for OTC Options on the same basis as for exchange-listed options cleared by OCC. However, OCC is proposing to implement enhancements to its risk models for all longer-tenor options (including OTC Options) in order to better reflect certain risks of longer-tenor options. The changes described herein would apply to all longer-tenor options cleared by OCC and would be implemented before OCC begins clearing OTC Options.

#### 2. <u>Description of Proposed Rule Changes</u>

OCC states that the proposed rule change includes daily OTC quotes, variations in implied volatility, and valuation adjustments in the modeling of all longer-tenor options under STANS, thereby enhancing OCC's ability to set margin requirements through the use of risk-based models and parameters and encouraging clearing members to have sufficient financial resources to meet their obligations to OCC. OCC believes the proposed rule change would not affect OCC's safeguarding of securities and funds in its custody or control because, though it may change margin requirements in respect of certain longer-tenor options, it does not change the manner in which margin assets are

pledged. In addition, OCC believes the proposed rule change allows OCC to enhance its risk management procedures and controls related to longer-tenor options.

OCC states that it calculates clearing-level margin using STANS, which determines the minimum expected liquidating value of each account using a large number of projected price scenarios created by large-scale Monte Carlo simulations. OCC is proposing to implement enhancements to the STANS margin calculation methodology with respect to longer-tenor options and to amend Rule 601 to reflect these enhancements as well as to make certain clarifying changes in the description of STANS in Rule 601. The specific details of the calculations performed by STANS are maintained in OCC's proprietary procedures for the calculation of margin and coded into the computer systems used by OCC to calculate daily margin requirements.

OCC has proposed at this time to clear only OTC Options on the S&P 500 index and only such options with tenors of up to five years. However, OCC currently clears FLEX Options with tenors of up to fifteen years. While OCC believes that its current risk management practices are adequate for current clearing activity, OCC proposes to implement risk modeling enhancements with respect to all longer-tenor options.

## Daily OTC Indicative Quotes

OCC states that, in general, the market for listed longer-tenor options is less liquid that the market for other options, with less volume and therefore less price information. In order to supplement OCC's pricing data derived from the listed markets, and to improve the price discovery process for longer-tenor options, OCC proposes to include in the daily dataset of market prices used by STANS to value each portfolio indicative daily quotations obtained through a third-party service provider that obtains these quotations through a daily poll of OTC derivatives dealers. A third-party service provider was selected to provide this data in lieu of having the data provided directly by the OTC derivatives dealers in order to avoid unnecessarily duplicating reporting that is already done in the OTC markets.

#### Variations in Implied Volatility

OCC states that, to date, the STANS methodology has assumed that implied volatilities of option contracts do not change during the two-day risk horizon used by OCC in the STANS methodology. According to OCC, back testing of its margin models has identified few instances in which this assumption would have, as a result of sudden changes in implied volatility, resulted in margin deposits insufficient to liquidate clearing member accounts without loss. However, as OCC expects to begin clearing more substantial volumes of longer-tenor options, including OTC Options, OCC believes that implied volatility shocks may become more relevant due to the greater sensitivity of longer-tenor options to implied volatility. OCC therefore proposes to introduce variations in implied volatility in the modeling of all longer-tenor options under STANS. OCC states that this will be achieved by incorporating, into the set of risk factors whose behavior is included in the econometric models underlying STANS, time series of proportional changes in implied volatilities for a range of tenors and in-the-money and out-of-the-money amounts representative of the dataset provided by OCC's third-party service provider.

OCC states that it has reviewed individual S&P 500 Index put and call options positions with varying in-the-money amounts and with four to nine years of residual tenor and that such review indicates that the inclusion of modeled implied volatilities

tends to result in less margin being held against short call positions and more margin being held against short put positions. OCC believes these results are consistent with what would be expected given the strong negative correlation that exists between changes in implied volatility and market returns.

OCC states that the description of the Monte Carlo simulations performed within STANS in Rule 601 references revaluations of assets and liabilities in an account under numerous price scenarios for "underlying interests." In order to accommodate the proposed implied volatility enhancements, OCC is proposing to amend this portion of Rule 601 to provide that the scenarios used may also involve projected levels of other variables influencing prices of cleared contracts and modeled collateral. Accordingly, the references to "underlying interests" are proposed to be deleted.

#### Valuation Adjustment

OCC states that historically it has not cleared a significant volume of longer-tenor options, but that it anticipates that there will be growth in volume of longer-tenor options, including OTC Options, being cleared with three to five year tenors. Longer-tenor options may represent a larger portion of any clearing member's portfolio in the future, and OCC has therefore identified a need to model anticipated changes in the value of longer-tenor options on a portfolio basis in order to address OCC's exposure to longertenor options that may have illiquid characteristics. OCC proposes to introduce a valuation adjustment into the portfolio net asset value used by STANS based upon the aggregate sensitivity of any longer-tenor options in a portfolio to the overall level of implied volatilities at three years and five years and to the relationship between implied volatility and exercise prices at both the three- and five-year tenors in order to allow for

the anticipated market impact of unwinding a portfolio of longer-tenor options, as well as for any differences in the quality of data in OCC's third party service provider's dataset, given that month-end data may be subjected to more extensive validation by the service provider than daily data. In order to accommodate the planned valuation adjustment for longer-tenor options, OCC proposes to add language to Rule 601 to indicate that the projected portfolio values under the Monte Carlo simulations may be adjusted to account for bid-ask spreads, illiquidity, or other factors.

#### Clarification of Pricing Model Reference in Rule 601

Rule 601 currently refers to the use of "options pricing models" to predict the impact of changes in values on positions in OCC-cleared contracts. OCC is proposing to amend this description to reflect that OCC currently uses non-options related models to price certain instruments, such as futures contracts and U.S. Treasury securities. OCC states that this change is not intended to be substantive and simply clarifies the description in Rule 601.

## Effect on Clearing Members

OCC believes that the proposed rule change will affect clearing members who engage in transactions in longer-tenor options, and indirectly their customers, by enhancing the STANS margin calculation methodology for these options. The STANS enhancements could increase margin requirements with respect to these positions. However, OCC states that it does not believe that the enhancements will result in significantly increased margin requirements for any particular clearing member, and therefore that it is not aware of any significant problems that clearing members are likely to have in complying with the proposed rule change.

OCC believes the proposed rule change is consistent with the purposes and requirements of Section 17A(b)(3)(F) of the Act<sup>6</sup> and the rules and regulations thereunder, including Rules 17Ad-22(b)(2) and (d)(2), because, by providing additional clarity to clearing members and others concerning the current calculation of margin requirements under OCC's Rules, while also enhancing the calculation of margin with respect to longer-tenor options, the proposed modifications would help remove impediments to and perfect the mechanism of a national system for the prompt and accurate clearance and settlement of securities transactions,<sup>7</sup> ensure that OCC's rules are reasonably designed to have participation requirements that are objective and publicly disclosed and permit fair and open access,<sup>8</sup> and provide for a well-founded, transparent, and enforceable legal framework.<sup>9</sup> OCC states that the proposed rule change is not inconsistent with any rules of OCC, including any other rules proposed to be amended.

## (B) <u>Clearing Agency's Statement on Burden on Competition</u>

OCC does not believe that the proposed rule change would impose a burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. With respect to a burden on competition among clearing agencies, OCC does not believe that the proposed rule change would have any impact because OCC is the only registered clearing agency that issues options and provides central counterparty services to the options markets.

<sup>9</sup> 17 CFR 240.17Ad-22(d)(1).

<sup>&</sup>lt;sup>6</sup> 15 USC § 78q-1.

<sup>&</sup>lt;sup>7</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>&</sup>lt;sup>8</sup> 17 CFR 240.17Ad-22(d)(2).

OCC does not believe that enhancing OCC's margin model for longer-tenor options would inhibit access to any of OCC's services or disadvantage or favor any user of OCC's services in relationship to any other such user because the model enhancements would apply equally to all clearing members clearing longer-tenor options. Moreover, OCC believes that the proposed rule change would also promote competition among participants in the longer-tenor options markets. The rule change would enhance OCC's ability to manage risk within OCC's existing structure, and improve OCC's ability to reduce systemic risk to the longer-tenor options market in general as well as reduce interdealer counterparty risk in the OTC Options market, allowing for increased participation in this market.

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 impose a burden on competition that is unnecessary or inappropriate in furtherance of the purposes of the Act because the changes would enhance OCC's margin methodology for longer-tenor options in ways that help to promote the purposes of the Act and Rule 17Ad-22 thereunder as described above.

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

Written comments were not and are not intended to be solicited by OCC 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 <u>Federal Register</u> 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 such proposed rule change, or
- (B) institute proceedings to determine whether the proposed rule change should be disapproved.

The proposal shall not take effect until all regulatory actions required with respect to the proposal are completed.<sup>10</sup>

# IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

# Electronic Comments:

- Use the Commission's Internet comment form (<u>http://www.sec.gov/rules/sro.shtml);</u> or
- Send an e-mail to <u>rule-comments@sec.gov</u>. Please include File Number SR-OCC-2013-08 on the subject line.

<sup>&</sup>lt;sup>10</sup> OCC also filed the proposed rule change as an advance notice under Section 806(e)(1) of the Clearing Supervision Act. See supra note 3.

#### Paper Comments:

• Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-OCC-2013-08. 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 am and 3:00 pm. Copies of the filing also will be available for inspection and copying at the principal office of OCC and on OCC's website

(http://www.theocc.com/about/publications/bylaws.jsp). All comments received will be posted without change; the Commission does not edit personal identifying information

from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-OCC-2013-08 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.<sup>11</sup>

Kevin M. O'Neill Deputy Secretary

<sup>&</sup>lt;sup>11</sup> 17 CFR 200.30-3(a)(12).