

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-97763; File No. SR-OCC-2023-004)

June 20, 2023

Self-Regulatory Organizations; The Options Clearing Corporation; Order Granting Approval of Proposed Rule Change by The Options Clearing Corporation to amend and enhance the Options Clearing Corporation’s Model Risk Management Policy

**I. INTRODUCTION**

On April 27, 2023, the Options Clearing Corporation (“OCC”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change SR-OCC-2023-004 pursuant to Section 19(b) of the Securities Exchange Act of 1934 (“Exchange Act”)<sup>1</sup> and Rule 19b-4<sup>2</sup> thereunder. The proposed rule change would amend OCC’s Model Risk Management Policy (the “MRM Policy” or “Policy”) to, in part, broaden the scope of OCC’s processes for managing model risk. The proposed rule change was published for public comment in the Federal Register on May 17, 2023.<sup>3</sup> The Commission has received no comments regarding the proposed rule change.

**II. BACKGROUND<sup>4</sup>**

OCC is a central counterparty (“CCP”), which means it interposes itself as the buyer to every seller and seller to every buyer for financial transactions. As the CCP for the listed options markets in the U.S., as well as for certain futures, OCC is exposed to certain risks arising from its

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

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

<sup>3</sup> Securities Exchange Act Release No. 97484 (May 11, 2023), 88 FR 31549 (May 17, 2023) (File No. SR-OCC-2023-004) (“Notice of Filing”).

<sup>4</sup> Capitalized terms used but not defined herein have the meanings specified in OCC’s Rules and By-Laws, available at <https://www.theocc.com/about/publications/bylaws.jsp>.

relationships with its members. To manage such risks, OCC uses quantitative methods to make estimates, forecasts, and projections in the context of its credit risk models, margin system and related models, and liquidity risk models (each a “Risk Model”).<sup>5</sup>

OCC’s use of models inherently exposes OCC to model risk, such as the risk of losses arising out of decisions based on incorrect or misused model outputs. For example, a model that is not managed properly could potentially cause OCC to under-collect the collateral used to cover credit risk posed by a Clearing Member. OCC’s MRM Policy outlines OCC’s framework for managing model risk and defines the roles and responsibilities throughout the risk model and methodology lifecycle.

Currently, the Policy applies to the Risk Models that OCC uses to determine, quantify, or measure actual or potential risk exposures or risk mitigating actions.<sup>6</sup> The Policy also describes and outlines the roles and responsibilities of various groups at OCC with regard to model risk management.<sup>7</sup> Further, changes to the Policy are subject to annual review and approval by the Risk Committee of OCC’s Board of Directors.<sup>8</sup> As described in more detail below, OCC proposes to expand the application of the Policy to contemplate methodologies comprising Risk Models and their related inputs and outputs, rather than only individual Risk Models. To accommodate the expansion of the Policy’s scope beyond individual Risk Models, OCC proposes to revise the roles and responsibilities described in the MRM Policy. To further

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<sup>5</sup> See Securities Exchange Act Release No. 82785 (Feb. 27, 2018), 83 FR 9345 (Mar. 5, 2018) (File No. SR-OCC-2017-011) (approving the formalization of the MRM Policy).

<sup>6</sup> See id.

<sup>7</sup> See id.

<sup>8</sup> See Notice of Filing, 88 FR at 31552, n. 22.

broaden the Policy, OCC proposes adding a new section regarding the use of tools with quantitative or mathematical techniques not focused on credit risk models, margin system and related models, and liquidity risk models (such tools and techniques referred to as “Risk Applications”).<sup>9</sup>

A. Expanding from Risk Models to Risk Methodologies

As noted above, OCC proposes to expand the scope of its MRM Policy to encompass not only individual Risk Models, but also the methodologies such models comprise. Such “Risk Methodologies” include the related inputs and outputs of OCC’s Risk Models, which OCC uses to estimate or compute the distinct aspects of OCC’s credit (*i.e.*, Clearing Fund and margin) and liquidity resources. To effectuate this expansion, OCC proposes to replace references to Risk Models with references to Risk Methodologies, and to revise the roles and responsibilities of OCC staff as described below.

B. OCC Internal Roles and Responsibilities

OCC proposes changes to the roles and responsibilities defined in its MRM Policy to accommodate the shift in focus from Risk Models to Risk Methodologies. Such changes include the expansion of the Model Risk Management (“MRM”) department’s responsibilities. MRM would become responsible for validating both Risk Models and Risk Methodologies no less than annually.<sup>10</sup> Further, the proposed Policy would require MRM, in validating OCC’s Risk

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<sup>9</sup> OCC also proposes non-material verbiage changes, such as updating references to internal policies and removing duplicative definitions. For example, OCC would remove standalone definitions at the end of the Policy where either the term is defined in the body of the Policy or is not used in the Policy.

<sup>10</sup> Such validations would be performed both prior to implementation as well as on an ongoing basis to evaluate the performance of individual Risk Models. Pursuant to the MRM Policy, OCC requires MRM to validate its Risk Models annually, which OCC defines as every “12 months or 365 days.” The head of MRM would be responsible for

Methodologies, to review the performance of each methodology and verify the related software implementation.<sup>11</sup> Additionally, certain references to a specific department would be replaced with references to such department's parent to encompass a broader set of staff and responsibilities. For example, discussion of OCC's Quantitative Risk Management ("QRM") department's role in monitoring the use and performance of individual Risk Models would be replaced with discussion of OCC's Financial Risk Management ("FRM") department, of which QRM is a part. Similarly, OCC proposes to expand the responsibilities of the Model Risk Working Group ("MRWG") in accordance with the expansion of the MRM Policy.<sup>12</sup> Currently, the MRWG reviews risk model changes and determines which should be sent to OCC's Management Committee for further consideration. OCC proposes to expand the MRWG's purview to include review of Risk Methodologies (not just individual Risk Models).<sup>13</sup>

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developing and maintain OCC's Annual Model Validation Plan. OCC proposes to use the more generic "head of MRM" to accommodate non-material title changes that may occur from time to time. For example, the head of MRM was previously the Executive Director of MRM, but is currently the Managing Director, Model Risk Management.

- <sup>11</sup> Such validations would be governed by two procedures underlying the MRM Policy (the Methodology and Model Validation Procedure and the Methodology and Model Performance Monitoring Procedure), which OCC provided to staff as confidential exhibits to File No. SR-OCC-2023-004.
- <sup>12</sup> The MRWG assists OCC's Management Committee in overseeing and governing OCC's model-related risk issues. In addition to the expansion of responsibilities described here, OCC proposes to describe the membership of the MRWG more generally in the MRM Policy than is currently the case. Based on a review of OCC's Model Risk Working Group Procedure, the Commission understands that the MRM Policy change will not remove any of the current departments represented on the MRWG. OCC provided the MRWG Procedure as a confidential exhibit to File No. SR-OCC-2023-004.
- <sup>13</sup> OCC also proposes non-substantive changes that touch on roles and responsibilities. For example, OCC's Chief Financial Risk Officer ("CFRO") has responsibility for reviewing and approving Risk Model documentation. Currently, the Policy describes review of documentation as the responsibility of the CFRO or the CFRO's delegate. The proposed Policy would instead describe it as the responsibility of the CFRO pursuant to OCC's

C. New Section on Risk Applications

Lastly, OCC proposes to add a new section regarding the use of Risk Applications. The current MRM Policy focuses on OCC's financial risk management (i.e., credit risk models, margin system and related models, and liquidity risk models).<sup>14</sup> The Risk Applications are tools with quantitative or mathematical techniques specifically not focused on financial risk management. Although the Risk Applications do not affect OCC's Risk Methodologies (or the underlying Risk Models), the processes for managing the potential risks are similar, so OCC proposes to encompass both Risk Methodologies and Risk Applications in its Model Risk Management Policy going forward.<sup>15</sup>

**III. DISCUSSION AND COMMISSION FINDINGS**

Section 19(b)(2)(C) of the Exchange Act directs the Commission to approve a proposed rule change of a self-regulatory organization if it finds that such proposed rule change is consistent with the requirements of the Exchange Act and the rules and regulations thereunder applicable to such organization.<sup>16</sup> After carefully considering the proposed rule change, the Commission finds that the proposal is consistent with the requirements of the Exchange Act and

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Risk Methodology Documentation Procedure. According to OCC, the change would not result in any substantive change in the roles and responsibilities. See Notice of Filing, 88 FR at 31550, n. 10.

<sup>14</sup> See Securities Exchange Act Release No. 82785 (Feb. 27, 2018), 83 FR 9345 (Mar. 5, 2018) (File No. SR-OCC-2017-011) (approving the formalization of the MRM Policy).

<sup>15</sup> The proposed MRM Policy would also note that OCC uses user developed applications ("UDAs"), which are analytical applications designed to manipulate and analyze data that are used on a repetitive basis and might expose OCC to Model Risk, and that the governance for such UDAs is outlined in OCC's User Developed Application Management Procedure.

<sup>16</sup> 15 U.S.C. 78s(b)(2)(C).

the rules and regulations thereunder applicable to OCC. More specifically, the Commission finds that the proposal is consistent with Section 17A(b)(3)(F) of the Exchange Act,<sup>17</sup> Rules 17Ad-22(e)(3), (e)(4), (e)(6), and (e)(7)<sup>18</sup> thereunder as described in detail below.

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

Section 17A(b)(3)(F) of the Exchange Act requires, among other things, that a clearing agency's rules are designed to assure the safeguarding of securities and funds in custody or control of the clearing agency or for which it is responsible.<sup>19</sup>

The Commission believes that the proposed change supports OCC's ability to safeguard of securities and funds because the proposed change builds on the foundation of OCC's current processes to provide a more complete view of model risk at OCC. The MRM Policy governs OCC's processes for reducing model risk. Expanding OCC's view of model risk to encompass Risk Methodologies rather than focusing only on individual Risk Models in isolation will give OCC a more comprehensive understanding of model risk. The Commission continues to believe that reducing model risk may allow OCC to avoid taking non-defaulters' resources to manage a default by covering losses and shortfalls with a defaulter's collateral.<sup>20</sup> Similarly, applying its model risk management practices to OCC's Risk Applications will reduce the likelihood of loss arising out of decisions based on those applications.

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<sup>17</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>18</sup> 17 CFR 240.17Ad-22(e)(3), 17 CFR 240.17Ad-22(e)(4), 17 CFR 240.17Ad-22(e)(6), and 17 CFR 240.17Ad-22(e)(7).

<sup>19</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>20</sup> See Securities Exchange Act Release No. 82785 (Feb. 27, 2018), 83 FR 9345, 9346 (Mar. 5, 2018) (File No. SR-OCC-2017-011).

The Commission believes, therefore, that the proposal is consistent with the requirements of Section 17A(b)(3)(F) of the Exchange Act.

B. Consistency with Rule 17Ad-22(e)(4), (e)(6), and (e)(7) under the Exchange Act

Rules 17Ad-22(e)(4)(vii), (e)(6)(vii) and (e)(7)(vii) under the Exchange Act require a covered clearing agency to establish, implement, maintain, and enforce written policies and procedures reasonably designed to, among other things, require the performance of a model validation for its credit risk models, margin system and related models, and liquidity risk models not less than annually, or more frequently as may be contemplated by the covered clearing agency's risk management framework established pursuant to Rule 17Ad-22(e)(3) under the Exchange Act.<sup>21</sup> The Commission has stated that a covered clearing agency generally should consider, in establishing and maintaining policies and procedures for margin, whether it regularly reviews and validates its margin system.<sup>22</sup>

The Commission previously found the adoption of the MRM Policy to be consistent with Rules 17Ad-22(e)(4)(vii), (e)(6)(vii), and (e)(7)(vii) under the Exchange Act because the MRM Policy requires the annual validations of the performance, parameters, and assumptions of OCC's credit risk, margin, and liquidity risk models. As described above, OCC proposes to

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<sup>21</sup> 17 CFR 240.17Ad-22(e)(4)(vii), (e)(6)(vii) and (e)(7)(vii). The requirements of Rule 17Ad-22(e)(4) pertain to the effective identification, measurement, monitoring, and management of credit exposures. 17 CFR 240.17Ad-22(e)(4). The requirements of Rule 17Ad-22(e)(6), which apply to a covered clearing agency that performs central counterparty services, pertain to the covering of a covered clearing agency's credit exposures to its participants. 17 CFR 240.17Ad-22(e)(6). The requirements of Rule 17Ad-22(e)(7) pertain to the effective measurement, monitoring, and management of liquidity risk. 17 CFR 240.17Ad-22(e)(7).

<sup>22</sup> See Standards for Covered Clearing Agencies, Securities Exchange Act Release No. 78961 (Sept. 28, 2016), 81 FR 70786, 70819 (Oct. 13, 2016).

broaden the scope of the Policy to contemplate not only individual Risk Models, but also the Risk Methodologies such models comprise. The proposal includes governance changes that would facilitate expansion of the Policy's scope without reducing the current validation obligations of OCC's MRM department. The Commission believes that expanding the scope of the MRM Policy to encompass Risk Methodologies without weakening the arrangements governing the validation of individual Risk Models would strengthen OCC's validation of its credit risk models, margin system and related models, and liquidity risk models.

The Commission believes, therefore, that the proposal is consistent with the requirements of Rules 17Ad-22(e)(4)(vii), (e)(6)(vii) and (e)(7)(vii) under the Exchange Act.<sup>23</sup>

C. Consistency with Rule 17Ad-22(e)(3) under the Exchange Act

Rule 17Ad-22(e)(3)(i) requires, among other things, that a covered clearing agency establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain a sound risk management framework for comprehensively managing legal, credit, liquidity, operational, general business, investment, custody, and other risks that arise in or are borne by the covered clearing agency, which includes risk management policies, procedures, and systems designed to identify, measure, monitor, and manage the range of risks that arise in or are borne by the covered clearing agency, that are subject to review on a specified periodic basis and approved by the board of directors annually.<sup>24</sup>

Currently, the MRM Policy (and related risk management processes) applies to Risk Models, which include only credit risk models, margin system and related models, and liquidity

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<sup>23</sup> 17 CFR 240.17Ad-22(e)(4)(vii), (e)(6)(vii) and (e)(7)(vii).

<sup>24</sup> 17 CFR 240.17Ad-22(e)(3)(i).

risk models (i.e., financial risk management models). As proposed, the MRM Policy would apply to quantitative or mathematical techniques (i.e., the Risk Applications) that OCC uses outside of financial risk management. As a result, OCC is proposing to apply a consistent risk management approach to Risk Methodologies and Risk Applications. The Commission believes that broadening the application of risk management processes to cover models that deal with both financial risks and non-financial risks is consistent with the maintain a sound risk management framework for comprehensively managing such risks.

The Commission believes, therefore, that the proposal is consistent with the requirements of Rule 17Ad-22(e)(3)(i) under the Exchange Act.<sup>25</sup>

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<sup>25</sup> 17 CFR 240.17Ad-22(e)(3)(i).

## VI. CONCLUSION

On the basis of the foregoing, the Commission finds that the proposed rule change, is consistent with the requirements of the Exchange Act, and in particular, the requirements of Section 17A of the Exchange Act<sup>26</sup> and the rules and regulations thereunder.

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Exchange Act,<sup>27</sup> that the proposed rule change (SR-OCC-2022-004) be, and hereby is, approved

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>28</sup>

J. Matthew DeLesDernier,  
Deputy Secretary.

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<sup>26</sup> In approving this proposed rule change, the Commission has considered the proposed rules' impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

<sup>27</sup> 15 U.S.C. 78s(b)(2).

<sup>28</sup> 17 CFR 200.30-3(a)(12).