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August 30, 2024

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

Re: Rule Certification Concerning The Options Clearing Corporation's Backtesting Framework and to Establish a Resource Backtesting Margin Charge

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, The Options Clearing Corporation ("OCC") hereby certifies a rule change concerning its backtesting framework and to establish a Resource Backtesting Margin Charge. The date of implementation of the rule is at least 10 business days following receipt of the certification by the CFTC. The proposal has also been submitted to the Securities and Exchange Commission ("SEC") under Section 19(b) of the Securities Exchange Act of 1934 ("Exchange Act") and Rule 19b-4 thereunder as File No. SR-OCC-2024-009.[1] The change will not be implemented until OCC has obtained all necessary regulatory approvals.

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

Explanation and Analysis

The purpose of this rule certification is to (i) amend OCC's Margin Policy to more comprehensively describe OCC's approach to backtesting, including how OCC establishes and reviews assumptions underlying OCC's backtesting and criteria for escalating backtesting results; (ii) provide for a new category of backtesting designed to evaluate whether OCC maintains sufficient margin resources to cover its credit exposure to the liquidation portfolio of each Clearing Member from the last margin collection until the end of the liquidation horizon following the default of that Clearing Member with a high degree of confidence (as defined below, "Resource Backtesting"); (iii) implement a Resource Backtesting Margin Charge that OCC would collect from Clearing Members who experience Resource Backtesting deficiencies that bring their margin

1 See Exchange Act Release No. 100584 (July 24, 2024), 89 FR 61211 (July 30, 2024) (SR-OCC-2024-011).

coverage rates below a 99% coverage target; and (iv) make certain conforming changes to other OCC rules to reflect these proposed changes.

Proposed changes to OCC's Rules are contained in Exhibit A. Proposed changes to OCC's Margin Policy, Model Risk Management Policy and STANS Methodology Description are contained in confidential Exhibits B, C, and D, respectively. Material proposed to be added is marked by underlining and material proposed to be deleted is marked with strikethrough text. 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]

Overview

OCC is the sole clearing agency for standardized equity options listed on national securities exchanges registered with the SEC. OCC also clears certain stock loan and futures transactions. In its role as a clearing agency, OCC is the guarantor for all contracts cleared through OCC; that is, OCC becomes the buyer to every seller or the seller to every buyer (or the lender to every borrower and the borrower to every lender, in the case of stock loans). As a central counterparty, OCC is exposed to credit risk in the event of the failure of one its members because OCC is obligated to perform on the contracts it clears even when one of its members defaults.

OCC manages this credit risk through various safeguards to ensure that it has sufficient financial resources in the event of a Clearing Member failure. For example, OCC periodically collects margin collateral from its Clearing Members, which is used to cover the credit exposures they individually present to OCC. OCC has established a proprietary system, the System for Theoretical Analysis and Numerical Simulation ("STANS"), that runs various models used to calculate margin requirements, as described in the STANS Methodology Description.

To monitor whether margin requirements calculated by STANS are adequate, OCC compares the margin derived from its use of the STANS margin models against the amount it could have lost if a Clearing Member had failed ("backtesting"). OCC relies on backtesting to evaluate the accuracy of its margin models by comparing the calculated margin coverage for each margin account against the actual profit and loss on the margined portfolios. OCC performs backtesting at least once each day using standard predetermined parameters and assumptions. While backtesting does not directly establish Clearing Members' margin requirements, OCC maintains broad authority under its rules to collect additional margin if OCC identifies issues with its margin coverage.[3] In addition, backtesting

[2] OCC's By-Laws and Rules can be found on OCC's public website: https://www.theocc.com/Company-Information/Documents-and-Archives/By-Laws-and-Rules.

[3] See OCC Rule 601(c) ("Notwithstanding any other provision of this Rule 601, [OCC] may fix the margin requirement for an account or any class of cleared contracts at such amount as it deems necessary or appropriate under the circumstances to protect the respective interests of Clearing Members, [OCC], and the public."); OCC Rule 609(a) (providing OCC's authority to issue intra-day margin calls to protect OCC, other Clearing Members and the general public, among other reasons); see also OCC Rule 307C (authorizing OCC to impose

may reveal opportunities to enhance OCC's credit risk management and margin methodology or to adjust model parameters.

This proposed rule change would make three enhancements to OCC's backtesting framework. First, OCC proposes to amend its rule-filed Margin Policy to comprehensively describe material aspects of its backtesting framework. As a self-regulatory organization, OCC is subject to requirements to submit filings with its regulators in connection with changes to its rules, which include material aspects of the facilities of OCC. OCC has filed as rules certain frameworks and policies that describe OCC's approach for credit risk management, including OCC's Margin Policy. Specifically, the Margin Policy establishes a process for ongoing monitoring, review, testing and verification of OCC's risk-based margin system, including by requiring OCC to conduct daily backtesting, conduct analysis of exceedances, and report results at least monthly through OCC's governance process,[4] as required by SEC Rule 17Ad-22(e)(6)(vi).[5] However, the Margin Policy does not currently provide detail concerning (i) how OCC establishes and modifies its assumptions for backtesting; or (ii) how OCC establishes and reviews criteria and thresholds for escalating backtesting results and reviews of backtesting assumptions to appropriate decisionmakers. This proposal would amend the Margin Policy to provide further detail about those aspects of OCC's backtesting framework, as well as a more comprehensive description of the different types of backtesting OCC performs and their respective purposes.

Second, OCC is proposing to add another category of backtesting to its backtesting framework. OCC's current backtesting assesses whether OCC's margin model achieves a 99% coverage rate for each marginable account, which is the level at which OCC's models calculate margin requirements.[6] However, under OCC's By-Laws and Rules,[7] each Clearing Member may have multiple marginable accounts on which OCC maintains different liens designed to facilitate Clearing Members' compliance with the SEC's customer protection regime.[8] Accordingly, in order to conduct backtesting at the level of each Clearing Member Organization, OCC proposes to amend the Margin Policy to add Resource Backtesting, as defined below, as a separate category of backtesting within OCC's backtesting framework to assess the adequacy of OCC's margin resources to cover its credit exposure at the Clearing Member level. OCC has designed its Resource

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protective measures, including to "adjust the amount or composition of margin" when, under Rule 307, a Clearing Member "presents increased credit or liquidity risk to OCC," among other reasons).

4 See Exchange Act Release No. 82658 (Feb. 7, 2018), 83 FR 6646, 6649 (Feb. 14, 2018) (SR-OCC-2017-007) (Commission order approving OCC's Margin Policy, inclusive of its provision for backtesting of each margin account).

5 17 CFR 240.17Ad-22(e)(6)(vi).

6 See Exchange Act Release No. 82658, supra note 4, 83 FR at 6647.

7 See OCC By-Laws, Art. VI, Sec. 3 (providing for the various accounts and their respective lien structures).

8 See, e.g., 17 CFR 240.15c3-3(e) (providing for the reserve formula used in calculating the amounts of funds a clearing member is required to deposit in a special reserve bank account for the exclusive benefit of customers, including a debit for "[m]argin required and on deposit with [OCC] for all option contracts written or purchased in customer accounts").

Backtesting to assess whether OCC maintains sufficient margin resources, among other prefunded financial resources,[9] to cover its credit exposure to each participant fully with a high degree of confidence, consistent with SEC Rule 17Ad-22(e)(4)(i).[10] Specifically, Resource Backtesting would test whether the liquidation portfolio of each Clearing Member from the last margin collection until the end of the liquidation horizon following the Clearing Member's default achieves a 99% coverage rate, in line with the coverage standard for the current backtesting of OCC's margin models.

Third, OCC proposes to amend its rules to establish a margin add-on that OCC would charge a Clearing Member if Resource Backtesting coverage for that Clearing Member falls below 99% ("Resource Backtesting Margin Charge"). Accordingly, OCC's new backtesting framework would impact the total margin collected from certain Clearing Members depending on the performance of OCC's margin models and the activity those members clear through OCC. As discussed further below, OCC believes that the Resource Backtesting Margin Charge would help OCC ensure it collects margin sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default, consistent with SEC Rule 17Ad-22(e)(6)(iii).[11]

In connection with these three backtesting enhancements, OCC would also make certain conforming changes to the Model Risk Management Policy and STANS Methodology Description to reflect changes in defined terms associated with backtesting and changes to the underlying procedures.

Background

Backtesting Procedures

STANS is OCC's proprietary risk management system for calculating Clearing Member margin requirements.[12] The STANS methodology utilizes large-scale Monte Carlo simulations to

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9 Such other prefunded financial resources include, in order of contribution within OCC's default waterfall: (i) the Clearing Fund deposit of the defaulting Clearing Member, which would be at least $500,000; (ii) OCC's skin-in-the-game in the form of OCC's Minimum Corporate Contribution and its liquid net assets funded by equity in excess of 110% of its Target Capital Requirement (which, as of December 31, 2023, was more than $130 million); and (iii) the Clearing Fund deposits of non-defaulting Clearing Members (as of December 31, 2023, the Clearing Fund was more than $16.7 billion) and the EDCP Unvested Balance (i.e., the unvested funds held in respect of OCC's Executive Deferred Compensation Plan Trust that OCC would be charged on a proportionate basis with the Clearing Fund deposits of non-defaulting Clearing Members).

10 17 CFR 240.17Ad-22(e)(4)(i).

11 17 CFR 240.17Ad-22(e)(6)(iii).

12 See Exchange Act Release No. 91079 (Feb. 8, 2021), 86 FR 9410 (Feb. 12, 2021) (File No. SR-OCC-2020-016). OCC makes its STANS Methodology Description available to Clearing Members. An overview of the STANS methodology is on OCC's public website: https://www.theocc.com/Risk-Management/Margin-Methodology.

forecast price and volatility movements in determining a Clearing Member's margin requirement.[13] OCC has conducted daily backtesting of margin accounts subject to STANS margining since 2006.

In 2014, OCC filed proposed changes to its backtesting procedures.[14] Among other things, the changes included: (1) the addition of certain industry-standard statistical tests, including the Kupiec Test[15] and Christoffersen Independence Test[16]; (2) backtesting of hypothetical portfolios (which OCC currently refers to as "Model Backtesting"), in addition to actual portfolios (which OCC currently refers to as "Business Backtesting"), to provide more comprehensive insight into the adequacy of the underlying model assumptions under market conditions prevailing in the backtesting observation periods, as well as stressed market conditions; (3) adjustments to the forecasted horizon used for backtesting to better reflect the two-day liquidation period (OCC's margin period of risk or "MPOR") used in margin calculations and to provide OCC with a more accurate view of the sufficiency of its margin methodology; and (4) system changes to give OCC's backtesting staff additional tools to help identify the root cause of backtesting exceedances. The SEC issued a notice of no objection with respect to those proposed changes.[17]

OCC currently maintains its Model Backtesting and Business Backtesting procedures in internal OCC procedures and technical documents. Among other things, those procedures address data acquisition, application of statistical tests, analyses initiated to address root causes of exceedances, reporting of results, annual methodology reviews, and issue escalation. The technical documents are similar in nature to the margin model whitepapers that support OCC's STANS methodology.[18]

Backtesting Framework

In addition to the procedural documents noted above, OCC considers its backtesting framework to include its Margin Policy, among other rule-filed documents established after OCC

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13 See OCC Rule 601.

14 See Exchange Act Release No. 73749 (Dec. 5, 2014), 79 FR 73673 (Dec. 11, 2014) (SR-OCC-2014-810).

15 The Kupiec Test is a proportion of failures test that compares the actual number of exceedances with the number that would be expected in light of the confidence level associated with the calculation of margin. See Kupiec, P. "Techniques for Verifying the Accuracy of Risk Management Models," Journal of Derivatives, v3, P73-84. (1995).

16 The Christoffersen Independence Test measures the extent to which exceedances are independent of each other. See Christoffersen, P. "Evaluating Interval Forecasts." International Economic Review, 39 (4), 841-862 (1998).

17 See Exchange Act Release No. 75290 (June 24, 2015), 80 FR 37323 (June 30, 2015) (SR-OCC-2014-810).

18 As described in the rule filing establishing the STANS Methodology Description, the whitepapers describe how the various quantitative components of STANS were developed and operate, including the various parameters and assumptions contained within those components and the mathematical theories underlying the selection of those quantitative methods. See Exchange Act Release No. 91079, supra note 12, 80 FR at 9410 n.5 and accompanying text. The model whitepapers are not filed as rules of OCC.

last filed changes to its backtesting procedures.[19] The Margin Policy provides that OCC's Financial Risk Management Department ("FRM") continually evaluates the effectiveness of its margin models through daily backtesting of each margin account as provided in the Business Backtesting Procedure, analyzing in detail all accounts exhibiting losses in excess of calculated margin requirements.[20] The Margin Policy further directs OCC's Quantitative Risk Management business unit ("QRM") to design backtests to focus on: (i) satisfying OCC's regulatory obligations; (ii) identifying potential opportunities to improve the margin methodology; and (iii) identifying trends in exceedances that may be indicative of behavioral changes by market participants. In addition, the Margin Policy directs QRM to design backtests to find potential opportunities to improve OCC's risk-assessment processes, noting that problems may arise from both technical and model-related issues. With respect to the former, the Margin Policy notes that technical issues may arise from corporate actions and special dividends, for example. The Margin Policy provides that FRM performs Business Backtesting to measure whether the losses observed for a constant set of positions over OCC's MPOR were in excess of the total risk charges (i.e., aggregate of expected shortfall, stress test charges and add-on charges) required for the account. The Margin Policy directs FRM to classify any observation in which losses are in excess as an exceedance.

While the Margin Policy contemplates that backtesting results and analyses of backtesting assumptions may require escalation, it does not provide for established escalation criteria or thresholds. The absence of specific guidance, thresholds or criteria for escalation could lead to inconsistencies in the escalation of similar backtesting exceedances. For example, the Margin Policy currently directs QRM to report identified problems and overall performance to FRM and the Model Risk Working Group ("MRWG"),[21] and that the MRWG determines "whether the results require escalation" to the Management Committee. The Margin Policy further provides that QRM presents MRWG monthly reporting, or more frequently when determined by MRWG, and quarterly reporting that accumulate daily backtesting results and detailed descriptions of the accounts that have incurred exceedances, trends and causes of the exceedances. As with the escalation of identified problems and overall performance, the Margin Policy directs QRM to provide notable results from these reviews to the Chief Financial Risk Officer (i.e., the head of FRM) and MRWG, and that MRWG determines whether "escalation is warranted" to the Management Committee,

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19 For example, the rule-filed STANS Methodology Description describes ongoing model performance monitoring and backtesting in that document's executive summary, noting that further detail on such model monitoring activity is found in the Margin Policy and the Model Risk Management Policy. See Exchange Act Release No. 90763 (Dec. 21, 2020), 85 FR 85788, 85790 n. 18 and accompanying text (Dec. 29, 2020) (SR-OCC-2020-016). In addition, the Model Risk Management Policy provides that margin models will be monitored "according to the Model Backtesting Procedure [and] Business Backtesting Procedure," among other procedures. See Exchange Act Release No. 82473 (Jan. 9, 2018), 83 FR 2271, 2273 (Jan. 16, 2018) (SR-OCC-2017-011).

20 See Exchange Act Release No. 82658, supra note 4, 83 FR at 6648.

21 The MRWG is a cross-functional group responsible for assisting OCC's management in overseeing OCC's model-related risk comprised of representatives from relevant OCC business units including Quantitative Risk Management, Model Risk Management, and Corporate Risk Management.

which may determine what remedial actions may be taken.[22] In addition, the Margin Policy provides for a monthly review of the parameters and assumptions for Business Backtesting, the results of which are reported to the MRWG to discuss and escalate issues "as necessary."[23]

Proposed Changes

(i) . Backtesting Framework

OCC is proposing amendments to its Margin Policy to describe more comprehensively its approach to backtesting, including OCC's:

- backtesting framework, which includes (i) the purpose and scope of the backtesting OCC performs and (ii) the assumptions underlying OCC's backtesting and the process for reviewing and modifying those assumptions; and
- backtesting reporting, including how OCC establishes and reviews criteria for escalating exceedances.

Specifically, OCC would replace the first two paragraphs of the section of the Margin Policy that concerns margin monitoring, which currently address OCC's Business Backtesting, and a subsection that concerns backtesting reporting, with two new subsections: one that more comprehensively describes OCC's backtesting framework and another that describes backtesting reporting, as described below. The current third paragraph of that section, which concerns the monthly review of margin model parameters and sensitivity analyses of the margin model, would be relocated to its own subsection below the new subsection on backtesting reporting with certain edits discussed below related to the review of backtesting assumptions and the conditions for more frequent review.

Purpose and Scope of Model Backtesting

With respect to OCC's current backtesting processes, the new backtesting framework subsection in the Margin Policy would provide that FRM will continue to conduct daily backtesting of actual and hypothetical portfolios to evaluate the performance of its margin methodology, as it does today. OCC would refer to such backtesting as "Model Backtesting," which would distinguish such backtesting from the proposed Resource Backtesting discussed below. As such, Model Backtesting under the proposed amendments would encompass what OCC currently refers to as "Business Backtesting" (i.e., backtesting of its margin model performance using actual portfolios) and "Model Backtesting" (i.e., backtesting of its margin model performance using hypothetical

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[22] Remedial actions could take various forms including, but not limited to, margin add-on charges to account for risk that may not be captured appropriately by OCC's margin models, adjustments to model parameters, or other changes to OCC's margin models or margin methodology, subject to any necessary approvals by OCC's Risk Committee, Board of Directors, and regulators.

[23] See Exchange Act Release No. 82658, supra note 4, 83 FR at 6647 (discussing how the backtesting results are "reported to [the MRWG] and may be escalated to OCC's Management Committee").

portfolios). With respect to the latter, the Margin Policy would explain that FRM conducts Model Backtesting of hypothetical portfolios to target specific aspects of the models that may be masked by the backtesting of actual portfolios because margin accounts may have thousands of positions in many diverse products. With respect to the former, the Margin Policy would explain that OCC conducts Model Backtesting of actual portfolios to determine whether the losses observed for a constant set of positions over OCC's liquidation horizon were in excess of margin requirements forecasted by OCC's margin methodology for each margin account. This description aligns with OCC's current Business Backtesting practices. Accordingly, OCC would continue to conduct Model Backtesting at the level of each marginable account, which is the level at which OCC calculates margin requirements. As the Margin Policy would explain, OCC conducts Model Backtesting at this level because Model Backtesting exceedances potentially indicate issues that could be actively impacting OCC's margin requirements for the margin accounts. In addition, backtesting at this level is consistent with OCC's obligations in its capacity as a derivatives clearing organization ("DCO") registered with the CFTC.[24]

The Margin Policy would further provide that FRM conducts Model Backtesting, as it does today, to evaluate whether margin requirements forecasted by OCC's margin methodology are sufficient to cover the realized loss of a portfolio at the maximum exposure estimated to occur at the end of the liquidation period with an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure—the coverage standard identified in SEC Rule 17Ad-22(e)(6)(iii).[25] This is the regulatory standard that OCC's current Business Backtesting was designed to evaluate. The Margin Policy would also provide that FRM will classify as an "exceedance" a daily outcome in which the loss in portfolio value over the applicable time horizon is larger in magnitude than what the STANS model predicted. In addition, the Margin Policy would explain that Model Backtesting is limited to those components of margin requirements that capture changes in market risk factors when assessing OCC's compliance with SEC Rule 17Ad-22(e)(6)(iii).[26]

OCC would continue to exclude collateral from Model Backtesting that is not modeled by STANS (commonly referred to as "non-Collateral in Margin" or "non-CiM" collateral),[27] or that does not capture changes in market risk factors. OCC's current backtesting analyses are not designed to assess the sufficiency of non-CiM collateral, which OCC values instead using the more

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[24] See 17 CFR 39.13(g)(7)(i)(C) (requiring a DCO to conduct daily backtests for "each account" held by a clearing member at the DCO).

[25] 17 CFR 240.17Ad-22(e)(6)(iii).

[26] Id.

[27] Following the implementation of STANS in 2006, OCC filed a proposed rule change to include equity securities deposited by Clearing Members to satisfy margin requirements in STANS margin calculations, referred to as "Collateral in Margin" or "CiM." See Exchange Act Release No. 58158 (July 15, 2008), 73 FR 42646, 42646-47 (SR-OCC-2007-020). OCC implemented CiM, in part, to incentivize Clearing Members to deposit risk reducing assets and to better risk manage collateral deposits using the more sophisticated STANS treatment versus a fixed haircut rate.

traditional method of fixed collateral haircuts.[28] This limitation reflects that backtesting's purpose is to assess the performance of OCC's margin models in calculating margin requirements,[29] as opposed to the performance of other aspects of OCC's credit risk management. As such, Model Backtesting would continue to exclude collateral that is valued using collateral haircuts outside of the STANS margin methodology. In addition, the particular Model Backtesting analysis used to assess OCC's compliance with SEC Rule 17Ad-22(e)(6)(iii)[30] would exclude certain add-on charges that are not tied to changes in market risk factors.[31] However, as discussed below, Resource Backtesting would take into account non-CiM collateral and the margin collected through add-on charges not related to market risk when assessing the sufficiency of the financial resources OCC collects from each Clearing Member. In addition, as discussed below, OCC may maintain variations of Model Backtesting for diagnostic or informational purposes that include such add-ons.

Backtesting Assumptions

The proposed backtesting framework subsection to the Margin Policy would also provide that FRM maintains assumptions used in backtesting in its internal procedures. The existence of backtesting assumptions may be inferred from OCC's existing Margin Policy, which provides for their review. However, the Margin Policy does not currently identify the categories of relevant assumptions, provide for how they are established or modified, or explain how assumptions may differ across different types of backtesting depending on the purpose of those backtesting variants. The amended Margin Policy would provide that the assumptions include, but are not limited to, the timing of default, liquidation horizon, available resources, lookback period, backtesting portfolio, and the confidence level of the tests used to evaluate the statistical significance of an exceedance rate.[32]

In addition, the Margin Policy would explain that OCC may provide for backtesting variations for reporting, diagnostic and informational purposes, each of which may have different assumptions based on the purpose of the backtesting variant. For example, OCC plans to report

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28 See, e.g., Exchange Act Release No. 98101 (Aug. 10, 2023), 88 FR 55775 (Aug. 16, 2023) (SR-OCC-2022-012) (approving OCC's procedures-based approach for setting and adjusting fixed haircuts for Government securities and GSE debt securities deposited by Clearing Members).

29 See Standards for Covered Clearing Agencies, Exchange Act Release No. 78961 (Sept. 28, 2016), 81 FR 70786, 70819 (Oct. 13, 2016) (S7-03-14) ("[B]acktests are conducted with respect to the margin model and not the margin resources themselves."); 17 CFR 240.17Ad-22(a) "Backtesting" ("Backtesting means an ex-post comparison of actual outcomes with expected outcomes derived from the use of margin models.").

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

31 For example, OCC may collect additional margin from a Clearing Member as a protective measure under Rule 307 when OCC determines that the Clearing Member's operational or financial condition presents elevated risk to OCC, other Clearing Members, and the public.

32 As addressed in OCC's prior advance notice, OCC employs the Kupiec Test and the Christoffersen Independence Test to evaluate whether the exceedance rate is larger than the expected value. See supra notes 15-16 and accompanying text.

Model Backtesting results for actual portfolios in connection with OCC's quantitative disclosures under the Principles for Financial Market Infrastructures ("PFMI")—which OCC discloses in compliance with SEC Rule 17Ad-22(e)(23)—because such Model Backtesting at the margin account level aligns with the guidance for such disclosures.[33]

The Margin Policy would further provide that changes to these backtesting assumptions would require escalation by MRWG and OCC's Management Committee, with ultimate approval by the Risk Committee. These assumptions relate to foundational aspects of OCC's margin methodology that may be tied to specific regulatory requirements[34] or modification of which may require proposed rule changes.[35] Accordingly, Board-level approval by the Risk Committee would be required to approve any necessary regulatory filing to modify OCC's margin methodology. The Margin Policy would further require that FRM would prepare and present to MRWG a review of the backtesting assumptions more frequently than monthly in the event of triggers related to high market volatility, low market liquidity, and significant increases or decreases in position size or concentration risk (as has been proposed to be defined in the Margin Policy, "CCA Monitoring Thresholds"),[36] as contemplated by regulation.[37]

The Margin Policy would further provide that FRM's written procedures may include other triggers for evaluation of backtesting assumptions. OCC expects that one of the triggers it would establish under this rule would be the implementation of changes to OCC's margin methodology that may affect backtesting assumptions. For example, if MRWG were to approve a change to OCC's margin methodology in the form of a new margin add-on charge that was implemented following

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33 See Committee on Payments and Market Infrastructures & Board of the International Organization of Securities Commissions ("CPMI-IOSCO"), Public quantitative disclosure standards for central counterparties, at 7 (Feb. 2015), available at https://www.bis.org/cpmi/publ/d125.pdf (providing guidance on disclosure 6.5 with respect to initial margin backtesting results for margin accounts).

34 For example, with respect to the confidence interval, SEC Rules require that OCC's risk-based margin system must be designed to calculate margin sufficient to cover the maximum exposure estimated to occur in the internal between the last margin collection and the close out of positions following a participant default with an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure. See 17 CFR 240.17Ad-22(a) "Potential future exposure", (e)(6)(iii).

35 For example, OCC's rule-filed Margin Policy codifies OCC's two-day MPOR assumption. See Exchange Act Release No. 82658, supra note 4, 83 FR at 6647-6648 (describing the Margin Policy discussion of OCC's two-day risk horizon).

36 See Exchange Act Release No. 99393 (Jan. 19, 2024), 89 FR 5062, 5066 (Jan. 25, 2024) (SR-OCC-2024-001). These thresholds are currently provided in procedures under OCC's Clearing Fund Methodology Policy with respect to the stress testing analyses that breaches of those thresholds would trigger. See Exchange Act Release No. 83406 (June 11, 2018), 83 FR 28018, 28026 (June 15, 2018) (SR-OCC-2018-008) ("The [Clearing Fund Methodology] Policy would require that OCC maintain procedures for determining whether, and in what circumstances, such intra-month reviews shall be conducted, and would indicate the persons responsible for making the determination."). Pursuant to those procedures, OCC's Stress Test and Liquidity Risk Management ("STLRM") business unit currently monitors market activity against these thresholds, which are approved by OCC's Stress Test Working Group ("STWG") and the MRWG.

37 See 17 CFR 240.17Ad-22(e)(6)(vi)(C).

approval by the Risk Committee and any necessary regulatory filing, MRWG would review the backtesting assumptions and associated triggers to determine whether that add-on charge should be included in the portfolio composition assumption across OCC's backtesting variants, depending on their respective purposes.

The Margin Policy would further provide that changes to the triggers for backtesting assumption reviews must be approved by MRWG. This is already true with respect to the CCA Monitoring Thresholds that trigger backtesting assumption reviews, changes to which must be approved by the MRWG and the STWG.[38] In addition, MRWG approval would be required to change any other thresholds MRWG believes would be appropriate for triggering a review of backtesting assumptions. In the case of other triggers for backtesting assumptions, OCC believes that MRWG is the appropriate governing body to establish triggers that go beyond those prescribed by regulation because as between MRWG and STWG, MRWG is the internal governing body tasked with of its oversight of model risk related to margin models.

Backtesting Reporting

As discussed above, the purpose of the proposed Model Backtesting is to provide OCC decisionmakers with timely information about OCC's margin coverage and potential opportunities to enhance OCC's credit risk management or margin methodology, or to adjust model parameters. Currently, the Margin Policy provides for monthly reviews to MRWG. In addition, the Margin Policy directs QRM to identify and report problems and overall performance to MRWG, which then in turn determines whether to escalate the issue to the Management Committee. OCC proposes to replace the current subsection that addresses reporting of backtesting results with a new subsection that more clearly provides that OCC maintains criteria for escalating backtesting results to relevant decisionmakers.

Specifically, the new subsection would provide that FRM will maintain escalation criteria for backtesting exceedances according to which FRM will, if met, escalate exceedance information to the MRWG, Management Committee, or Risk Committee, as applicable. Accordingly, the procedures may provide for escalations to different governing bodies depending on the nature of the exceedances or issues such exceedances may evidence.[39] The Margin Policy would provide that such required escalation criteria would include, but are not limited to: (i) thresholds related to the size and number of exceedances for Model Backtesting of actual portfolios, (ii) thresholds related to statistical tests applicable to Model Backtesting of hypothetical portfolios; and (iii) thresholds related to the size of an individual Clearing Member's Resource Backtesting deficiency and the coverage rate across all Clearing Members in the aggregate. For example, OCC anticipates that such escalation criteria for Model Backtesting of actual portfolios would include an exceedance that is

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[38] See supra note 36.

[39] While the proposed change contemplates and allows for a tiered escalation approach, OCC anticipates that the escalation criteria it would initially implement would require escalation to each of the MRWG, Management Committee and Risk Committee when the criteria are met.

equal to or larger than 50% of the applicable Clearing Member's Clearing Fund contribution.[40] With respect to Model Backtesting of hypothetical portfolios, escalation criteria would include criteria for escalation of results based on the Kupiec Test and Christoffersen Tests (e.g., for the Kupiec Test, when the coverage rate of instruments in a category of instruments falls below 99% with statistical significance of 90%[41]).

Outside of the escalation of backtesting exceedances that meet the escalation criteria, the Margin Policy would continue to provide for a review of all backtesting exceedances or deficiencies on an at-least monthly basis. Specifically, the subsection on backtesting reporting would provide that at least monthly, FRM will provide the MRWG a detailed analysis of any Model Backtesting exceedances or Resource Backtesting deficiencies, and a review of the backtesting assumptions. In addition, the Margin Policy would provide that FRM will prepare a review of assumptions for backtesting more frequently than monthly when the CCA Monitoring Thresholds, as discussed above, are breached. In addition to the CCA Monitoring Thresholds, the Margin Policy would provide that the Backtesting Procedure may identify other triggers that, if met, would require FRM to prepare and present to MRWG a review of assumptions for backtesting, including, but not limited to, implementation of rule changes to OCC's margin methodology that may affect backtesting assumptions. Changes to the triggers for review of backtesting assumptions must be approved by MRWG.

The Margin Policy would also provide that QRM conducts an annual review of OCC's backtesting framework, including QRM's recommendations regarding whether OCC should change any of the backtesting assumptions and exceedance escalation criteria. With respect to the escalation criteria, the Margin Policy would provide that changes to the escalation criteria must be approved by the governing body to which the escalation must be made. For example, changes to the criteria for escalating exceedances to the Risk Committee must be approved by the Risk Committee.[42] With respect to any proposed changes to the backtesting assumptions, the Margin Policy would provide that the MRWG would evaluate the results of the annual review and escalate any recommended changes to the backtesting framework, including any recommended changes to the backtesting assumptions, to the Management Committee for consideration. The Management

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[40] OCC does not intend this example to be a statement that establishes or changes any standard, limit or guideline with respect to the rights, obligations, or privileges of specified persons or the meaning, administration, or enforcement of an existing rule.

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[42] Because OCC anticipates that the initial escalation criteria it would adopt under this proposal would require escalation to each of the MRWG, Management Committee and Risk Committee, all such escalation criteria will require Risk Committee approval to change. See supra note 39. Should the MRWG or Management Committee adopt more sensitive escalation criteria for themselves, any change to the criteria for escalating to the Risk Committee would continue to require Risk Committee approval while the escalation criteria for the MRWG and Management Committee would be subject to approval by the MRWG or Management Committee, respectively.

Committee, in turn, would report the results of the annual review to the Risk Committee, including any changes it believes should be made to OCC's backtesting assumptions, which the Risk Committee would be authorized to approve for implementation. As part of this annual review process, MRWG, the Management Committee and the Risk Committee would also be authorized to approve changes to the escalation criteria applicable to each governing body, as discussed above. OCC believes these changes would provide greater clarity concerning the escalation of backtesting exceedances to appropriate OCC decisionmakers.

(ii) Resource Backtesting

In addition to formalizing its Model Backtesting in the Margin Policy, OCC proposes to enhance its backtesting framework by establishing Resource Backtesting designed to evaluate whether OCC maintains sufficient financial resources to cover its credit exposure to the liquidation portfolio of each Clearing Member following the default of that Clearing Member until the end of the liquidation horizon with a high degree of confidence. OCC would conduct Resource Backtesting using actual portfolios at the Clearing Member level. Accordingly, while Model Backtesting is conducted at the account level at which margin requirements are calculated under the STANS methodology, Resource Backtesting would consider OCC's credit exposure to a Clearing Member across that member's marginable accounts.

Backtesting at the Clearing Member level would not be as simple as aggregating profit and loss ("P&L") and margin resources across each marginable account maintained by a Clearing Member because OCC's By-Laws and Rules provide OCC with different types of liens over different types of accounts. For example, a surplus in a securities customer account, for which OCC maintains a restricted lien, may not be used to offset a loss in the member's firm account.[43] In contrast, a surplus in the member's firm account, for which OCC maintains a general lien, could be used to offset losses in any of the member's other accounts.[44] OCC would consider the liens on a particular account when netting deficits and surpluses across account types to ensure that surpluses in an account over which OCC maintains a restricted lien do not offset losses in another account for purposes of assessing the sufficiency of OCC's financial resources to cover the default of a Clearing Member.

Resource Backtesting would also take into account the value of other margin resources collected from a Clearing Member available to address default losses, including non-CiM margin collateral and certain margin add-ons. Conversely, OCC would exclude the Clearing Fund deposit of the applicable Clearing Member as a prefunded financial resource of that Clearing Member under Resource Backtesting.[45] In addition, such margin resources would be limited to required resources,

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43 See By-Law Art. VI § 3(e).

44 See, e.g., OCC Rule 1104(e) (clarifying, for the avoidance of doubt, that margin assets in a firm lien account may be applied to cover losses in a segregated futures account).

45 OCC considered including, but ultimately determined not to include a Clearing Member's Clearing Fund deposit as a financial resource for that Clearing Member in Resource Backtesting. The Clearing Fund deposit

and would therefore exclude any margin collateral held by OCC in excess of a Clearing Member's required margin.[46] As discussed above, these details about the composition of the Resource Backtesting portfolios would be backtesting assumptions that the Margin Policy would require FRM to document in its procedures.

In addition, while Model Backtesting assesses the performance of OCC's margin models in calculating margin requirements by evaluating P&L for a constant portfolio, Resource Backtesting would be designed to determine whether the liquidating value of a Clearing Member's portfolios was positive or negative at the end of OCC's liquidation horizon. Accordingly, Resource Backtesting would take into account observed intraday position changes from the time of the last good margin collection until the assumed point of default.

OCC would assess Resource Backtesting with the expectation that exceedances of financial resources would be no more than one percent in the lookback period for each Clearing Member (i.e., 99% coverage). To distinguish between Model Resource exceedances, OCC would use the term "deficiency" with respect to Resource Backtesting, which would result when the prefunded financial resources collected from the Clearing Member Organization ("CMO") would have been insufficient to cover the potential loss if the CMO had defaulted. That is, OCC would classify a result as a Resource Backtesting deficiency when the liquidating value of the CMO's portfolios is negative.

OCC would integrate Resource Backtesting into the Margin Policy's discussion of the backtesting framework and backtesting reporting. The purpose and scope of Resource Backtesting, as described above, would be added to the backtesting framework subsection. In addition, the Margin Policy would provide that FRM will maintain requirements with respect to backtesting assumptions, monthly backtesting reviews, and escalation criteria for Resource Backtesting deficiencies, and the same governance relating to review and changes to assumptions and escalation criteria for Model Backtesting would apply to Resource Backtesting. With respect to escalation criteria for Resource Backtesting deficiencies, the Margin Policy would provide that FRM will maintain written procedures that establish criteria including, but not limited to, thresholds related to the size of a Resource Backtesting deficiency and the coverage rate across all Clearing Members in

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of a defaulting Clearing Member is a prefunded financial resource that OCC would use to cover any loss prior to charging other resources in the default waterfall, including OCC's skin-in-the-game or the mutualized Clearing Fund deposits of non-defaulting Clearing Members. See OCC Rule 1006(b). Each Clearing Member's Clearing Fund deposit is comprised of a $500,000 minimum deposit and a variable component that is currently allocated to each Clearing Member based predominately on each Clearing Member's margin requirement. See OCC Rule 1003. Based on 2023 historic data, each Clearing Member would be above the 99% coverage target if the Clearing Fund deposit of that Clearing Member was included as a resource for Resource Backtesting. However, concerns were raised about including such resources in Resource Backtesting because the Clearing Fund, in the aggregate, is sized using stressed exposures. Accordingly, OCC is proposing to limit Resource Backtesting to margin resources.

[46] Because a Clearing Member is entitled to withdraw excess collateral, limiting Resource Backtesting to required resources addresses concerns that a Clearing Member may withdraw any excess collateral just prior to its default.

the aggregate. For example, OCC anticipates establishing criteria under this rule to escalate when the aggregate cover rate across all Clearing Members (including any Resource Backtesting Margin Charges then in effect as a resource) falls below 99%.[47] As another example, OCC anticipates establishing a threshold for any verified Resource Backtesting deficiency that exceeds the lesser of (i) 50% of the Clearing Member's individual Clearing Fund contribution, or, (ii) in the case of Clearing Members whose Clearing Fund contributions are in excess of $200 million, $100 million.[48]

(iii) <u>Resource Backtesting Margin Charge</u>

Based on OCC's analysis of Resource Backtesting results using the proposed methodology described above, OCC has observed that the Resource Backtesting for some Clearing Members falls below a 99% coverage threshold (i.e., greater than two Resource Backtesting deficiency days in a rolling 12-month period).[49] Specifically, based on 2023 historical data, approximately 25% of Clearing Members would have fallen below the Resource Backtesting coverage target. The size of the third-largest deficiencies ranged from a few hundred dollars to an outlier of $35 million, with the majority below $100,000 and all but a few below $1 million. Collectively, the amounts represent less than 0.1% on average of the aggregate margin OCC collects. In order to ensure that OCC's margin resources, among other prefunded financial resources,[50] are sufficient to cover the 99% coverage target, OCC proposes to establish a Resource Backtesting Margin Charge. OCC notes that other covered clearing agencies under the SEC's jurisdiction have, with SEC approval, established similar charges designed to collect additional resources when a Clearing Member's margin coverage falls below the agencies' coverage target.[51]

The thresholds for applying a Resource Backtesting Margin Charge, the method for calculating the charge, and the proposed rule changes proposed to reflect this new charge are discussed below.

<u>Thresholds for Applying the Resource Backtesting Margin Charge</u>

The Resource Backtesting Margin Charge would only apply to those Clearing Members whose 12-month trailing Resource Backtesting falls below 99% coverage based on confirmed

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[49] Based on 250 observation days per year, each observed Resource Backtesting deficiency reduces the coverage by 0.4%.

[50] <u>See</u> <u>supra</u> note 45.

[51] <u>See</u> Exchange Act Release No. 79167 (Oct. 26, 2016), <u>81 FR 75883</u>, 75884 (Nov. 1, 2016) (SR-FICC-2016-006; SR-NSCC-2016-004).

Resource Backtesting deficiencies (i.e., three or more confirmed Resource Backtesting deficiencies over the last 12 months). On an at-least monthly basis, OCC would review and determine which Clearing Members may be subject to the Resource Backtesting Margin Charge, or whose Resource Backtesting Margin Charge amount is subject to change, based on each Clearing Member's trailing 12-month Resource Backtesting coverage. Resource Backtesting Margin Charges would be applied on a daily basis for the applicable accounts of the Clearing Member that contributed to the deficiencies. If in a subsequent month an affected Clearing Member's trailing 12-month backtesting coverage rises above 99%, the Resource Backtesting Margin Charge would be removed.

In conducting this analysis for purposes of identifying Clearing Members who should be subject to the Resource Backtesting Margin Charge and for determining the amount of the third-largest Resource Backtesting deficiency for purposes of calculating the charge, OCC would not take into account Resource Backtesting Margin Charges already in effect, but would take into account the number and size of deficiencies subsequent to the Resource Backtesting Margin Charge already applied. For example, if a Clearing Member subject to a Resource Backtesting Margin Charge experienced subsequent Resource Backtesting deficiencies that were smaller in size than a Resource Backtesting Margin Charge currently in effect, such deficiencies would continue to count towards the overall deficiency count, even if they are covered by an existing Resource Backtesting Margin Charge. This approach ensures that Clearing Members will continue to be subject to a Resource Backtesting Margin Charge while three or more deficiencies remain in the look-back period. If, in that example, the third-largest deficiency driving the Resource Backtesting Margin Charge fell out of the 12-month look-back period, the Resource Backtesting Margin Charge would then be reduced to the third largest of the remaining deficiencies, subject to OCC authority to adjust the amount as discussed further below. In addition, if a Clearing Member subject to the charge were to experience additional Resource Backtesting deficiencies that were greater in magnitude than the deficiency that had been driving the Resource Backtesting Margin Charge, OCC would increase the Resource Backtesting Margin Charge as necessary to achieve a 99% coverage target within the rolling 12-month lookback based on the methodology for sizing the Resource Backtesting Margin Charge discussed below.

Calculating the Resource Backtesting Margin Charge

The Resource Backtesting Margin Charge would generally be equal to the third-largest Resource Backtesting deficiency in the rolling 12-month lookback period rounded up to the nearest $1,000, subject to adjustments as further described below. Setting the Resource Backtesting Margin Charge to cover the third-largest deficiency would bring the Clearing Member's margin coverage back in line with OCC's 99% coverage target on a lookback basis. The Resource Backtesting Margin Charge would generally be allocated proportionally to the Clearing Member's accounts contributing to the third-largest Resource Backtesting deficiency.

For Clearing Members with more than three deficiencies, however, such additional financial resources as allocated based on the accounts driving the third-largest deficiency may not necessarily cover Resource Backtesting deficiencies that are lower in dollar amount, but with a different allocation of accounts contributing to the remaining deficiencies. For example, if a customer account contributed more to the third-largest Resource Backtesting deficiency and the Clearing Member's firm account (or another account) contributed more to any lesser Resource Backtesting deficiency, then a charge allocated proportionally to accounts based on the third-largest deficiency may not cover the lesser Resource Backtesting deficiencies on a look-back basis because funds allocated to a customer account cannot be used to offset losses in any other account.[52] In circumstances when applying and allocating the Resource Backtesting Margin Charge based on the third-largest deficiency would not bring the Clearing Member above OCC's coverage target on a look-back basis, OCC would have authority to increase the charge for a particular account in an amount necessary to meet the coverage target pursuant to establish procedures, as discussed below.

Consistent with Commission-approved rules of other clearing agencies,[53] OCC would also retain discretion to adjust the Resource Backtesting Margin Charge based on other circumstances (i.e., in addition to account for differences in the accounts contributing to a Clearing Member's Resource Backtesting deficiencies) that may impact the likelihood or estimated size of potential future backtesting deficiencies, consistent with achieving OCC's 99% Resource Backtesting coverage target. Such other circumstances may include, but are not limited to, differences in magnitude of the deficiencies observed over the last 12-month period, variability in the Clearing Member's activity since the observed deficiencies, cyclicality of observed deficiencies, and/or market volatility. MRWG approval would be required to approve such other adjustments.

Establishing the Resource Backtesting Margin Charge in OCC's Rules

To implement the Resource Backtesting Margin Charge, OCC proposes to add OCC Rule 601(h) and amend the Margin Policy. Proposed Rule 601(h)(1) would provide that OCC may require a Clearing Member to deposit additional margin assets to mitigate exposures to OCC that may not otherwise be covered by the margin requirements calculated in accordance with Rule 601 and OCC's policies and procedures. Rule 601(h)(1) would further provide that OCC may assess the charge as part of the Clearing Member's daily margin requirement, as needed, to enable OCC to achieve its Resource Backtesting coverage target. Specifically, Rules 601(h)(1) would provide that the Resource Backtesting Margin Charge may apply when a Clearing Member has a 12-month trailing Resource Backtesting coverage below the 99 percent backtesting coverage target.

With respect to calculation of the charge, Rule 601(h)(2) would provide that the Resource Backtesting Margin Charge generally will be equal to the third-largest Resource Backtesting

52 In contrast, if the firm account, over which OCC maintains a general lien, was the driver of the third-largest deficiency, the charge allocated to the firm account can be used to cover a Resource Backtesting deficiency with a proportionally greater shortfall driven by any other account.

53 See Exchange Act Release No. 79167, supra note 51, 81 FR at 75884 ("Although the third largest historical backtesting deficiency for a Member is used as the Backtesting Charge in most cases, [NSCC and FICC] retain[ ] discretion to adjust the charge amount based on other circumstances that may be relevant for assessing whether an impacted Member is likely to experience future backtesting deficiencies and the estimated size of such deficiencies.").

deficiency during the previous 12 months, rounded up to the nearest $1000. Like the SEC-approved rules of other clearing agencies,[54] Rule 601(h)(2) would also provide that OCC may, in its discretion, adjust such charge if OCC determines that circumstances particular to a Clearing Member's clearance and settlement activity and/or market volatility warrant a different approach to determining or applying such charge in a manner consistent with achieving OCC's backtesting coverage target. As discussed below, the governance concerning exercise of such discretion and the factors that may inform it would be addressed in the Margin Policy.

Rule 601(h)(3) would provide that in calculating a Clearing Member's Resource Backtesting coverage for purposes of the Resource Backtesting Margin Charge and in calculating the third-largest Resource Backtesting deficiency, OCC would not include amounts already collected as a Resource Backtesting Margin Charge from that Clearing Member. As discussed above, OCC would continue to count future Resource Backtesting deficiencies for the purpose of determining whether a Clearing Member should remain subject to the charge by reviewing whether the Clearing Member would have had Resource Backtesting deficiencies had no Resource Backtesting Margin Charge been in effect. In addition, OCC would, as part of the at-least monthly review, determine the third-largest Resource Backtesting deficiency for purposes of increasing or decreasing a charge already in effect without including the existing Resource Backtesting Margin Charge as a resource. This provision mirrors the rules of other clearing agencies filed with the SEC[55] However, OCC would, in accordance with established procedures, test the sufficiency of the Resource Backtesting Margin Charge against a Resource Backtesting variant that includes that charge as a financial resource for purposes of: (i) confirming that the charge, as allocated proportionally to the accounts contributing to the third-largest Resource Backtesting deficiency, would be sufficient to achieve the 99% coverage target, and (ii) increasing the Resource Backtesting Margin Charge for a particular account that may be contributing a proportionally greater amount to other Resource Backtesting deficiencies if the coverage target is not met.

Rule 601(h)(4) would further provide a definition of "Resource Backtesting," which is not a term otherwise found in the By-Laws and Rules. Specifically, Rule 601(h)(4) would provide that for purposes of that Rule, "Resource Backtesting" means backtesting pursuant to OCC's policies and procedures designed to evaluate whether OCC maintains sufficient financial resources to cover its credit exposure to the liquidation portfolio of each Clearing Member from the last margin collection until the end of the liquidation horizon following the Clearing Member's default with a high degree of confidence.

OCC would also amend the section of the Margin Policy that addresses margin add-ons to reflect and reference the Resource Backtesting Margin Charge provisions of proposed OCC Rule 601(h). The Margin Policy would identify the governance processes related to the at-least monthly review of Resource Backtesting deficiencies for purposes of imposing or adjusting a Resource

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54 See supra note 51 and accompanying text.

55 See Exchange Act Release No. 93678 (Nov. 30, 2021), 86 FR 69109, 69110 (Dec. 6, 2021) (SR-NSCC-2021-014).

Backtesting Margin Charge. Specifically, the Margin Policy would provide that FRM would review Resource Backtesting results for the purposes of determining whether a Clearing Member should be assessed a Resource Backtesting Margin Charge and, if so, the amount to be charged. While the review and determination would be conducted at-least monthly, a Resource Backtesting Margin Charge could be applied on an intramonth basis based on the daily backtesting results reviewed by FRM.

The Margin Policy would further provide for the governance with respect to applying a Resource Backtesting Margin Charge. Specifically, based on the at-least monthly review of the Resource Backtesting deficiencies, an FRM Officer[56] would be authorized to approve[57] a Resource Backtesting Margin Charge equal to the third-largest Resource Backtesting deficiency rounded up to the nearest $1,000, excluding any Resource Backtesting Margin Charge currently in effect. The Margin Policy would further provide that the Resource Backtesting Margin Charge generally would be allocated proportionally to the Clearing Member's accounts contribution to the third-largest Resource Backtesting deficiency.

To account for the circumstances when a charge allocated based on the third-largest Resource Backtesting deficiency may be insufficient to increase a Clearing Member's Resource Backtesting to OCC's 99% coverage target due to differences in the accounts contributing to Resource Backtesting deficiencies, the Margin Policy would identify such circumstances as one in which OCC may adjust the Resource Backtesting Margin Charge, consistent with proposed Rule 601(h)(2). In addition, the Margin Policy would provide that an FRM Officer would be authorized, in accordance with established procedures, to approve an additional amount for a particular account necessary to achieve OCC's 99% coverage target at the Clearing Member level. These established procedures would utilize a Resource Backtesting variant that includes the Resource Backtesting Margin Charge as a financial resource to test whether, after applying the charge, the coverage for that Clearing Member would be above OCC's 99% coverage target on a look-back basis. If not, FRM would increase the charge for the accounts contributing to the third largest of the remaining Resource Backtesting deficiencies until the 99% coverage target has been achieved. The FRM Officer's authority to approve an adjustment to the Resource Backtesting Margin Charge would be limited to such increases. Any other adjustments, including any reduction other than a reduction due to a change in the third-largest Resource Backtesting deficiency in the rolling 12-month lookback period, would require MRWG approval.

The Margin Policy would further provide that other adjustments to the Resource Backtesting Margin Charge may be made with approval of the MRWG. As provided in proposed Rule 601(h)(2), such adjustments must be consistent with achieving OCC's Resource Backtesting

[56] Officers are identified in OCC's By-Laws. See OCC By-Law Art. IV. In this context, an FRM Officer would include any member of FRM appointed by the Chief Executive Officer or Chief Operating Officer, including a Managing Director, Executive Director or Executive Principal. Id. § 9.

[57] This type of FRM Officer approval is designed as a control to avoid imposing a charge based on erroneous information.

coverage target. The Margin Policy would provide that circumstances in which MRWG may approve such other adjustments include, but are not limited to, differences in magnitude of the deficiencies observed over the last 12-month period, variability in the Clearing Member's activity since the observed deficiencies, cyclicality of observed deficiencies and/or market volatility.[58]

The Margin Policy would further provide that to the extent OCC implements changes to its margin methodology that affect Clearing Members' margin requirements, OCC would reevaluate Resource Backtesting coverage within the 12-month lookback period based on the margin resources it would have collected under the revised methodology to determine whether a Resource Backtesting Margin Charge for a particular Clearing Member is warranted and, if so, in what amount. For example, if OCC were to begin requiring the collection of additional margin resources through another add-on charge designed to capture some aspect of market risk not adequately captured under OCC's current models (other than the Resource Backtesting Margin Charge itself), the additional resources that OCC would have collected through that add-on may, if charged at the time, have covered observed Resource Backtesting deficiencies within the look-back period, either in whole or in part. In such circumstances, OCC would re-calculate the Resource Backtesting Margin Charge based on the deficiencies that would have remained had the additional resources been collected at the time of the deficiencies. As such, OCC believes the Margin Policy would be designed to avoid double-margining Clearing Members when OCC begins collecting additional margin resources following changes to its margin methodology implemented within the 12-month lookback period.

(iv) <u>Conforming Changes</u>

In connection with the consolidation of OCC's current Business Backtesting and Model Backtesting, as well as the addition of Resource Backtesting, OCC proposes to consolidate its internal procedures for all backtesting into a Backtesting Procedure and associated technical document. Accordingly, OCC would amend its Margin Policy and Model Risk Management Policy to refer to the new Backtesting Procedure, rather than the current Business Backtesting Procedure and Model Backtesting Procedure. In addition, OCC would update the description of ongoing model performance monitoring in the STANS Methodology Description to reflect OCC's Model Backtesting as provided in the Margin Policy and supporting procedure and technical document. OCC would also insert headings into the section of the Margin Policy that addresses add-on charges, including the proposed Resource Backtesting Margin Charge, to separate the discussion of add-on charges for which the Margin Policy already provides specific treatment, such as the add-on to

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[58] These circumstances are consistent with those identified by the SEC in approving authority of other clearing agencies to adjust similar backtesting margin charges. <u>See</u> Exchange Act Release No. 79167, <u>supra</u> note 51, 81 FR at 75884 ("Examples of relevant circumstances that would be considered in calculating the final, applicable Backtesting charge amount include material differences in the three largest backtesting deficiencies observed over the prior 12-month period, variability in the net settlement activity after the collection of the Member's Required Deposit, seasonality in observed backtesting deficiencies and observed market price volatility in excess of the member's historical VaR charge.").

address specific wrong-way risk ("SWWR"), (i.e., the risk that the value of a Clearing Member's positions is positively correlated with the creditworthiness of the Clearing Member).[59]

Implementation Timeframe

OCC will implement the proposed changes within sixty (60) days after the date that OCC receives all necessary regulatory approvals for the proposed changes. OCC will announce the implementation date of the proposed change by an Information Memorandum posted to its public website at least two (2) weeks prior to implementing the Resource Backtesting Margin Charge.

Consistency with DCO Core Principles

OCC reviewed the DCO core principles ("Core Principles") as set forth in the Act,[60] the regulations thereunder,[61] and the provisions applicable to a DCO that elects to be subject to the provisions of 17 CFR Subpart C ("Subpart C DCO").[62] During this review, OCC identified the following as potentially being impacted:

Risk Management OCC believes that the proposed changes concerning Model Backtesting are consistent with Core Principle D and the CFTC Regulations thereunder, which require in relevant part that a DCO's models and parameters used in setting margin requirements be risk based and reviewed on a regular basis.[63] In particular, a DCO is required to test the adequacy of its initial margin requirements by, in relevant part, conducting (i) daily backtests[64] with respect to products that are experiencing significant market volatility for each account held by a Clearing Member at the DCO that contains a significant positions in that product, by house origin and each customer origin, and (ii) at least monthly backtests for each account held by a Clearing Member, by house origin and each customer origin.[65] In conducting such backtests, a DCO must compare portfolio losses only to those components of initial margin that capture changes in market risk factors.[66] In additional, regulations applicable to a Subpart C DCO require that it conduct an assessment of the theoretical

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59 See Exchange Act Release No. 87718 (Dec. 11, 2019), 84 FR 68992 (Dec. 17, 2019) (SR-OCC-2019-010) (approving OCC's SWWR Add-On).

60 7 U.S.C. 7a-1(c)(2).

61 17 CFR 39.9-39.27.

62 E.g., 17 CFR 39.30-39.39.

63 See 7 USC 7a-1(c)(2)(D)(v); 17 CFR 39.13(g)(1).

64 The Commission defines "backtest" to mean "a test that compares a [DCO's] initial margin requirements with historical price changes to determine the extent of actual margin coverage.

65 17 CFR 39.13(g)(7)(i)-(ii).

66 17 CFR 39.13(g)(7)(iii).

and empirical properties of its margin model for all products it clears on an annual basis, or more frequently if there are material relevant market developments.[67]

The proposed Margin Policy would describe how OCC conducts backtesting of its margin models and for each account, including each firm account and each customer account, at least once each day, as required under CFTC Regulation 39.13(g)(7)(i) and (ii).[68] The Margin Policy would also provide that Model Backtesting would be limited to limited to those components of margin requirements that capture changes in market risk factors, consistent with CFTC Regulation 39.13(g)(7)(iii).[69] The proposed enhancements would provide greater clarity and transparency about how OCC establishes, reviews and adjusts the assumptions for backtesting, including the role of the MRWG, Management Committee and Risk Committee in approving changes thereto. Such reviews would occur on at least a monthly basis, but would occur more frequently when the CCA Monitoring Thresholds are breached, consistent with CFTC Regulation 39.36(d).[70]

Financial Resources OCC believes that the proposed changes concerning Resource Backtesting and establishment of the Resource Backtesting Margin Charge are consistent with Core Principle B and the CFTC Regulations thereunder, which require, in relevant part, that each DCO have adequate financial resources to discharge each responsibility of the DCO and maintain sufficient financial resources to cover its exposures with a high degree of confidence.[71] OCC proposes to expand its backtesting analyses to include Resource Backtesting in order to ensure that OCC maintains sufficient margin resources collected from a Clearing Member, among other prefunded financial resources, to cover its credit exposures to that Clearing Member fully with a high degree of confidence. Such Resource Backtesting would take into account other resources collected from a Clearing Member, including non-CiM resources that are subject to fixed collateral haircuts rather than valued through OCC's margin models. In addition, Resource Backtesting would be done at the Clearing Member level, taking into consideration netting rules based on the types of liens OCC has on specific margin accounts. Accordingly, OCC believes that such Resource Backtesting is designed to assess the sufficiency of the margin resources collected from each Clearing Member, among other prefunded resources, available to cover the default of that Clearing Member at the Clearing Member level, consistent with CFTC Regulation 39.11(a).[72]

OCC also believes that the proposed Resource Backtesting Margin Charge is consistent with Core Principles B and G and the CFTC Regulations thereunder, including CFTC Regulation

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[67] 17 CFR 39.36(d).

[68] 17 CFR 39.13(g)(7)(i)-(ii).

[69] 17 CFR 39.13(g)(7)(iii).

[70] 17 CFR 39.36(d).

[71] 17 CFR 39.11(a).

[72] Id.

39.13(g)(2)(iii),[73] which requires that the actual coverage of the initial margin requirements produced by OCC's models, along with projected measures of the models' performance, shall meet an established confidence level of at least 99 percent, based on data from an appropriate historic time period for each account held by a Clearing Member at the DCO, by house origin and by each customer origin. OCC's current backtesting already considers whether OCC's margin model achieves a 99% coverage rate for each marginable account, and OCC maintains authority under its Rules and the Margin Policy to adjust a Clearing Member's margin in the rare event that the 99% coverage standard for Model Backtesting is breached. However, with respect to the proposed Resource Backtesting, OCC has observed deficiencies that would bring certain Clearing Members below OCC's coverage standard. The Resource Backtesting Margin Charge is designed to require additional margin resources when OCC identifies Resource Backtesting deficiencies that bring a Clearing Member's margin coverage, considering OCC's exposure to all of the Clearing Member's accounts, below OCC's 99% coverage standard. OCC has established its Resource Backtesting coverage target to ensure that it maintains sufficient financial resources to discharge its responsibilities with a high degree of confidence, consistent with Core Principle B. The Resource Backtesting Margin Charge applied generally would be equal to the third-largest Resource Backtesting deficiency during the lookback period in order to achieve OCC's Resource Backtesting coverage target, rounded up to the nearest $1,000. OCC would also retain discretion to adjust the Resource Backtesting Margin Charge based on facts and circumstances that would lead it to conclude that a different amount was appropriate and consistent with achieving its 99% coverage target. Accordingly, OCC believes that the proposed Resource Backtesting Margin Charge is consistent with Core Principles B and G and CFTC Regulation 39.11(a)[74] and 39.13(g)(2)(iii)[75] thereunder.

For these reasons, OCC believes that the proposed changes are consistent with the requirements of the DCO Core Principles and the CFTC Regulations thereunder.

Opposing Views

No substantive opposing views were expressed related to the rule amendments by OCC's Board members, Clearing Members or market participants. Public comments on the proposed rule change filed with the SEC, if any, and any OCC response to such comments may be viewed on the SEC's public website.[76]

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[73] 17 CFR 39.13(g)(2)(iii).

[74] 17 CFR 39.11(a).

[75] 17 CFR 39.13(g)(2)(iii).

[76] See Options Clearing Corporation (OCC) Rulemaking, https://www.sec.gov/rules-regulations/self-regulatory-organization-rulemaking/occ.

Notice of Pending Rule Certification

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

Certification

OCC hereby certifies that the rule set forth at Exhibits A through D of the enclosed filing 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,

/s/ Mark C. Brown

Mark C. brown
Executive Director & Associate General Counsel
The Options Clearing Corporation

Enclosure: Exhibits A, B, C & D