SECURITIES AND EXCHANGE COMMISSION (Release No. 34-101569; File No. SR-FICC-2024-003)

November 8, 2024

Self-Regulatory Organizations; Fixed Income Clearing Corporation; Order Approving a Proposed Rule Change, as Modified by Partial Amendment No. 1, to Adopt a Minimum Margin Amount at GSD

On February 27, 2024, Fixed Income Clearing Corporation ("FICC") filed with

the Securities and Exchange Commission ("Commission") proposed rule change SR-

FICC-2024-003 pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934

("Act")¹ and Rule 19b-4 thereunder.² The proposed rule change was published for

comment in the Federal Register on March 15, 2024.³ On March 25, 2024, pursuant to

Section 19(b)(2) of the Act,⁴ the Commission designated a longer period within which to

approve, disapprove, or institute proceedings to determine whether to approve or

disapprove the Proposed Rule Change.⁵ On April 5, 2024, FICC filed Partial Amendment

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ Securities Exchange Act Release No. 99711 (March 11, 2024), 89 FR 18991 (March 15, 2024) (SR-FICC-2024-003). FICC also filed the proposals contained in the proposed rule change as advance notice SR-FICC-2024-801 with the Commission pursuant to Section 806(e)(1) of the Dodd-Frank Wall Street Reform and Consumer Protection Act entitled the Payment, Clearing, and Settlement Supervision Act of 2010 ("Clearing Supervision Act"). 12 U.S.C. 5465(e)(1); 17 CFR 240.19b-4(n)(1)(i). Notice of the advance notice was published in the <u>Federal Register</u> on March 15, 2024. Securities Exchange Act Release No. 99712 (March 11, 2024), 89 FR 18981 (March 15, 2024) (SR-FICC-2024-801). Pursuant to Section 806(e)(1)(H) of the Clearing Supervision Act, the Commission extended the review period of the advance notice for an additional 60 days after finding that the advance notice raised novel and complex issues. On March 22, 2024, the Commission requested additional information from FICC pursuant to Section 806(e)(1)(D) of the Clearing Supervision Act, which tolled the Commission's review period of review of the advance notice. 12 U.S.C. 5465(e)(1)(D). On April 26, 2024, the Commission received FICC's response to the Commission's request for additional information.

⁴ 15 U.S.C. 78s(b)(2).

⁵ Securities Exchange Act Release No. 99769 (March 19, 2024), 89 FR 20716 (March 25, 2024) (SR-FICC-2024-003).

No. 1 to the proposed rule change to correct errors FICC discovered regarding the impact analysis filed as Exhibit 3 and discussed in the filing narrative, as well as correct a typo in the methodology formula in Exhibit 5b.⁶ The corrections in Partial Amendment No. 1 did not change the substance of the proposed rule change.⁷ The proposed rule change, as modified by Partial Amendment No. 1, is hereinafter referred to as the "Proposed Rule Change." On May 20, 2024, the Commission published in the <u>Federal Register</u> notice of filing of Partial Amendment No. 1 and an order instituting proceedings to determine whether to approve or disapprove the Proposed Rule Change.⁸ On September 12, 2024, pursuant to Section 19(b)(2) of the Act,⁹ the Commission extended the period for the

⁶ FICC has requested confidential treatment pursuant to 17 CFR 240.24b-2 with respect to Exhibit 3 and Exhibit 5b.

On April 5, 2024, FICC filed Partial Amendment No. 1 to the advance notice, which makes the same corrections as Partial Amendment No. 1 to the proposed rule change. The Commission published notice of the advance notice, as modified by Partial Amendment No. 1, for comment in the <u>Federal Register</u> on May 20, 2024. Securities Exchange Act Release No. 100140 (May 14, 2024), 89 FR 43941 (May 20, 2024) (SR-FICC-2024-801). The advance notice, as modified by Partial Amendment No. 1, is hereinafter referred to as the "Advance Notice." On August 13, 2024, the Commission made a second request for additional information from FICC pursuant to Section 806(e)(1)(D) of the Clearing Supervision Act, which tolled the Commission's review period of review of the Advance Notice. 12 U.S.C. 5465(e)(1)(D). On September 26, 2024, the Commission received FICC's response to the Commission's second request for additional information.

⁸ Securities Exchange Act Release No. 100141 (May 14, 2024), 89 FR 43915 (May 20, 2024) (SR-FICC-2024-003) ("Notice").

⁹ 15 U.S.C. 78s(b)(2)(B)(ii)(II).

conclusion of proceedings to determine whether to approve or disapprove the Proposed Rule Change.¹⁰

The Commission received comment letters on the Proposed Rule Change.¹¹ In addition, the Commission received a letter from FICC responding to the public comments.¹² For the reasons discussed below, the Commission is approving the Proposed Rule Change.

I. DESCRIPTION OF THE PROPOSED RULE CHANGE

A. <u>Executive Summary</u>

FICC proposes to add a new Minimum Margin Amount ("MMA") calculation to the GSD margin methodology to ensure that FICC collects sufficient margin amounts from its members during sudden periods of extreme market volatility. Recently, FICC faced increased risk exposure to its members during two periods of extreme market volatility, <u>i.e.</u>, the COVID-related volatility in March 2020 and the volatility resulting from the successive interest rate hikes that began in March 2022. Those periods of volatility involved market price changes that exceeded the GSD margin model's projections, causing FICC to collect margin amounts that were insufficient to cover FICC's risk exposure to its members. This highlighted the need for FICC to enhance the

¹⁰ Securities Exchange Act Release No. 100958 (Sept. 6, 2024), 89 FR 74309 (Sept. 12, 2024) (SR-FICC-2024-003).

¹¹ Comments on the Proposed Rule Change are <u>available at https://www.sec.gov/comments/sr-ficc-2024-003/srficc2024003.htm</u>. Comments on the Advance Notice are <u>available at https://www.sec.gov/comments/sr-ficc-2024-801/srficc2024801.htm</u>. Because the proposals contained in the Advance Notice and the Proposed Rule Change are the same, all comments received on the proposals were considered regardless of whether the comments were submitted with respect to the Advance Notice or the Proposed Rule Change.

¹² See Letter from Timothy B. Hulse, Managing Director Financial Risk, Governance & Credit Risk of Depository Trust & Clearing Corporation, (June 24, 2024) ("FICC Letter").

GSD margin methodology to provide better coverage during periods of extreme market volatility.

FICC proposes to add the MMA calculation to the Value-at-Risk charge ("VaR Charge") component of the GSD margin methodology. Whereas the current VaR Charge is determined as the greater of two separate calculations, FICC proposes to add the MMA as a third calculation so that the VaR Charge would be the greater of three separate calculations. FICC specifically designed the MMA calculation to be more responsive to volatile market conditions than the two existing VaR Charge calculations. As described more fully below, the MMA calculation uses a filtered historical simulation ("FHS") approach, which takes historical price data, removes the historical volatility estimates, and replaces them with volatility estimates that reflect current market conditions. The FHS approach also incorporates parameters that would give more weight to recent market events, such that when market volatility spikes, the MMA calculation would generate higher amounts and be more likely to exceed the other two VaR Charge calculations. Conversely, when market volatility subsides, the MMA calculation would generate lower amounts and be less likely to exceed the other two VaR Charge calculations.

FICC conducted a 2-year impact study to analyze, among other things, the actual daily member-level margin amounts and backtesting results in comparison to the margin amounts and backtesting results had the MMA calculation been in place. The impact study indicates that if FICC used the MMA calculation during the 2-year period of

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analysis, FICC's margin collections and backtesting coverage would have significantly improved and enabled FICC to meet its 99 percent backtesting performance targets.

B. Background

FICC, through its Government Securities Division ("GSD"),¹³ serves as a central counterparty ("CCP") and provider of clearance and settlement services for transactions in U.S. government securities, as well as repurchase and reverse repurchase transactions involving U.S. government securities.¹⁴ A key tool that FICC uses to manage its credit exposures to its members is the daily collection of the Required Fund Deposit (<u>i.e.</u>, margin) from each member.¹⁵ The aggregated amount of all members' Required Fund Deposits constitutes the Clearing Fund, which FICC would access should a defaulted member's own Required Fund Deposit be insufficient to satisfy losses to FICC caused by the liquidation of that member's portfolio.¹⁶

A member's Required Fund Deposit consists of a number of components, each of which is calculated to address specific risks faced by FICC.¹⁷ The VaR Charge generally comprises the largest portion of a member's Required Fund Deposit amount. The VaR Charge is a calculation of the volatility of the unsettled securities positions in a member's

¹³ The GSD Rules are <u>available at</u> <u>https://www.dtcc.com/~/media/Files/Downloads/legal/rules/ficc_gov_rules.pdf</u>. Terms not otherwise defined herein are defined in the GSD Rules.

¹⁴ GSD also clears and settles certain transactions on securities issued or guaranteed by U.S. government agencies and government sponsored enterprises.

¹⁵ <u>See GSD Rule 4 (Clearing Fund and Loss Allocation), supra note 13.</u>

¹⁶ See id.

¹⁷ <u>Supra</u> note 15.

portfolio.¹⁸ For each member portfolio, FICC currently uses two separate methods to calculate amounts, the greater of which constitutes the member's VaR Charge.¹⁹

FICC's first calculation uses a sensitivity-based VaR methodology to estimate the possible losses for a given portfolio based on: (1) confidence level, (2) a time horizon, and (3) historical market volatility. The sensitivity VaR methodology is intended to capture the market price risks that are associated with the securities positions in a member's margin portfolio,²⁰ at a 99 percent confidence level. This methodology projects the potential losses that could occur in connection with the liquidation of a defaulting member's portfolio, assuming a portfolio would take three days to liquidate in normal market conditions. The sensitivity VaR methodology relies on sensitivity data and historical risk factor time series data generated by an external vendor to calculate the risk profile of each member's portfolio. In the event of a vendor data disruption, the GSD Rules provide for an alternative volatility calculation hat relies on historical market index proxies (the "Margin Proxy" calculation).²¹

FICC recognizes that the sensitivity VaR methodology might not generate margin amounts sufficient to cover its exposure to its members consistent with its regulatory

¹⁸ <u>See GSD Rule 1 (Definitions – VaR Charge), supra note 13.</u>

¹⁹ <u>See id.</u>

²⁰ Market price risk refers to the risk that volatility in the market causes the price of a security to change between the execution of a trade and settlement of that trade. This risk is sometimes also referred to as volatility risk.

²¹ See GSD Rule 1 (Definitions – Margin Proxy), <u>supra</u> note 13; Securities Exchange Act Release Nos. 80341 (March 30, 2017), 82 FR 16644 (April 5, 2017) (SR-FICC-2017-801); Securities Exchange Act Release No. 83223 (May 11, 2018), 83 FR 23020 (May 17, 2018) (SR-FICC-2018-801).

obligations when applied to certain types of member portfolios.²² Therefore, FICC's second calculation uses a haircut-based methodology (currently referred to in the GSD Rules as the "VaR Floor"),²³ in which FICC applies a haircut to the market value of the gross unsettled positions in the member's portfolio.²⁴ The current VaR Floor is not designed to address the risk of potential underperformance of the sensitivity VaR methodology under extreme market volatility.²⁵ Each member's VaR Charge is either the sensitivity VaR calculation or the VaR Floor calculation, whichever is greater.²⁶

FICC regularly assesses whether its margin methodologies generate margin levels commensurate with the particular risk attributes of each relevant product, portfolio, and market. For example, FICC employs daily backtesting²⁷ to determine the adequacy of

²² See Notice, supra note 8 at 43918. Specifically, for member portfolios that contain both long and short positions in different classes of securities that have a high degree of historical price correlation, the sensitivity VaR methodology can generate inadequate VaR Charges. See id.

²³ <u>Supra note 18.</u>

See Securities Exchange Act Release No. 83362 (June 1, 2018), 83 FR 26514 (June 7, 2018) (SR-FICC-2018-001). Specifically, FICC calculates the VaR Floor by multiplying the absolute value of the sum of the portfolio's net long positions and net short positions, grouped by product and remaining maturity, by a percentage designated by FICC for such group. For U.S. Treasury and agency securities, such percentage shall be a fraction, no less than 10 percent, of the historical minimum volatility of a benchmark fixed income index for such group by product and remaining maturity. For mortgage-backed securities, such percentage shall be a fixed percentage that is no less than 0.05 percent. Supra note 18.

²⁵ <u>See Notice, supra note 8 at 43918.</u>

²⁶ <u>Supra note 18.</u>

²⁷ Backtesting is an ex-post comparison of actual outcomes (<u>i.e.</u>, the actual margin collected) with expected outcomes derived from the use of margin models. <u>See</u> 17 CFR 240.17ad-22(a)(1).

margin collections from its members.²⁸ FICC compares each Member's Required Fund Deposit²⁹ with the simulated liquidation gains/losses, using the actual positions in each member portfolio and the actual historical security returns. A backtesting deficiency occurs when a member's Required Fund Deposit would not have been adequate to cover the projected liquidation losses. Backtesting deficiencies highlight exposures that could subject FICC to potential losses in the event of a member default.

FICC believes that its current VaR model has performed well in low to moderate volatility markets,³⁰ though it has not met FICC's performance targets during periods of extreme market volatility.³¹ As described more fully below, FICC performed an impact study on its members' margin portfolios covering the period beginning July 1, 2021 through June 30, 2023 ("Impact Study").³² During the period of the Impact Study,

^{FICC's Model Risk Management Framework ("Model Risk Management Framework") sets forth the model risk management practices of FICC and states that VaR and Clearing Fund requirement coverage backtesting would be performed on a daily basis or more frequently. See Securities Exchange Act Release Nos. 81485 (Aug. 25, 2017), 82 FR 41433 (Aug. 31, 2017) (SR-FICC-2017-014); 84458 (Oct. 19, 2018), 83 FR 53925 (Oct. 25, 2018) (SR-FICC-2018-010); 88911 (May 20, 2020), 85 FR 31828 (May 27, 2020) (SR-FICC-2020-004); 92380 (July 13, 2021), 86 FR 38140 (July 19, 2021) (SR-FICC-2021-006); 94271 (Feb. 17, 2022), 87 FR 10411 (Feb. 24, 2022) (SR-FICC-2022-001); 97890 (July 13, 2023), 88 FR 46287 (July 19, 2023) (SR-FICC-2023-008).}

²⁹ Members may be required to post additional collateral to the Clearing Fund in addition to their Required Fund Deposit amount. See e.g., Section 7 of GSD Rule 3 (Ongoing Membership Requirements), supra note 13 (providing that adequate assurances of financial responsibility of a member may be required, such as increased Clearing Fund deposits). For backtesting comparisons, FICC uses the Required Fund Deposit amount, without regard to the actual, total collateral posted by the member to the GSD Clearing Fund.

³⁰ During the periods of relatively low to moderate market volatility from January 2013 to March 2020, the VaR model generally performed above the 99 percent performance targets. <u>See Notice, supra note 8 at 43917.</u>

³¹ During the pandemic-related volatility in March 2020 and the successive interest rate hikes that began in March 2022, the VaR model fell below the 99 percent performance targets. <u>See</u> Notice, <u>supra</u> note 8 at 43916-18.

³² As part of the Proposed Rule Change, FICC filed Exhibit 3 – FICC Impact Study. Pursuant to 17 CFR 240.24b-2, FICC requested confidential treatment of Exhibit 3.

FICC's VaR model backtesting coverage was 98.86 percent, with 843 VaR model backtesting deficiencies.³³ Also, during the period of the Impact Study, FICC's overall margin backtesting coverage was 98.87 percent, with 685 overall margin backtesting deficiencies.³⁴ Thus, the Impact Study demonstrates that FICC's backtesting metrics fell below performance targets during the period of the Impact Study.³⁵ FICC states that the foregoing backtesting deficiencies are attributable to recent periods of extreme volatility in the fixed income market caused by monetary policy changes, inflation, and recession fears, which have led to greater risk exposures for FICC.³⁶ Specifically, FICC states that the periods of extreme market volatility in March 2020 related to the COVID pandemic and the successive interest rate hikes that began in March 2022, have led to market price changes that exceeded the projections of FICC's current VaR model, resulting in insufficient VaR Charges.³⁷

³³ <u>See Notice, supra note 8 at 43921.</u>

³⁴ <u>See id.</u>

³⁵ <u>See Notice, supra note 8 at 43916-18.</u>

³⁶ <u>See id.</u>

³⁷ <u>See id.</u>

Accordingly, in the Proposed Rule Change, FICC proposes changes to the VaR model that FICC believes would mitigate the risk of potential underperformance of the VaR model during periods of extreme market volatility.³⁸

C. <u>Proposed Changes</u>

In the Proposed Rule Change, FICC proposes to introduce a new minimum margin amount (i.e., the MMA) into the GSD margin methodology. FICC proposes to calculate the MMA for each member portfolio as a supplement to the existing sensitivity VaR calculation and the haircut-based VaR Floor calculation described above in Section I.B. FICC proposes to rename the current haircut-based VaR Floor calculation as the "VaR Floor Percentage Amount." FICC proposes to revise the existing VaR Floor definition to mean the greater of (1) the VaR Floor Percentage Amount, and (2) the MMA. Thus, the greater of the three calculations (i.e., sensitivity VaR, VaR Floor Percentage Amount, and MMA) would constitute the member's VaR Charge. Additionally, FICC proposes to clarify that the VaR Floor would also apply in the event

³⁸ The proposed changes would revise the GSD Rules and FICC's Methodology Document – GSD Initial Market Risk Margin Model (the "QRM Methodology") relevant to the VaR model. As part of the Proposed Rule Change, FICC filed Exhibit 5b – Proposed Changes to the QRM Methodology. Pursuant to 17 CFR 240.24b-2, FICC requested confidential treatment of Exhibit 5b. FICC originally filed the QRM Methodology as a confidential exhibit to proposed rule change SR-FICC-2018-001. See supra note 24; see also Securities Exchange Act Release No. 83223 (May 11, 2018), 83 FR 23020 (May 17, 2018) (SR-FICC-2018-801). FICC has subsequently amended the QRM Methodology. See Securities Exchange Act Release Nos. 85944 (May 24, 2019), 84 FR 25315 (May 31, 2019) (SR-FICC-2019-001); 90182 (Oct. 14, 2020), 85 FR 66630 (Oct. 20, 2020) (SR-FICC-2020-009); 93234 (Oct. 1, 2021), 86 FR 55891 (Oct. 7, 2021) (SR-FICC-2021-007); 95605 (Aug. 25, 2022), 87 FR 53522 (Aug. 31, 2022) (SR-FICC-2022-005); 97342 (Apr. 21, 2023), 88 FR 25721 (Apr. 27, 2023) (SR-FICC-2023-003); 99447 (Jan. 30, 2024), 89 FR 8260 (Feb. 6, 2024) (SR-FICC-2024-001).

that the Margin Proxy is invoked. The proposed changes are described in greater detail below.

1. <u>Minimum Margin Amount Calculation</u>

FICC would calculate the MMA for each portfolio using historical price returns to represent risk.³⁹ FICC would calculate the MMA as the sum of the following: (1) amounts calculated using an FHS approach⁴⁰ to assess volatility by scaling historical market price returns to current market volatility, with market volatility being measured by applying an exponentially weighted moving average ("EWMA") to the historical market price returns with a decay factor between 0.93 and 0.99,⁴¹ as determined by FICC based on sensitivity analysis, macroeconomic conditions, and/or backtesting performance; (2) amounts calculated using a haircut method to measure the risk exposure of those securities that lack sufficient historical price return data; and (3) amounts calculated to incorporate risks related to (i) repo interest volatility ("repo interest

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⁴¹ FICC would provide members with at least one Business Day advance notice of any change to the decay factor via an Important Notice.

FICC refers to the proposed approach as the "price return-based risk representation" in the QRM Methodology. <u>See</u> Notice, <u>supra</u> note 8 at 43918. Given the availability and accessibility of historical price returns data, FICC believes the proposed approach would help minimize and diversify FICC's risk exposure from external data vendors. <u>See id.</u>

⁴⁰ The FHS method differs from the historical simulation method, which uses historical price return data as is, by incorporating the volatilities of historical price returns. In particular, the FHS method constructs the filtered historical price returns in two steps: "devolatilizing" the historical price returns by dividing them by a volatility estimate for the day of the price return; and "revolatilizing" the devolatilized price returns by multiplying them by a volatility estimate based on the current market. For additional background on the FHS method, <u>see</u> Filtered Historical Simulation Value-at-Risk Models and Their Competitors, Pedro Gurrola-Perez and David Murphy, Bank of England, March 2015, <u>at www.bankofengland.co.uk/working-paper/2015/filtered-historical-simulation-value-at-risk-models-and-their-competitors</u>.

volatility charge")⁴² and (ii) transaction costs related to bid-ask spread in the market that could be incurred when liquidating a portfolio ("bid-ask spread risk charge").⁴³

FHS Method: For the FHS method, FICC would first construct historical price returns using certain mapped fixed income securities benchmarks. Specifically, FICC proposes to use the following mapped fixed income securities benchmarks with the FHS method when calculating the MMA: (1) Bloomberg Treasury indexes for U.S. Treasury and agency securities; (2) Bloomberg TIPS indexes for Treasury Inflation-Protected Securities ("TIPS"); and (3) to-be-announced ("TBA") securities for mortgage-backed securities ("MBS") pools. FICC states that it chose these benchmarks because their price movements generally closely track those of the securities mapped to them and that their price history is generally readily available and accessible.⁴⁴

After constructing historical price returns, FICC would estimate a market volatility associated with each historical price return by applying an EWMA to the historical price returns. FICC would "devolatilize" the historical price returns (<u>i.e.</u>, remove an amount attributable to the historical market volatility from the price returns) by dividing them by the corresponding EWMA volatilities to obtain the residual returns. FICC would "revolatilize" the residual returns (i.e., add an amount attributable to the

⁴² The "repo interest volatility charge" is a component of the VaR Charge designed to address repo interest volatility. The repo interest volatility charge is calculated based on internally constructed repo interest rate indices. As proposed, FICC would include the repo interest volatility charge as a component of the MMA; however, FICC is not proposing to otherwise change the repo interest volatility charge or the manner in which it is calculated. <u>See</u> Notice, <u>supra</u> note 8 at 43918.

⁴³ The "bid-ask spread risk charge" is a component of the VaR Charge designed to address transaction costs related to bid-ask spread in the market that FICC could incur when liquidating a portfolio. As proposed, FICC would include the bid-ask spread risk charge as a component of the MMA; however, FICC is not proposing to otherwise change the bid-ask spread risk charge or the manner in which it is calculated. <u>See</u> Notice, <u>supra</u> note 8 at 43918.

⁴⁴ <u>See Notice, supra note 8 at 43919.</u>

current market volatility to the residual returns) by multiplying them by the current EWMA volatility to obtain the filtered returns.

FICC proposes to use the FHS method to improve the responsiveness of the VaR model to periods of extreme market volatility because historical returns are scaled to current market volatility.⁴⁵ FICC would use filtered return time series to simulate the profits and losses of a member's portfolio and derive the volatility of the portfolio using the standard historical simulation approach. Specifically, FICC would map each security that is in a member's portfolio to a respective fixed income securities benchmark, as applicable, based on the security's asset class and remaining maturity. FICC would use the filtered returns of the benchmark as the simulated returns of the mapped security to calculate the simulated profits and losses of a member's portfolio. Finally, FICC would calculate the MMA as the 99-percentile of the simulated portfolio loss. In accordance with FICC's model risk management practices and governance set forth in the Clearing Agency Model Risk Management Framework,⁴⁶ FICC would determine the mapped fixed income securities benchmarks, historical market price returns, parameters, and volatility assessments used to calculate the MMA.

FHS Parameters: The proposed MMA would use a lookback period for the FHS and a decay factor for calculating the EWMA volatility of the historical price returns. Specifically, the MMA lookback period would be the same as the lookback period currently used for the sensitivity VaR calculation, which is 10 years, plus, to the extent applicable, a stressed period. FICC would analyze the MMA's lookback period and

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⁴⁵ <u>See Notice, supra note 8 at 43916-17.</u>

See Model Risk Management Framework, supra note 28.

evaluate its sensitivity and impact on margin model performance, consistent with the VaR methodology outlined in the QRM Methodology and pursuant to the model performance monitoring required under the Model Risk Management Framework.⁴⁷

The decay factor generally affects (1) whether and how the MMA would be invoked (i.e., applied as a member's VaR Charge), (2) the peak level of margin increase or the degree of procyclicality, and (3) how quickly the margin would fall back to prestress levels. As proposed, FICC would have the discretion to set the decay factor between 0.93 and 0.99, with the initial decay factor value set at 0.97. FICC expects that any adjustment to the decay factor would be an infrequent event that would typically happen only when there is an unprecedented market volatility event resulting in risk exposures to FICC that cannot be adequately mitigated by the then-calibrated decay factor.⁴⁸ FICC's decision to adjust the decay factor would be based on an analysis of the decay factor's sensitivity and impact to the model performance, considering factors including the impact to the VaR Charges, macroeconomic conditions, and/or backtesting performance.⁴⁹ Any decision by FICC to adjust the decay factor would be in accordance

⁴⁷ The Model Risk Management Framework provides that all models undergo ongoing model performance monitoring and backtesting, which is the process of evaluating an active model's ongoing performance based on theoretical tests, monitoring the model's parameters through the use of threshold indicators, and/or backtesting using actual historical data/realizations to test a VaR model's predictive power. <u>Supra</u> note 28.

⁴⁸ <u>See Notice, supra note 8 at 43920.</u>

⁴⁹ <u>See id.</u>

with FICC's model risk management practices and governance set forth in the Model Risk Management Framework.⁵⁰

Haircut Method: Occasionally, a member's portfolio might contain classes of securities that reflect market price changes that are not consistently related to historical price moves. The value of such securities is often uncertain because the securities' market volume varies widely. Because the volume and historical price information for such securities are not sufficient to perform accurate statistical analyses, the FHS method would not generate an MMA amount that adequately reflects the risk profile of such securities. Accordingly, FICC would use a haircut method to assess the market risk of securities that are more difficult to simulate (e.g., due to thin trading history).

Specifically, FICC would use a haircut method for MBS pools that are not TBA securities eligible, floating rate notes, and U.S. Treasury/agency securities with remaining time to maturities of less than or equal to one year. FICC would also use a haircut method to account for the basis risk between an agency security and the mapped U.S. Treasury index to supplement the historical market price moves generated by the FHS method for agency securities to reflect any residual risks between agency securities and the mapped fixed income securities benchmarks (<u>i.e.</u>, Bloomberg Treasury indexes).⁵¹ Similarly, FICC would use a haircut method to account for the MBS pool/TBA basis risk to address

⁵⁰ <u>See</u> Model Risk Management Framework, <u>supra</u> note 28. Similar to the lookback period described above, FICC would also analyze the decay factor to evaluate its sensitivity and impact to the model performance pursuant to the model performance monitoring required under the Model Risk Management Framework.

⁵¹ Accounting for the basis risk would enable FICC to explicitly model and manage the basis risk between an agency security and the mapped U.S. Treasury index, given that agency securities are not as actively traded as U.S. Treasury securities.

the residual risk for using TBA price returns as proxies for MBS pool returns used in the FHS method.

Ongoing Performance Monitoring: The Model Risk Management Framework would require FICC to conduct ongoing model performance monitoring of the MMA methodology.⁵² FICC's current model performance monitoring practices would provide for sensitivity analysis of relevant model parameters and assumptions to be conducted monthly, or more frequently when markets display high volatility.⁵³ Additionally, FICC would monitor each member's Required Fund Deposit and the aggregate Clearing Fund requirements versus the requirements calculated by the MMA, by comparing the results versus the three-day profit and loss of each member's portfolio based on actual market price moves.⁵⁴ Based on the results of the sensitivity analysis and/or backtesting, FICC could consider adjustments to the MMA, including changing the decay factor as appropriate.⁵⁵ Any adjustment to the MMA calculation would be subject to the model risk management practices and governance process set forth in the Model Risk Management Framework.⁵⁶

Impact Study: As mentioned above in Section I.B., FICC performed an Impact Study on its members' margin portfolios covering the period beginning July 1, 2021

⁵² <u>See note 28.</u>

⁵³ <u>See Notice, supra note 8 at 43920.</u>

^{54 &}lt;u>See id.</u>

⁵⁵ <u>See id.</u>

⁵⁶ <u>See Model Risk Management Framework, supra</u> note 28.

through June 30, 2023.⁵⁷ The Impact Study lists the actual daily and average VaR Charges at both the member-level and CCP-level during the period of the Impact Study, compared with how those amounts would have changed if the proposed MMA had been in place. The Impact Study also lists the actual daily backtesting results at the memberlevel during the period of the Impact Study, compared with how those amounts would have changed if the proposed MMA had been in place. The Impact Study shows that if the proposed MMA had been in place. The Impact Study, when compared to the current VaR methodology: (1) the aggregate average daily start-of-day ("SOD") VaR Charges would have increased by approximately \$2.90 billion or 13.89 percent; (2) the aggregate average daily noon VaR Charges would have increased by approximately \$3.03 billion or 14.06 percent; and (3) the aggregate average daily Backtesting Charges⁵⁸ would have decreased by approximately \$622 million or 64.46 percent.⁵⁹

The Impact Study indicates that if the proposed MMA had been in place, the VaR model backtesting coverage would have increased from approximately 98.86 percent to 99.46 percent during the period of the Impact Study and the number of VaR model

⁵⁷ FICC states that it currently does not use Margin Proxy as an adjustment factor to the VaR and does not intend to use it as such in the future. <u>See</u> Notice, <u>supra</u> note 8 at 43921.

⁵⁸ The Backtesting Charge is an additional charge that may be added to a member's VaR Charge to mitigate exposures to FICC caused when the member exhibits a pattern of breaching the target coverage ratio of 99 percent. <u>See</u> GSD Rule 1 (Definitions – Backtesting Charge), <u>supra</u> note 13.

⁵⁹ Margin Proxy was not invoked during the period of the Impact Study. However, if the proposed MMA had been in place and the Margin Proxy was invoked during the period of the Impact Study: the aggregate average daily SOD VaR Charges would have increased by approximately \$4.16 billion or 20.97 percent; the VaR model backtesting coverage would have increased from approximately 98.17 percent to 99.38 percent; and the number of the VaR model backtesting deficiencies would have been reduced by 899 (from 1358 to 459, or approximately 66.2 percent). See Notice, supra note 8 at 43921

backtesting deficiencies would have been reduced by 441 (from 843 to 402, or approximately 52 percent). The Impact Study also indicates that if the proposed MMA had been in place: (1) overall margin backtesting coverage would have increased from approximately 98.87 percent to 99.33 percent, (2) the number of overall margin backtesting deficiencies would have been reduced by 280 (from 685 to 405, or approximately 41 percent), and (3) the overall margin backtesting coverage for 94 members (approximately 72 percent of the GSD membership) would have improved, with 36 members who were below 99 percent coverage brought back to above 99 percent.

On average, at the member-level, the proposed MMA would have increased the SOD VaR Charge by approximately \$22.43 million, or 17.56 percent, and the noon VaR Charge by approximately \$23.25 million, or 17.43 percent, over the period of the Impact Study. The largest average percentage increase in SOD VaR Charge for any member would have been approximately 66.88 percent, or \$97,051 (0.21percent of the member's average Net Capital),⁶⁰ and the largest average percentage increase in noon VaR Charge for any member would have been approximately 64.79 percent, or \$61,613 (0.13 percent of the member's average Net Capital). The largest average dollar increase in SOD VaR Charge for any member would have been approximately \$268.51 million (0.34 percent of the member's average Net Capital), or 19.06 percent, and the largest dollar increase in noon VaR Charge for any member would have been approximately \$268.51 million (1.07 percent of the member's average Net Capital), or 13.67 percent. The top 10 members based on the size of their average SOD VaR Charges and average noon VaR Charges

⁶⁰ The term "Net Capital" means, as of a particular date, the amount equal to the net capital of a broker or dealer as defined in SEC Rule 15c3-1(c)(2), or any successor rule or regulation thereto. <u>See GSD Rule 1 (Definitions), supra note 13.</u>

would have contributed approximately 51.87 percent and 53.64 percent of the aggregated SOD VaR Charges and aggregated noon VaR Charges, respectively, during the period of the Impact Study had the proposed MMA been in place. The same members would have contributed to 50.08 percent and 51.52 percent of the increase in aggregated SOD VaR Charges and aggregated noon VaR Charges, respectively, had the proposed MMA been in place during the period of the Impact Study.

2. <u>Clarification of VaR Floor to Include Margin Proxy</u>

As mentioned above in Section I.B., the Margin Proxy methodology is currently invoked as an alternative volatility calculation if the requisite vendor data used for the sensitivity VaR calculation is unavailable for an extended period of time.⁶¹ FICC proposes to clarify that the VaR Floor, which does not depend upon any vendor data, operates as a floor for the Margin Proxy, such that if the Margin Proxy, when invoked, is lower than the VaR Floor, then the VaR Floor would be utilized as the VaR Charge with respect to a member's portfolio. FICC believes this clarification would enable Margin Proxy to be an effective risk mitigant under extreme market volatility and heightened market stress because as discussed above in Section I.C.1., the proposed VaR Floor would include the MMA calculation.⁶²

II. DISCUSSION AND COMMISSION FINDINGS

Section 19(b)(2)(C) of the Act⁶³ directs the Commission to approve a proposed rule change of a self-regulatory organization if it finds that such proposed rule change is

⁶¹ FICC may deem such data to be unavailable and deploy Margin Proxy when there are concerns with the quality of data provided by the vendor. <u>See</u> Notice, <u>supra</u> note 8 at 43920.

⁶² <u>See id.</u>

⁶³ 15 U.S.C. 78s(b)(2)(C).

consistent with the requirements of the Act and rules and regulations thereunder applicable to such organization. After carefully considering the Proposed Rule Change, the Commission finds that the Proposed Rule Change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to FICC. In particular, the Commission finds that the Proposed Rule Change is consistent with Sections 17A(b)(3)(F) and (b)(3)(I) of the Act⁶⁴ and Rules 17Ad-22(e)(4)(i), (e)(6)(i), and (e)(23)(ii) thereunder.⁶⁵

A. <u>Consistency with Section 17A(b)(3)(F) of the Act</u>

Section 17A(b)(3)(F) of the Act⁶⁶ requires that the rules of a clearing agency, such as FICC, be designed to, among other things, (i) promote the prompt and accurate clearance and settlement of securities transactions, (ii) assure the safeguarding of securities and funds which are in the custody or control of the clearing agency or for which it is responsible, and (iii) protect investors and the public interest.

As described above in Section I.C., FICC proposes to introduce the MMA into its margin methodology to help ensure that FICC collects sufficient margin to manage its potential loss exposure during periods of extreme market volatility. Specifically, the extreme market volatilities during recent stressful market periods led to market price changes that exceeded the current VaR model's projections, generating margin amounts that were not sufficient to mitigate FICC's credit exposure to its members' portfolios at a 99 percent confidence level. FICC's proposed incorporation of the MMA calculation into

⁶⁵ 17 CFR 240.17Ad-22(e)(4)(i), (e)(6)(i), and (e)(23)(ii).

⁶⁴ 15 U.S.C. 78q-1(b)(3)(F) and (b)(3)(I).

⁶⁶ 15 U.S.C. 78q-1(b)(3)(F).

the GSD margin methodology would result in margin levels that better reflect the risks and particular attributes of member portfolios during periods of extreme market volatility.

Implementing the MMA would enable FICC to collect additional margin when the market price volatility implied by the current sensitivity VaR calculation and VaR Floor calculation is lower than the market price volatility implied by the proposed MMA calculation. In its consideration of the proposed MMA, the Commission reviewed and analyzed the: (1) Proposed Rule Change, including the supporting exhibits that provided confidential information on the proposed MMA calculation, Impact Study (including detailed information regarding the impact of the proposed changes on the portfolios of each FICC member over various time periods),⁶⁷ and backtesting coverage results, (2) FICC's response to the Commission's requests for additional information;⁶⁸ (3) public comments and FICC's response; and (4) the Commission's own understanding of the

⁶⁷ The Impact Study, filed confidentially as Exhibit 3, includes, among other things, the following confidentially filed information covering the period from July 1, 2021 through June 30 2023: actual daily VaR amounts for each member; daily VaR amounts for each member had MMA been implemented; daily VaR increase (reflected in dollars, percent, and percent of Net Capital), if any, attributable to MMA; average member-level VaR amounts (reflected in dollars and average of Net Capital); average member-level VaR amounts had MMA been implemented; average member-level VaR amounts had MMA been implemented; average member-level VaR amounts had MMA been implemented; average member-level VaR amounts had MCA been implemented; average member-level VaR amounts, Net Capital amounts, and CCP-level VaR amounts; member-level VaR amounts had Margin Proxy been invoked (daily and summarized); and member-level backtesting results (daily and summarized).

⁶⁸ See supra notes 3, 7. Because the proposals contained in the Proposed Rule Change and the Advance Notice are the same, all information submitted by FICC was considered regardless of whether the information was submitted with respect to the Proposed Rule Change or the Advance Notice. FICC's responses to the Commission's requests for additional information with respect to the Advance Notice include, among other things, the following confidentially filed information: FICC's proprietary information regarding the GSD margin methodology; backtesting data and analyses of daily member-level sensitivity VaR, Margin Proxy, and MMA amounts with alternative stress periods; daily member-level backtesting, sensitivity VaR, and MMA amounts during the Impact Study period specific to bond and MBS positions; and daily member-level sensitivity VaR and MMA amounts for the period of February 1, 2024 through July 31, 2024, with analysis relating to the FICC-CME cross-margining arrangement.

performance of the current GSD margin methodology, with which the Commission has experience from its general supervision of FICC, compared to the proposed margin methodology.

Based on the Commission's review of the Impact Study, had the proposed MMA been in place, both the VaR model backtesting coverage and the overall margin backtesting coverage would have risen above the 99 percent confidence level to 99.46 percent and 99.33 percent, respectively, over the time period covered by the Impact Study.⁶⁹ Additionally, the number of VaR model backtesting deficiencies and overall margin backtesting deficiencies would have been reduced by 441 and 280, respectively.⁷⁰

The proposed MMA methodology would be more likely to apply as the VaR Charge during periods of extreme market volatility because the MMA methodology is more responsive to spikes in market volatility than the sensitivity VaR calculation. As described above in Section I.C.1., the MMA calculation relies, in part, on the FHS method, which takes historical price data, removes the historical volatility estimates, and replaces them with volatility estimates that reflect current market conditions. Additionally, as described above in Section I.C.1., the decay factor used in the FHS method affects: (1) whether and how the MMA would apply to determine a member's VaR Charge; (2) the peak level of margin increase or the degree of procyclicality; and (3) how quickly the margin would fall back to pre-stress levels. A faster decay (<u>i.e.</u>, smaller decay factor value), like the one FICC intends to use initially, would give more weight to more recent market events, while a slower decay would give more weight to older market

⁶⁹ <u>See Notice, supra note 8 at 43921.</u>

⁷⁰ <u>See id.</u>

events. Thus, when market volatility spikes, the MMA calculation would generate higher amounts and thereby be more likely to apply as the VaR Charge (after exceeding the sensitivity VaR calculation). Conversely, when market volatility subsides, the MMA calculation would generate lower amounts and be less likely to apply.

The Impact Study supports this analysis. If the proposed MMA calculation had been in place during the period of the Impact Study, the MMA would have applied primarily during the recent extreme market volatility events (i.e., those in March 2020 and commencing in March 2022). In contrast, during periods of low to moderate market volatility, the MMA calculation would generally not be the greatest amount of the three calculations and thus, would not be invoked. Instead, in periods of low to moderate market volatility, the sensitivity VaR calculation is likely to be the VaR Charge for members whose portfolios do not contain long and short positions in different classes of securities that share a high degree of price correlation. For such long/short portfolios, in low to moderate volatility markets, the VaR Floor Percentage Amount calculation is more likely to be the VaR Charge. The sensitivity VaR calculation and VaR Floor Percentage Amount calculations are likely to generate sufficient margin levels above FICC's 99 percent performance targets during periods of low to moderate market volatility. Indeed, during the periods of low to moderate market volatility from January 2013 to March 2020, the GSD VaR model has generally performed above FICC's 99 percent backtesting performance targets.⁷¹ Implementing the proposed MMA should enable FICC to better manage its exposure to its members during periods of extreme market volatility by generating margin levels that meet FICC's 99 percent backtesting

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See Notice, supra note 8 at 43917.

performance targets.

Additionally, FICC proposes to clarify that if the Margin Proxy, when invoked, is lower than the VaR Floor, then the VaR Floor would be utilized as the VaR Charge with respect to a member's portfolio. Although Margin Proxy was not invoked during the period of the Impact Study, had the proposed changes been in place during that period, the VaR model backtesting coverage would have increased from approximately 98.17 percent to 99.38 percent and the VaR model backtesting deficiencies would have been reduced by 899 (from 1,358 to 459). The Commission agrees that ensuring the VaR Floor operates as a floor for the Margin Proxy would be more effective at mitigating risks under extreme market volatility because as proposed, the VaR Floor would include the MMA calculation.

By helping to ensure that FICC collects margin amounts sufficient to manage the risk associated with its members' portfolios during periods of extreme market volatility, the proposed MMA changes and Margin Proxy clarifications would help limit FICC's exposure in a member default scenario. These proposed changes would generally provide FICC with additional resources to manage potential losses arising out of a member default. Such an increase in FICC's available financial resources would decrease the likelihood that losses arising out of a member default would exceed FICC's prefunded resources resulting in a disruption of FICC's operation of its critical clearance and settlement services. Accordingly, the MMA should help FICC to continue providing

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prompt and accurate clearance and settlement of securities transactions in the event of a member default, consistent with Section 17A(b)(3)(F) of the Act.⁷²

In addition, as described above in Section I.B., FICC would access the mutualized Clearing Fund should a defaulted member's own margin be insufficient to satisfy losses to FICC caused by the liquidation of that member's portfolio. The MMA should help ensure that FICC has collected sufficient margin from members, thereby limiting non-defaulting members' exposure to mutualized losses. By helping to limit the exposure of FICC's non-defaulting members to mutualized losses, the MMA should help FICC assure the safeguarding of securities and funds which are in its custody or control, consistent with Section 17A(b)(3)(F) of the Act.⁷³

The Proposed Rule Change should also help protect investors and the public interest by mitigating some of the risks presented by FICC as a CCP. Because a defaulting member could place stresses on FICC with respect to FICC's ability to meet its clearance and settlement obligations upon which the broader financial system relies, it is important for FICC to maintain a robust margin methodology to limit FICC's credit risk exposure in the event of a member default. As described above in Section I.C.1., the proposed MMA likely would function as the VaR Charge during periods of extreme market volatility. When applicable, the MMA would increase FICC's margin collection during such periods of extreme market volatility. Therefore, implementing the MMA should help improve FICC's ability to collect sufficient margin amounts that are commensurate with the risks associated with its members' portfolios during periods of

⁷² <u>See 15 U.S.C. 78q-1(b)(3)(F).</u>

⁷³ <u>See id.</u>

extreme market volatility. By better enabling FICC to collect margin that more accurately reflects the risk characteristics of its members' portfolios during volatile markets, FICC would be in a better position to absorb and contain the spread of any losses that might arise from a member default. Therefore, the MMA should reduce the possibility that FICC would need to utilize resources from non-defaulting members due to a member default, which could cause liquidity stress to non-defaulting members and inhibit their ability to facilitate securities transactions. Accordingly, because the MMA should help mitigate some of the risks presented by FICC as a CCP, the Proposed Rule Change is designed to protect investors and the public interest, consistent with Section 17A(b)(3)(F) of the Act.⁷⁴

One commenter states that implementation of the MMA would increase costs for market participants, leading to negative effects on the broader U.S. Treasury markets.⁷⁵ Specifically, the commenter states that markets with high margin costs generally have fewer market participants, decreased market liquidity, wider bid/offer spreads, and encourage market participants to either exit the market or pass additional expenses to their customers.⁷⁶ In response, FICC states that the proposed MMA is not designed to advantage or disadvantage capital formation.⁷⁷ Instead, FICC states that the purpose of the proposed MMA is to manage the risk associated with member portfolios during

⁷⁴ <u>See id.</u>

⁷⁵ <u>See</u> Letter from Independent Dealer and Trade Association (May 7, 2024) ("IDTA Letter") at 5-6.

⁷⁶ <u>See id.</u>

⁷⁷ <u>See FICC Letter at 5.</u>

periods of extreme market volatility.⁷⁸ FICC states that although the Proposed Rule Change's increased margin requirements could lessen liquidity for members, it is necessary and appropriate to mitigate the relevant risks.⁷⁹

As stated above in Section I.B., during the period of the Impact Study, the actual GSD VaR model backtesting coverage and overall margin backtesting coverage both fell below the 99 percent confidence level. These shortfalls are specifically attributable to the periods of extreme market volatility of March 2020 and commencing in March 2022. The Impact Study demonstrates that had the proposed MMA calculation been in place during that period, margin amounts would have exceeded the 99 percent backtesting coverage levels. Thus, implementing the MMA calculation would have better enabled FICC to calculate and collect margin amounts sufficient to mitigate the risks presented by its members' portfolios during periods of extreme market volatility.

The Commission acknowledges that implementing the proposed MMA would increase margin requirements during periods of extreme market volatility. However, as detailed above in Section I.C.1., the Impact Study demonstrates that the increased margin requirements attributable to the MMA at the member-level would represent relatively small percentages (<u>i.e.</u>, typically a fraction of one percent) of members' average Net Capital, which tends to indicate that members would likely have access to sufficient financial resources to meet the increased MMA obligation if invoked during periods of extreme market volatility. Therefore, the comment that the increased margin costs attributable to the MMA would decrease market liquidity, widen bid/offer spreads, and

⁷⁸ <u>See id.</u>

⁷⁹ <u>See id.</u>

encourage market participants to either exit the market or pass additional expenses to their customers, do not appear likely based on the limited size of increased VaR Charges from the Impact Study. Additionally, by helping to ensure FICC collects sufficient margin to cover its exposure to members, implementing the MMA would decrease the likelihood of loss mutualization in the event of a member default, which could encourage greater market participation. Moreover, FICC has a regulatory obligation to have policies and procedures to calculate and collect margin amounts sufficient to mitigate the relevant risks presented to it by its members' portfolios.⁸⁰ Indeed, FICC's role as a CCP that reduces systemic risk and promotes market stability is dependent on effectively managing the relevant risks, which includes FICC's collection of sufficient margin from its members.

The Commission also acknowledges the possibility that, as a result of the Proposed Rule Change, some members might pass along some of the costs related to margin requirements such that these costs ultimately are borne, to some degree, by their customers. However, a non-defaulting member's exposure to mutualized losses resulting from a member default, and any consequent disruptions to clearance and settlement absent the Proposed Rule Change, might also increase costs to a member's customers and potentially adversely impact market participation, liquidity, and access to capital. The Proposed Rule Change, by helping to reduce counterparty default risk, would allow the corresponding portion of transaction costs to be allocated to more productive uses by

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See 17 CFR 240.17ad-22(e)(4)(i).

members and their customers who otherwise would bear those costs.⁸¹ Moreover, as discussed above, by helping to limit the exposure of non-defaulting members to mutualized losses, the Proposed Rule Change should help FICC assure the safeguarding of securities and funds of its members that are in FICC's custody or control, consistent with Section 17A(b)(3)(F).⁸²

One commenter states that the proposed MMA would negatively affect markets by having a detrimental effect on certain trading strategies that rely on margin offsets across maturity buckets.⁸³ The commenter states that the MMA would eliminate such offsets, resulting in gross margining across maturity buckets and decreased liquidity.⁸⁴ In response, FICC states that the proposed MMA would not eliminate such margin offsets across maturity buckets.⁸⁵ Specifically, FICC states that the MMA would not differ from the current VaR model insofar as the FHS approach would likewise offset the market risk of long positions in one maturity bucket with the market risk of short positions in another maturity bucket.⁸⁶ Based on the Commission's review and understanding of FICC's proposed changes to the QRM Methodology,⁸⁷ the Commission agrees with FICC's

⁸¹ See Securities Exchange Act Release No. 78961 (September 28, 2016), 81 FR 70786, 70866-67 (October 13, 2016) (S7-03-14) ("CCA Standards Adopting Release").

⁸² <u>See</u> 15 U.S.C. 78q-1(b)(3)(F).

⁸³ <u>See</u> IDTA Letter at 5 (discussing trading strategies that involve Treasury securities in separate maturity buckets, such as buyers at Treasury auctions "rolling backwards" ahead of the auction by short-selling one issue and buy a different outstanding Treasury, Butterfly Spread, and "roll down the curve").

⁸⁴ <u>See id.</u>

⁸⁵ <u>See FICC Letter at 5.</u>

⁸⁶ <u>See id.</u>

⁸⁷ <u>Supra</u> note 38.

response that the FHS approach allows for similar offsetting as the current GSD VaR model regarding the market risk of long positions in one maturity bucket offsetting the market risk of short positions in another maturity bucket.⁸⁸

Another commenter states that FICC's Proposed Rule Change did not adequately address the procyclicality risk⁸⁹ associated with the MMA calculation.⁹⁰ The commenter suggests that FICC should consider revising the MMA calculation to include antiprocyclical measures that would avoid extreme reactions to changes in market volatility.⁹¹ In response, FICC states that it considered and evaluated a number of antiprocyclical measures when developing the MMA.⁹² However, FICC states that, based on the "outlook" for interest rate volatility, FICC determined to rely on the decay factor to control the MMA's responsiveness to market volatility.⁹³

The Commission disagrees with the comment that FICC's proposed MMA calculation does not adequately address procyclicality risk. The decay factor affects, among other things, the speed of the MMA calculation's responsiveness to spikes in extreme market volatility, as well as the speed with which the MMA calculation would

⁸⁸ <u>See</u> FICC Letter at 5.

⁸⁹ Procyclicality risk with respect to margin requirements is the cycle created when a decrease in the mark-to-market value of the securities in a portfolio triggers an increase in margin requirements, which in turn, causes a further decrease in portfolio value.

⁹⁰ See Letter from Robert Toomey, Head of Capital Markets, Managing Director/Associate General Counsel, Securities Industry and Financial Markets Association (May 22, 2024) ("SIFMA Letter") at 6-7.

⁹¹ <u>See SIFMA Letter at 7.</u>

⁹² <u>See FICC Letter at 5-6.</u>

⁹³ <u>See id.</u> When referring to the "outlook for interest rate volatility," the Commission understands that FICC is not referring to a particular analysis of interest rate volatility, but rather is referring to the potential for future interest rate volatility.

generate lower numbers after such volatility subsides. FICC chose to initially set the decay factor at 0.97 – a relatively fast decay factor – to respond to market volatility relatively quickly.⁹⁴ FICC's data demonstrate that had the MMA been in place during the period of the Impact Study, the MMA would have been invoked in a targeted manner (<u>i.e.</u>, specifically during periods of extreme market volatility, but not during periods of low to moderate market volatility). Further, the Commission understands that FICC would be able to use the decay factor to address future interest rate volatility that may occur. Thus, the Impact Study supports FICC's assertion that including the decay factor in the MMA calculation would have mitigated any procyclical results.

Accordingly, the potential impacts of the Proposed Rule Change are justified by the potential benefits to members and the resulting overall improved risk management at FICC described above (<u>i.e.</u>, the prompt and accurate clearance and settlement of securities transactions and the safeguarding of securities and funds based on the collection of margin commensurate with the risks presented by members' portfolios), to

⁹⁴ FICC could adjust the decay factor in accordance with the Model Risk Management Framework. FICC would analyze the decay factor to evaluate its sensitivity and impact to the model performance pursuant to the model performance monitoring required under the Model Risk Management Framework. <u>Supra</u> note 28.

render the Proposed Rule Change consistent with the investor protection and public interest provisions of Section 17A(b)(3)(F) of the Act.⁹⁵

For the reasons discussed above, the Proposed Rule Change is consistent with the requirements of Section 17A(b)(3)(F) of the Act.⁹⁶

B. <u>Consistency with Section 17A(b)(3)(I) of the Act</u>

Section 17A(b)(3)(I) of the Act requires that the rules of a clearing agency, such as FICC, do not impose any burden on competition not necessary or appropriate in furtherance of the Act.⁹⁷ Section 17A(b)(3)(I) does not require the Commission to make a finding that FICC chose the option that imposes the least possible burden on competition. Rather, the Act requires that the Commission find that the Proposed Rule Change does not impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act, which involves balancing the competitive effects of the proposed rule change against all other relevant considerations under the Act.⁹⁸

One commenter states that the MMA's increased margin requirements would be disproportionately burdensome when compared to the MMA's benefits.⁹⁹ Specifically, the commenter cites FICC's statement that during the period of the Impact Study, the overall margin backtesting coverage was approximately 98.87 percent, which is only 0.13

⁹⁸ <u>See</u> Bradford National Clearing Corp., 590 F.2d 1085, 1105 (D.C. Cir. 1978).

⁹⁵ <u>See</u> 15 U.S.C. 78q-1(b)(3)(F).

⁹⁶ <u>See id.</u>

⁹⁷ 15 U.S.C. 78q-1(b)(3)(I).

⁹⁹ <u>See</u> IDTA Letter at 2, 6.

percent under the targeted 99 percent confidence level.¹⁰⁰ In response, FICC states that while the overall margin backtesting coverage during the Impact Study period was 98.87 percent, the GSD's rolling 12-month backtesting coverage actually fell below the 99 percent target in June 2022 and remained below 99 percent until June 2023, with the lowest being 98.33 percent in November 2022.¹⁰¹ Thus, FICC states that the MMA is not designed merely to increase overall margin backtesting coverage by 0.13 percent.¹⁰² As discussed above, had the MMA had been in place during the period of the Impact Study, GSD's overall margin backtesting coverage would have increased from approximately 98.87 percent to 99.33 percent. FICC states that the proposed MMA is part of FICC's overall risk management enhancement program in response to the challenges presented by the market volatility in 2020 and 2022, with MMA specifically designed to enhance the GSD VaR model performance and improve backtesting coverage during periods of extreme market volatility.¹⁰³

The Commission acknowledges that the Proposed Rule Change would entail increased margin charges in certain circumstances. However, increased margin requirements do not present an undue burden on competition if they are necessary or appropriate in furtherance of the Act. As stated above, the Commission has reviewed FICC's backtesting data, and the Commission agrees that it indicates that had the MMA been in place during the Impact Study period, it would have generated margin levels that

¹⁰⁰ <u>See id.</u>

¹⁰¹ <u>See</u> FICC Letter at 6.

¹⁰² <u>See id.</u>

¹⁰³ <u>See FICC Letter at 6-7.</u>

better reflect the risks and particular attributes of the member portfolios and help FICC achieve backtesting coverage above FICC's targeted confidence level. In turn, the Proposed Rule Change would improve FICC's ability to maintain sufficient financial resources to cover its credit exposures to each member in full with a high degree of confidence. Specifically, as described above, the MMA would better enable FICC to calculate the VaR Charge based on the risks presented by the securities positions in each member's portfolio during periods of extreme market volatility. To the extent a member's VaR Charge would increase under the Proposed Rule Change, that increase would be based on the securities held by the member and FICC's requirement to collect margin to appropriately address the associated risk. By helping FICC to better manage its credit exposure, the MMA's increased margin requirements would improve FICC's ability to mitigate the potential losses to FICC and its members associated with liquidating a member's portfolio in the event of a member default.

One commenter states that the MMA's increased margin requirements would unfairly burden smaller FICC members. The commenter further suggests that the MMA should be applied to either the largest FICC members only, or to FICC members in proportion to the risk posed by different segments of the market.¹⁰⁴

In response, FICC refers to its analysis in the Notice regarding whether the Proposed Rule Change would impose a burden on competition.¹⁰⁵ Specifically, FICC acknowledges that during the Impact Study period, the MMA would have increased members' SOD and noon VaR Charges by an average of approximately \$22.43 million,

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¹⁰⁴ <u>See</u> IDTA Letter at 6.

or 17.56 percent, and \$23.25 million, or 17.43 percent, respectively, and that the Proposed Rule Change could impose a burden on competition.¹⁰⁶ Additionally, FICC states that members may be affected disproportionately by the MMA because members with lower operating margins or higher costs of capital than other members are more likely to be impacted.¹⁰⁷ However, FICC states that any burden on competition from the Proposed Rule Change is necessary and appropriate in furtherance of FICC's obligations under the Act, because the Proposed Rule Change would change the GSD Rules to better: (1) assure the safeguarding of securities and funds that are in FICC's custody, control, or responsibility, consistent with section 17A(b)(3)(F) of the Act; and (2) enable FICC to collect sufficient margin amounts that are commensurate with the risks presented by its member portfolios, consistent with Rules 17Ad-22(e)(4)(i) and 17Ad-22(e)(6)(i).¹⁰⁸

Furthermore, FICC states that the methodology for computing the MMA does not take into consideration the member's size or overall mix of business relative to other members.¹⁰⁹ Any effect the Proposed Rule Change would have on a particular member's margin requirement is solely a function of the default risk posed to FICC by the member's activity at FICC – firm size or business model is not pertinent to the

¹⁰⁶ <u>See id.</u>

¹⁰⁷ <u>See id.</u>

¹⁰⁸ <u>See</u> Notice, <u>supra</u> note 8 at 43923-24; FICC Letter at 3-4; 15 U.S.C. 78q-1(b)(3)(F); 17 CFR 240.17Ad-22(e)(4)(i) and (e)(6)(i).

¹⁰⁹ <u>See FICC Letter at 4.</u>

assessment of that risk.¹¹⁰ Accordingly, FICC states that the Proposed Rule Change does not discriminate against members or affect them differently on either of those bases.¹¹¹

As stated above, the Commission acknowledges that the Proposed Rule Change would entail increased margin charges in certain circumstances. In considering the costs and benefits of the requirements of Rule 17Ad-22(e)(6), the Commission expressly acknowledged that "since risk-based initial margin requirements may cause market participants to internalize some of the costs borne by the CCP as a result of large or risky positions, ensuring that margin models are well-specified and correctly calibrated with respect to economic conditions will help ensure that they continue to align the incentives of clearing members with the goal of financial stability."¹¹² Nevertheless, in response to the comment that the Proposed Rule Change would disproportionately affect smaller FICC members, the Commission understands that the impact of the MMA would be entirely determined by a member's portfolio composition and trading activity rather than the member's size or type. Specifically, as described above, the MMA would better enable FICC to calculate the VaR Charge based on the risks presented by the securities positions in each member's portfolio during periods of extreme market volatility. To the extent a member's VaR Charge would increase under the Proposed Rule Change, that

¹¹⁰ <u>See id.</u>

¹¹¹ <u>See id.</u>

¹¹² See CCA Standards Adopting Release at 70870, <u>supra</u> note 81. In addition, when considering the benefits, costs, and effects on competition, efficiency, and capital formation, the Commission recognized that a covered clearing agency, such as FICC, might pass incremental costs associated with compliance on to its members, and that such members may seek to terminate their membership with that CCA. See id. at 70865.

increase would be based on the securities held by the member and FICC's requirement to collect margin to appropriately address the associated risk.

In addition, as discussed above, the Commission acknowledges that the impact of a higher margin requirement may present higher costs on some members relative to others due to a number of factors, such as access to liquidity resources, cost of capital, business model, and applicable regulatory requirements. These higher relative burdens may weaken certain members' competitive positions relative to other members.¹¹³ However, in this instance, any competitive burden stemming from a higher impact on some members than on others is necessary or appropriate in furtherance of the Act. FICC is required to establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a riskbased margin system that, at a minimum, considers and produces margin levels commensurate with the risks and particular attributes of each relevant product, portfolio, and market.¹¹⁴ FICC's members include a large and diverse population of entities with a range of ownership structures.¹¹⁵ By participating in FICC, each member is subject to the same margin requirements, which are designed to satisfy FICC's regulatory obligation to manage the risks presented by its members. As discussed in more detail in Section II.D. below, the Proposed Rule Change is designed to ensure that FICC collects margin that is

¹¹³ These potential burdens are not fixed, and affected members may choose to restructure their liquidity sources, costs of capital, or business model, thereby moderating the potential impact of the Proposed Rule Change.

¹¹⁴ <u>See</u> 17 CFR 240.17Ad-22(e)(6)(i).

¹¹⁵ See FICC GSD Membership Directory, available at <u>https://www.dtcc.com/client-center/ficc-gov-directories</u>.

commensurate with the risks presented by each member's portfolio during periods of extreme market volatility.

Additionally, as discussed above, the Commission has reviewed FICC's backtesting data and agrees that it indicates that had the MMA been in place during the Impact Study period, it would have generated margin levels that better reflect the risks and particular attributes of the member portfolios and help FICC achieve backtesting coverage closer to FICC's targeted confidence level. In turn, the Proposed Rule Change would improve FICC's ability to maintain sufficient financial resources to cover its credit exposures to each member in full with a high degree of confidence. By helping FICC to better manage its credit exposure, the Proposed Rule Change would improve FICC's ability to 1) mitigate the potential losses to FICC and its members associated with liquidating a member's portfolio in the event of a member default, in furtherance of FICC's obligations under Section 17A(b)(3)(F) of the Act,¹¹⁶ and (2) collect sufficient margin amounts that are commensurate with the risks presented by its members' portfolios, consistent with Rules 17Ad-22(e)(4)(i) and 17Ad-22(e)(6)(i).¹¹⁷

Commenters also expressed concerns about the cumulative burdens of the Proposed Rule Change in conjunction with recent changes to the GSD Rules regarding

¹¹⁶ <u>See</u> 15 U.S.C. 78q-1(b)(3)(F).

¹¹⁷ <u>See</u> 17 CFR 240.17Ad–22(e)(4)(i) and (e)(6)(i).

margin requirements, including an announced special charge that FICC collects in connection with certain volatile market events ("VME Special Charge").¹¹⁸

In response, FICC states that each of the GSD margin components is specifically designed to mitigate a different risk and limit FICC's exposures.¹¹⁹ FICC states that it announced the VME Special Charge on April 12, 2024 to supplement a member's margin requirement for the days immediately surrounding five scheduled economic indicator release dates if a forward looking indicator were to signal potential heightened market volatility.¹²⁰ FICC further states that the VME Special Charge is designed to complement the Proposed Rule Change. Specifically, FICC states that the VME Special Charge is designed to cover the periods leading up to the market events that can impact the market, while the Proposed Rule Change, in contrast, is specifically designed to respond to observed market volatility and supplement the VaR model following the observation of extreme market volatility.¹²¹ FICC states that by applying the VME Special Charge as disclosed in the Important Notice, it expects that its VaR model, in conjunction with the

¹¹⁸ See IDTA Letter at 4-5; SIFMA Letter at 5-6 (referring to other recent margin changes at FICC, including, e.g., the imposition of a special charge at volatile market events) (citing Memo from FICC to Government Securities Division Members (Apr. 12, 2024)). See also GSD Rule 4, Section 1b(a)(vii) (defining "special charge"), supra note 13.

¹¹⁹ <u>See FICC Letter at 8-9.</u>

¹²⁰ See id. On April 12, 2024, FICC published on its website an Important Notice indicating that as of April 15, 2024, FICC would collect a special charge equal to 10 percent of a Netting Member's VaR Charge on the two days prior to, and on the day of, certain volatile market events specified in the Important Notice, if certain conditions are met. The Important Notice is <u>available at</u> <u>https://www.dtcc.com/-/media/Files/pdf/2024/4/12/GOV1681-24---Special-Charge-at-Volatile-Market-Events.pdf</u>.

¹²¹ <u>See</u> FICC Letter at 8.

proposed MMA, would be able to respond to observed market volatility, removing the need for additional special charges.¹²²

FICC also describes a number of other recent changes to the GSD margin model, although commenters did not specify any other recent changes to the GSD Rules beyond the VME Special Charge. Specifically, FICC states that in July 2023, FICC revised the stressed period used to calculate the VaR Charge in order to provide better risk coverage on the short-end of the curve.¹²³ FICC also states that in October 2023, FICC adopted a Portfolio Differential Charge in order to mitigate the risk presented to FICC by period-over-period fluctuations in a member's portfolio.¹²⁴

As stated above in Section I.A., each member's Required Fund Deposit consists of a number of components, which are calculated to address specific risks faced by FICC.¹²⁵ Each Required Fund Deposit component, when applicable, may increase a member's margin requirements. However, the various margin components are designed to generate margin amounts commensurate with the relevant risks associated with the content of member portfolios. For example, the special charge is an additional margin component specifically provided for in the GSD Rules and designed to address risks

¹²² <u>See id</u>.

¹²³ See Securities Exchange Act Release No. 97342 (April 21, 2023), 88 FR 25721 (April 27, 2023) (SR-FICC-2023-003) (Order Granting Proposed Rule Change to Revise the Description of the Stressed Period Used to Calculate the VaR Charge and Make Other Changes) ("Stressed Period Order"); see FICC Letter at 8.

 <u>See</u> Securities Exchange Act Release No. 98494 (Sept. 25, 2023), 88 FR 67394 (Sept. 29, 2023) (SR-FICC-2023-011) (Order Approving Proposed Rule Change, as Modified by Amendment No. 1, to Adopt a Portfolio Differential Charge as an Additional Component to the GSD Required Fund Deposit) ("Portfolio Differential Order"). FICC also states that the Impact Study was generated based on the assumption that the Portfolio Differential Charge was in effect during the entirety of the Impact Study Period. <u>See</u> FICC Letter at 8.

¹²⁵ <u>Supra</u> note 15.

associated with market conditions or other financial and operational factors.¹²⁶ In particular, the VME Special Charge is necessary to mitigate risks – not mitigated by other margin components – regarding potentially heightened market volatility for the days immediately surrounding five scheduled economic indicator release dates, including the two days prior to the event when the volatility would not yet be captured by the current VaR model.¹²⁷ Although cumulative, these margin components are consistent with FICC's obligation to maintain a risk-based margin system that considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market.¹²⁸

The Portfolio Differential Charge is designed to mitigate the risks attributable to intraday margin fluctuations in certain member portfolios as those members execute trades throughout the day.¹²⁹ Specifically, since FICC generally novates and guarantees trades upon trade comparison, a member's trading activity may result in coverage gaps due to large unmargined intraday portfolio fluctuations that remain unmitigated from the time of novation until the next scheduled margin collection.¹³⁰ The impact of the Portfolio Differential Charge depends on the period-over-period change in the size and

¹²⁶ <u>See GSD Rule 4 (Clearing Fund and Loss Allocation), supra note 13.</u>

¹²⁷ <u>Supra</u> note 120.

¹²⁸ 17 CFR 240.17Ad-22(e)(6)(i).

¹²⁹ <u>See Portfolio Differential Order, supra note 124 at 67396.</u>

¹³⁰ <u>See id</u>.

composition of a member's portfolio.¹³¹ In approving FICC's Portfolio Differential proposed rule change, the Commission determined, among other things, that implementing the Portfolio Differential Charge would better enable FICC to collect margin amounts commensurate with FICC's intraday credit exposures to its members.¹³² The Commission also considered the proposed Portfolio Differential Charge's impact on competition and found the proposal to be consistent with the Act.¹³³ Although the Portfolio Differential Charge, when applicable, and the VaR Charge are cumulative to one another, both margin components are designed to mitigate different risks.

Additionally, not all margin components are cumulative to one another. For example, in addition to the Portfolio Differential Charge discussed above, one of the margin components recently changed relates to FICC's Stressed Period Order,¹³⁴ which involves a VaR Charge calculation that would be an alternative to the MMA rather than in addition to the MMA. As described above in Section I.C.1., the sensitivity VaR methodology incorporates a lookback period of 10 years to capture periods of historical volatility. As described in the Stressed Period Order, the GSD VaR methodology allows FICC to include an additional period of historically observed stressed market events if the 10-year lookback period does not contain a sufficient number of stressed events.¹³⁵

See Securities Exchange Act Release No. 98160 (Aug. 17, 2023), 88 FR 57485, 57488 (Aug. 23, 2023) (SR-FICC-2023-011) (Notice of Filing of Proposed Rule Change, as Modified by Amendment No. 1, to Adopt a Portfolio Differential Charge as an Additional Component to the GSD Required Fund Deposit).

¹³² <u>See Portfolio Differential Order, supra</u> note 124 at 67397.

¹³³ <u>See id</u>.

¹³⁴ <u>See Stressed Period Order, supra note 123.</u>

¹³⁵ <u>See id</u>. at 25722.

Although FICC's decision to adjust the stressed period could increase a member's VaR Charge, that increase would be in direct relation to the specific risks presented by the member's portfolio.¹³⁶ The ability to quickly adjust the stressed period provides FICC with the flexibility to timely respond to rapidly changing market conditions and better ensure that the sensitivity VaR calculation results in margin amounts that sufficiently risk manage FICC's credit exposures to its members' portfolios during such market conditions.¹³⁷ However, as described above in Section I.C., a member's VaR Charge would be the greater of three calculations (<u>i.e.</u>, sensitivity VaR, VaR Floor Percentage Amount, and MMA). The sensitivity VaR calculation, even if increased pursuant to the Stressed Period Order, and MMA are not cumulative.

One commenter states that the Commission's approval of the Proposed Rule Change should be delayed until after conducting further analysis, including analyses that incorporate expected increases in cleared volumes and the totality of changes to margin requirements associated with FICC's upcoming implementation of its requirement to facilitate access to clearance and settlement services of all eligible secondary market transactions in U.S. Treasury securities.¹³⁸ The Commission disagrees that the commenter's requested additional analyses are necessary for the Commission to evaluate the Proposed Rule Change for consistency with the Act and the rules thereunder. As stated above in the preamble to Section II., the standard of review under Section

¹³⁶ <u>See id</u>. at 25722-24.

¹³⁷ <u>See Stressed Period Order, supra note 123 at 25724.</u>

¹³⁸ See SIFMA Letter at 8; Securities Exchange Act Release No. 99149 (Dec. 13, 2023), 89 FR 2714 (Jan. 16, 2024) (the rules adopted therein are referred to as the "Treasury Clearing Rules").

19(b)(2)(C) of the Act¹³⁹ is for the Commission to approve a proposed rule change of a self-regulatory organization upon finding that such proposed rule change is consistent with the requirements of the Act and rules and regulations thereunder applicable to such organization. In this Section II., the Commission describes its review of the Proposed Rule Change for consistency with the Act and regulations thereunder, along with the Commission's rationale for approving the Proposed Rule Change. The Commission will separately evaluate any proposed rule change that FICC files in connection with implementing FICC's obligations under the Treasury Clearing Rules.

Therefore, for the reasons stated above, the Proposed Rule Change is consistent with the requirements of Section 17A(b)(3)(I) of the Act.¹⁴⁰

C. <u>Consistency with Rule 17Ad-22(e)(4)(i)</u>

Rule 17Ad-22(e)(4)(i) under the Act requires that FICC establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively identify, measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes, including by maintaining sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence.¹⁴¹

The Proposed Rule Change is consistent with Rule 17ad-22(e)(4)(i) under the Exchange Act.¹⁴² As described above in Section I.C.1., the current GSD VaR model

- ¹⁴¹ 17 CFR 240.17Ad-22(e)(4)(i).
- ¹⁴² <u>See id.</u>

¹³⁹ 15 U.S.C. 78s(b)(2)(C).

¹⁴⁰ 15 U.S.C. 78q-1(b)(3)(I).

generated margin amounts that were not sufficient to mitigate FICC's credit exposure to its members' portfolios at the 99 percent backtesting confidence level during periods of extreme market volatility, particularly during March 2020 and beginning in March 2022. The Impact Study demonstrates that had the proposed MMA calculation been in place during that period, margin amounts would have exceeded the 99 percent backtesting coverage levels. Therefore, adding the MMA calculation to the GSD margin methodology should better enable FICC to calculate and collect margin amounts that are sufficient to mitigate FICC's credit exposure to its members' portfolios during periods of extreme market volatility.

Additionally, FICC proposes to clarify that if the Margin Proxy, when invoked, is lower than the VaR Floor, then the VaR Floor would be utilized as the VaR Charge with respect to a member's portfolio. Although Margin Proxy was not invoked during the period of the Impact Study, had the proposed changes been in place during that period, the VaR model backtesting coverage would have been increased to exceed the 99 percent backtesting coverage level. Therefore, the proposed clarifications regarding the applicability of the VaR Floor when Margin Proxy is invoked would help ensure FICC's ability to manage its credit exposures to members by maintaining sufficient financial resources to cover such exposures fully with a high degree of confidence.

Accordingly, for the reasons discussed above, the proposed MMA changes and Margin Proxy clarifications are reasonably designed to enable FICC to effectively

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identify, measure, monitor, and manage its credit exposure to participants, consistent with Rule 17ad-22(e)(4)(i).¹⁴³

D. Consistency with Rules 17Ad-22(e)(6)(i)

Rules 17Ad-22(e)(6)(i) requires that FICC establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that, at a minimum, considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market, and calculates margin sufficient to cover its potential future exposure to participants.¹⁴⁴

The Proposed Rule Change is consistent with Rule 17ad-22(e)(6)(i). As described above in Section I.C., the Impact Study demonstrates that the current VaR model generated margin deficiencies during periods of extreme market volatility, whereas implementing the proposed MMA changes and Margin Proxy clarifications would result in VaR Charges that reflect the risks of member portfolios during such periods better than the current GSD VaR model. Moreover, FICC's inclusion of the decay factor in the MMA calculation appropriately limits invoking the MMA as the VaR Charge to periods of extreme market volatility. The decay factor affects, among other things, the peak level of margin increase or the degree of procyclicality and how quickly the margin would fall back to pre-stress levels. FICC chose to initially set the decay factor at 0.97 – a relatively

¹⁴³ <u>See</u> 17 CFR 240.17Ad-22(e)(4)(i).

¹⁴⁴ 17 CFR 240.17ad-22(e)(6)(i).

fast decay factor – to be quickly responsive to market volatility.¹⁴⁵ FICC's data demonstrate that had the MMA been in place during the period of the Impact Study, the MMA would have been invoked in a targeted manner (<u>i.e.</u>, specifically during periods of extreme market volatility, but not during periods of low to moderate market volatility). Thus, the MMA is specifically designed to enable FICC to collect margin amounts commensurate with the relevant risks associated with member portfolios during periods of extreme market volatility. The Proposed Rule Change would provide FICC with a margin methodology better designed to enable FICC to cover its credit exposures to its members by enhancing FICC's risk-based margin system to produce margin levels commensurate with the relevant risks during periods of extreme market volatility.

Several commenters addressed FICC's Impact Study. Specifically, one commenter states that the Impact Study is too limited, providing backtesting data with extremely uneven daily impacts, thereby rendering it impossible to properly assess the MMA's impacts.¹⁴⁶ Another commenter states that FICC underestimates the MMA's impacts by using the full two-year period of the Impact Study to calculate average impacts when the actual period of increased volatility only covers a nine-month period.¹⁴⁷ This commenter states that while FICC expressed the increase in margin requirements in terms of long-term averages, broker-dealers actually plan for capitalization based on

¹⁴⁵ FICC could adjust the decay factor in accordance with the Model Risk Management Framework. FICC would analyze the decay factor to evaluate its sensitivity and impact to the model performance pursuant to the model performance monitoring required under the Model Risk Management Framework. <u>Supra</u> note 28.

¹⁴⁶ SIFMA Letter at 6.

¹⁴⁷ <u>See</u> IDTA Letter at 3 (arguing that calculating averages using a two-year period instead of a ninemonth period decreases the average 2.66 times).

meeting their largest margin requirement rather than their average capital usage.¹⁴⁸ The commenters state that while FICC's impact analysis cited examples of members with the largest average percentage and dollar increases resulting from the MMA, those market participants are either too small or too large to be representative of the Proposed Rule Change's impact on other members.¹⁴⁹ The commenters state that the actual effects of the MMA on middle-market dealers will be higher than FICC's cited examples.¹⁵⁰ The commenters suggest that alternative impact measurements would provide a more accurate analysis of the proposed MMA's impacts.¹⁵¹

In response to these comments, FICC states that due to confidentiality restrictions on releasing member-level data, the public-facing Proposed Rule Change filing narrative analyzed the Impact Study using anonymized data and averages of maximum dollar and percentage changes.¹⁵² However, FICC provided the Commission with expanded and detailed daily member-level Impact Study data confidentially, as part of the Proposed

¹⁴⁸ <u>See</u> IDTA Letter at 3.

¹⁴⁹ <u>See</u> IDTA Letter at 3; SIFMA Letter at 6.

See e.g., IDTA Letter at 3-4 (contrasting FICC's Impact Study analysis that expresses the largest member increase that would have resulted from the MMA as 0.21 percent of net capital, against the average margin increase that the MMA would have added for IDTA members of 5.1 percent of net capital, or 16.0 percent of net capital for the top 100 days in terms of margin increases); see SIFMA Letter at 6.

See IDTA Letter at 3-4, 7; SIFMA Letter at 6. For example, one commenter suggests that FICC should express the impact as the average percent increase for the top 100 most stressful days. See IDTA Letter at 3-4 (stating that the average percentage increase for the top 100 most stressful days in terms of margin increases for IDTA members, the more relevant metric in terms of capital planning in actual practice was 37.23 percent or \$27.52 million). The other commenter suggests that a better measure of liquidity impact than average daily data would be the peak aggregate additional margin that would be required for both a 1-day and 5-day period. See SIFMA Letter at 6.

¹⁵² <u>See FICC Letter at 7.</u>

Rule Change filing in Exhibit 3.¹⁵³ FICC further states that both prior and subsequent to filing the Proposed Rule Change, FICC actively engaged with members on multiple occasions, conducting outreach to each member in order to provide notice of the Proposed Rule Change along with individualized anticipated impacts for each member.¹⁵⁴

In considering the comments critical of the Impact Study and FICC's analyses thereof, the Commission considered the Proposed Rule Change (including the Impact Study¹⁵⁵ and other confidentially filed data¹⁵⁶), comment letters, FICC's response letter, and the Commission's own understanding of the GSD margin methodology based on its general supervision of FICC. Based on the Commission's review and analysis of these materials, the Commission disagrees with the comments suggesting that FICC's Impact Study and analyses are inaccurate and/or misleading. In the Proposed Rule Change narrative, FICC described the Impact Study in anonymized terms, highlighting averages and maximum dollar and percentage changes, due to the confidential nature of the member-level transactions that comprise the underlying data. However, FICC filed the confidential member-level data with the Commission in Exhibit 3 to the Proposed Rule Change filing. FICC also provided relevant confidential data in its response to the Commission's requests for additional information with respect to the Advance Notice.¹⁵⁷ Additionally, in the Commission's supervisory role, the Commission routinely collects

¹⁵³ <u>See id.</u>

¹⁵⁴ <u>See</u> FICC Letter at 6.

¹⁵⁵ <u>See supra</u> note 67.

¹⁵⁶ <u>Supra</u> notes 3, 7, 68.

¹⁵⁷ <u>Supra</u> notes 3, 7.

confidential margin-related data from FICC. These data sources enable the Commission to evaluate the effects of the MMA on a member-by-member basis.

The purpose of the Impact Study and FICC's analyses thereof in the publicly available Proposed Rule Change filing materials is to highlight comparisons of the GSD VaR model's performance with and without incorporating the MMA and to highlight the Proposed Rule Change's general impacts on members using anonymized data and averages of maximum dollar and percentage changes. FICC did not state that its public discussion of the Impact Study was the sole source of data for the Commission and the public to utilize in evaluating the Proposed Rule Change. Rather, FICC provided additional detailed member-level data confidentially, both to members and the Commission, to more fully evaluate the impacts of the Proposed Rule Change.

Regarding the comments that FICC's analysis of the Impact Study data presented an inaccurate picture of the MMA's impacts,¹⁵⁸ the Commission recognizes that FICC provided individual impact studies for each member that included the average impact for the entire period of the Impact Study as well as the average impact on those days that the proposed MMA would have been applied for each member.¹⁵⁹ Therefore, the commenters' concerns regarding the Impact Study do not take into account that both the Commission and FICC's members also reviewed more detailed confidential data to better

¹⁵⁸ These comments include regarding: FICC's use of the two-year period of the Impact Study instead of the 9-month period of extreme market volatility when presenting average impacts (see IDTA Letter at 3); FICC's use of long-term average margin increases instead of maximum margin increases resulting from implementing the MMA (see id.); FICC's examples of members with the largest average percentage and dollar increases resulting from the MMA (see IDTA Letter at 3; see SIFMA Letter at 6); and preferred alternative impact measurements (see IDTA Letter at 3-4; see SIFMA Letter at 6).

¹⁵⁹ <u>See FICC Letter at 7.</u>

understand the specific member-level impacts of the Proposed Rule Change. The comment that FICC's public discussion of the Impact Study presented limited data, rendering it impossible to properly evaluate the MMA's impacts, does not take into account that FICC provided more comprehensive confidential data to the Commission and members that was sufficient to properly assess the MMA's impacts. Specifically, such data includes, among other things, actual daily VaR Charge for each member, hypothetical daily VaR Charge for each member had the MMA been in place, hypothetical daily VaR Charge for each member had Margin Proxy been invoked, analyses of increases attributable to the MMA, and numerous backtesting analyses. The comment that FICC's public discussion of the Impact Study underestimated the MMA's impacts by calculating the average impacts based on the full two-year period rather than the nine-month period of volatility does not take into account that FICC confidentially provided individual impact studies for each member that included average impacts on each day that the MMA would have applied to the member.¹⁶⁰ Similarly, the comment that FICC's public discussion of the Impact Study expressed the increase in margin requirements in terms of long-term averages as opposed to largest margin requirements does not take into account that FICC confidentially provided individual impact studies for each member indicating maximum margin increases on each day that the MMA would have applied to the member.¹⁶¹ The comment that FICC's public discussion of the Impact Study cited impacted members that are not representative and underestimate the MMA's impacts on middle-market participants does not take into account that FICC provided

^{160 &}lt;u>See id.</u>

¹⁶¹ <u>See id.</u>

member-level impact data to each member.¹⁶²

One commenter also states that FICC should expand the Impact Study to cover the March 2020 period of stress in light of FICC's statements that the Proposed Rule Change was driven, in part, by the VaR model's underperformance during that period.¹⁶³ In response, FICC states that inclusion of that data is not necessary because the Impact Study's two-year period achieves the purpose of demonstrating the effectiveness of the proposed MMA during periods of both low and high market volatility.¹⁶⁴ The Commission agrees that the Impact Study's two-year period sufficiently demonstrates the performance of the proposed MMA during periods of both low and high market volatility, as the two-year study period also included periods of both low and high market volatility. Inclusion of March 2020 in the Impact Study is not required for the Commission to evaluate the responsiveness of the MMA.

Accordingly, the Proposed Rule Change is consistent with Rule 17ad-22(e)(6)(i) because the new MMA margin calculation and Margin Proxy clarifications should better enable FICC to establish a risk-based margin system that considers and produces relevant

¹⁶² <u>See id.</u>

¹⁶³ <u>See SIFMA Letter at 6.</u>

¹⁶⁴ <u>See FICC Letter at 6.</u>

margin levels commensurate with the risks associated with liquidating participant portfolios in a default scenario during periods of extreme market volatility.¹⁶⁵

E. <u>Consistency with Rule 17Ad-22(e)(23)(ii)</u>

Rule 17Ad-22(e)(23)(ii) requires that FICC establish, implement, maintain and enforce written policies and procedures reasonably designed to provide sufficient information to enable participants to identify and evaluate the risks, fees, and other material costs they incur by participating in FICC.¹⁶⁶

One commenter states that the Proposed Rule Change lacks transparency, quick implementation, and tools and resources to support market preparedness to identify risks and costs associated with how FICC calculates margin amounts.¹⁶⁷ Specifically, the commenter urges FICC to provide members with (1) daily VaR calculations, (2) an MMA calculator, and (3) a phased implementation of the MMA, including a parallel run period where the MMA is calculated but not invoked.¹⁶⁸

In response, FICC states that it provides tools and resources to enable members to determine their margin requirements and the impact of FICC's proposals.¹⁶⁹ Specifically, FICC maintains the Real Time Matching Report Center, Clearing Fund Management System, FICC Customer Reporting Service, and FICC Risk Client Portal which are client

¹⁶⁵ 17 CFR 240.17Ad-22(e)(6)(i).

¹⁶⁶ 17 CFR 240.17ad-22(e)(23)(ii).

¹⁶⁷ <u>See SIFMA Letter at 7-8.</u>

¹⁶⁸ <u>See id.</u>

¹⁶⁹ <u>See FICC Letter at 7.</u>

accessible websites for accessing risk reports and other risk disclosures.¹⁷⁰ These resources enable members to view Clearing Fund requirement information and margin component details, including portfolio breakdowns by CUSIP and amounts attributable to the sensitivity-based VaR model.¹⁷¹ Members are also able to view data on market amounts for current clearing positions and associated VaR Charges.¹⁷² Additionally, the FICC Client Calculator enables members to, among other things, enter "what-if" position data to determine hypothetical VaR Charges before trade execution. FICC states that as of June 24, 2024, FICC is in the process of enhancing the FICC Client Calculator to incorporate the MMA and FICC expects the enhancement to be available to members prior to implementation of the MMA, subject to the Commission's approval.¹⁷³ FICC also states that it is currently developing a tool that would enable non-members to assess potential VaR Charges (including MMA) as well.¹⁷⁴

The extensive tools and resources that FICC makes available to members should enable members to obtain individualized information to determine their Clearing Fund requirements, margin component details, and assess the impact of FICC's proposals. Additionally, FICC's multiple member outreach efforts (before and after development of the Proposed Rule Change) provided members with relevant individualized impact analyses with which to evaluate the Proposed Rule Change. Accordingly, FICC has

¹⁷² <u>See id.</u>

¹⁷⁴ <u>See id.</u>

¹⁷⁰ <u>See id.</u>

¹⁷¹ <u>See id.</u>

¹⁷³ <u>See id.</u>

provided tools and resources sufficient for its members to evaluate their daily VaR and other margin-related calculations, rendering a phased implementation of the proposed MMA unwarranted.

Based on the foregoing, FICC has provided sufficient information, tools, and resources to enable members to identify and evaluate the relevant risks and costs associated with the Proposed Rule Change, consistent with Rule 17ad-22(e)(23)(ii).¹⁷⁵

III. CONCLUSION

On the basis of the foregoing, the Commission finds that the proposed rule change is consistent with the requirements of the Act and in particular with the requirements of Section 17A of the Act¹⁷⁶ and the rules and regulations promulgated thereunder.

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Act¹⁷⁷ that proposed rule change SR-FICC-2024-003, be, and hereby is, APPROVED.¹⁷⁸

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁷⁹

Sherry R. Haywood,

Assistant Secretary.

¹⁷⁵ 17 CFR 240.17Ad-22(e)(23)(ii).

¹⁷⁶ 15 U.S.C. 78q-1.

¹⁷⁷ 15 U.S.C. 78s(b)(2).

¹⁷⁸ In approving the proposed rule change, the Commission considered the proposals' impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f). <u>See also</u> Sections II.A. and II.B.

¹⁷⁹ 17 CFR 200.30-3(a)(12).