SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-86927; File No. SR-FICC-2019-003)

September 11, 2019

Self-Regulatory Organizations; Fixed Income Clearing Corporation; Order Approving a Proposed Rule Change to Revise the MBSD VaR Floor

I. Introduction

On July 18, 2019, Fixed Income Clearing Corporation (“FICC”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)¹ and Rule 19b-4 thereunder,² proposed rule change SR-FICC-2019-003. The proposed rule change was published for comment in the Federal Register on August 8, 2019.³ The Commission did not receive any comment letters on the proposed rule change. For the reasons discussed below, the Commission is approving the proposed rule change.

II. Description of the Proposed Rule Change

FICC proposes to amend its Mortgage-Backed Securities Division (“MBSD”) Clearing Rules (“MBSD Rules”)⁴ and the Methodology and Model Operations Document

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⁴ Capitalized terms used herein and not defined shall have the meaning assigned to such terms in the MBSD Rules, available at http://www.dtcc.com/legal/rules-and-procedures.aspx.
MBSD Quantitative Risk Model ("QRM Methodology Document") to change one of FICC’s margin calculations to: (1) allow FICC to adjust the margin calculation within a specified range if necessary to cover FICC’s credit exposures to each Clearing Member fully with a high degree of confidence; (2) provide that FICC would notify Clearing Members in advance of any such change to the margin calculation; (3) provide that FICC would perform model performance monitoring of the margin calculation on at least a monthly basis; and (4) make certain non-substantive technical changes.

A. **Background**

A key tool that FICC uses to manage the credit risk presented by Clearing Members is the daily calculation and collection of Required Fund Deposits from Clearing Members. The Required Fund Deposit serves as each Clearing Member’s margin, and the aggregate of all Clearing Members’ Required Fund Deposits constitutes the MBSD Clearing Fund, which FICC would access should a defaulting Clearing Member’s own Required Fund Deposit be insufficient to satisfy losses to FICC caused by the liquidation of that Clearing Member’s portfolio. Each Clearing Member’s Required Fund Deposit amount consists of multiple components, the largest of which is based on the volatility of specified net unsettled positions in the Clearing Member’s portfolio, known as the value-at-risk ("VaR") Charge. This model-based volatility calculation is designed to capture

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5 FICC requested confidential treatment of the QRM Methodology Document and has filed it separately with the Secretary of the Commission in connection with this proposed rule change. See 17 CFR 240-24b-2.

6 MBSD Rule 4, supra note 4.

7 Id.

8 Id.
the market price risk associated with the securities in the Clearing Member’s portfolio.\(^9\)

Specifically, the methodology underlying this calculation projects the potential gains or losses that could occur in connection with the liquidation of a defaulting Clearing Member’s portfolio, assuming that a portfolio would take three days to hedge or liquidate in normal market conditions. The model-based volatility calculation uses the projected liquidation gains or losses to arrive at a VaR Charge amount that would cover the projected liquidation losses at a 99 percent confidence level.\(^10\)

The MBSD Rules currently provide for two scenarios in which alternatives to the model-based volatility calculation of the VaR Charge would be necessary.\(^11\) First, FICC would base the VaR Charge on an alternative volatility calculation using historical market price changes of certain benchmark securities (the “Margin Proxy”) for scenarios in which the primary source of data required to perform the model-based volatility calculation becomes unavailable for an extended period of time.\(^12\) Second, FICC would set the VaR Charge at 5 basis points of the market value of a Clearing Member’s gross unsettled positions (the “VaR Floor”) for scenarios in which the model-based volatility calculation (or Margin Proxy, if used) results in an amount that is less than the VaR Floor.\(^13\)

\(^9\) MBSD Rule 1, supra note 4.

\(^10\) Unregistered Investment Pool Clearing Members are subject to a VaR Charge with a minimum targeted confidence level assumption of 99.5 percent. See MBSD Rule 4, Section 2(c), supra note 4.

\(^11\) MBSD Rule 1, supra note 4.

\(^12\) Id.

\(^13\) Id.
The VaR Floor addresses the risk that the model-based volatility calculation (or Margin Proxy, if used) may result in little or no VaR Charge for certain portfolios where the calculation methodology applies substantial risk offsets among long and short positions in different classes of mortgage-backed securities that have a high degree of historical price correlation.\footnote{14} Due to the risk that historical price correlation may not persist in future market conditions,\footnote{15} FICC would employ the VaR Floor, which is based on the market value of the gross unsettled positions in the Clearing Member’s portfolio, in order to protect FICC against such risk in the event that FICC is required to liquidate a mortgage-backed securities portfolio in stressed market conditions.

B. \textbf{VaR Floor Percentage Adjustments}

The MBSD Rules currently define the VaR Floor as “5 basis points of the market value of a Clearing Member’s gross unsettled positions.”\footnote{16} Therefore, the VaR Floor is used as the Clearing Member’s VaR Charge when the model-based volatility calculation yields an amount that is lower than 5 basis points (referred to herein as the “VaR Floor Percentage”) of the market value of the Clearing Member’s gross unsettled positions.\footnote{17}

\footnote{14} Such portfolios can represent large gross positions, but net down to a relatively low VaR Charge amount.

\footnote{15} For example, certain TBAs may have highly correlated historical price returns despite having different coupons and, although the net risk exposure may be adequately modeled under current market conditions, future market conditions could cause the risk relationship to change in a way that may not be adequately captured by the model. TBA is defined in MBSD Rule 1. \textit{See} MBSD Rule 1, \textit{supra} note 4.

\footnote{16} MBSD Rule 1, \textit{supra} note 4.

\footnote{17} \textit{Id.}
After conducting a review of the VaR Floor Percentage in June 2017, FICC found that a VaR Floor Percentage of 5 basis points resulted in VaR Charges that did not adequately cover the market risk of certain portfolios during periods of market volatility.\(^{18}\) FICC noted that an increase in the VaR Floor Percentage to 10 basis points would improve the backtesting coverage of those portfolios to 99.8%.\(^{19}\) The 2017 review also revealed that when applying the Margin Proxy, a VaR Floor Percentage of 5 basis points resulted in VaR Charges that did not adequately cover certain portfolios with offsetting long and short positions within the same agency program.\(^{20}\) FICC further noted that an increase in the VaR Floor Percentage to 20 basis points would better cover the risks of such portfolios.\(^{21}\)

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\(^{18}\) The 2017 review revealed that during periods of market volatility, a VaR Floor Percentage of 5 basis points resulted in VaR Charges that did not adequately cover portfolios containing long-short positions (e.g., a portfolio that was long the GNMA II/FNMA basis at a higher coupon and short the GNMA II/FNMA basis at a lower coupon). Notice, supra note 3 at 39043.

\(^{19}\) Id.

\(^{20}\) The Margin Proxy allows for further netting among positions within the same agency program than would occur using the model-based volatility calculation. Notice, supra note 3 at 39043.

\(^{21}\) FICC conducted an impact study for the twelve months ending February 2019, and found that in the Margin Proxy scenario, a VaR Floor Percentage of 20 basis points would improve backtesting coverage to 99% for 11 of the 14 portfolios that would have been below 99% based on a VaR Floor Percentage of 5 basis points. Additionally, FICC found that increasing the VaR Floor Percentage to 20 basis points would reduce the number of backtesting deficiencies associated with the 3 small portfolios that would have remained below the 99% confidence level (from 45 deficiencies to 11). FICC states that it would utilize another margin charge (the Backtesting Charge) to further mitigate any remaining exposure. Notice, supra note 3 at 39043.
Accordingly, FICC proposes to revise the VaR Floor definition to allow FICC to adjust the VaR Floor Percentage within a specified range in order to cover FICC’s credit exposure to each Clearing Member fully with a high degree of confidence. FICC proposes to set the range within which it would be allowed to adjust the VaR Floor Percentage at no less than 5 basis points and no more than 30 basis points of a Clearing Member’s gross unsettled positions. According to FICC, the discretionary range for the VaR Floor Percentage up to 30 basis points is appropriate because it will enable FICC to make timely adjustments that would ensure the VaR Charge remains adequate if market conditions change.

FICC’s discretion to adjust the VaR Floor Percentage would be subject to the governance process set forth in the Clearing Agency Model Risk Management Framework (“Framework”) applicable to model performance concerns. Specifically, the Model Validation and Control Group (“MVC”) would escalate any proposed VaR Floor Percentage adjustment to the Model Risk Governance Committee (“MRGC”),

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22 Id.
23 Id.
24 Id.
which, in turn, would escalate the proposed adjustment to the Management Risk Committee and/or Risk Committee of the Board for approval. Additionally, FICC proposes to review, on at least an annual basis, the impact of alternative VaR Floor Percentages within the proposed range of 5 to 30 basis points to the backtesting performance and to Clearing Members’ margin charges.

Upon Commission approval of the proposed rule change, FICC proposes to initially set the VaR Floor at 10 basis points when there is sufficient data to generate the model-based volatility calculation, and 20 basis points when there is insufficient data for the model-based volatility calculation (i.e., when the Margin Proxy is used).

C. Notifications to Clearing Members of Changes to VaR Floor Percentage

For any adjustment to the VaR Floor Percentage that would fall within the proposed range, FICC would issue an Important Notice no later than 10 Business Days prior to the implementation of the adjustment. FICC states that providing notice in advance of the implementation of an adjustment is designed to provide Clearing Members with time to adjust to any new VaR Charge amounts that would result from an adjustment to the VaR Floor Percentage. FICC believes that 10 Business Days’ prior notice would provide Clearing Members with sufficient time to prepare for any new VaR

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26 Framework Approval Order, supra note 25 at 41436; Notice, supra note 3 at 39042.

27 Notice, supra note 3 at 39042.

28 Notice, supra note 3 at 39042-43.

29 Notice, supra note 3 at 39044.
Charge amounts and thereby ensure that the Clearing Members have the funds to satisfy their new VaR Charge amounts.\textsuperscript{30}

For adjustments that would fall outside of the proposed range, FICC has represented that it would submit a rule filing to the Commission.\textsuperscript{31} As proposed, FICC would not apply a VaR Floor Percentage that is less than 5 basis points (which is the current VaR Floor Percentage); however, the proposed change would allow FICC to adjust the VaR Floor Percentage above 5 basis points (up to 30 basis points).

D. Model Performance Monitoring of VaR Floor Percentage

The Framework provides that, as part of model performance monitoring, on at least a monthly basis, FICC: (1) performs a sensitivity analysis on its margin model; (2) reviews the key parameters and assumptions for backtesting; and (3) considers modifications to ensure its backtesting practices are appropriate for determining the adequacy of applicable margin resources.\textsuperscript{32} The Framework also states that MVC performs a model validation for each FICC model approved for use in production not less than annually, including, among other things, on its margin systems and related models.\textsuperscript{33}

The VaR Floor Percentage is currently subject to periodic model validations as part of FICC’s margin model validation on at least an annual basis to determine if the VaR Floor Percentage would remain adequate to cover FICC’s credit exposure to

\textsuperscript{30} Id.

\textsuperscript{31} Notice, \textit{supra} note 3 at 39042.

\textsuperscript{32} Framework Approval Order, \textit{supra} note 25 at 41437; Notice, \textit{supra} note 3 at 39042.

\textsuperscript{33} Framework Approval Order, \textit{supra} note 25 at 41434; Notice, \textit{supra} note 3 at 39042.
Clearing Members with certain types of portfolios fully with a high degree of confidence.\textsuperscript{34} FICC proposes to designate the VaR Floor Percentage as a parameter of its VaR model that will be reviewed on at least a monthly basis per the Framework. As such, FICC proposes to amend the QRM Methodology Document to state that FICC would conduct model performance monitoring of the VaR Floor Percentage on at least a monthly basis.

E. Technical Changes

FICC proposes several technical changes to the MBSD Rules to restate the calculation of the VaR Floor to provide more detail than the current provision and to use the defined terms “Long Positions”\textsuperscript{35} and “Short Positions.”\textsuperscript{36} Specifically, FICC would add a new sentence stating: “Such VaR Floor will be determined by multiplying the sum of the absolute values of Long Positions and Short Positions, at market value, by a percentage designated by the Corporation that is no less than 0.05\% and no greater than 0.30\%. [FICC] shall determine the percentage within this range to be applied based on factors including but not limited to a review performed at least annually of the impact of the VaR Floor parameter at different levels within the range to the backtesting performance and to Clearing Members’ margin charges. [FICC] shall inform Clearing

\textsuperscript{34} See id.

\textsuperscript{35} The term “Long Position” means a Member’s obligations with respect to the purchase of an Eligible Security or an Option Contract, as determined pursuant to the MBSD Rules. MBSD Rule 1, supra note 4.

\textsuperscript{36} The term “Short Position” means a Member’s obligation with respect to the sale of an Eligible Security or an Option Contract, as determined pursuant to the MBSD Rules. MBSD Rule 1, supra note 4.
Members of the applicable percentage utilized by the VaR Floor by an Important Notice issued no later than 10 Business Days prior to the implementation of such percentage.”

Finally, FICC proposes a technical change to the QRM Methodology Document to reference that there will be at least annual model validation of the VaR Floor Percentage. FICC states that the purpose of the proposed technical changes is to enhance the clarity and accuracy of the MBSD Rules and the QRM Methodology Document.

III. Discussion and Commission Findings

Section 19(b)(2)(C) of the Act directs the Commission to approve a proposed rule change of a self-regulatory organization if it finds that such proposed rule change is consistent with the requirements of the 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) of the Act and Rules 17Ad-22(e)(4)(i), (e)(6)(i), (e)(23)(ii), each promulgated under the Act, for the reasons described below.

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37 The QRM methodology Document currently provides that the VaR Floor Percentage is reviewed annually and updated. Notice, supra note 3 at 39043.

38 Notice, supra note 3 at 39044.


41 17 CFR 240.17Ad-22(e)(4)(i).
A. **Consistency with Section 17A(b)(3)(F) of the Act**

Section 17A(b)(3)(F) of the Act requires, in part, that the rules of a clearing agency be designed to promote the prompt and accurate clearance and settlement of securities transactions and assure the safeguarding of securities and funds which are in the custody or control of the clearing agency or for which it is responsible.\(^{44}\)

First, as described above in Section II.B., FICC states that the current VaR Floor Percentage of 5 basis points has resulted in VaR Charges that do not adequately cover FICC’s exposure to certain Clearing Member portfolios. FICC’s proposal for the ability to adjust the VaR Floor Percentage from 5 basis points up to 30 basis points would better enable FICC to collect margin amounts commensurate with its credit exposure to the types of Clearing Member portfolios not adequately covered using a VaR Floor Percentage of 5 basis points. FICC’s collection of margin amounts commensurate with its credit exposures would help ensure that FICC maintains adequate funds necessary to manage the risks associated with performing its clearance and settlement functions.

Accordingly, the Commission finds the proposal to allow FICC to adjust the VaR Floor Percentage from 5 basis points up to 30 basis points would promote the prompt and accurate clearance and settlement of securities transactions, consistent with Section 17A(b)(3)(F) of the Act.\(^{45}\) Moreover, FICC’s collection of margin amounts commensurate with the credit exposure presented by each Clearing Member portfolio

\(^{42}\) 17 CFR 240.17Ad-22(e)(6)(i).

\(^{43}\) 17 CFR 240.17Ad-22(e)(23)(ii).


\(^{45}\) **Id.**
should help ensure that, in the event of a Clearing Member default, FICC’s operations would not be disrupted and non-defaulting Clearing Members would not be exposed to losses that they cannot anticipate or control. Accordingly, the Commission finds the proposal to allow FICC to adjust the VaR Floor Percentage from 5 basis points up to 30 basis points should safeguard the securities and funds that are in FICC’s custody or control or for which FICC is responsible, consistent with Section 17A(b)(3)(F) of the Act.\textsuperscript{46}

Second, as described above in Section II.C., FICC states that it designed the proposal to provide 10 Business Days’ notice to Clearing Members prior to implementing any adjustment to the VaR Floor Percentage in order to provide Clearing Members with sufficient time prepare for any new VaR Charge amounts and thereby ensure that Clearing Members are able to satisfy their Required Fund Deposit amounts. Providing such notice in advance of implementing any adjustment to the VaR Floor Percentage would help Clearing Members prepare to meet their margin obligations, and thereby facilitate FICC’s collection of adequate margin amounts necessary to manage the risks associated with performing its clearance and settlement functions, as well as help ensure that, in the event of a Clearing Member default, FICC’s operations would not be disrupted and non-defaulting Clearing Members would not be exposed to losses that they cannot anticipate or control. Accordingly, the Commission finds the proposal to provide 10 Business Days’ notice to Clearing Members prior to implementing any adjustment to the VaR Floor Percentage should: (1) promote the prompt and accurate clearance and settlement of securities transactions; and (2) safeguard the securities and funds that are in

\textsuperscript{46} Id.
FICC’s custody or control or for which FICC is responsible, consistent with Section 17A(b)(3)(F) of the Act.\textsuperscript{47}

Third, as described above in Section II.D., the VaR Floor Percentage is currently subject to periodic model validations as part of FICC’s margin model validation on at least an annual basis. FICC proposes to increase the frequency of this review by designating the VaR Floor Percentage as a parameter of its VaR model to be reviewed on at least a monthly basis. More frequent reviews would alert FICC of the need to adjust the VaR Floor Percentage and would enable FICC to make such adjustments in a more timely manner. Thus, more frequent reviews of the VaR Floor Percentage would help FICC ensure that it collects margin amounts commensurate with the credit risks presented by each Clearing Member portfolio. FICC’s collection of margin amounts commensurate with the credit exposure presented by each Clearing Member portfolio should help ensure that, in the event of a Clearing Member default, FICC’s operations would not be disrupted and non-defaulting Clearing Members would not be exposed to losses that they cannot anticipate or control. Accordingly, the Commission finds the proposal for FICC to review the VaR Floor Percentage on at least a monthly basis would safeguard the securities and funds that are in FICC’s custody or control or for which FICC is responsible, consistent with Section 17A(b)(3)(F) of the Act.\textsuperscript{48}

Fourth, as described above in Section II.E., FICC designed the proposed technical changes to enhance the clarity and accuracy of the MBSD Rules and the QRM Methodology Document. Enhancing the clarity and accuracy of the MBSD Rules helps

\textsuperscript{47} Id.
\textsuperscript{48} Id.
to provide Clearing Members with a better understanding of their rights and obligations thereunder. A better understanding of Clearing Member rights and obligations would reasonably help to increase the predictability and certainty of Clearing Member interactions with FICC, which, in turn, would better enable FICC to perform its clearance and settlement functions. Additionally, since the QRM Methodology Document is used by FICC Risk Management personnel, enhanced clarity regarding the frequency of model validation of the VaR Floor Percentage would better enable FICC personnel to perform the related risk management functions that support FICC’s clearance and settlement activities. Accordingly, the Commission finds the proposed technical changes would promote the prompt and accurate clearance and settlement of securities transactions, consistent with Section 17A(b)(3)(F) of the Act.49

B. Consistency with Rule 17Ad-22(e)(4)(i) under the Act

Rule 17Ad-22(e)(4)(i) under the Act requires a covered clearing agency to 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 exposures arising from its payment, clearing, and settlement processes by maintaining sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence.50

As described above in Section II.D., FICC’s proposal to conduct at least monthly reviews of the VaR Floor Percentage is designed to help FICC more effectively identify, measure, monitor, and manage its credit exposure to each Clearing Member portfolio by

49 Id.
50 17 CFR 240.17Ad-22(e)(4)(i).
increasing the frequency of review from annually to monthly and thereby enabling FICC to identify the need for adjustments to the VaR Floor Percentage in a more timely manner. Additionally, as described above in Section II.B., FICC’s proposed ability to adjust the VaR Floor Percentage within the range of 5 to 30 basis points is designed to better enable FICC to limit its credit exposure to certain Clearing Member portfolios in the event that the model-based volatility calculation (or Margin Proxy, if used) yield too low a VaR Charge for such portfolios. As described above in Sections II.B. and C., FICC’s proposals for the ability to adjust the VaR Floor Percentage within the range of 5 to 30 basis points, as well as the provision of prior notice of such adjustments to Clearing Members, are designed to help FICC better manage its credit exposure to Clearing Members by collecting sufficient margin with respect to each Clearing Member portfolio. Accordingly, the Commission finds the proposed changes are consistent with the requirements of Rule 17Ad-22(e)(4)(i) under the Act.\(^{51}\)

C. **Consistency with Rule 17Ad-22(e)(6)(i) under the Act**

Rule 17Ad-22(e)(6)(i) under the Act requires a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to cover, if the covered clearing agency provides central counterparty services, its credit exposures to its participants by establishing a risk-based margin system that, at a

\(^{51}\) Id.
minimum, considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market.  

FICC’s proposals to: (1) monitor the VaR Floor Percentage; (2) adjust the VaR Floor Percentage in the event that other calculations result in VaR Charges that do not adequately cover the risks presented by certain Clearing Member portfolios; and (3) notify Clearing Members in advance of any adjustment to the VaR Floor Percentage, are designed to cover FICC’s credit exposure to Clearing Member portfolios where such exposure has not been adequately covered in the past. Specifically, the proposal to allow FICC to adjust the VaR Floor Percentage from 5 basis points up to 30 basis points should help FICC to collect margin amounts commensurate with its credit exposure to the types of Clearing Member portfolios not adequately covered using a VaR Floor Percentage of 5 basis points. FICC’s proposal to provide Clearing Members with notice in advance of implementing any adjustment to the VaR Floor Percentage should help Clearing Members prepare to meet their margin obligations, and thereby facilitate FICC’s collection of margin amounts commensurate with affected Clearing Member portfolios. FICC’s proposal to increase the frequency with which it reviews the VaR Floor Percentage from annually to monthly should alert FICC of the need to adjust the VaR Floor Percentage and make such adjustments in a more timely manner. Thus, the increased frequency of review would further help FICC ensure that it collects margin amounts commensurate with the credit risks presented by each Clearing Member.

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52 17 CFR 240.17Ad-22(e)(6)(i).
portfolio. For these reasons, the Commission finds the proposed changes are consistent with the requirements of Rule 17Ad-22(e)(6)(i) under the Act.  

D. Consistency with Rule 17Ad-22(e)(23)(ii) under the Act

Rule 17Ad-22(e)(23)(ii) under the Act requires a covered clearing agency to 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 the covered clearing agency.  

As described above in Section II.E., FICC’s proposed technical changes to the MBSD Rules would provide more details as to how the VaR Floor is calculated than is currently set forth in the MBSD Rules. Providing more comprehensive written information in the MBSD Rules regarding the VaR Floor would enable Clearing Members to better understand how the VaR Floor operates, which, in turn, should enable Clearing Members to better evaluate the costs of participating in FICC. Accordingly, the Commission finds the proposed technical changes to the MBSD Rules are consistent with Rule 17Ad-22(e)(23)(ii) under the Act.

IV. Conclusion

53 Id.
55 Id.
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 Act\textsuperscript{56} and the rules and regulations promulgated thereunder.

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Act\textsuperscript{57} that proposed rule change SR-FICC-2019-003, be, and hereby is, APPROVED.\textsuperscript{58}

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.\textsuperscript{59}

Jill M. Peterson  
Assistant Secretary

\textsuperscript{58} In approving the proposed rule change, the Commission considered the proposals’ impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).  
\textsuperscript{59} 17 CFR 200.30-3(a)(12).