SECURITIES AND EXCHANGE COMMISSION

April 3, 2019

Self-Regulatory Organizations; ICE Clear Credit LLC; Order Approving Proposed Rule Change Relating to the ICC Risk Parameter Setting and Review Policy

I. Introduction

On February 6, 2019, ICE Clear Credit LLC (“ICC”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”), and Rule 19b-4 thereunder, a proposed rule change (SR-ICC-2019-002) to formalize the ICC Risk Parameter Setting and Review Policy (“Risk Parameter Policy”). The proposed rule change was published in the Federal Register on February 22, 2019. The Commission did not receive comments 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

The proposed rule change would formalize the Risk Parameter Policy. The Risk Parameter Policy would explain ICC’s process for setting and calibrating the core parameters of, and reviewing the assumptions underlying, the ICC Risk Management

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3 Capitalized terms used herein but not otherwise defined have the meaning set forth in the ICC Rules or the Risk Parameter Policy. Available at https://www.theice.com/publicdocs/clear_credit/ICE_Clear_Credit_Rules.pdf.
Model (the “Model”). The Risk Parameter Policy would also explain the analyses that ICC performs to explore the sensitivity of the Model’s outputs to certain core parameters.

A. Parameter Setting and Calibration

The Risk Parameter Policy would discuss the process of setting and reviewing the Model’s core parameters and their underlying assumptions.\(^5\) The Risk Parameter Policy would first list each of the Model’s parameters and then summarize (i) the method used to review and set the parameter; (ii) the frequency of review; (iii) the group within ICC responsible for the review (Risk Management Department (“ICC Risk”), Risk Working Group (“RWG”), or Risk Committee (“RC”)); and (iv) whether the review is statistical or non-statistical. The Risk Parameter Policy would then explain in detail the process for setting and reviewing the parameters, with the parameters categorized according to their associated component of the Model: (i) liquidity charge; (ii) concentration charge; (iii) jump-to-default; (iv) interest rate sensitivity; (v) basis risk; and (vi) integrated spread response.

For the parameters associated with the liquidity charge, the Risk Parameter Policy would describe the parameters associated with index instruments and single-name instruments.\(^6\) With respect to index instruments, the Risk Parameter Policy would specify how ICC Risk estimates the Bid Offer Widths (“BOWs”) for indices across volatile and extreme market conditions, in addition to how ICC Risk recognizes long-short benefits when computing portfolio-level index liquidity charges. With respect to single-name instruments, the Risk Parameter Policy would explain the parameters that

\(^5\) Notice, 84 FR at 5748.

\(^6\) Notice, 84 FR at 5749.
ICC uses to incorporate a price-based BOW component and a spread-based BOW component into the liquidity charge. The Risk Parameter Policy would require ICC Risk to estimate and review the liquidity charge parameters and their underlying assumptions at least monthly and present the analysis and any proposed changes to the RWG for review.

For the parameters associated with the concentration charge, the Risk Parameter Policy would explain how ICC Risk establishes specific threshold levels for each index or SN Risk Factor (“RF”). The thresholds would reflect the market depth and liquidity for the considered RFs. The concentration charges would apply to positions that exceed those thresholds and would increase as the amount above the threshold increases. The Risk Parameter Policy would require ICC Risk to estimate and review the concentration charge parameters and their underlying assumptions at least monthly and present the analysis and any proposed changes to the RWG for review. Moreover, the Risk Parameter Policy would require ICC Risk to consult the RC if the review and analysis results in a proposed change that could impact total initial margin requirements by more than 5%. In that case, ICC Risk could not implement the proposed change without first obtaining a no-objection from the RC.

For the parameters associated with jump-to-default, the Risk Parameter Policy would categorize the parameters as either Loss-Given-Default (“LGD”) or Wrong-Way Risk (“WWR”). LGD would consider possible loss resulting from a default while WWR would consider the strong adverse correlation between a default risk and the occurrence

7 Notice, 84 FR at 5749. ICC deems each index, sub-index, or underlying SN reference entity a separate RF.

8 Notice, 84 FR at 5749.
of large losses in a Clearing Participant’s (“CP”) portfolio. The LGD parameters would measure losses associated with various credit events by constructing scenarios for anticipated recovery rates associated with those credit events. The Risk Parameter Policy would explain these scenarios and estimations and further explain computations for RF groups (“RFG”)

9 and related parameters. The Risk Parameter Policy would also explain the parameters used to quantify WWR, compute WWR jump-to-default requirements, and determine the level of collateral necessary to cover WWR. The Risk Parameter Policy would further explain the thresholds that are established as parameters for each RF generating exposure to WWR. Exposure to WWR beyond these thresholds would increase the amount of collateral needed to cover that exposure. The Risk Parameter Policy would require ICC Risk to estimate and review at least monthly the LGD and WWR parameters and their underlying assumptions and present the analysis and any proposed changes to the RWG for review. Moreover, the Risk Parameter Policy would require ICC Risk to consult the RC if the review and analysis results in a proposed change that could impact total initial margin requirements by more than 5%. In that case, ICC Risk could not implement the proposed change without first obtaining a no-objection from the RC.

For the parameters associated with interest rate sensitivity, the Risk Parameter Policy would specify how ICC Risk estimates the up and down parallel shifts for the US Dollar and Euro default-free discount term structures. 10 The interest rate sensitivity aspect of the Model would account for the risk associated with changes in the default-free

9 ICC deems a set of SN RFs related by a common parental ownership structure a RFG.

10 Notice, 84 FR at 5749.
discount term structure used to price CDS instruments. The Risk Parameter Policy would require ICC Risk to estimate and review the interest rate sensitivity parameters and their underlying assumptions at least monthly and present the analysis and any proposed changes to the RWG for review.

For the parameters associated with basis risk, the Risk Parameter Policy would explain how ICC Risk estimates the risk associated with the differences between the index instruments and their replicating baskets of single-name constituents. As index-derived single-name positions and opposite single-name positions are offset, the Model would use the basis risk requirement to capture the differences between the trading characteristics of index instruments and their replicating baskets of single-name constituents. The Risk Parameter Policy would require ICC Risk to estimate and review the interest rate sensitivity parameters and their underlying assumptions at least monthly and present the analysis and any proposed changes to the RWG for review.

For the parameters associated with integrated spread response, the Risk Parameter Policy would classify them as either univariate or multivariate. The Risk Parameter Policy would describe the estimation of the univariate parameters, including the consideration of time series analysis of credit spread log-returns. The Risk Parameter Policy would further explain how different mean absolute deviation estimates are obtained for each time series and explain the setting of the exponentially weighted moving average decay rate. The Risk Parameter Policy would also explain how ICC determines and reviews the multivariate parameters. Using a simulation framework, ICC

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11 Notice, 84 FR at 5749.
12 Notice, 84 FR at 5749-5750.
would generate spread and recovery rate scenarios by means of copulas to integrate the univariate distributions that describe spread and RR fluctuations. The Risk Parameter Policy would describe the multivariate parameters that serve as inputs to the copula simulations. The Risk Parameter Policy would require ICC Risk to estimate and review the integrated spread response parameters and their underlying assumptions at least monthly and present the analysis and any proposed changes to the RWG for review.

B. Sensitivity Analysis

The Risk Parameter Policy would explain the analyses that ICC Risk performs to explore the sensitivity of the Model’s outputs to certain core parameters.\(^\text{13}\) The Risk Parameter Policy would divide sensitivity analyses into those that would include an ICC-wide portfolio impact study and those that would not. Moreover, the Risk Parameter Policy would require monthly summary reports to the RC or the RWG, depending on the parameter analyzed.

The Risk Parameter Policy would specify which parameters would be subject to a sensitivity analysis.\(^\text{14}\) First, the Risk Parameter Policy would require a sensitivity analysis on those parameters that are calibrated on an ad-hoc basis rather than using a purely statistical approach. For example, the Risk Parameter Policy would describe how ICC conducts a sensitivity analysis on the univariate level integrated spread response parameters through alternative techniques to estimate the parameters that fit the standardized distributions to the observed credit spread log-return data. Second, the Risk Parameter Policy would require a sensitivity analysis for routine updates to statistical

\(^{13}\) Notice, 84 FR at 5750.

\(^{14}\) Id.
parameters, which occur daily or monthly. Finally, the Risk Parameter Policy would require a sensitivity analysis of other specific parameters, including portfolio benefits, WWR thresholds, and log-return mean absolute deviation estimates.

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 the rules and regulations thereunder applicable to such organization.\textsuperscript{15} For the reasons given below, the Commission finds that the proposal is consistent with Section 17A(b)(3)(F) of the Act\textsuperscript{16} and Rules 17Ad-22(b)(2), 17Ad-22(b)(3), and 17Ad-22(d)(8) thereunder.\textsuperscript{17}

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

Section 17A(b)(3)(F) of the Act requires, among other things, that the rules of ICC be designed to promote the prompt and accurate clearance and settlement of securities transactions and, to the extent applicable, derivative agreements, contracts, and transactions, as well as to assure the safeguarding of securities and funds which are in the custody or control of ICC or for which it is responsible, and, in general, to protect investors and the public interest.\textsuperscript{18}

As discussed above, the proposed rule change would formalize ICC’s Risk Parameter Policy. The Commission believes that, in general, the Risk Parameter Policy


\textsuperscript{17} 17 CFR 240.17Ad-22(b)(2), (b)(3), and (d)(8).

would help ensure the sound operation of ICC’s Model. Specifically, the Commission believes that the Risk Parameter Policy, in describing in detail ICC’s process for setting and reviewing the parameters of, and assumptions underlying, the Model, would help assure the soundness of the Model by ensuring that ICC has in place a standardized process for setting and reviewing the Model’s parameters. Because the Model’s parameters affect the output of the Model – ICC’s margin requirements – the Commission believes that reviewing and setting the parameters and underlying assumptions is important to ensure the effective operation of the ICC’s margin system.

The Commission further believes that the Risk Parameter Policy, in requiring monthly parameter reviews and sensitivity analyses, and setting out the requirements for reporting the results of such reviews to the RWG and/or RC, would help assure that ICC personnel are informed of the results of such reviews and therefore able to take action to correct any issues with the Model’s parameters or assumptions.

By helping to assure the sound operation of the Model and ICC’s margin requirements, which ICC uses to manage the credit exposures associated with clearing security based swap transactions, the Commission believes that the proposed rule change would help improve ICC’s ability to avoid the losses that could result from the miscalculation of ICC’s credit exposures. Because such losses could disrupt ICC’s ability to operate and thus promptly and accurately clear and settle security based swap transactions, the Commission finds the proposed rule change would promote the prompt and accurate clearance and settlement of securities transactions. Because such losses could also threaten access to securities and funds in ICC’s control, the Commission finds the proposed rule change would help assure the safeguarding of securities and funds that
are in the custody or control of ICC or for which it is responsible. Likewise, for both of these reasons, the Commission finds the proposed rule change would, in general, help protect investors and the public interest.

Therefore, the Commission finds that the proposed rule change would promote the prompt and accurate clearance and settlement of securities transactions, assure the safeguarding of securities and funds in ICC’s custody and control, and, in general, protect investors and the public interest, consistent with the Section 17A(b)(3)(F) of the Act.19

B. Consistency with Rules 17Ad-22(b)(2) and 17Ad-22(b)(3)

Rule 17Ad-22(b)(2) requires that ICC establish, implement, maintain and enforce written policies and procedures reasonably designed to use margin requirements to limit its credit exposures to participants under normal market conditions and use risk-based models and parameters to set margin requirements and review such margin requirements and the related risk-based models and parameters at least monthly.20 Rule 17Ad-22(b)(3) requires that ICC establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain sufficient financial resources to withstand, at a minimum, a default by the two participant families to which it has the largest exposures in extreme but plausible market conditions.21

As discussed above, the Commission believes that the proposed rule change would help ensure the soundness of the Model by formalizing ICC’s process for setting and reviewing the Model’s parameters and underlying assumptions. The Commission

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20 17 CFR 240.17Ad-22(b)(2).
21 17 CFR 240.17Ad-22(b)(3).
believes that the proposed rule change would therefore help ICC to maintain margin requirements to limit its credit exposures to participants under normal market conditions. Moreover, as discussed above, the Risk Parameter Policy would also require that ICC Risk conduct parameter reviews and sensitivity analyses monthly, consistent with the requirement of Rule 17Ad-22(b)(2). Finally, as discussed above, the Risk Parameter Policy would also require that ICC Risk report the results of its reviews to the RWG and/or RC and, in some cases, receive no-objection from the RC prior to making changes to the parameters or assumptions. The Commission believes that this aspect of the Risk Parameter Policy would help ICC to use risk-based models and parameters to set margin requirements by providing the RWG and/or RC an opportunity to correct any issues with the Model’s parameters or assumptions. The Commission therefore finds that the proposed rule is consistent with Rule 17Ad-22(b)(2).

Moreover, the amount a CP must contribute to ICC’s Guaranty Fund is equal to the expected losses to ICC associated with the default of that CP, calculated using ICC’s stress test methodology, and taking into account, among other things, the loss after application of initial margin. Thus, ICC’s guaranty fund is based on the initial margin requirements. The Commission therefore believes that, in helping to maintain the soundness of ICC’s Model, and therefore ICC’s margin requirements, the proposed rule change would also help ICC to maintain sufficient financial resources to withstand, at a minimum, a default by the two participant families to which it has the largest exposures.

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22 17 CFR 240.17Ad-22(b)(2).
23 Id.
24 See ICC Rule 801(a).
in extreme but plausible market conditions. The Commission therefore finds that the proposed rule is consistent with Rule 17Ad-22(b)(3).  

Therefore, for these reasons, the Commission finds that the proposed rule change is consistent with Rules 17Ad-22(b)(2) and 17Ad-22(b)(3).  

C. Consistency with Rule 17Ad-22(d)(8)  

Rule 17Ad-22(d)(8) requires that ICC establish, implement, maintain and enforce written policies and procedures reasonably designed to have governance arrangements that are clear and transparent to fulfill the public interest requirements in Section 17A of the Act and to promote the effectiveness of ICC’s risk management procedures.  

As described above, the proposed rule change would make ICC Risk responsible for conducting parameter reviews and sensitivity analyses on a monthly basis. ICC Risk would in turn consult with the RWG. For certain parameters, ICC risk would also consult the RC if the review and analysis results in a proposed change that could impact total initial margin requirements by more than 5%. In that case, ICC Risk could not implement the proposed change without first obtaining a no-objection from the RC.  

Finally, the Risk Parameter Policy would also require monthly summary reports of sensitivity analyses to the RC or the RWG, depending on the parameter analyzed.  

The Commission believes that in assigning these responsibilities, the proposed rule change would establish governance arrangements relating to the Risk Parameter Policy that are clear and transparent to fulfill the public interest requirements in Section 17A of the Act and to promote the effectiveness of ICC’s risk management procedures.
17A of the Act by clearly assigning and documenting responsibilities for reporting and acting on the results of the reviews of the Model’s parameters and assumptions.

Moreover, the Commission believes that by ensuring the RWG and RC are informed of the results of reviews, the Risk Parameter Policy would help promote the effectiveness of ICC’s risk management procedures in thereby providing the RC and RWG an opportunity to correct any issues with the Model’s parameters and underlying assumptions.

Therefore, for this reason, the Commission finds that the proposed rule change is consistent with Rule 17Ad-22(d)(8).\textsuperscript{28}

\textsuperscript{28} 17 CFR 240.17Ad-22(d)(8).
IV. Conclusion

On the basis of the foregoing, the Commission finds that the proposal is consistent with the requirements of the Act, and in particular, with the requirements of Section 17A(b)(3)(F) of the Act\(^{29}\) and Rules 17Ad-22(b)(2), 17Ad-22(b)(3), and 17Ad-22(d)(8) thereunder.\(^{30}\)

IT IS THEREFORE ORDERED pursuant to Section 19(b)(2) of the Act\(^{31}\) that the proposed rule change (SR-ICC-2019-002) be, and hereby is, approved.\(^{32}\)

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.\(^{33}\)

Eduardo A. Aleman
Deputy Secretary

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\(^{30}\) 17 CFR 240.17Ad-22(b)(2), (b)(3), and (d)(8).


\(^{32}\) In approving the proposed rule change, the Commission considered the proposal’s impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

\(^{33}\) 17 CFR 200.30-3(a)(12).