# SECURITIES AND EXCHANGE COMMISSION (Release No. 34-85047; File No. SR-ICC-2019-001)

February 4, 2019

Self-Regulatory Organizations; ICE Clear Credit LLC; Proposed Rule Change Relating to the ICE CDS Clearing: Back-Testing Framework

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934,<sup>1</sup> and

Rule 19b-4,<sup>2</sup> notice is hereby given that on January 28, 2019, ICE Clear Credit LLC

("ICC") filed with the Securities and Exchange Commission ("Commission") the

proposed rule change as described in Items I, II and III below, which Items have been

prepared by ICC. The Commission is publishing this notice to solicit comments on the

proposed rule change from interested persons.

# I. <u>Clearing Agency's Statement of the Terms of Substance of the Proposed Rule</u> <u>Change</u>

The principal purpose of the proposed rule change is to revise the ICE CDS

Clearing: Back-Testing Framework ("Back-Testing Framework"). These revisions do not

require any changes to the ICC Clearing Rules ("Rules").

II. <u>Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the</u> <u>Proposed Rule Change</u>

In its filing with the Commission, ICC included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. ICC has prepared summaries, set forth in sections (A), (B), and (C) below, of the most significant aspects of these statements.

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

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

# (A) <u>Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the</u> <u>Proposed Rule Change</u>

(a) Purpose

ICC proposes to update and formalize the Back-Testing Framework that describes ICC's back-testing approach, back-testing procedures, and guidelines for remediating poor back-testing results. ICC proposes to formalize the Back-Testing Framework following Commission approval of the proposed rule change.

ICC's Back-Testing Framework includes a discussion of ICC's back-testing approach to verify that the number of actual losses is consistent with the number of projected losses. Generally, ICC's back-testing analysis counts the number of occurrences, also referred to as exceedances, when the observed portfolio loss for a given horizon is greater than the model projected risk measure, defined as the sum of the selected initial margin components. The total number of exceedances is evaluated against the desired risk quantile and the model is considered well calibrated if the number of exceedances is consistent with the chosen risk quantile. The Back-Testing Framework also addresses multi-currency portfolios by accounting for the foreign exchange risk exposure and summarizes the associated back-testing analysis, which is performed in the clearinghouse base currency (i.e., US Dollar).

ICC utilizes the Basel Traffic Light System ("BTLS") to assess the soundness of its risk management model ("model"). The Back-Testing Framework contains a summary of the BTLS, including descriptions and calculations associated with each zone of the BTLS. The BTLS is based on three zones: green, yellow, and red. Each zone is defined by the maximum number of acceptable exceedances. In practice, the more portfolios that

fall within the green zone, the sounder the model. The BTLS does not penalize the model for conservativeness.

The Back-Testing Framework contains ICC's procedures for performing backtesting analyses. The ICC Risk Management Department ("ICC Risk") performs daily, weekly, monthly, and quarterly portfolio-level back-testing analyses. The Back-Testing Framework sets forth ICC's calculation of the observed loss, which is referred to as the N-day worst unrealized profit/loss ("P/L"), using the changes in portfolio net asset values ("NAVs"). The initial margin risk horizon is reflected as "N-day" where N≥5 is the initial margin risk horizon or the Margin Period of Risk ("MPOR"). The back-testing analysis is based on the greatest MPOR, rounded up to the nearest integer, for instruments in the considered portfolio. For example, if an instrument is subject to 5.5-day MPOR estimations, then the back-testing analysis is performed by comparing the model projected risk measure to the N-day worst unrealized P/L with N=6. The model projected risk measure, which is subject to back-testing, is the sum of the following selected initial margin components: integrated spread response, basis risk, and interest rate sensitivity ("back-tested components"). Under the Back-Testing Framework, the remaining components of initial margin are excluded because they are not always market observed and statistically modeled.

ICC back-tests its model with Clearing Participant ("CP") portfolios and a hypothetical set of portfolios ("special strategy portfolios") at the 99.5% risk quantile. Under the Back-Testing Framework, back-testing analysis is performed for the model at the 99.5% risk quantile for all CP-related portfolios. The Back-Testing Framework also includes a sample set of special strategy portfolios, which allow ICC to consider a range

of hypothetical but realistic portfolios in its back-testing analysis. Back-testing results for the special strategy portfolios are reviewed periodically to identify and assess potential weaknesses in model assumptions.

The Back-Testing Framework describes ICC's procedures for reporting backtesting results. Daily portfolio back-testing results are reported on a periodic basis for each CP based on the appropriate MPOR. The Back-Testing Framework provides example computations for a sample MPOR of 5 days (i.e., all instruments in the considered portfolio are subject to a 5-day MPOR). For each day in the back-testing period, all components of initial margin are provided, and the back-tested components and non-back-tested components are identified. The sum of the back-tested components is given alongside the unrealized P/L and the associated shortfall. An exceedance summary shows the total number of exceedances in the period and states the maximum number of exceedances that satisfy each zone in the BTLS. Back-testing results for the full period are also reported, and the back-tested components and the N-day P/L results for every back-tested day are computed for each portfolio associated with a given CP.

The Back-Testing Framework discusses the exceedance summaries that are provided when ICC back-tests its model with CP and special strategy portfolios at the 99.5% risk quantile. The Back-Testing Framework notes the reporting frequency, along with the information that is delivered as part of an exceedance summary, such as the number of observations and exceedances for the set of back-testing results and the maximum number of exceedances allowed in each zone in the BTLS. Moreover, in addition to assessing the model's performance by back-testing, the Back-Testing

Framework directs ICC Risk to conduct monthly parameter reviews and parameter sensitivity analyses.

ICC Risk also periodically reports univariate back-testing results, namely, instrument and Risk Factor<sup>3</sup> ("RF") back-testing results, depending on market conditions. The Back-Testing Framework discusses how back-testing results are computed and reported for SN RFs and index instruments. As noted above, the back-testing analysis is performed for the model at the 99.5% risk quantile and exceedance summary results are generated. The Back-Testing Framework defines the model projected risk measure with respect to univariate back-testing as the sum of the integrated spread response and the interest rate sensitivity ("univariate back-tested components") and directs ICC Risk to perform several analyses if an exceedance is observed, which include, among others, an analysis of the spread and recovery rate changes. The Back-Testing Framework also contains information regarding ICC Risk's performance of univariate back-testing analysis in spread log-return space, including the utilization of different mean absolute deviation estimates and an indication of when such analysis may be performed.

The Back-Testing Framework provides guidelines for remediating poor backtesting results. Back-testing results are identified as poor if the number of observed exceedances at the portfolio level falls in the red zone of the BTLS. The Back-Testing Framework discusses various actions to be taken upon the identification of poor backtesting results, which include seeking feedback from the Risk Working Group ("RWG")<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> ICC deems each index, sub-index, or underlying single name ("SN") reference entity a separate RF.

<sup>&</sup>lt;sup>4</sup> The RWG consists of risk personnel from CPs and provides input to help ensure ICC's risk management framework is robust.

and consulting with the Risk Committee on any necessary remedial action. The Back-Testing Framework describes an instance where the number of exceedances falls in the red zone but may not be indicative of poor back-testing results, namely, where overlapping back-testing periods are involved and the effects of one adverse observation are responsible for a cluster of exceedances. The Back-Testing Framework provides the Chief Risk Officer and Risk Oversight Officer with the responsibility and the authority to determine whether the number of exceedances is indicative of poor back-testing results. The Back-Testing Framework also notes the actions to be taken if the number of exceedances falls in the yellow zone, including a review by ICC Risk to determine the cause of the model's worsened performance and, if necessary, a complimentary backtesting analysis without overlapping back-testing periods.

Under the Back-Testing Framework, if poor back-testing results are identified at the portfolio level, individual RF back-testing results are further analyzed. The Back-Testing Framework contains information regarding the analysis if poor back-testing results are identified for certain RFs, including analysis on the spread log-return statistical model assumptions, estimation techniques, and estimated parameters.

To remediate poor back-testing results, the Back-Testing Framework provides ICC Risk with the authority to take various actions depending on the situation, including updating statistical parameters (i.e., parameters estimated by statistical analysis of data sets) and increasing the frequency of parameter updates. The Back-Testing Framework references several situations that may lead to poor back-testing results, along with the actions that ICC Risk may take for remediation, including poor back-testing results associated with distressed SN RFs, poor performance at the portfolio level driven by

improper portfolio benefits, and poor back-testing results due to recent changes in the dependence structure among RFs. Under the Back-Testing Framework, ICC Risk may apply additional initial margin while investigating the model's poor performance and, if needed, recommend model enhancements to the Risk Committee and the Board.

(b) Statutory Basis

Section 17A(b)(3)(F) of the Act<sup>5</sup> requires, among other things, that the rules of a clearing agency be designed to promote the prompt and accurate clearance and settlement of securities transactions, and to the extent applicable, derivative agreements, contracts and transactions; to assure the safeguarding of securities and funds which are in the custody or control of the clearing agency or for which it is responsible; in general, to protect investors and the public interest; and to comply with the provisions of the Act and the rules and regulations thereunder. ICC believes that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to ICC, in particular, to Section  $17(A)(b)(3)(F)^6$ , because ICC believes that the proposed rule change to formalize the Back-Testing Framework promotes the soundness of ICC's risk management model. The Back-Testing Framework describes ICC's backtesting approach, back-testing procedures, and guidelines for remediating poor backtesting results. The various elements set forth in the Back-Testing Framework assess the ability of the model to reliably forecast risk at the selected risk quantile and ensure that ICC takes appropriate remedial action upon the identification of poor back-testing results. The Back-Testing Framework provides assurances as to the appropriateness of the model,

<sup>&</sup>lt;sup>5</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>&</sup>lt;sup>6</sup> Id.

including the appropriateness of margin requirements, thereby facilitating ICC's ability to promptly and accurately clear and settle its cleared CDS contracts; enhancing ICC's ability to assure the safeguarding of securities and funds which are in the custody or control of ICC or for which it is responsible; and protecting investors and the public interest. Moreover, ICC believes that having policies and procedures that clearly and accurately document ICC's back-testing procedures are an important component to the effectiveness of ICC's risk management system, which promotes the prompt and accurate clearance and settlement of securities transactions, derivatives agreements, contracts, and transactions; the safeguarding of securities and funds which are in the custody or control of ICC or for which it is responsible; and the protection of investors and the public interest. As such, the proposed rule change is designed to promote the prompt and accurate clearance and settlement of securities transactions, derivatives agreements, contracts, and transactions; to contribute to the safeguarding of securities and funds associated with security-based swap transactions in ICC's custody or control, or for which ICC is responsible; and, in general, to protect investors and the public interest within the meaning of Section 17A(b)(3)(F) of the Act.<sup>7</sup>

In addition, the proposed rule change is consistent with the relevant requirements of Rule 17Ad-22.<sup>8</sup> Rule 17Ad-22(b)(2)<sup>9</sup> requires ICC to 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

<sup>&</sup>lt;u>Id.</u>

<sup>&</sup>lt;sup>8</sup> 17 CFR 240.17Ad-22.

<sup>&</sup>lt;sup>9</sup> 17 CFR 240.17Ad-22(b)(2).

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. The Back-Testing Framework requires the remediation of poor-back-testing results; the performance of daily, weekly, monthly, and quarterly portfolio-level back-testing analyses; and the performance of monthly parameter reviews and parameter sensitivity analyses. Such procedures serve to promote the soundness of ICC's risk management model and to ensure that ICC's risk management system is effective and appropriate in addressing the risks associated with clearing security based swap-related portfolios. Namely, by requiring that ICC review and improve the model, the Back-Testing Framework promotes ICC's use of margin requirements to limit its credit exposures to participants under normal market conditions and ICC's use of 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, consistent with Rule 17Ad-22(b)(2).<sup>10</sup>

Rule 17Ad-22(b)(3)<sup>11</sup> requires ICC to 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 CP families to which it has the largest exposures in extreme but plausible market conditions. The Back-Testing Framework supports ICC's ability to maintain sufficient margin requirements and enhances ICC's approach to identifying potential weaknesses in the risk methodology by measuring the quality of its model using the BTLS, thereby ensuring that ICC continues

<sup>&</sup>lt;sup>10</sup> Id.

<sup>&</sup>lt;sup>11</sup> 17 CFR 240.17Ad-22(b)(3).

to maintain sufficient financial resources to withstand, at a minimum, a default by the two CP families to which it has the largest exposures in extreme but plausible market conditions, consistent with the requirements of Rule 17Ad-22(b)(3).<sup>12</sup>

Rule 17Ad-22(d)(8)<sup>13</sup> requires ICC to 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.<sup>14</sup> The Back-Testing Framework clearly assigns and documents responsibility and accountability for performing back-testing analyses and remediating poor back-testing results. These governance arrangements are clear and transparent, such that information relating to the assignment of responsibilities and the requisite involvement of the Chief Risk Officer, the Risk Oversight Officer, ICC Risk, the RWG, the Risk Committee, and the Board is clearly documented, consistent with the requirements of Rule 17Ad-22(d)(8).<sup>15</sup>

## (B) <u>Clearing Agency's Statement on Burden on Competition</u>

ICC does not believe the proposed rule change would have any impact, or impose any burden, on competition. The proposed change to formalize the Back-Testing Framework will apply uniformly across all market participants. Therefore, ICC does not believe the proposed rule change imposes any burden on competition that is inappropriate in furtherance of the purposes of the Act.

- <sup>14</sup> 15 U.S.C. 78q-1.
- <sup>15</sup> 17 CFR 240.17Ad-22(d)(8).

<sup>&</sup>lt;sup>12</sup> Id.

<sup>&</sup>lt;sup>13</sup> 17 CFR 240.17Ad-22(d)(8).

## (C) <u>Clearing Agency's Statement on Comments on the Proposed Rule Change</u> <u>Received from Members, Participants or Others</u>

Written comments relating to the proposed rule change have not been solicited or received. ICC will notify the Commission of any written comments received by ICC.

## III. Date of Effectiveness of the Proposed Rule Change

Within 45 days of the date of publication of this notice in the <u>Federal Register</u> or within such longer period up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

(A) by order approve or disapprove such proposed rule change, or

(B) institute proceedings to determine whether the proposed rule change should be disapproved.

#### IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

#### Electronic Comments:

- Use the Commission's Internet comment form (<u>http://www.sec.gov/rules/sro.shtml</u>); or
- Send an e-mail to <u>rule-comments@sec.gov</u>. Please include File Number SR-ICC-2019-001 on the subject line.

#### Paper Comments:

Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549. All submissions should refer to File Number SR-ICC-2019-001. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (http://www.sec.gov/rules/sro.shtml). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 am and 3:00 pm. Copies of such filings will also be available for inspection and copying at the principal office of ICE Clear Credit and on ICE Clear Credit's website at https://www.theice.com/clear-credit/regulation.

All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-ICC-2019-001 and should be submitted on or before [insert date 21 days from publication in the <u>Federal Register</u>].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>16</sup>

Eduardo A. Aleman Deputy Secretary

<sup>&</sup>lt;sup>16</sup> 17 CFR 200.30-3(a)(12).