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SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-85357; File No. SR-ICC-2019-001)

March 19, 2019

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

I. Introduction

On January 28, 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”),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change (SR-ICC-2019-001) to update and formalize the ICE CDS Clearing: Back-Testing Framework (“Back-Testing Framework”).<sup>3</sup> The proposed rule change was published in the Federal Register on February 8, 2019.<sup>4</sup> 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 update and formalize the Back-Testing Framework. The Back-Testing Framework would describe ICC’s back-testing process,

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

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

<sup>3</sup> Capitalized terms used herein but not otherwise defined have the meaning set forth in the ICC Rules or the Back-Testing Framework. Available at [https://www.theice.com/publicdocs/clear\\_credit/ICE\\_Clear\\_Credit\\_Rules.pdf](https://www.theice.com/publicdocs/clear_credit/ICE_Clear_Credit_Rules.pdf).

<sup>4</sup> Securities Exchange Act Release No. 34-85047 (Feb. 4, 2019), 84 FR 2938 (Feb. 8, 2019) (SR-ICC-2019-001) (“Notice”).

reporting of back-testing results, and procedures for remediating poor back-testing results.

A. Back-Testing Process

Generally, ICC's back-testing process would count the number of occurrences, also referred to as exceedances, when the observed loss for a Clearing Participant's ("CP") portfolio over a given time horizon is greater than the risk measure projected by ICC's Risk Management Model (the "Model").<sup>5</sup> ICC would then evaluate the total number of exceedances against the number of exceedances acceptable at the 99.5% risk quantile.<sup>6</sup> Under the Framework, the ICC Risk Management Department ("ICC Risk") would perform daily, weekly, monthly, and quarterly portfolio-level back-testing analyses.<sup>7</sup>

The Back-Testing Framework would calculate the observed loss for a CP's portfolio as the worst unrealized profit/loss ("P/L") over the Margin Period of Risk ("MPOR"), using the changes in net asset values ("NAVs").<sup>8</sup> The Back-Testing Framework would use the greatest MPOR for all of the instruments in the considered portfolio, rounded up to the nearest integer.<sup>9</sup> For example, if an instrument is subject to 5.5-day MPOR estimations and no other instrument in the portfolio has a longer MPOR,

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<sup>5</sup> Notice, 84 FR at 2938.

<sup>6</sup> Notice, 84 FR at 2939.

<sup>7</sup> Notice, 84 FR at 2938.

<sup>8</sup> Id.

<sup>9</sup> Id.

then ICC would perform the back-testing analysis by comparing the N-day worst unrealized P/L against the model projected risk measure with N=6.<sup>10</sup>

The Back-Testing Framework would define the model projected risk measure as the sum of the following selected initial margin components: integrated spread response, basis risk, and interest rate sensitivity (collectively, the “Back-Tested Components”).<sup>11</sup>

The Back-Testing Framework would not test the other components of initial margin (Jump-To-Default, Wrong-Way-Risk, Concentration Charge, and Liquidity Charge) because those components are not always market observed and statistically modeled.<sup>12</sup>

For multi-currency portfolios, the Back-Testing Framework would require that the back-testing analysis be performed in the clearinghouse base currency (U.S. Dollar) and would account for the foreign exchange risk exposure.<sup>13</sup>

Under the Back-Testing Framework, ICC would utilize the Basel Traffic Light System (“BTLS”) to assess the soundness of the Model.<sup>14</sup> The BTLS would be based on three zones: green, yellow, and red, with each zone defined by the maximum number of acceptable exceedances.<sup>15</sup> Under the Back-Testing Framework, ICC would consider the

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<sup>10</sup> Id.

<sup>11</sup> Notice, 84 FR at 2938.

<sup>12</sup> Notice, 84 FR at 2939.

<sup>13</sup> Notice, 84 FR at 2938.

<sup>14</sup> Id.

<sup>15</sup> Id.

model well calibrated if the number of exceedances across all CP-related portfolios is consistent with the 99.5% risk quantile.<sup>16</sup>

In addition to analyzing all CP-related portfolios, the Back-Testing Framework would also analyze a range of hypothetical portfolios. The Back-Testing Framework would refer to these portfolios as special strategy portfolios.<sup>17</sup> ICC would use the back-testing results for the special strategy portfolios to identify and assess potential weaknesses in the Model's assumptions.<sup>18</sup>

Finally, in addition to assessing the Model's performance by back-testing, the Back-Testing Framework would direct ICC Risk to assess the Model by conducting monthly parameter reviews and parameter sensitivity analyses.

B. Reporting of Results

The Back-Testing Framework would require a number of reports regarding the back-testing analysis of CP portfolios. First, daily portfolio back-testing results would be reported for each CP based on the appropriate MPOR.<sup>19</sup> For each day in the back-testing period, the report would provide all components of initial margin and identify the back-tested components and non-back-tested components.<sup>20</sup> The report would also provide the sum of the back-tested components alongside the unrealized P/L and the associated

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<sup>16</sup> Id.

<sup>17</sup> Notice, 84 FR at 2939.

<sup>18</sup> Id.

<sup>19</sup> Id.

<sup>20</sup> Id.

shortfall.<sup>21</sup> Second, the Back-Testing Framework would require a report of the back-testing results for the full period of the MPOR.<sup>22</sup> Third and finally, with each set of back-testing results (daily and full period), the Back-Testing Framework would require an exceedance summary showing the total number of exceedances in the back-testing period and the maximum number of exceedances that satisfy each zone in the BTLS.<sup>23</sup> This report would show the back-tested components and the N-day P/L results for every back-tested day for each portfolio associated with a given CP.<sup>24</sup>

In addition to reporting results per a given CP, the Back-Testing Framework would also require that ICC Risk report, periodically and as appropriate depending on market conditions, instrument and Risk Factor (“RF”)<sup>25</sup> level results.<sup>26</sup> Specifically, with this report, ICC Risk would compute the unrealized worst P/Ls over the appropriate time period, projected risk measures and exceedances for each RF and present the results as an average over all SN RFs for five groups of benchmark tenors.

C. Remediation of Poor Results

The Back-Testing Framework would provide guidelines for remediating poor back-testing results. The Back-Testing Framework would identify back-testing results as

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<sup>21</sup> Id.

<sup>22</sup> Id.

<sup>23</sup> Notice, 84 FR at 2939.

<sup>24</sup> Id.

<sup>25</sup> ICC deems each index, sub-index, or underlying single name (“SN”) reference entity a separate RF.

<sup>26</sup> Id.

poor if the number of observed exceedances falls in the red zone of the BTLS.<sup>27</sup> The Back-Testing Framework would also note that red-zone results coming from overlapping back-testing periods should not be automatically classified as poor back-testing results if the effects of one adverse observation are responsible for a cluster of exceedances.<sup>28</sup> In that case, the Back-Testing Framework would make the Chief Risk Officer and Risk Oversight Officer responsible for determining whether the number of exceedances is indicative of poor back-testing results, basing their determination in part on an additional back-testing analysis without overlapping periods.<sup>29</sup>

The Back-Testing Framework would describe various actions to be taken upon the identification of poor back-testing results, including seeking feedback from the Risk Working Group and consulting with the Risk Committee on any necessary remedial action.<sup>30</sup> Moreover, if poor back-testing results are identified and confirmed at the portfolio level, the Back-Testing Framework would require an analysis of individual RF back-testing results.<sup>31</sup> Finally, the Back-Testing Framework would empower ICC Risk to recommend enhancements to the Risk Committee and the Board.<sup>32</sup>

The Back-Testing Framework would also describe the actions to take if the number of exceedances falls in the yellow zone, including a review by ICC Risk to

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<sup>27</sup> Notice, 84 FR at 2939.

<sup>28</sup> Id.

<sup>29</sup> Notice, 84 FR at 2939.

<sup>30</sup> Id.

<sup>31</sup> Id.

<sup>32</sup> Id.

determine the cause of the Model's performance and, if necessary, a complimentary back-testing analysis without overlapping back-testing periods.<sup>33</sup>

### 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.<sup>34</sup> For the reasons given below, the Commission finds that the proposal is consistent with Section 17A(b)(3)(F) of the Act<sup>35</sup> and Rules 17Ad-22(b)(2), 17Ad-22(b)(3), and 17Ad-22(d)(8) thereunder.<sup>36</sup>

#### 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.<sup>37</sup>

As discussed above, the proposed rule change would update and formalize ICC's Back-Testing Framework. The Commission believes that, in general, the Back-Testing

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<sup>33</sup> Id.

<sup>34</sup> 15 U.S.C. 78s(b)(2)(C).

<sup>35</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>36</sup> 17 CFR 240.17Ad-22(b)(2), (b)(3), and (d)(8).

<sup>37</sup> 15 U.S.C. 78q-1(b)(3)(F).

Framework would help ensure the sound operation of ICC's Model. Specifically, the Commission believes that the Back-Testing Framework, in describing in detail ICC's process for conducting back-testing of the Model, would help assure the soundness of the Model by ensuring that ICC has a means for determining whether the Model's margin requirements cover possible losses under CP portfolios at the 99.5% risk quantile. The Commission further believes that the Back-Testing Framework, in setting out the requirements for reporting the results of the back-testing process, would help assure that ICC personnel are informed of the results and therefore able to take action to correct the Model if necessary. Finally, the Commission believes that the Back-Testing Framework, in mandating action to remediate poor back-testing results, would assure that ICC corrects deficiencies in the Model.

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 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.<sup>38</sup>

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.<sup>39</sup> 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.<sup>40</sup>

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 conducting back-testing, reporting the results of back-testing, and remediating poor results. The Commission believes that the proposed rule change would therefore help

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<sup>38</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>39</sup> 17 CFR 240.17Ad-22(b)(2).

<sup>40</sup> 17 CFR 240.17Ad-22(b)(3).

ICC to maintain margin requirements to limit its credit exposures to participants under normal market conditions. Moreover, as discussed above, the Back-Testing Framework would also require that ICC Risk conduct monthly parameter reviews and parameter sensitivity analyses. The Commission believes that this aspect of the Back-Testing Framework would help ICC to review margin requirements and the related risk-based models and parameters at least monthly. Finally, as discussed above, the Back-Testing Framework would also require reporting the results of the back-testing process. The Commission believes that this aspect of the proposed rule change would help ICC to use risk-based models and parameters to set margin requirements by helping assure that ICC personnel are informed of the results of back-testing and therefore able to take action to improve the Model if necessary. The Commission therefore finds that the proposed rule is consistent with is consistent with Rule 17Ad-22(b)(2).<sup>41</sup>

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.<sup>42</sup> 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 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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<sup>41</sup> 17 CFR 240.17Ad-22(b)(2).

<sup>42</sup> See ICC Rule 801(a).

in extreme but plausible market conditions. The Commission therefore finds that the proposed rule is consistent with is consistent with Rule 17Ad-22(b)(3).<sup>43</sup>

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).<sup>44</sup>

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.<sup>45</sup>

As described above, the proposed rule change would make a number of ICC personnel responsible for reporting and remediating back-testing results. Specifically, the Back-Testing Framework would require that ICC Risk periodically report results in terms of each CDS instrument, depending on market conditions. If red-zone results appear from overlapping back-testing periods, the Back-Testing Framework would make the Chief Risk Officer and Risk Oversight Officer responsible for determining whether the number of exceedances is indicative of poor back-testing results. Moreover, if the number of exceedances falls in the yellow zone, the Back-Testing Framework would require ICC Risk to determine the cause of the Model's performance. Finally, as discussed above, the Back-Testing Framework would also require that ICC Risk conduct monthly parameter reviews and parameter sensitivity analyses.

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<sup>43</sup> 17 CFR 240.17Ad-22(b)(3).

<sup>44</sup> 17 CFR 240.17Ad-22(b)(2), (b)(3).

<sup>45</sup> 17 CFR 240.17Ad-22(d)(8).

The Commission believes that in assigning these responsibilities, the proposed rule change would establish governance arrangements relating to the Back-Testing Framework that are clear and transparent to fulfill the public interest requirements in Section 17A of the Act by clearly assigning and documenting responsibilities for reporting and acting on the results of back-testing. Moreover, the Commission believes that in setting out specific actions to remediate poor back-testing results the proposed rule change would promote the effectiveness of ICC's risk management procedures by requiring specific actions to correct deficiencies in the Model.

Therefore, for this reason, the Commission finds that the proposed rule change is consistent with Rule 17Ad-22(d)(8).<sup>46</sup>

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<sup>46</sup> 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<sup>47</sup> and Rules 17Ad-22(b)(2), 17Ad-22(b)(3), and 17Ad-22(d)(8) thereunder.<sup>48</sup>

IT IS THEREFORE ORDERED pursuant to Section 19(b)(2) of the Act<sup>49</sup> that the proposed rule change (SR-ICC-2019-001) be, and hereby is, approved.<sup>50</sup>

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>51</sup>

Eduardo A. Aleman  
Deputy Secretary

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<sup>47</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>48</sup> 17 CFR 240.17Ad-22(b)(2), (b)(3), and (d)(8).

<sup>49</sup> 15 U.S.C. 78s(b)(2).

<sup>50</sup> 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).

<sup>51</sup> 17 CFR 200.30-3(a)(12).

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