SECURITIES AND EXCHANGE COMMISSION (Release No. 34-91586; File No. SR-ICEEU-2021-006)

April 16, 2021

Self-Regulatory Organizations; ICE Clear Europe Limited; Order Approving Proposed Rule Change Relating to the ICE Clear Europe CDS Clearing Stress Testing Policy, CDS End of Day Price Discovery Policy, CDS Risk Model Description and CDS Risk Policy and CDS Parameters Review Procedures

I. <u>Introduction</u>

On February 23, 2021, ICE Clear Europe Limited ("ICE Clear Europe") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"),¹ and Rule 19b-4,² a proposed rule change to amend its CDS End of Day Price Discovery Policy ("Price Discovery Policy"), CDS Clearing Stress Testing Policy ("Stress Testing Policy"), CDS Risk Policy ("Risk Policy"), and CDS Risk Model Description ("Risk Model Description") and to formalize a set of CDS Parameters Review Procedures ("Parameters Review Procedures"). The proposed rule change was published for comment in the <u>Federal Register</u> on March 8, 2021.³ The Commission did not receive comments regarding the proposed rule change.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ Self-Regulatory Organizations; ICE Clear Europe Limited; Notice of Filing of Proposed Rule Change Relating to the ICE Clear Europe CDS Clearing Stress Testing Policy, CDS End of Day Price Discovery Policy, CDS Risk Model Description and CDS Risk Policy and CDS Parameters Review Procedures, Exchange Act Release No. 91240 (March 2, 2021); 86 Fed. Reg. 13417 (March 8, 2021) (SR-ICEEU-2021-006) ("Notice").

II. Description of the Proposed Rule Change

As discussed further below, the proposed rule change would amend the Price Discovery Policy, Stress Testing Policy, Risk Policy, and Risk Model Description, and would formalize the Parameters Review Procedures, to describe more fully certain existing operational practices at ICE Clear Europe. The proposed rule change also would amend the Stress Testing Policy to incorporate the impact of the COVID-19 pandemic into the stress testing framework and would amend the Risk Model Description to address findings of an independent validation.⁴

A. <u>Amendments to the Price Discovery Policy</u>

The Price Discovery Policy describes the procedures and processes that ICE Clear Europe uses to produce reliable, market-driven prices for credit default swap ("CDS") instruments. In order to provide more reliable pricing where fewer than three Clearing Members have open interest in a particular instrument, the proposed rule change would clarify the general process for determining prices in such a situation. The proposed rule change also would make minor terminology updates to add uniformity to defined terms, properly reference various ICE Clear Europe personnel and operations, add a new table illustrating example assignment of index risk factors to market proxy groups, and make typographical corrections throughout the document to better reflect the Rules and other ICE Clear Europe documentation.

⁴ Capitalized terms not otherwise defined herein have the meanings assigned to them in the ICE Clear Europe Rulebook, Price Discovery Policy, Stress Testing Policy, Risk Policy, Risk Model Description, and Parameters Review Procedures, as applicable. The description that follows is excerpted from the Notice, 86 Fed. Reg. at 13417.

The proposed rule change first would amend the Price Discovery Policy to consolidate and clarify the process that ICE Clear Europe would use to determine prices for a particular instrument or risk sub-factor when fewer than three Clearing Members have open interest in that instrument or risk sub-factor.⁵ The Price Discovery Policy currently states that if fewer than three Clearing Members clear open interest in an instrument, ICE Clear Europe may require all Clearing Members to provide a price submission for that instrument. In that case, the Price Discovery Policy further provides that ICE Clear Europe would not use its firm trade mechanism to require Clearing Members to enter into trades for that instrument at the prices submitted. For single-name CDS, the current version of the Price Discovery Policy provides an identical process where fewer than three Clearing Members have open interest in a particular risk sub-factor.

The proposed rule change would combine the separately described processes for instruments and risk sub-factors. The proposed amendments first would state that tradeable quotes (meaning price submissions from Clearing Members having an open interest) would be ICE Clear Europe's preferred source of price data and should be used where possible and reliable. As revised, the Price Discovery Policy would acknowledge, however, that where there are fewer than three Clearing Members with open interest in an instrument or risk sub-factor, there would not be enough Clearing Members for ICE Clear Europe to use its firm trade

⁵ As explained in the Price Discovery Policy, the term instrument refers to the complete set of contractual terms that affect the value of a CDS contract, while the term risk sub-factor refers to the complete set of contractual terms that affect the value of a CDS contract as well as the reference entity for that contract.

mechanism.⁶ In that case, ICE Clear Europe would require indicative price quotes⁷ from all Clearing Members but would not require Clearing Members to enter into firm trades at those prices. The minimum number of three Clearing Members, below which indicative quotes would be used, would be subject to ongoing review by ICE Clear Europe and ICE Clear Europe could change it as necessary.

The proposed rule change would also add a new Table 4 illustrating an example of assignment of certain CDS indices (referred to as index risk factors) to market proxy groups. The proposed new Table 4 would show the index risk factors for each of the CDX and iTraxx market proxy groups, clarifying how ICE Clear Europe categorizes those index risk factors. The market proxy group for a particular index risk factor affects how ICE Clear Europe determines the end-of-day bid-offer width for that index risk factor.⁸ Relatedly, the proposed rule change would update a reference to Table 2 in the EOD BOWs section to Table 4 and update existing references to Tables 4 through 7 to Tables 5 through 8. The new table would clarify the Price Discovery Policy and would not change ICE Clear Europe's existing practices.⁹

⁶ As described above, under ICE Clear Europe's firm trade mechanism, ICE Clear Europe selects Clearing Members to enter into trades at the prices submitted, and thus this serves as means of ensuring that Clearing Members submit realistic price quotes.

⁷ As proposed to be revised, the Price Discovery Policy would provide that an indicative quote is a reasonable estimate of the market price but does not necessarily reflect a price at which the member would transact.

⁸ Notice, 86 Fed. Reg. at 13418.

⁹ Notice, 86 Fed. Reg. at 13418.

Moreover, the proposed rule change would update the governance section of the policy. In the governance section addressing material changes to the EOD price discovery methodology, spread-to-price conversion determinants, or parameters, the proposed rule change would clarify that review is to be performed by the Trading Advisory Group (instead of the Trading Advisory Committee) and the Product Risk Committee (instead of the Risk Committee). These changes would reflect the current names of those groups at ICE Clear Europe. Moreover, the Price Discovery Policy currently requires that the Board and Executive Risk Committee be notified of level red breaches of the policy, which are the most severe breaches, as soon as possible. The proposed rule change would replace "as soon as possible" with "immediately", thus clarifying the need for immediate notification to the Board and Executive Risk Committee.

Finally, the proposed rule change would update certain references and the titles of defined terms throughout the Price Discovery Policy to be consistent with terminology used in the Rules and other ICE Clear Europe documentation and make other minor typographical updates. For example, the proposed rule change would replace the term "Clearing Participant" with "Clearing Member"; "CP" with "CM"; and "Trading Advisory Committee"/"TAC" with "Trading Advisory Group"/"TAG". Moreover, the proposed rule change would modify the statement that trading desks at each self-clearing member are "required" to copy ICE Clear Europe on intraday quotes that are provided to market participants via email to instead state that the self-clearing members are "requested" to copy ICE Clear Europe on such emails.

B. Amendments to the Stress Testing Policy

The Stress Testing Policy describes the practices that ICE Clear Europe uses to identify potential weaknesses in its risk methodologies and ensure that its financial resources are

adequate. The proposed rule change would make a number of amendments to the Stress Testing Policy, including adding stress test scenarios; clarifications and enhancements to the stress-testing methodology description to capture significant market behaviors observed during the COVID-19 pandemic; and clarifications to the governance of stress testing. These changes are described below and organized according to the sections of the Stress Testing Policy.

In addition to those changes, throughout the various sections of the Stress Testing Policy the proposed rule change would correct typographical errors, update certain references, and update the titles of defined terms. For example, the proposed rule change would replace the term "Members" with "CM" to refer to Clearing Members and "Guaranty Fund" with "GF". The proposed rule change would also replace references to the "Board Risk Committee" or "BRC" with references to the "Model Oversight Committee" or "MOC", to ensure that the Stress Testing Policy references the correct ICE Clear Europe committees.

i. <u>Purpose</u>

The proposed rule change would revise the discussion of the purpose of the Stress Testing Policy to better reflect how the policy is integrated into ICE Clear Europe's risk procedures and governance structure and the Clearing House's current governance framework. Specifically, the proposed rule change would reference the Model Oversight Committee ("MOC") rather than an outdated reference to the Board Risk Committee ("BRC"). Further, the proposed rule change would state that any terms not defined in the policy would be defined in both the ICE Clear Europe CDS Risk Policy and the Rules, rather than solely in the Rules.

ii. Methodology

First, the proposed rule change would amend the methodology section of the Stress Testing Policy. The methodology section explains ICE Clear Europe's overall process for creating stress scenarios and applying those scenarios to actual cleared portfolios and hypothetical portfolios. ICE Clear Europe uses this stress testing process to determine the sufficiency of its financial resources. The proposed rule change would add a discussion of stress testing in the context of wrong way risk to the general methodology section of the policy.¹⁰ As described in the revised Stress Testing Policy, ICE Clear Europe would combine into one subportfolio all positions in index risk factors and single-name risk factors that exhibit high levels of positive association with a Clearing Member's portfolio. ICE Clear Europe would then separately stress test this sub-portfolio to further analyze the wrong way risk. The proposed rule change is intended to better reflect existing practice and does not reflect a change in Clearing House practice.¹¹

The proposed rule change would also revise the methodology section to update the process for the retirement or modification of outdated stress scenarios or portfolios. Currently, the methodology section of the Stress Testing Policy provides that in the event that a scenario or

¹¹ Notice, 86 Fed. Reg. at 13418.

¹⁰ As described in the Risk Model Description, ICE Clear Europe's risk model considers two types of wrong way risk: specific and general. Specific wrong way risk results from a Clearing Member's self-referencing trades, meaning CDS trades whose underlying reference entity is the Clearing Member, or an entity guaranteed by, or affiliated with the Clearing Member. General wrong way risk results from trades that involve instruments that are highly correlated with a Clearing Member, or an entity guaranteed by, or affiliated with a Clearing Member.

portfolio is no longer applicable or has been superseded, ICE Clear Europe's Clearing Risk Department may retire or modify the outdated scenario or portfolio by (i) consulting with ICE Clear Europe senior management; (ii) conducting analysis to support its recommendation; (iii) discussing the analysis and obtaining input from the Risk Working Group; and (iv) presenting the final analysis to the CDS Risk Committee and/or the BRC for approval. As revised, when the Clearing Risk Department seeks to retire or modify a scenario or portfolio, it would first conduct an analysis to determine whether the change is significant. The Risk Oversight Department would review this analysis. The ICE Clear Europe Board, or its delegated committee, would then approve the decommissioning of scenarios if that decommissioning constituted a significant change, while the MOC would approve the decommissioning of scenarios (if it did not constitute a significant change) or recommend the decommissioning of scenarios to the Board if the change were deemed significant in the course of the MOC's review. Under the revised Stress Testing Policy, the criteria to determine the significance would be in accordance with the applicable law and the existing regulatory guidelines. The proposed rule change would largely formalize current practice and reflect the role of the MOC under the Clearing House's Model Risk Governance Framework.

Similarly, the proposed rule change would also clarify that if the Clearing Risk Department wishes to add new scenarios or portfolios, the MOC must approve the addition, but the Board's approval is not required. Currently, the Stress Testing Policy provides that where the Clearing Risk Department seeks to add new scenarios or portfolios, the CDS Risk Committee is informed of the additions, but its recommendation or approval is not required.

Finally, the proposed rule change would also describe and clarify one of the assumptions that ICE Clear Europe currently uses in stress testing. Specifically, the proposed rule change would add a statement that during the execution of stress testing and sensitivity testing, under the multiple Clearing Members default scenario, the stress testing would explicitly incorporate the conditional uncollateralized loss-given-defaults resulting from the defaulting Clearing Members' single-name positions.

iii. Predefined Scenarios; New COVID-19 Scenarios

The proposed rule change would next make a number of revisions to the section describing the predefined stress scenarios that ICE Clear Europe uses in stress testing. The proposed rule change first would clarify that the scenarios reflect a margin period of risk from 1 to 7 days, taking into account the 5-day margin period used in the existing margin methodology for house accounts and the 7-day margin period used in the existing margin methodology for client accounts. To accommodate this difference, the proposed rule change would replace references to a 5-day margin period of risk with an N-day margin period of risk, with N-day representing the greatest relevant stress period (i.e., 5 days for house accounts and 7 days for client accounts).

Next, the proposed rule change would amend the description of each of ICE Clear Europe's stress scenarios to describe them more thoroughly. The Stress Testing Policy categorizes the stress testing scenarios as either extreme but plausible or extreme market. Extreme but plausible scenarios are those scenarios that are believed to be potential, but with a low probability of occurrence, based on historically observed data or that are constructed based on hypothetical data. Extreme market scenarios, on the other hand, are designed to test the performance of ICE Clear Europe's risk model, as described in the Risk Model Description, under extreme conditions but are not expected to be realized market outcomes. The Stress Testing Policy further categorizes extreme but plausible scenarios as either historically observed or hypothetical.

With respect to the historically observed extreme but plausible scenarios, the proposed rule change would update the description of existing scenarios. First, the proposed rule change would update the description of the margin period of risk to reflect the use of N-day, rather than 5-day, as discussed above. The proposed rule change would also add further description of the historical period on which the scenarios are based and the determination of the stress period. For example, in the description of the 2008/2009 credit crisis scenario, the proposed rule change would clarify that the determination of the exact stress period is defined by the greatest observed change of spreads of the Most Actively Traded Instrument ("MATI") for each relevant subportfolio. The proposed rule change would make a similar clarification in the description of the Western European Credit Crisis scenarios. For the Lehman Brothers scenarios, the proposed rule change would define the scenario magnitudes for each risk factor according to both its sector classification and time to maturity of the considered instrument. ICE Clear Europe would derive the corresponding stress test, titled the Opposite LB Default Price Change Scenarios, from the Lehman Brothers scenarios by multiplying the scenario result by a negative factor in order to reflect the reduced magnitudes of the observed price increases during the considered period.

These proposed rule changes are intended to more thoroughly describe each of these existing stress testing scenarios.¹²

The proposed rule change also would clarify the scope of the discordant spread scenarios for corporate and sovereign single-name CDS. Specifically, the proposed rule change would update the description to better specify the indices on which the discordant scenarios are based. For example, the Stress Testing Policy currently provides that the scenarios are based on discordant moves among major indices. The proposed rule change would revise this to instead refer to discordant moves among the major European and North American five year on-the-run indices. The proposed rule change would also state that the Corporate Single-Names and Indices Discordant Spread Scenarios, which reflect realizations when certain indices or sub-indices for the EU region and certain U.S. on-the-run indices exhibited the greatest combined discordant change, would be created and applied to single-names and indices. Next, the proposed rule change would further update references to indices used in stress scenarios and state that other stress scenarios would be based on discordant spread realizations across European Indices. Finally, the proposed rule change would note that other stress scenarios would reflect discordant spreads realizations among geographical regions. These proposed rule changes are intended to more thoroughly describe each of these existing stress testing scenarios. $\frac{13}{13}$

Finally, the proposed rule change would also add new historically observed scenarios based on market conditions during the COVID-19 Pandemic. ICE Clear Europe would base these

¹² Notice, 86 Fed. Reg. at 13418-13419.

¹³ Notice, 86 Fed. Reg. at 13419.

scenarios on stress market moves experienced between February and April 2020. The first set of scenarios, titled the COVID-19 Widening/Tightening Spread Scenarios, would be based on the greatest observed N-day relative spread increases/decreases during the period. The second set of scenarios, titled the COVID-19 Price Decrease Scenario, would be based on the greatest observed N-day relative price decreases during the period.

With respect to the hypothetical extreme but plausible scenarios, the proposed rule change would add description of each of the current hypothetical scenarios and also add new scenarios based on discordant moves across different sectors and countries. For the current hypothetical scenarios, the proposed rule would clarify that ICE Clear Europe creates the 2008/2012 Crises Widening and Curve Inverting Scenarios by combining the largest shock among the 2008/2009 Credit Crisis Widening and the Western European Credit Crisis Widening Scenarios for each Risk Factor. The proposed rule change would add similar language to the description of the 2008/2012 Crises Tightening and Credit Curve Steepening Scenarios. The proposed rule change would also update the description of the Forward Looking Credit Events Scenarios to clarify that the Clearing Member reference entity that would be subject to the stress test.

The proposed rule change would also add description of new scenarios titled the Sectors and Countries Discordant Scenarios. These scenarios would be designed to reproduce discordant moves across sectors and entities of different countries, in particular the large price moves in the oil benchmark products in the first half of 2020 and COVID-19 stress period.

With respect to the Extreme Market Scenarios, the proposed rule change would clarify how ICE Clear Europe derives these scenarios. Specifically, ICE Clear Europe would create the extreme steepening and extreme inverting scenarios from crises steepening and crises inverting scenarios by applying a factor to steepening scenarios and doubling the shocks for inverting scenarios. Further, the proposed rule change would incorporate the new COVID-19 historical scenarios into the determination of extreme scenarios, much like the calculation of extreme scenarios based on the LB default scenario. Finally, the proposed rule change would clarify the description of the Guaranty Fund extreme market scenarios by specifying that these scenarios would be designed to account for the occurrence of credit events for two Clearing Member risk factor groups and three non-Clearing Member risk factor groups. The proposed rule change would also clarify that these scenarios consider an even more extreme case in which five risk factor groups for up to five Clearing Members undergo credit events.

iv. Guaranty Fund Adequacy Analysis

The proposed rule change would revise the section that describes the Guaranty Fund adequacy analysis by noting that the number of defaults of reference entities is one of the major risks in the CDS clearing service. Because of that risk, the Clearing Risk Department considers complementary extreme scenarios where a combination of up to five risk factor groups for up to five Clearing Members would be assumed to default before simulating spreads widening and tightening on the non-defaulting entities in order to fully deplete the Guaranty Fund. The proposed rule change would explain that the scenario and analysis aim to provide estimates of the level of protection achieved through initial margin and Guaranty Fund in relation to

multiple defaults. The proposed rule change is intended to clarify the stress-testing description but does not reflect a change in current practice.¹⁴

v. Portfolio Selection

The proposed rule change would update the description of the process for determination of sample portfolios for stress testing in the portfolio selection section. Currently, ICE Clear Europe applies the stress test scenarios to sample portfolios that are obtained from the actual cleared portfolios by considering positions opposite to those in the cleared portfolios. Under the proposed rule change, ICE Clear Europe would derive the portfolio from the currently cleared portfolios by only considering positions in index risk factors and sectors that exhibit a high degree of association with the Clearing Member at issue - in particular indices, sovereigns, and financials risk factors - rather than just considering exactly opposite positions. Next, the proposed rule change would further clarify that constructed sub-portfolios would be subject to the stress test analysis with the standard set of stress test scenarios. The proposed rule change would further clarify that the aim of the stress analysis with the hypothetical portfolios would be to provide estimates of the potential exposure of Clearing Members to risk factors generating General Wrong Way Risk.

Finally, the proposed rule change would remove the current reference to special strategy sample portfolios and instead add a new provision addressing application of stress testing scenarios to expected future portfolios upon the launch of new clearing services or products. This

¹⁴ Notice, 86 Fed. Reg. at 13420.

stress test analysis would be presented to and reviewed by the CDS Product Risk Committee prior to launch.

vi. Interpretation and Review of Stress-Testing Results

The proposed rule change would amend the interpretation and review of the stress-testing results section to update the governance of enhancements to stress scenarios. Currently, the Stress Testing Policy provides that depending on the outcome of the stress testing, ICE Clear Europe's Clearing Risk Department may consider enhancements to ICE Clear Europe's risk model. The Stress Testing Policy provides that such enhancements to stress scenarios will first be discussed with senior management and then the CDS Risk Committee, and the Board Risk Committee, with ultimate approval by the ICE Clear Europe Board. The proposed rule change would revise this to provide that enhancements to stress scenarios would be discussed and approved based on the governance outlined in ICE Clear Europe's Model Risk Governance Framework.

Similarly, the Stress Testing Policy currently notes that certain stress testing can lead to a review if the results show ICE Clear Europe's financial resources are insufficient. The proposed rule change would simplify this discussion by noting that ICE Clear Europe's financial resources should cover the two greatest Affiliate Groups' uncollateralized stress losses under the extreme but plausible market scenarios and if not, additional funds could be required and enhancements to the current risk methodology would be considered. Further, the proposed rule change would provide that the ICE Clear Europe Board and its delegated committees (rather than the CDS Risk Committee and BRC) would be provided with information as to the stress test results where necessary or appropriate to perform their duties.

Finally, the proposed rule change would remove certain outdated and/or duplicative statements, including matters relating to governance that are now addressed in the Model Risk Governance Framework and outdated references to certain examples or specific committees. For example, under the proposed rule change, the MOC instead of the Executive Risk Committee would undertake any related deficiency analysis and review. Moreover, the Stress Testing Policy currently discusses the governance of the review and approval to changes to the stress scenarios, stress testing, or risk model. The proposed rule change would delete this description, because ICE Clear Europe would now conduct this review in accordance with the procedures in the Model Risk Governance Framework. Finally, under the proposed rule change, the stress testing report would be presented to the CDS Product Risk Committee instead of the CDS Risk Committee during scheduled meetings instead of scheduled monthly meetings.

vii. Policy Governance and Reporting

The proposed changes to the policy governance and reporting section, would update the committees involved in the review and approval of the Stress Testing Policy, to be more consistent with other ICE Clear Europe documentation. For example, the CDS Risk Committee and the BRC currently review the Stress Testing policy annually. Under the proposed rule change, only the BRC would conduct this annual review, and the proposed rule change would delete references to the CDS Risk Committee. Moreover, currently the Executive Risk Committee must discuss any material changes to the Stress Testing Policy and the Board must approve such changes on the advice of the CDS Risk Committee. Under the proposed rule change, the MOC, not the Executive Risk Committee, would discuss the changes and the Board

would approve the changes on the advice of the CDS Product Risk Committee, rather than the CDS Risk Committee.

viii. Appendix

In the appendix, the proposed rule change would update the description of the FX stress test scenario amendments to reflect the greatest N-day relative depreciation (instead of five-day), similar to the changes discussed above.

C. <u>Amendments to the Risk Policy</u>

The Risk Policy provides an overview of the policies and procedures that ICE Clear Europe uses to manage and mitigate risks, including among other things, initial margin and Guaranty Fund requirements, mark-to-market margin, and intra-day risk monitoring. The proposed rule change would make a number of amendments to the Risk Policy. These changes are described below and organized according to the sections of the Risk Policy.

In addition to these changes, throughout the Risk Policy, the proposed rule change would update the titles of certain defined terms. For example, the proposed rule change would replace use of the term "ICE Clear Europe" with "ICEU". The proposed rule change would also replace "general WWR" with "GWWR" to mean general wrong way risk and replace "Risk Factor Group" with "RFG".

i. Initial Margin

In the initial margin section of the Risk Policy, the proposed rule change would add further description of ICE Clear Europe's initial margin methodology. The proposed rule change would note that ICE Clear Europe's initial margin methodology uses a combined stress-based spread response value at risk measure and a Monte Carlo simulation spread response value at

risk measure. The proposed rule change would then add further description of each of the stressbased spread response value at risk measure and the Monte Carlo simulation spread response value at risk measure.

For the stress-based spread response value at risk measure, the proposed rule change would clarify the description of this measure. Currently, the Risk Policy provides that using this measure, ICE Clear Europe defines the spread scenarios using two credit regimes and three credit curve shapes. The proposed rule change would keep the description of the two credit regimes and three credit curve shapes but would clarify that the two credit regimes consist of widening and tightening regimes. Moreover, the Risk Policy lists the benchmark tenors for which ICE Clear Europe makes estimates under the spread response value at risk measure. The proposed rule change would add additional tenors to this list, to clarify the applicable benchmark tenors estimated for all the risk sub-factors and replace certain outdated references to tenors.

For the Monte Carlo simulation spread response value at risk measure, the proposed rule change would add a new subsection to the Risk Policy to describe this approach. Under this approach, ICE Clear Europe would generate hypothetical scenarios regarding changes in CDS spreads, which ICE Clear Europe would use to re-price CDS instruments in a portfolio. ICE Clear Europe would then estimate a profit/loss for each re-priced CDS instrument. ICE Clear Europe would aggregate these estimated profit/loss figures and use them to estimate the value at risk measure for the portfolio.

Moreover, the proposed rule change would update the description of the antiprocyclicality considerations to account for the changes to the Stress Testing Policy described above. The Risk Policy currently provides that to account for anti-procyclicality, it takes into

consideration stress price changes derived from market behavior during and after the Lehman Brothers default period. The proposed rule change would expand this to take into consideration stress price changes derived from the extreme but plausible stress test scenarios, with a cross reference to the Stress Testing Policy. Thus, this change would take into account the broader range of scenarios in the revised Stress Testing Policy, discussed above.

Finally, the proposed rule change would update the description of the monitoring of the initial margin methodology and of the governance concerning changes to the initial margin methodology. Currently, the Risk Policy provides that the Clearing Risk Department recommends margin methodology changes to the Board for approval, working in consultation with the Risk Working Group and the CDS Risk Committee. Under the proposed rule change, the Clearing Risk Department may recommend margin methodology changes based on the governance in the Model Risk Governance Framework, working in consultation with the Risk Working Group and the CDS Product Risk Committee.

ii. Mark-to-Market Margin

In the mark-to-market margin section of the Risk Policy, the proposed rule change would delete the description of determination of cash owing, the payment of mark-to-market margin, the timing of margin calculations, the making of mark-to-market margin, and the rights of a Clearing Member upon a change in mark-to-market margin balance. These matters are generally covered by other ICE Clear Europe documentation, such as the Finance Procedures.

iii. Intra-Day Monitoring

In the intra-day monitoring section of the Risk Policy, the proposed rule change would add description of how ICE Clear Europe assures itself of the quality of the intraday prices it receives for CDS. The proposed rule change would provide that ICE Clear Europe would ensure the quality of the intraday prices by monitoring and comparing the quotes received with the intraday prices of the transactions cleared at ICE CDS clearing houses and further that ICE Clear Europe could also compare intraday prices with those of another third-party provider.

The proposed rule change would further amend the description of the intraday risk limit. As described in the Risk Policy, ICE Clear Europe uses intraday prices to re-value Clearing Members' portfolios and estimate an unrealized profit/loss. The unrealized profit/loss is compared to the intraday risk limit. The intraday risk limit is a limit on the amount of unrealized profit/loss that ICE Clear Europe would accept for a Clearing Member before taking additional action, such as increased monitoring or an intraday margin call. Currently, the intraday risk limit is 40% of a Clearing Member's total initial margin requirements, with a minimum amount of Euro 15 million and a cap of Euro 100 million. The proposed rule change would keep the intraday risk limit at 40% of a Clearing Member's total initial margin requirements, but would replace the fixed minimum and fixed cap (Euro 15 million and Euro 100 million, respectively), with a minimum amount corresponding to the Clearing Member's minimum Guaranty Fund contribution and a maximum amount set and reviewed by ICE Clear Europe senior management and the CDS Product Risk Committee.¹⁵

¹⁵ ICE Clear Europe represents that while there is no plan to change the existing EUR 100 million cap in practice, this change would give ICE Clear Europe flexibility if it determined it was appropriate to review and reconsider this amount in the future. Notice, 86 Fed. Reg. at 13421.

The proposed rule change would also revise the list of actions that ICE Clear Europe would take in response to a Clearing Member's estimated intraday profit/loss approaching the intraday risk limit. Currently, the Risk Policy provides that once the estimated intraday profit/ loss equals half of the intraday risk limit, ICE Clear Europe will investigate and closely monitor the Clearing Member. The proposed rule change would delete this provision because ICE Clear Europe considers it unnecessary in light of another requirement in the Risk Policy (i.e., that once the estimated intraday profit/loss exceeds half of the intraday risk limit, ICE Clear Europe will inform the Clearing Member that it may be subject to an intraday margin call, and the proposed rule change would not alter this provision). In ICE Clear Europe's view, this provision renders the investigation when the estimated intraday profit/loss equals half of the intraday risk limit unnecessary because in informing the Clearing Member that it may be subject to an intraday margin call, the Clearing Risk Department will make any necessary investigations of the matter.¹⁶

Similarly, the proposed rule change would delete the requirement that ICE Clear Europe's Risk Management Department notify the ICE Clear Europe Treasury Department of a special margin call, as an operational detail that should not be covered by the Risk Policy. Moreover, ICE Clear Europe represents that the Clearing Risk Department would set the margin level and communicate it to other ICE Clear Europe departments in the ordinary course, as it does for any change of margin level.¹⁷

¹⁶ Notice, 86 Fed. Reg. at 13421.

¹⁷ Notice, 86 Fed. Reg. at 13421.

iv. CDS Guaranty Fund

In the CDS Guaranty Fund section of the Risk Policy, the proposed rule change would revise the description of the Guaranty Fund at the beginning of this section. Currently, the Risk Policy describes the Guaranty Fund as mutualizing losses under extreme but plausible market scenarios and as designed to provide adequate funds to cover losses associated with the default of the two Clearing Members, as well as any affiliated Clearing Members, with the greatest potential losses under these scenarios. The proposed rule change would simplify this description to state that the ICE Clear Europe Guaranty Fund is designed to cover losses under extreme but plausible market scenarios with respect to two Affiliate Groups of Clearing Members.

The proposed rule change would also amend the discussion of the anti-procyclicality considerations of the Guaranty Fund. Instead of referring to stress price changes based only on market behavior during and after the Lehman Brothers default period, the proposed rule change would refer to stress price changes based on the extreme but plausible price-based stress test scenarios described in the Stress Testing Policy, consistent with changes to the Stress Testing Policy discussed above.

The proposed rule change would also amend the description of ICE Clear Europe's process for allocating Guaranty Fund requirements to Clearing Members. The Risk Policy currently provides that ICE Clear Europe's Risk Department performs the allocation every Thursday, with the allocation based on a Clearing Member's close of business positions as of Wednesday. The proposed rule change would revise this to state that the Clearing Risk Department performs the allocation weekly, with the allocation based on a Clearing Member's close of business positions.

close of business positions as of the previous day. Thus, this change would increase flexibility, while retaining the same weekly performance of the allocation.

The proposed rule change would revise the description of ICE Clear Europe's Guaranty Fund calls. Currently, the Risk Policy provides that to accommodate US dollar denominated sovereign CDS contracts, ICE Clear Europe requires a portion of the Guaranty Fund to be in US dollars. The proposed rule change would revise this to clarify that ICE Clear Europe requires a portion of the Guaranty Fund to be in US dollars to accommodate US dollar denominated CDS contracts, not just sovereign CDS contracts, given that ICE Clear Europe's US dollar denominated CDS contracts are not limited to sovereign contracts. The proposed rule change would also remove the current numerical example of Guaranty Fund calls/collection as unnecessary.

v. Back-Testing and Stress Testing

In the Back-Testing and Stress Testing section of the Risk Policy, the proposed rule change would update the governance regarding review of the CDS risk models. Currently, the Risk Policy provides that if the model calibration consistently demonstrates exceptions outside of the coverage level, the Risk Management Department will review the models and recommend revisions to the Board and CDS Risk Committee. The proposed rule change would instead provide that in such a situation, the Clearing Risk Department would review the models and recommend revisions following the governance outlined in the Model Risk Governance Framework. Moreover, the proposed rule change would revise the description of stress testing to refer to the COVID-19 scenarios that the proposed rule change would add to ICE Clear Europe's Stress Testing Policy, as discussed above.

vi. Policy Governance and Reporting

Finally, in the Policy Governance and Reporting section, the proposed rule change would update the names of certain ICE Clear Europe committees without changing the substance of the governance process. For example, the proposed rule change would use the term "ROD" instead of "Risk Oversight Department" and the term "CDS PRC" to mean the CDS Product Risk Committee.

D. <u>Amendments to the Risk Model Description</u>

The Risk Model Description details the methodology that ICE Clear Europe uses to calculate initial margin requirements and Guaranty Fund requirements for its CDS Clearing Members. The proposed rule change would make a number of amendments to the Risk Model Description to clarify existing descriptions, change an existing practice with respect to a calculation associated with wrong way risk, and implement the findings of an independent validation. These changes are described below and organized according to the sections of the Risk Model Description.

In addition to those changes, throughout the Risk Model Description, the proposed rule change would correct references to ICE Clear Europe departments and committees and update the titles of defined terms.

i. <u>Background</u>

The proposed rule change would first update the background section of the Risk Model Description, which generally describes the design of the CDS initial margin model and its development. The proposed rule change would add to this background additional description to note that the time horizon for the interest rate sensitivity requirement of the initial margin

methodology (which is further discussed below) would be 5 days for house accounts and 7 days for client accounts, consistent with the changes to the Stress Testing Policy described above.

ii. Initial Margin Methodology

ICE Clear Europe's CDS initial margin methodology consists of seven components: (i) spread response, (ii) recovery rate sensitivity, (iii) liquidity charge, (iv) jump to default, (v) concentration charge, (vi) interest rate sensitivity, and (vii) basis risk. As discussed below, the proposed rule change would amend the description of the recovery rate sensitivity, concentration charge, and spread response components.

The proposed rule change would first amend the description of the recovery rate sensitivity requirement by clarifying the volatility floor. ICE Clear Europe would estimate the volatility floor based on the average overlapping five-day absolute change of recovery rates for a prescribed set of reference entities that have defaulted, with observed recovery rates of more than a year, comprising a stress period of 2009-2012.

The proposed rule change would next update the loss threshold calculation in the determination of specific wrong way risk and general wrong way risk to be based on price minus recovery rate as opposed to one minus recovery rate. ICE Clear Europe represents that although this change makes the calculation more precise, the monetary impact on margin requirements is expected to be immaterial (and near zero).¹⁸

The proposed rule change also would amend the description of the concentration charge requirement. Here the proposed rule change would clarify the description of data used to set a

¹⁸ Notice, 86 Fed. Reg. at 13423.

threshold that ICE Clear Europe uses in calculating the concentration charge. The current Risk Model Description describes this data as market risk transfer data obtained from the Depository Trust & Clearing Corporation. The proposed rule change would maintain this description but would further specify that the data contain both bilateral positions among market participants and positions cleared at ICE.

The proposed rule change would also amend the description of ICE Clear Europe's antiprocyclicality measures, which are a part of the spread response component. Currently, ICE Clear Europe bases the anti-procyclicality measures on the Lehman Brothers default scenario. The proposed rule change would revise the anti-procyclicality measures to base them on historically observed extreme but plausible stress test scenarios in price space defined in the revised Stress Testing Policy. As discussed above, these scenarios are not limited to Lehman Brothers. Rather, they include various other scenarios, such as those based on the COVID-19 pandemic discussed above. Accordingly, the proposed rule change would revise the description of the anti-procyclicality measures in the Risk Model Description to include the other scenarios from the revised Stress Testing Policy, consistent with the changes discussed above. In addition, the proposed rule change would also make amendments to reflect the 20% portfolio gross margin floor required under relevant European regulation.¹⁹

Moreover, the proposed rule change would update the loss given default risk analysis to specify initial values of certain parameters and to note that certain parameters are reviewed by the Risk Working Group on at least a monthly basis.

¹⁹ <u>See</u> European Market Infrastructure Regulation Article 27.

Finally, the Risk Model Description also provides a description of the haircut that ICE Clear Europe applies, as part of its initial margin methodology, to multi-currency portfolios. The proposed rule change would not alter the substance of this description. Rather, it would add a sentence to state that in order to provide consistency and uniformity in the parameters applied to the CDS risk model, ICE Clear Europe would adopt the same haircut in line with ICE Clear Credit LLC, which is described as being a more conservative haircut. ICE Clear Europe represents that this merely documents existing practice and does not alter ICE Clear Europe's approach.²⁰

iii. Guaranty Fund Methodology

The proposed rule change would make one change to the section that details ICE Clear Europe's Guaranty Fund Methodology. Similar to the initial margin methodology, ICE Clear Europe applies haircuts to multi-currency portfolios to ensure that the Guaranty Fund is sufficient to cure losses in multiple currencies. The proposed rule change would not alter the substance of the description of this haircut. Rather, it would add a sentence to state that in order to provide consistency and uniformity in the parameters applied to the CDS risk model, ICE Clear Europe would adopt the same haircut in line with ICE Clear Credit LLC, which is described as being a more conservative haircut.. ICE Clear Europe represents that this merely documents existing practice and does not alter ICE Clear Europe's approach.²¹

²⁰ Notice, 86 Fed. Reg. at 13422.

²¹ Notice, 86 Fed. Reg. at 13422.

iv. Monte Carlo Approach

The proposed rule change would next revise the section that describes ICE Clear Europe's Monte Carlo approach. ICE Clear Europe uses its Monte Carlo approach to derive the spread response requirement of the initial margin methodology.

The proposed rule change would make several revisions to the description of the Monte Carlo approach, beginning with the introductory section. Currently, the introductory section provides that the Monte Carlo approach has been implemented as a benchmark model to capture the spread risk component of initial margin. The proposed rule change would revise this to state that the Monte Carlo approach is the governance-approved and implemented model adopted by ICE Clear Europe to capture the spread risk component of initial margin and that the final spread response requirement is the more conservative of the stress-based spread response requirement and the Monte Carlo simulated spread response requirement.

Next, the proposed rule change would delete the sections entitled Monte Carlo Simulations via Cholesky Decomposition, Monte Carlo Simulations via Eigenvalue Decomposition, Distribution, Full Matrix Simulation Framework, Simulation of Standardized Log Returns, Model Parameters, Monte Carlo Engine Setups, and Conclusion, as unnecessary in light of revisions that would be made to other sections of the description. Specifically, the proposed rule change would significantly revise the sections on Copula Simulation, Conditional Block Matrix Simulation Framework, Risk Measures, and add a new section on Copula Parameter Estimation. These revisions would update the copula simulation description to provide further detail as to the determination and use of the linear correlation matrix and construction of student-t random variables and vectors for the production of relevant scenarios; revise the description of the conditional block matrix simulation framework and full matrix simulation framework to provide a more simplified description of the two-step conditional simulation approach; and describe copula parameter estimation for purposes of multivariate distribution.

The proposed rule change would also provide more detail with respect to the use of simulated P/L scenarios, combined with the post-index-decomposition positions related to a given risk factor, to generate a currency-specific risk factor P/L vector. ICE Clear Europe would attribute each risk factor to only one sub-portfolio and denominate all instruments related to a given risk factor in the same currency. ICE Clear Europe would apply this multi-currency risk aggregation approach to risk factors within the European Corporate and U.S. Corporate sub-portfolios denominated in EUR and USD currencies, respectively. The proposed rule change would also add a diagram to demonstrate a bivariate simulation aspect of the risk aggregation approach.

The proposed rule change would also amend the Risk Measures section to explain that each cleared portfolio initially would be split into sub-portfolios based on common features in order to obtain risk estimates reflective of the market behavior and default management practices. The ICE Clear Europe Risk Management department would periodically review the definitions of the sub-portfolios and update them upon consultation with the Product Risk Committee.

Finally, the proposed rule change also would clarify that in the Monte Carlo implementation, distributions are based on simulated CDS spread scenarios, and that instrument profits or losses are calculated by re-pricing instruments at their coupons as well as their implied recovery rates.

v. <u>Data</u>

The data section of the Risk Model Description explains the sources of data that ICE Clear Europe uses for end of day prices, which are inputs in calculating initial margin and guaranty fund requirements. The proposed rule change would make a number of modifications to this section.

First, the Risk Model Description explains the order in which ICE Clear Europe accesses the various sources of price data. The proposed rule change would add to this explanation a further description of what ICE Clear Europe would do if end of day prices were not available from the usual sources, such as when clearing a new product without a long history of trading. In that case, ICE Clear Europe would estimate end of day prices by using proxy log-returns of existing clearable risk sub-factors from a similar or correlated industry/sector. Moreover, where ICE Clear Europe launches clearing of a product already cleared at ICE Clear Europe (for example, a new time series of an existing CDS contract), ICE Clear Europe would use the existing CDS spreads time series directly after reviewing the back-test results. Finally, the proposed rule change would clarify an existing statement regarding the availability of time series data for certain risk factors, by changing the term to "risk sub-factors".

The proposed rule change would next add detail regarding the collection, analysis and back-testing of relevant pricing data for new products that ICE Clear Europe is beginning to clear, which the Risk Model Description refers to as risk sub-factors. Pursuant to the proposed additions, when launching clearing of new risk sub-factors, ICE Clear Europe would collect prices from Clearing Members on the benchmark tenors as per its normal end-of-day price discovery process before making the contracts eligible. ICE Clear Europe's Clearing Risk department would be responsible for reviewing the fixed maturity time series data on the benchmark tenors until the first day of the price collection. If ICE Clear Europe needed to fill in missing data, the proposed rule change would explain that ICE Clear Europe would back-fill missing data in log-return space derived from the available end-of-day fixed-maturity spread levels, and if needed, would apply interpolation and extrapolation techniques to derive the missing data. Once ICE Clear Europe had a complete fixed maturity time series, the Clearing Risk Department would then perform back-tests on hypothetical trading strategies and stress tests on hypothetical portfolios to further ensure that time series for the new risk sub-factors were appropriate. The results of the analyses would be presented to the CDS Product Risk Committee. The proposed rule change would also explain how ICE Clear Europe transforms fixed maturity time series to constant maturity time series to eliminate the impact of semi-annual rolls.

The proposed rule change also would explain how fixed maturity time series would be transformed to constant maturity time series to eliminate the impact of semi-annual rolls. The amendments would provide further detail as to the manner in which constant maturity time series are determined and used for index and single-name risk factors.

Finally, the proposed rule change would explain that back-testing results would be available to assess the quality of time series as well as the performance of the calibrated models. Currently, the Risk Model Description only provides that back-testing results are available to assess the performance of the calibrated models.

vi. <u>Testing</u>

The testing section of the current Risk Model Description provides an overview of the tests that ICE Clear Europe uses to assess the soundness of its risk model, such as benchmarking

the spread response requirement and back-testing other components of the model. For each test, the Risk Model Description explains the theoretical framework behind the test, how the test is executed, and how ICE Clear Europe uses the results of the test. The proposed rule change would not alter the substance of these various tests. The proposed rule change would, however, delete much of the detail about these tests from the Risk Model Description. Because these tests are already described in other ICE Clear Europe documentation, such as the Stress Testing Policy and Back-Testing Policy, ICE Clear Europe does not believe it is necessary to describe those tests again in the Risk Model Description. Instead, the Risk Model Description, as amended by the proposed rule change, would provide a short description of each of the tests and would explain which other ICE Clear Europe document contains the details for each of the tests. Thus, the amendments would not make a substantive change in ICE Clear Europe's approach to testing but would simplify the description and clarify relevant assumptions.

vii. Assessment of Assumptions and Limitations

The assessment of assumptions and limitations section currently explains the assumptions that provide the theoretical foundation for ICE Clear Europe's risk model. The proposed rule change would not delete or amend this existing explanation. The proposed rule change would add, however, a further explanation of another assumption used to determine the size of the Guaranty Fund: the use of the same time series data in determining initial margin requirement and sizing the Guaranty Fund. The proposed rule change would explain that ICE Clear Europe

uses the same time series to ensure a conservative approach to portfolio loss when sizing the Guaranty Fund and to avoid unnecessary complexity.²²

E. <u>Parameters Review Procedures</u>

Finally, the proposed rule change would formalize the Parameters Review Procedures. The Parameters Review Procedures describe how ICE Clear Europe calibrates and reviews the parameters that underlie its risk model, as described in the Risk Model Description discussed above. For each of the components of the risk model, the Parameters Review Procedures would describe the parameters that ICE Clear Europe uses for those components as well as the procedures and processes ICE Clear Europe would use to update those parameters. As explained in the Parameters Review Procedures, ICE Clear Europe performs these updates monthly.

The Parameters Review Procedures also would explain how ICE Clear Europe analyzes the sensitivity of the risk model to changes in certain parameters. Specifically, ICE Clear Europe would perform this sensitivity analysis on parameters that are calibrated on a more ad-hoc basis, rather than using a strictly statistical approach, such as the portfolio benefits provided during the computation of the spread response requirement. ICE Clear Europe would use this analysis to understand how an update or a change to these parameters might alter margin requirements. As with updates to the parameters, ICE Clear Europe performs this sensitivity analysis monthly.

Finally, the Parameters Review Procedures would describe the distribution of the reports of this sensitivity analysis. Generally, the Parameters Review Procedures would require that summary reports be presented to the Risk Oversight Department. In the case of the sensitivity

²² Notice, 86 Fed. Reg. at 13423.

analysis of the dependence structure shifts, however, the Parameters Review Procedures would require that report to be presented to the Product Risk Committee and Risk Oversight Department. Similarly, in the case of the sensitivity analysis of the exponentially weighted moving average, the Parameters Review Procedures would require that report to be presented to the Risk Working Group.

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.²³ For the reasons given below, the Commission finds that the proposed rule change is consistent with Section 17A(b)(3)(F) of the Act²⁴ and Rules 17Ad-22(e)(4)(ii), (e)(4)(vi)(A), (e)(4)(vi)(B), (e)(6)(i), (e)(6)(iv), and (e)(6)(vi)(B).²⁵

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 ICE Clear Europe 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

²³ 15 U.S.C. 78s(b)(2)(C).

²⁴ 15 U.S.C. 78q-1(b)(3)(F).

²⁵ 17 CFR 240.17Ad-22(e)(4)(ii), (e)(4)(vi)(A), (e)(4)(vi)(B), (e)(6)(i), (e)(6)(iv), and (e)(6)(vi)(B).

ICE Clear Europe or for which it is responsible.²⁶ As discussed in more detail below, the Commission generally believes that the changes discussed above should improve ICE Clear Europe's management of the risks resulting from clearing and settling transactions and therefore believes that the proposed rule change is consistent with Section 17A(b)(3)(F) of the Act.²⁷

The Commission believes that the changes to the Price Discovery Policy discussed in Part II.A above should consolidate and clarify the process that ICE Clear Europe would use to determine prices for a particular instrument or risk sub-factor when fewer than three Clearing Members have open interest in that instrument or risk sub-factor. In doing so, the Commission believes that these changes should improve ICE Clear Europe's ability to derive reliable prices for instruments and sub-risk factors even where only a few Clearing Members have open interest. Similarly, the Commission believes that updating the names of ICE Clear Europe committees and requiring that the Board and Executive Risk Committee be notified of level red breaches immediately, would improve ICE Clear Europe's ability to oversee and respond to matters under the Price Discovery Policy. Finally, the Commission believes that the added Table 4, updated references, and updated defined terms should improve clarity and reduce the possibility for error in applying the Price Discovery Policy.

The Commission further believes that the changes to the Stress Testing Policy discussed in Part II.B above should clarify ICE Clear Europe's stress testing practices regarding wrong way risk, the margin period of risk, and the assumptions used in stress testing. Moreover, with

²⁶ 15 U.S.C. 78q-1(b)(3)(F).

²⁷ 15 U.S.C. 78q-1(b)(3)(F).

respect to stress testing scenarios, the Commission further believes that updating the process for adding and retiring scenarios and portfolios, revising the description of existing scenarios, and adding new scenarios based on market conditions during the COVID-19 pandemic should help to ensure that ICE Clear Europe's scenarios reflect actual and recent stressed market conditions. Similarly, the Commission believes that clarifying the assumptions used in the analysis of Guaranty Fund adequacy and the determination of sample portfolios for stress testing should help to ensure that ICE Clear Europe's practices are applied accurately and consistently. Finally, the Commission believes that the updated governance of enhancements and review of stress testing results, the updated description of the ICE Clear Europe committees involved in the review of stress testing results and changes to the Stress Testing Policy, and the corrections of typographical errors, references, and titles, should improve the operation of the Stress Testing Policy.

The Commission also believes that the changes made to the Risk Policy, as discussed in Part II.C above, should help to ensure that the Risk Policy accurately reflects ICE Clear Europe's risk methodology and is applied consistently with other ICE Clear Europe policies and procedures. Specifically, the Commission believes that adding further description of ICE Clear Europe's initial margin methodology, including the stress-based spread response, Monte Carlo simulation spread response, and anti-procyclicality considerations, should help to ensure that the Risk Policy accurately reflects ICE Clear Europe's current margin methodology. Moreover, the Commission believes that revising (i) the description of the Guaranty Fund, including the antiprocyclicality considerations, (ii) the explanation of ICE Clear Europe's stress testing, and (iii) the names of the ICE Clear Europe committees involved in the review of the stress testing should

help to ensure that the Risk Policy is applied consistently with the revised Stress Testing Policy and Model Risk Governance Framework. Updating the description of the monitoring of the initial margin methodology and of the governance concerning changes to the initial margin methodology, including the names of ICE Clear Europe committees involved in such governance, should help ensure that the Risk Policy reflects ICE Clear Europe's current governance processes. The Commission further believes that removing the description of certain matters related to mark-to-market margin that are already described in other ICE Clear Europe documentation should reduce duplication and the possibility for inconsistency between the Risk Policy and other ICE Clear Europe policies. Similarly, updating the governance regarding review of the back-testing and stress testing of models and the description of stress test scenarios should help to ensure consistency with the Model Risk Governance Framework and the Stress Testing Policy. Finally, updating the titles of defined terms should help to ensure that the Risk Policy is applied consistently with other ICE Clear Europe policies and procedures.

The Commission further believes that the other changes discussed in Part II.C above should help ensure that ICE Clear Europe can apply the Risk Policy in a manner consistent with the particular facts and circumstances at any given time. Updating the description of intra-day monitoring and the intraday risk limit, including replacing the fixed minimum and maximum, should allow ICE Clear Europe to alter the minimum and maximum limit, as needed, in accordance with changes to the Guaranty Fund minimum or as set by ICE Clear Europe senior management and the CDS Product Risk Committee. Similarly, the Commission believes that removing the requirement that ICE Clear Europe investigate and closely monitor a Clearing Member once that Clearing Member's estimated intraday profit/loss equals half of the intraday risk limit, and removing the requirement that ICE Clear Europe's Risk Management Department notify the ICE Clear Europe Treasury Department of a special margin call, should improve provide ICE Clear Europe's ability to respond to changes in a Clearing Member's intraday risk limit. Amending the allocation of the Guaranty Fund requirements so ICE Clear Europe would allocate them weekly, instead of every Thursday, also should give ICE Clear Europe the ability to determine the best day of the week to allocate the requirements while still requiring a weekly allocation. Finally, the Commission believes that specifying that ICE Clear Europe requires a portion of the Guaranty Fund to be in US dollars to accommodate US dollar denominated CDS contracts, not just sovereign CDS contracts, should help to ensure that the Risk Policy can accommodate all of the US dollar contracts that ICE Clear Europe clears.

The Commission also believes that the changes to the Risk Model Description discussed in Part II.D above should help to ensure that ICE Clear Europe's risk methodology is up-to-date and consistent with related ICE Clear Europe policies. Specifically, the revised time horizon for the interest rate sensitivity requirement of the initial margin methodology of 5 days for house accounts and 7 days for client accounts should help to ensure consistency with ICE Clear Europe's revised Stress Testing Policy. Moreover, the Commission believes that revising the anti-procyclicality measures to include scenarios from the revised Stress Testing Policy should help to ensure consistency with the revised Stress Testing Policy and help to ensure that the antiprocyclicality measures consider the most recent scenarios and market data. Similarly, updating the loss given default risk analysis to specify initial values of certain parameters and to note that certain parameters are reviewed by the Risk Working Group on at least a monthly basis would help to ensure consistency with the Parameters Review Procedures. Finally, the Commission believes that revising the testing section of the Risk Model Description to provide an overview of the tests that ICE Clear Europe uses to assess the soundness of its risk model and to explain which other ICE Clear Europe policies contain the details for each of the tests should help to ensure consistency with other ICE Clear Europe documentation with respect to such testing.

The Commission similarly believes that certain other changes to the Risk Model Description discussed in Part II.D above should help to ensure that ICE Clear Europe's risk methodology is up-to-date and consistent with ICE Clear Europe operational practices. Specifically, clarifying the volatility floor to the recovery rate sensitivity requirement and the data used to set a threshold in calculating the concentration charge would help to ensure that the Risk Model Description reflects ICE Clear Europe's current operational practices. Similarly, clarifying the 20% portfolio gross margin floor required under relevant European regulation and adoption of the same haircut in line with ICE Clear Credit LLC to multi-currency portfolios in both the initial margin and Guaranty Fund methodologies would help to ensure the accuracy of the Risk Model Description without substantively changing ICE Clear Europe's practices. Adding further explanation of the assumption regarding the same time series of data, which is used to determine the size of the Guaranty Fund, should also clarify the Risk Model Description. In outlining the steps ICE Clear Europe would take if end-of-day prices were not available from the usual sources, including the back-testing of pricing data, the proposed rule change should help to ensure that the Risk Model Description matches ICE Clear Europe's operational practices when clearing a new product. Updating the loss threshold calculation in the determination of specific wrong way risk and general wrong way risk (to be based on price minus recovery rate as opposed to one minus recovery rate) should make the calculation more precise. Finally, by

revising the description of ICE Clear Europe's Monte Carlo approach, including copula simulation, simulated P/L scenarios, and the use of sub-portfolios, the Commission believes the proposed rule change should help to ensure that the Risk Model Description matches ICE Clear Europe's operational practices, and is thus consistent and comprehensive.

Finally, as discussed in Part II.E above, the proposed rule change would formalize the Parameters Review Procedures. The Commission believes the Parameters Review Procedures should help ICE Clear Europe to maintain its risk model, as set forth in the Risk Model Description, by setting out procedures for calibrating and reviewing the parameters that underlie the risk model and analyzing the sensitivity of the risk model to changes in certain parameters, each on a monthly basis. Moreover, the Parameters Review Procedures would require reporting of this review and analyses, which the Commission believes should help to inform decisionmakers at ICE Clear Europe and allow them to take action as needed to adjust the risk model.

Because ICE Clear Europe uses the Price Discovery Policy, Stress Testing Policy, Risk Policy, Risk Model Description, and Parameters Review Procedures to manage the risks associated with clearing and settling transactions, the Commission believes that the changes described above would be consistent with Section 17A(b)(3)(F) of the Act.²⁸ Specifically, ICE Clear Europe uses the methodologies described in the Price Discovery Policy, Risk Policy, and Risk Model Description to derive end-of-day prices and produce initial margin and Guaranty Fund requirements, all of which ICE Clear Europe uses to manage risks arising from clearing and settling transactions. Moreover, ICE Clear Europe uses the Stress Testing Policy and

²⁸ 15 U.S.C. 78q-1(b)(3)(F).

Parameters Review Procedures to identify potential weaknesses and sensitivities in its risk methodologies. Thus, the Commission believes that in making the improvements to the Price Discovery Policy, Stress Testing Policy, Risk Policy, and Risk Model Description as discussed above, and in formalizing the Parameters Review Procedures, the proposed rule change should improve ICE Clear Europe's ability to manage the risks associated with clearing and settling transactions.

The Commission further believes the proposed rule change should thereby help ICE Clear Europe avoid potential losses that could result from the mismanagement of such risks. Because these potential losses, if realized, could impair ICE Clear Europe's ability to promptly and accurately clear and settle transactions and safeguard securities and funds, the Commission believes the proposed rule change should promote the prompt and accurate clearance and settlement of transactions and help assure the safeguarding of securities and funds in ICE Clear Europe's custody or control.

Therefore, the Commission finds that the proposed rule change should promote the prompt and accurate clearance and settlement of securities transactions and assure the safeguarding of securities and funds in ICE Clear Europe's custody and control, consistent with the Section 17A(b)(3)(F) of the Act.²⁹

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

Rule 17Ad-22(e)(4)(ii) requires that ICE Clear Europe establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively identify, measure,

²⁹ 15 U.S.C. 78q-1(b)(3)(F).

monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes, including by maintaining additional financial resources at the minimum to enable it to cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the two participant families that would potentially cause the largest aggregate credit exposure for ICE Clear Europe in extreme but plausible market conditions.³⁰ As discussed above, the Commission believes the proposed rule change should improve ICE Clear Europe's Risk Methodology Description by, among other things, clarifying that ICE Clear Europe would adopt the same haircut in line with ICE Clear Credit LLC to multi-currency portfolios in the Guaranty Fund methodology and adding a further explanation of another assumption used to determine the size of the Guaranty Fund. Moreover, as discussed above, the proposed rule change would amend the Risk Policy to allow ICE Clear Europe to allocate Guaranty Fund requirements weekly, instead of every Thursday, thus allowing ICE Clear Europe to determine the best day of the week to allocate the requirements while still requiring a weekly allocation. Through application of its risk model, as described in the Risk Methodology Description, ICE Clear Europe produces Guaranty Fund requirements for Clearing Members that it then allocates to, and collects from, Clearing Members. Such Guaranty Fund requirements, in turn, enable ICE Clear Europe to maintain additional financial resources at the minimum to enable it to cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the two participant families that would potentially cause the largest aggregate credit exposure for ICE Clear Europe in extreme but plausible market conditions. Thus, the

³⁰ 17 CFR 240.17Ad-22(e)(4)(ii).

Commission finds that these aspects of the proposed rule change are consistent with Rule 17Ad-22(e)(4)(ii).³¹

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

Rule 17Ad-22(e)(4)(vi)(A) requires that ICE Clear Europe 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 testing the sufficiency of its total financial resources available to meet the minimum financial resource requirements under Rule 17Ad-22(e)(4)(i) through (iii), as applicable, by conducting stress testing of its total financial resources once each day using standard predetermined parameters and assumptions.³² As discussed above, the Commission believes the proposed rule change should improve ICE Clear Europe's Stress Testing Policy by, among other things, revising the description of existing stress testing scenarios and adding new scenarios based on market conditions during the COVID-19 pandemic. Because ICE Clear Europe uses the Stress Testing Policy and the stress testing scenarios to conduct daily stress testing of its total financial resources, the Commission believes this aspect of the proposed rule change should help to ensure that ICE Clear Europe conducts stress testing of its total financial resources once each day using standard predetermined parameters and

³¹ 17 CFR 240.17Ad-22(e)(4)(ii).

³² 17 CFR 240.17Ad-22(e)(4)(vi)(A).

assumptions. Thus, the Commission finds that this aspect of the proposed rule change is consistent with Rule 17Ad-22(e)(4)(vi)(A).³³

D. <u>Consistency with Rule 17Ad-22(e)(4)(vi)(B)</u>

Rule 17Ad-22(e)(4)(vi)(B) requires that ICE Clear Europe 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 testing the sufficiency of its total financial resources available to meet the minimum financial resource requirements under Rule 17Ad-22(e)(4)(i) through (iii), as applicable, by conducting a comprehensive analysis on at least a monthly basis of the existing stress testing scenarios, models, and underlying parameters and assumptions, and considering modifications to ensure they are appropriate for determining ICE Clear Europe's required level of default protection in light of current and evolving market conditions.³⁴ As discussed above, the Commission believes the proposed rule change should improve ICE Clear Europe's Stress Testing Policy by, among other things, updating the governance of enhancements and review of stress testing results and the description of the ICE Clear Europe committees involved in the review of stress testing results and changes to the Stress Testing Policy. Moreover, as discussed above, the Parameters Review Procedures would require that ICE Clear Europe, on a monthly basis, calibrate and review the parameters that underlie the risk model and analyze the sensitivity of the risk model to changes in certain

³³ 17 CFR 240.17Ad-22(e)(4)(vi)(A).

³⁴ 17 CFR 240.17Ad-22(e)(4)(vi)(B).

parameters. The Parameters Review Procedures would also require reporting of these reviews and analyses. The Commission therefore believes these aspects of the proposed rule change should help to ensure that ICE Clear Europe conducts a comprehensive analysis on at least a monthly basis of its existing stress testing scenarios, models, and underlying parameters and assumptions, and considers modifications to ensure they are appropriate for determining its required level of default protection in light of current and evolving market conditions. Thus, the Commission finds that these aspects of the proposed rule change are consistent with Rule 17Ad-22(e)(4)(vi)(B).³⁵

E. <u>Consistency with Rule 17Ad-22(e)(6)(i)</u>

Rule 17Ad-22(e)(6)(i) requires that ICE Clear Europe 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.³⁶ As discussed above, the Commission believes the proposed rule change should improve ICE Clear Europe's Risk Methodology Description by, among other things, clarifying components of the initial margin methodology. Through application of its risk model, as described in the Risk Methodology Description, ICE Clear Europe produces initial margin requirements commensurate with, the risks and particular attributes of each relevant

³⁵ 17 CFR 240.17Ad-22(e)(4)(vi)(B).

³⁶ 17 CFR 240.17Ad-22(e)(6)(i).

product, portfolio, and market. Thus, the Commission finds that this aspect of the proposed rule change is consistent with Rule 17Ad-22(e)(6)(i).³⁷

F. <u>Consistency with Rule 17Ad-22(e)(6)(iv)</u>

Rule 17Ad-22(e)(6)(iv) requires that ICE Clear Europe 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, uses reliable sources of timely price data and uses procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable.³⁸ As discussed above, the Commission believes that the changes to the Price Discovery Policy should consolidate and clarify the process that ICE Clear Europe would use to determine prices for a particular instrument or risk sub-factor when fewer than three Clearing Members have open interest in that instrument or risk sub-factor and therefore should improve ICE Clear Europe's ability to derive reliable prices for instruments and sub-risk factors even where only a few Clearing Members have open interest. In addition, the updated references and defined terms should improve clarity and reduce the possibility for error in applying the Price Discovery Policy.

Moreover, as discussed above, the Commission believes the proposed rule change should improve ICE Clear Europe's Risk Methodology Description by outlining the steps ICE Clear Europe would take if end-of-day prices were not available from the usual sources, such as when

³⁷ 17 CFR 240.17Ad-22(e)(6)(i).

³⁸ 17 CFR 240.17Ad-22(e)(6)(iv).

clearing a new product without a long history of trading, and providing a description of the collection, analysis, and back-testing of relevant pricing data for new products.

The Commission believes that both of these aspects of the proposed rule change – the changes to the Price Discovery Policy and the changes to the Risk Methodology Description – should help to ensure that ICE Clear Europe collects, and uses, reliable and timely price data. Moreover, the Commission believes that the procedures outlined in the Price Discovery Policy should help to address the situation where such data are not available because too few Clearing Members have open interest. The Commission similarly believes that procedures outlined in the Risk Methodology Description should help to address the situation where such data are not available, such as when clearing a new product without a long history of trading.

Thus, the Commission finds that these aspects of the proposed rule change are consistent with Rule 17Ad-22(e)(6)(iv).³⁹

G. <u>Consistency with Rule 17Ad-22(e)(6)(vi)(B)</u>

Rule 17Ad-22(e)(6)(vi)(B) requires that ICE Clear Europe 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, is monitored by management on an ongoing basis and is regularly reviewed, tested, and verified by conducting a sensitivity analysis of its margin model and a review of its parameters and assumptions for backtesting on at least a monthly basis, and considering modifications to ensure the backtesting practices are appropriate for determining the adequacy of ICE Clear Europe's margin

³⁹ 17 CFR 240.17Ad-22(e)(6)(iv).

resources.⁴⁰ As discussed above, the Parameters Review Procedures would require that ICE Clear Europe, on a monthly basis, calibrate and review the parameters that underlie the risk model and analyze the sensitivity of the risk model to changes in certain parameters. Thus, the Commission finds that this aspect of the proposed rule change is consistent with Rule 17Ad-22(e)(6)(vi)(B).⁴¹

⁴⁰ 17 CFR 240.17Ad-22(e)(6)(vi)(B).

⁴¹ 17 CFR 240.17Ad-22(e)(6)(vi)(B).

IV. 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(b)(3)(F) of the Act⁴² and Rules 17Ad-22(e)(4)(ii), (e)(4)(vi)(A), (e)(4)(vi)(B), (e)(6)(i), (e)(6)(vi)(B).⁴³

IT IS THEREFORE ORDERED pursuant to Section 19(b)(2) of the Act⁴⁴ that the proposed rule change (SR-ICEEU-2021-006), be, and hereby is, approved.⁴⁵

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁴⁶

J. Lynn Taylor Assistant Secretary

⁴² 15 U.S.C. 78q-1(b)(3)(F).

⁴⁵ 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).

⁴⁶ 17 CFR 200.30-3(a)(12).

⁴³ 17 CFR 240.17Ad-22(e)(4)(ii), (e)(4)(vi)(A), (e)(4)(vi)(B), (e)(6)(i), (e)(6)(iv), and (e)(6)(vi)(B).

⁴⁴ 15 U.S.C. 78s(b)(2).