



July 31, 2020

Mr. Christopher J. Kirkpatrick
Office of the Secretariat
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, NW
Washington, DC 20581

Re: Self-Certification Pursuant to Commission Rule 40.6 – ICE Clear Europe
Futures and Options Stress Testing Policy and Futures and Options Stress
Testing Methodology Document

Dear Mr. Kirkpatrick:

ICE Clear Europe Limited (“ICE Clear Europe” or the “Clearing House”), a registered derivatives clearing organization under the Commodity Exchange Act, as amended (the “Act”), hereby submits to the Commodity Futures Trading Commission (the “Commission”), pursuant to Commission Rule 40.6 for self-certification, (i) amendments to its Futures and Options Stress Testing Policy (the “F&O Stress Testing Policy” or “Policy”) and (ii) a new Futures and Options Stress Testing Methodology Document (the “F&O Stress Testing Methodology Document”). The amendments will become effective on the first business day following the tenth business day after submission, or such later date as ICE Clear Europe may determine.

Concise Explanation and Analysis

ICE Clear Europe is amending its F&O Stress Testing Policy as follows: (i) with respect to historical stress-testing scenarios, the methodology has been updated to include additional product groups, benchmark contracts and default shock values, in order to ensure that every cleared instrument is covered in the historical scenarios; (ii) with respect to theoretical stress-testing scenarios, the scenario implementations have been improved to ensure appropriate coverage of all relevant instruments; (iii) the provisions relating to policy reviews and breach management have been improved; and (iv) various drafting clarifications and improvements have been made. ICE Clear Europe is also

adopting an F&O Stress Testing Methodology Document which provides further detail with respect to the methodology applied to the stress-testing scenarios, particularly the historical stress-testing scenarios.

I. F&O Stress Testing Policy

General Drafting Clarifications and Improvements

By way of general drafting clarification and improvements, the amendments to the F&O Stress Testing Policy remove the background description of the board risk appetite and the limit appetite as these are addressed in other ICE Clear Europe documentation. Certain terminology has been updated throughout the F&O Stress Testing Policy: Original Margin has been updated to Initial Margin. Reference to the F&O Risk Committee has been updated to the F&O Product Risk Committee. Product Groups are referred to as Stress Groups. References to certain specific EMIR standards and provisions have been removed and the appendices relating to the existing stress testing methodology have been removed (as relevant detail is instead contained in the F&O Stress Testing Methodology Document).

Stress Testing and Guaranty Fund

The overall description of the method of testing the size of the Guaranty Fund has been simplified and clarified to state that stress tests are designed to cover the worst price moves over the last 30 years (historical scenarios) and extreme, but as yet unobserved price moves based on potential future events or market moves to a confidence level of 99.9% (theoretical scenarios). A clarification has been added that historical scenarios that are more than 30 years old can only be decommissioned following the standard governance provisions for removal of any scenario. The description of the utilization of the Guaranty Fund has been removed as unnecessary for purposes of this policy. In addition, a diagram illustrating the existing stress testing methodology has been deleted as unnecessary.

The calculation principles relating to stress testing has been amended as described below. Amendments clarify that historical stress shocks will be calibrated using the official settlement prices history from ICE Clear Europe as well as external market sources. If such market data does not exist, then ICE Clear Europe will calculate shocks using the waterfall proxy methodology which is described in the F&O Stress Testing Methodology Document. The amendments delete a statement that option pricing model calculations will assume theta decay over the holding period (as unnecessarily specific for purposes of the Policy).

The amendments further clarify that stress scenarios use risk factor moves over stress periods of risk (“SPOR”) that take into account the time horizon for the relevant liquidation period (rather than a one or two day period under the current policy). The F&O Stress Testing Policy notes that where risk factor moves across periods shorter than the liquidation period time horizon are more extreme due to market reversion, it may be more conservative and appropriate to apply a shorter SPOR. With respect to historical data, the amendments provide that where a risk factor does not have an internal or external data, ICE Clear Europe will rely on proxy mappings (which may vary depending on the scenario) to calibrate the stress shocks for instruments where

historical data is not available or reliable. Such proxy mappings are proposed by the Clearing House's Credit Risk Department and require approval from the Clearing House's Model Oversight Committee. The proxy mappings addressed in further detail in the F&O Stress Testing Methodology Document. The amendments also supplement the table of risk factors to address certain limitations of expiry-specific scenarios.

With respect to Stress Groups (formerly referred to as Product Groups), the criteria for choosing such groups and their constituents have been expanded to include the fundamental relationships between products.

Stress Scenarios

Pursuant to the amendments, the definition of the two broad categories of historical scenarios have been clarified: (i) Historical Type A, which is intended to replicate as accurately as possible the historical event; and (ii) Historical Type B which is designed to reflect the intention of the historical stress events, but adjust the market movements either to make them plausible under current market conditions, better capture the stress period moves across different asset classes, or more appropriately reflect the existing risk factor exposures of the Clearing House. The description of historical stress scenarios has been amended to move certain additional scenarios regarding the energy segment and certain assumptions used to examine potential losses from significant changes in correlation relationships from the Policy to the F&O Stress Testing Methodology Document. The amended Policy also removes certain general discussions of the use of proxies for particular markets, such as single stock equity futures products; proxy methodology is instead discussed in the F&O Stress Testing Methodology Document.

With respect to theoretical scenarios, ICE Clear Europe has clarified that scenario implementations include a variety of approaches to create extreme but plausible scenarios that are not contained within the set of historical scenarios and which may utilize expert judgement in their construction. Theoretical scenarios may also include narrative-driven macro or idiosyncratic scenarios driven by broad macroeconomic or specific technical events. Regulatory-driven scenarios from prior supervisory stress testing exercises can also be included. The revised policy also removes a further definition of some theoretical scenarios as "hypothetical" (such that all scenarios will be categorized as either historical or theoretical). The amendments provide that theoretical scenarios can be targeted and only shock certain instruments relevant to the design of the scenario (rather than all contracts).

The provisions related to reverse stress testing have been revised to remove statements that reverse stress scenarios are generated on a daily basis and that the Clearing House runs daily reverse stress test reports. Under the revised Policy, reverse stress testing results will be presented to the F&O Product Risk Committee every other month, rather than monthly. ICE Clear Europe nonetheless believes the revised approach provides for sufficient reverse stress testing and internal review of the results of such testing, consistent with relevant regulatory requirements.

The amendments add a new section stating that the uncollateralized stress-testing losses will be compared to the segment of the Guaranty Fund that is relevant to that

particular stress scenario. A scenario can be defined against the whole F&O Guaranty Fund or a particular segment (e.g., energy or financials and softs).

Governance

ICE Clear Europe is also amending the F&O Stress Testing Policy to reflect changes to the Clearing House's document governance and exception handling, specifically to provide that (i) the document owner is responsible for ensuring that documents remain up-to-date and are reviewed in accordance with the Clearing House's governance processes, (ii) the document owner (as maintained in other relevant ICE Clear Europe internal policies) will report material breaches or unapproved deviations from the F&O Stress Testing Policy to their Head of Department, the Chief Risk Officer and the Head of Compliance (or their delegates) who will determine if further escalation will be made, and (iii) exceptions to the F&O Stress Testing Policy will be approved in accordance with the Clearing House's governance process for the approval of changes to such document.

II. F&O Stress Testing Methodology Document

ICE Clear Europe is adopting the F&O Stress Testing Methodology Document in order to comprehensively describe ICE Clear Europe's methodology for applying the F&O Stress Testing Policy in situations where the required historical price data is not available, typically because the products that exist currently did not exist on those historical dates and therefore do not have historical price data for those dates. This approach will permit the extension of historical stress testing scenarios to all products.

The F&O Stress Testing Methodology Document provides an overview of the stress testing approach, consistent with the F&O Stress Testing Policy, and includes descriptions of the historical and theoretical stress scenarios. The methodology document provides that ICE Clear Europe ensures product coverage for historical scenarios under the following approach:

- (i) where input returns for a futures product or implied volatility for an options product are not available in a scenario, by using the same stress shock as the proxy benchmark such scenario has been mapped to;
- (ii) where the proxy benchmark does not have an input return in a scenario, by using the input return from that benchmark's proxy benchmark and such proxy process is repeated through the proxy waterfall until a benchmark with an input return is found;
- (iii) if, at the end of the proxy waterfall, the benchmark has no input returns to use, by using a default value for the return which is derived from the long term expected value of historical returns of the benchmark product (this default value will then be used for all products that ultimately proxy to that benchmark in that scenario); and
- (iv) where a default value is used in a historical scenario, running two variants of such scenario, one in which all the default prices are assumed to move up and the other all down, and in both, ICE Clear Europe will assume the default values of

option volatility to move up given the lack of correlations between the stress groups.

The F&O Stress Testing Methodology Document describes in further detail the proxy waterfall methodology referenced in the F&O Stress Testing Policy. The methodology sets out the techniques used to create price and volatility shocks for historical scenarios in situations where there is no reliable data for that price or volatility shock in the relevant historical period. The waterfall is based on a series of proxy relationships based on proximity to the relevant products. For any product that does not have historical data required to define its shock under the given base scenario, the relevant proxy will be used instead. Should that proxy not have data, the proxy's proxy will be used, in recursive fashion, until reaching the terminal benchmarks. If there is no data available for the terminal benchmarks, a default value shock will be used. The methodology document sets out calculation of the risk returns used to stress test particular instruments, based on the SPOR, the relevant maturity and a series of price data. The document also sets out the default value calculation and explains the application of the shock for all products under each scenario using the proxy waterfall. The F&O Stress Testing Methodology Document identifies certain assumptions and limitations that ICE Clear Europe has identified with respect to the proxy waterfall mechanism and default values.

The F&O Stress Methodology Document also describes the governance and oversight responsibilities relating to the Policy and stress scenarios of each of the Board, the Client Risk Committee and the Model Oversight Committee. All changes to the Policy and the overall framework and methodology are subject to the approval of the Board, as are significant changes to the design, scope or definition of scenarios and the decommissioning of scenarios. The methodology document also addresses procedures for periodic "business as usual" recalibration of parameters for existing scenarios, and further provides that scenario recalibration will be done quarterly rather than semi-annually, but that default shocks which are predicated on average value over the long history are subject to less frequent calibration.

Finally, the appendices to the F&O Stress Testing Methodology Document include: (i) a list of the sources of data that ICE Clear Europe inputs into the stress testing methodology; (ii) a list of the Stress Groups used in the Policy and the methodology document; (iii) a list of the terminal benchmark products applied at the end of the proxy waterfall; (iv) the detailed proxy waterfall algorithm; and (v) a worked example of the Clearing House's historical scenario coverage process.

Compliance with the Act and CFTC Regulations

The amendments to the F&O Stress Testing Policy and the adoption of the F&O Stress Testing Methodology Document are potentially relevant to the following core principles: (B) Financial Resources, (D) Risk Management and (O) Governance Fitness Standards and the applicable regulations of the Commission thereunder.

- *Financial Resources.* As discussed herein, ICE Clear Europe believes the proposed changes to its stress testing methodology will better calibrate its financial resource requirements to the particular risks of cleared positions and

enable it to better adapt to evolving market conditions. ICE Clear Europe has evaluated the overall impact of the amended Policy and new framework documentation on its financial resources. ICE Clear Europe does not believe that the amendments will have a material impact on its total pre-funded resources or F&O guaranty fund size. On average, ICE Clear Europe expects a non-material decrease in total pre-funded resources, largely due to the expanded product coverage covering certain risk reducing trades that may not have been covered previously. On average, ICE Clear Europe expects that a small number of F&O Clearing Members may experience an increase in their Guaranty Fund requirements; although most will see a non-material decrease in requirements, on average. As a result, ICE Clear Europe believes that the amendments are consistent with the requirements of Core Principle B and Commission Rule 39.11.

- *Risk Management.* As discussed herein, the proposed changes to ICE Clear Europe's stress testing methodology amend the market stress scenarios to ensure that all of the relevant products are covered in each stress scenario, through including additional product groups for historical scenarios and improving scenario implementations for theoretical scenarios. The amendments also improve the Clearing House's stress testing framework by providing a backup methodology for use of historical scenarios where market data is unavailable, increasing the coverage of its stress testing. These changes are intended to enhance the overall stress testing framework, and thus improve overall clearing house risk management. As a result, ICE Clear Europe believes the amendments are consistent with the requirements of Core Principle D and CFTC Rule 39.13.
- *Governance.* As described herein, the amendments to the F&O Stress Testing Policy more clearly define the roles and responsibilities of the document owner, the Head of Department, the senior members of the Risk Oversight Department and the senior members of the Compliance Department. The F&O Stress Testing Methodology Document describes the governance and oversight role of each of the Board, the Client Risk Committee and the Model Oversight Committee with respect to the F&O Stress Testing Policy and stress scenarios thereto. ICE Clear Europe believes that the amendments to the F&O Stress Testing Policy and the adoption of the F&O Stress Testing Methodology Document are therefore consistent with the requirements of Core Principle O and Commission Rule 39.24.

As set forth herein, the amendments consist of the amendments to the F&O Stress Testing Policy and the new F&O Stress Testing Methodology Document. ICE Clear Europe has requested confidential treatment with respect to the amendments to the F&O Stress Testing Policy and the new F&O Stress Testing Methodology Document, which have been submitted concurrently with this self-certification submission.

ICE Clear Europe hereby certifies that the amendments comply with the Act and the Commission's regulations thereunder.

ICE Clear Europe received no substantive opposing views in relation to the proposed amendments.

ICE Clear Europe has posted a notice of pending certification and a copy of this submission on its website concurrent with the filing of this submission.

If you or your staff should have any questions or comments or require further information regarding this submission, please do not hesitate to contact the undersigned at George.milton@theice.com or +44 20 7429 4564.

Very truly yours,

A handwritten signature in blue ink, appearing to read 'G. Milton', with a horizontal line underneath.

George Milton
Interim Head of Regulation & Compliance