



August 9, 2023

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

Re: ICE Clear Europe Self-Certification Pursuant to Commission Rule 40.6 –  
Liquidity Stress Testing Procedures

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, a new set of Liquidity Stress Testing Procedures (the “Liquidity Stress Testing Procedures” or “Procedures”)<sup>1</sup> discussed herein. 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 consolidating and formalizing into new Liquidity Stress Testing Procedures the documentation of certain existing practices and processes for determining if it has sufficient liquidity available under stress conditions. The Procedures complement existing ICE Clear Europe policies and procedures, including the ICE Clear Europe Liquidity and Investment Management Policy (which sets out principles of the cash and collateral management functions of the Clearing House) and the Liquidity Management Procedures (which address monitoring and management of

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<sup>1</sup> Capitalized terms used but not defined herein have the meanings specified in the ICE Clear Europe Clearing Rules and the Liquidity Stress Testing Procedures.

liquidity risks, liquidity needs and liquidity resources, including in the case of liquidity shortfalls).<sup>2</sup> ICE Clear Europe is also making certain enhancements to its liquidity stress testing (“LST”) practices as discussed herein.

### Liquidity Stress Testing

The Procedures include a section describing the Clearing House’s LST objectives. The Procedures state that the objective of LST is to answer the question of whether the Clearing has enough liquid assets to meet its payment obligations even under stressed scenarios. In particular, the Clearing House will seek to answer such question in respect of three groups of stressed scenarios: (i) two Clearing Member families defaulting simultaneous in all their capacities to the Clearing House under extreme but plausible market conditions, (ii) one Clearing Member family defaulting in all its capacities to the Clearing House under extreme but plausible market conditions, and (iii) one service provider defaulting or being unavailable due to technical issues. The Procedures describe that LST will achieve its objective by evaluating whether the Clearing House has enough assets (Liquid Resources or “LR”) to cover its payment obligations (Liquidity Needs or “LN”) each day under different scenarios of default or unavailability while under extreme but plausible market conditions. The liquidity scenarios will be the combinations of entities that are defaulting or are unavailable and is each a separate scenario. Consistent with current practice, the groups of scenarios used in liquidity stress testing are set out in the Clearing House’s liquidity parameters and reviews (“Parameters”).

The Procedures state the key elements of LST, the frequency of such testing and how the Clearing House utilizes the results. LST is made up of three key elements as follows: (i) LN, which are the payment obligations of the Clearing House on each day in the scenario, (ii) LR, which are the liquid assets that the Clearing House can use to meet its payment obligations on each day in the scenario, and (iii) Liquidity Coverage or “LC”, which is the excess (or lack, applicable) of LR that the Clearing House has on each day in the scenario after trying to meet the LN. The Procedures provide further detail and description of each element.

The Procedures also describe that the Clearing House evaluates the “cover 2” standard by viewing any failure from any Clearing Member family pair, in any material currency or in the aggregate, count as failing LST, rather than just examining the Clearing Member pair with the most negative LC.

The Procedures provide the LC is the key metric for LST. The LST is run daily and the results are used to review (i) the mix of LR in the investment programme, (ii) the term of those LR, and (iii) the allocation of LR between different service providers. Scenarios that fail LST will be investigated that day and mitigating actions will be taken to ensure sufficient liquidity in the relevant scenario. Mitigating actions may include requiring CMs to post additional LR, modifying the types, concentration and/or term

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<sup>2</sup> ICE Clear Europe has separately submitted for self-certification pursuant to Rule 40.6 related amendments to its Liquidity and Investment Management Policy and Liquidity Management Procedures that contemplate the adoption of the Liquidity Stress Testing Procedures. See Submission to Commission (filed August 9, 2023).

profile of LR, reviewing the assumptions and parameters of LST to assess whether they are overly conservative or implausible, among others described in the Procedures.

The Procedures also note that the Clearing House has payment obligations and liquid resources in multiple currencies and, to account for this, LC is calculated in the aggregate and reported in USD. LC is also calculated separately for each material currency, only including LR in that currency. The Procedures also address when a currency is determined to be material, where the list of material currencies may be found and how often such thresholds are reviewed.

### Performance Monitoring and Periodic Reviews

The Procedures describe the Clearing House's procedures for performance monitoring and periodic reviews of the LST program. It states that the Clearing House monitors the performance of its LST at least monthly using back testing, reverse stress testing and sensitivity testing as tools to help to identify trends or structural changes in the level of liquidity coverage or the profile of the LR. Each of these tests is described in further detail in the Procedures, including as to the tests and assumptions used for sensitivity analysis. The results of such monitoring may inform the Clearing House's decisions making around the appropriate mix of collateral posted by CMs. The Clearing House also analyses and discuss monthly (i) whether any new or emerging risks need to be included in the stress tests, and (ii) the adequacy of assumptions, parameters and inputs to LST and scenario groups. ICE Clear Europe assumes the adequacy of stress market conditions (from the credit stress testing) and collateral haircuts (both of which include extreme but plausible market scenarios), and these factors are not analyzed or discussed each month.

The Procedures also describe in further detail the use of sensitivity tests and analysis, including as to: (i) timing of the projected Variation Margin payment, which will simulate "Known" and "Projected" Variation Margin, (ii) netting assumptions, which will include varying the assumption that payments can be netted at different levels, and (iii) same day liquidation assumption, which will include analyzing the same day liquidation cap against the liquidity needs. Sensitivity analyses also include other material changes that that are already an integral part of the daily tests, including but not limited to (i) assuming no access to FX markets, (ii) stressing liquidation values for collateral or FX values, (iii) stressing market conditions, and (iv) access to treasury and repo markets.

### Core Calculation – Liquidity Needs

The Procedures include an explanation of the Clearing House's calculations in respect of its LN. As mentioned above, LN are the net payment obligations to Clearing Members and other entities that the Clearing House needs to cover in LST scenarios. The Procedures include a list of payment obligations included in LST, including variation margin, deliveries and settlements, liquidation costs, cash collateral withdrawals and exchanges, committed investments and other potential obligations. The Procedures describe in detail each such payment obligation and the scenarios in which such obligation may arise. A table has also been included which depicts the payment obligations that are included as LN, on which day they are included in the calculation, and whether the amounts are known in advance or are projections.

The Procedures describe the Clearing House's processes for aggregating payment obligations for purposes of LST. Payment obligations typically arise at a settlement account level and are then aggregated from the account level to the Clearing Member level, then to the Clearing Member family level and then to pairs of Clearing Member families by adding together the relevant payment obligations. There are certain exceptions to the process: (i) collateral exchanges, committed investments and "other" are at the ICEU level and not aggregated and (ii) for scenarios for the unavailability of services providers, the aggregation stops at the level of the individual service providers, even if multiple service providers are part of the same group of the companies.

### Core Calculation – Liquid Resources and Liquidity Coverage

The Procedures include an explanation of the Clearing House's calculations in respect of its LR and LC. The Procedures set out the process as follows: (i) eligibility as the first step, meaning that the Clearing House works out of the inventory of eligible assets (LR), (ii) availability as the next step, meaning that the Clearing House removes LR that are not available in that scenario (or reduce their values appropriately), and (iii) utility as the final step, meaning that the Clearing House works out the values for the next available LR on each day, and how much has been used up to cover the LN on the day (and previous days). LN will not be carried over from one day to the next and are either fully covered by the LR on a particular day or, if they are not fully covered, the LR are treated as fully used up. The Procedures describe in detail each step in the calculation of LR, reflecting the different types of eligible assets (including different forms of cash collateral on deposit at central banks and commercial banks or invested through reverse repurchase arrangements, committed or secured lines of credit, ICE Clear Europe's contribution to its guaranty funds and non-cash collateral of defaulting and non-defaulting Clearing Members). The Procedures also describe in detail each step in calculation of LC, for any given trading day (T) and for the following two trading days (T+1 and T+2).

### Other Calculation Components

The Procedures address the selection of market scenarios that are used in LST, and specifically the determination of the market scenario for each Clearing Member family pair that leads to the worst LC. A description of the metric that the Clearing House uses to select to the worst scenario will be included, taking into account LN and LR that are market-scenario dependent (particularly projected variation margin, physical delivery projected price move and wrong way risk), as well as descriptions of the selection process.

The Clearing House's processes for aggregating payment obligations described above to determine LN are summarized and worked examples of such calculation are included in an appendix to the Procedures.

The Procedures describe the inclusion in LST of two sets of LN related to Physical Deliveries for defaulting Clearing Members: missed deliveries (due to the seller failing to deliver physical goods on the delivery date, in which case the Clearing House will have to replace the goods at the replacement cost) and missed payments (due to the buyer or seller defaulting before the payment date, in which case the Clearing House will have to complete the payment to the Seller, and the LN will be the full invoice

value (which will be an LN credit if the Seller defaults as such payment will no longer be due)). A schedule of LN related to Physical Deliveries is set out in an appendix to the Procedures. As is described in further detail in the Procedures, the replacement cost is the cost to replace the goods or positions at the stressed market price and its components mirror those of liquidating a futures position. LST uses delivery margin (or the comparable initial margin) as a proxy for additional liquidation costs in the determination. The Procedures also describe how the Clearing House recognizes LN due to missed payments in full out to the physical delivery settlement period of risk (as set out in the Parameters from time to time). Positions with payment dates beyond such period of risk will be assumed to be liquidated at the end of the liquidity time horizon and their cost will be the replacement cost. For products that do not have a specific delivery or payment date set in advance but rather a range of dates, LST will be calculated using the relevant LN on the earliest date that delivery could happen until the specific date is known.

The Procedures describe in detail the Clearing House's framework regarding calculation of LN related to physical deliveries for different types of deliveries, including physical deliveries of UK gilts, physical deliveries for non-defaulting Clearing Members which are buyers, and physical deliveries for non-defaulting Clearing Members which are sellers.

As part of the Clearing House's 'other' calculation components, the Procedures describe the use of Clearing House's liquid resources from pledged accounts for LST purposes. The Procedures provide that the use of pledged cash and non-cash assets will be restricted to only covering the LN from the accounts that pledged the assets, due to restrictions in the Clearing House's Pledged Collateral Addendum. LST will therefore limit the LR included from such pledged accounts to the lowest of (i) the collateral posted by that account (or what is available, for non-cash collateral), and (ii) the LN for that account across all days that has not been filled by previous limits. Limits will be applied to the assets available in each scenario so that the LR cannot include more than what is available even if the calculated limit is higher than what is available. A worked example of the limits is included in Appendix 3 of the Procedures. The Procedures set certain additional limits with respect to use of pledged accounts in LST, including account-level limits and bulk limits for performing members.

The Procedures address cash collateral exchanges, which are an LN caused by cash collateral being exchanged for non-cash collateral in the same or in other currencies, or cash collateral in one currency being exchanged for cash collateral in another currency. The LN for cash collateral exchanges excess cash withdrawals will be included on T for each currency in the single currency calculations and as a total amount in USD in the aggregate calculation. Such inclusion assumes that the Clearing House will decline collateral exchanges (including both exchanges of cash collateral for non-cash collateral and exchanges of cash collateral in one currency for cash collateral in another currency) after T until a stress event has passed, as supporting by the Clearing House's Finance Procedures and by Rules 502(f) and (g). The Procedures describe the methodology for determining the amount used for cash collateral exchanges in LST, and in respect of pledged and non-pledge accounts.

The Procedures describe how LST adjusts to asset settlement holidays by treating holidays separately for each currency and asset class. The Procedures also set out how the Clearing House performs the ‘all currency’ calculation, which is an aggregate calculation of worst scenarios across currencies. For such calculation, LST calculates the worst Selection Metric using the total Selection Metric across all currencies in USD-equivalent. The conversion into USD will be used to select the worst scenarios, and the LN from those scenarios will then be used in their base currencies for the rest of the calculation. Once the market scenario is selected, the LN will be included and used in the calculation in their base currencies.

#### Assumptions, Limitations and Implications

The Procedures describe the key assumptions that underly LST, including but not limited to the following: (i) defaults will be due to missed payments, (ii) liquidity will be managed at a CCP level and not a product/segment level, (iii) LST will be calculated using the positions and liquid resources as they were at the close of business on T-1, (iv) all portfolios will remain unchanged during the stress testing period and the defaulters’ portfolios are not partially closed out or hedged until they are disposed of at the end of the margin period of risk, (v) the liquidity time horizon can be compressed to T, T+1 and T+2, and (vi) collateral and investments are highly liquid, based on the List of Permitted Cover . Details about each such assumption are provided.

The Procedures also recognize certain limitations of LST, including but not limited to the following: (i) cash collateral exchanges are projected from the current environment rather than specific, stressed periods. This will be conservative because in actual periods of stress, Clearing Members tend to leave more cash with clearinghouses, thereby reducing the cash collateral exchange amounts, and (ii) LST will not show the full value of stress payment flows since the LN will show the net variation margin flows rather than gross variation margin flows. The Clearing House is comfortable with this implication because the LC will be unchanged.

#### Document Governance and Exception Handling.

Finally, the Procedures describe governance and exception handling. The document owner will be responsible for ensuring that it remains up-to-date and reviewed in accordance with the Clearing House’s governance processes. Where the results of the tests described in the Procedures show insufficient liquid financial resources, the Clearing House will increase its liquid financial resources to an acceptable level as soon as practicable. The document owner will be responsible for reporting material breaches or unapproved deviations from the Procedures to their Head of Department, the Chief Risk Officer and the Head of Compliance (or their delegates), who together will determine if further escalation should be made to relevant senior executives, the Board or competent authorities. The Procedures state that exceptions to the Procedures will be approved in accordance with the Clearing House’s governance process for approval of changes to the Procedures.

#### Changes in Liquidity Stress Testing Practices

As set forth above, the Liquidity Stress Testing Procedures largely document and consolidate the Clearing House’s existing practices and processes with respect to LST,

and in such cases the adoption of the procedures will not result in a change in practice. Nonetheless, the Clearing House is making certain changes and enhancements to LST as part of adoption of the Liquidity Stress Testing Procedures, specifically as follows:

(i) LST will assume that non-cash collateral provided by non-defaulting Clearing Members can be liquidated by sale (as opposed to only through repurchase agreements), subject to an assumed cap on the same-day liquidation of securities. It is assumed for this purpose that the Clearing House could buy back equivalent non-cash collateral after the end of the applicable stress scenario. The change is intended to more precisely reflect the total liquidity resources available to the Clearing House in the event of a default, as the existing Rules and Procedures permit the use of non-cash title transfer collateral provided by non-defaulting Clearing Members for liquidity purposes, subject to the obligation of the Clearing House to restore any such non-cash collateral of non-defaulting Clearing Members. As discussed in (iii) below, LST will assume certain daily liquidation limits proposed to be provided for in the Liquidity Stress Testing Procedures. The current LST approach includes a more limited set of non-cash collateral resources (those provided by the defaulter), which is more restrictive than is required by the current Rules and Procedures. ICE Clear Europe believes the revised calculation is more consistent with the Rules and Procedures and presents a more accurate reflection of availability liquidity resources.

(ii) Pledged assets provided by defaulting or non-defaulting Clearing Members can be considered to cover LN, subject to certain restrictions, including but only using such assets for LST for LN relating to the account that pledged the asset, as set out in more detail above. These changes are intended to more clearly reflect in LST the limitations on the use of such pledged assets by the Clearing House under the existing Rules and Procedures. (For example, the current Liquidity Management Procedures and F&O Default Management Policy prohibit the use of pledged assets relating to an account to cover liquidity needs from other, non-pledged accounts.)

(iii) LST will assume a cap on the amount of liquidation of non-cash collateral (securities) that could be done on a same-day basis, as noted in the discussion of (i) above. The cap will be applied on a per currency basis in light of the Clearing House's annual testing. The change is intended to better take into account liquidity conditions in relevant securities markets in which non-cash collateral would be liquidated, to avoid overestimating for LST purposes the amount of securities that could be liquidated on any given day.

(iv) As set forth in more detail above, the Liquidity Stress Testing Procedures enhance the calculation of LN for physical deliveries, including by more clearly detailing the components of replacement cost, more clearly covering missed delivery of physical goods by the seller, and accounting for scenarios where there is a delivery and payment range. Overall, these enhancements will facilitate calculation of liquidity needs for both long and short positions that are in, or going into, delivery (as opposed to the net liquidity calculation across long and short positions made under the existing LST). ICE Clear Europe believes the revised calculation will enable it to more accurately assess the liquidity needs arising in connection with physical settlement obligations. The calculation takes advantage of operational enhancements that have been made to the

ICE Clear Europe systems used for managing physical deliveries which provide additional relevant data for LST.

(v) Changes have been made to the calculation of LN for collateral exchanges in order to be more stable over time using separate amounts for pledged and non-pledged accounts, and assuming that in the event of a liquidity issue, the Clearing House will suspend collateral exchanges on the days following a default on Day T, until liquidation is complete, consistent with the Rules as discussed above. Under the amended approach, LN will be projected using a conservative statistical confidence interval applied to a reasonable historical observation period of applicable daily net cash withdrawals. ICE Clear Europe believes this approach would provide a better projection of liquidity needs relating to exchanges than the current approach, which is based on a 7-day lookback.

In ICE Clear Europe's view, these changes will enhance the LST process and the Clearing House's ability to manage liquidity risk.

#### *Compliance with the Act and CFTC Regulations*

The amendments to the Delivery Procedures are potentially relevant to the following core principles: (B) Financial Resources, (D) Risk Management and (O) Governance, and the applicable regulations of the Commission thereunder.

- *Financial Resources.* As set forth above, the Procedures are designed to consolidate and formalize in a single document the Clearing House's practices relating to liquidity stress testing. The Procedures describe the Clearing House's processes for determining whether it has sufficient assets to cover its payment obligations under a range of different scenarios, including the way such calculations are made, the testing required to make such determinations, and key factors, components and considerations. In ICE Clear Europe's view, the amendments thus facilitate its ability to measure, monitor and manage its liquidity risks, consistent with the requirements of Core Principle B and Commission Rule 39.11(e).
- *Risk Management.* As discussed above, the Procedures describe in a single comprehensive and consolidated document the Clearing House's practices that relate to liquidity stress testing and management of such testing. The Procedures are intended to describe the Clearing House's current liquidity stress testing practices which are intended to ensure that the Clearing House has adequate liquidity to cover its payment and other obligations in the event of Clearing Member default or certain failures of other service providers. The Procedures also clarify the Clearing House's sources and mitigations of various types of liquidity risk. As set forth above, although the Procedures largely document existing practice, the Clearing House is also making certain enhancements to LST through the procedures, including with respect to the liquidation of assets by sale, treatment of pledged assets, treatment of physical deliveries and treatment of collateral exchanges. The Procedures will facilitate the Clearing House's ability to conduct LST and thereby measure, monitor and manage its liquidity risks. In ICE Clear Europe's view, as set out above, the



Procedures facilitate the Clearing House's overall management of the risks associated with discharging its responsibilities. As such, ICE Clear Europe believes the amendments are consistent with the requirements of Core Principle D and Commission Rule 39.13.

- *Governance.* As discussed, the Procedures clarify certain responsibilities of the document owner and other ICE Clear Europe personnel in respect of ongoing review of the Procedures. In line with the Clearing House's other policies and procedures, the Procedures also describe the responsibilities of the document owner and appropriate escalation and notification requirements for responding to exceptions and deviations from the Procedures. In ICE Clear Europe's view, the amendments are therefore consistent with the requirements of Core Principle O and CFTC Rule 39.24.

As set forth herein, the amendments consist of the amendments to the Liquidity Stress Testing Procedures. ICE Clear Europe has requested confidential treatment with respect to the amendments, 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 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](mailto:george.milton@theice.com) or +44 20 7429 4564.

Very truly yours,



George Milton  
Head of Regulation & Compliance