

VIA CFTC PORTAL

30 January 2019

Mr Christopher Kirkpatrick
Commodity Futures Trading Commission
115 21st Street NW
Three Lafayette Centre
Washington DC 20581

LCH Limited Self Certification: ForexClear Trade Registration Enhancements

Dear Mr Kirkpatrick

Pursuant to CFTC regulation §40.6(a), LCH Limited ("LCH"), a derivatives clearing organization registered with the Commodity Futures Trading Commission (the "CFTC"), is submitting for self-certification changes to the LCH rules in regarding enhancements to the trade registration process in the ForexClear service.

Part I: Explanation and Analysis

The ForexClear service plans to introduce a trade registration fund ("TRF") to facilitate the registration of ForexClear Contracts. A trade registration fund for the same purposes is already in place in the SwapClear service.

The ForexClear TRF is a mutualised fund designed to increase the certainty of intraday trade registration in the ForexClear service. It is funded by Clearing Members' resources, which will be available only after each Clearing Member's funded collateral has been utilised. The TRF is expected to incentivise client clearing.

In the event Clearing Members utilise any amount in the TRF, they will be required to replenish it as part of the last intra-day margin call and at every end-of-day (EOD) margin call. Further, each Clearing Member will only be able to utilise the TRF up to a given tolerance level, as established by LCH; in the event that a Clearing Member utilises at least 75% of its applicable tolerance during a business day, the Clearing Member will be required to replenish it at the following relevant intraday margin call.

Currently, the ForexClear Clearing Members are required to fulfil a Minimum Excess Requirement ("MER"), which is a buffer amount required to register new trades whilst limiting intraday margin calls. The Clearing Members that will opt in to the TRF will no longer be required to provide the MER buffer.

The rule changes will go live on, or after, March 11, 2019.

Part II: Description of Rule Changes

The proposed changes affect different parts of the LCH Rulebook, however the majority of the changes have been made to the Procedures Section 21 (“ForexClear Clearing Service”). Below is a summary of the changes made to this part of the Rulebook, however please note that equivalent changes have been made to the respective sections of the FCM Procedures.

The concept of the TRF is defined as ForexClear Tolerance in the proposed rules. The title of section 1.3 has been amended to include a reference to “Trade Registration Facilitation”. Under this section, a new sub-section 1.3.13 (“ForexClear Tolerance”) sets out the TRF functionality and the related obligations of Clearing Members, including the requirement to opt in to use the TRF, the right of LCH to set a ForexClear Tolerance Limit for each Clearing Members as well as that to require additional funds to replenish any utilised TRF amount.

The sub-section “Minimum Excess Requirement Buffer” has been moved from section 1.5 (amended as “Initial Margin, Variation Margin and NPV Payments”) to section 1.3 under a new sub-section 1.3.14. The first paragraph has been amended to reflect the cases where the MER buffer may or may not be required.

Further a new sub-section 1.3.15 sets out the details of an Initial Margin component called Completion Margin. This is a type of margin currently charged to Clearing Members to account for potential increases in their initial margin obligations due to position changes resulting from next-day fixing, with respect to ForexClear NDF Contracts, or next-day settlement, with respect to ForexClear Option Contracts. A reference to it in the rules has been added for completeness. The Completion Margin will continue to be charged regardless of where a Clearing Member opts in or out of the TRF. Sub-section 1.5.7 on the Mutualised Credit Extension (“MCE”), as well as references to this term, have been deleted as this type of margin is no longer required and becomes redundant because of the introduction of the ForexClear Tolerance.

Minor amendments have been made to section 1.2.5 (“Novation and Registration”) to note that the registration of Contracts will be subject to LCH holding sufficient collateral to cover the liabilities resulting from such Contracts, taking into account the applicable TRF resources and MER buffer. The rules note that the lack of sufficient collateral could result in LCH rejecting such Contracts.

The General Regulations and the FCM Regulations have been updated with the definition of the term ForexClear Tolerance and amended to reflect this term in relevant sections. The General Regulations include an additional paragraph in Regulation 11 (“Client Clearing Business”) paragraph m) iii) to note that the MER buffer and the ForexClear Tolerance may also be available to cover liabilities arising from the Contracts cleared by a Clearing Member’s client, where applicable.

References to the term ForexClear Tolerance have also been added in Schedule 5 (“ForexClear Default Fund Supplement”) of the Default Rules.

The text of the changes are attached hereto as:

- **Appendix I** – Procedures Section 21
- **Appendix II** – FCM Procedures
- **Appendix III** – General Regulations
- **Appendix IV** – FCM Regulations
- **Appendix V** – Default Rules

Part III: Core Principle Compliance

LCH has reviewed the changes against the requirements of the Core Principles and finds that they will continue to comply with all the requirements and standards therein.

Part IV: Public Information

LCH has posted a notice of pending certification with the CFTC and a copy of the submission on LCH's website at: <http://www.lch.com/rules-regulations/proposed-rules-changes>.

Part V: Opposing Views

There were no opposing views expressed to LCH by governing board or committee members, members of LCH or market participants that were not incorporated into the rule.

Certification

LCH hereby certifies to the Commodity Futures Trading Commission, pursuant to the procedures set forth in the Commission regulation § 40.6, that the attached rule submission complies with the Commodity Exchange Act, as amended, and the regulations promulgated thereunder.

Should you have any questions, please contact me at julian.oliver@lch.com.

Yours sincerely,



Julian Oliver
Chief Compliance Officer
LCH Limited

Appendix I
Procedures Section 21



LCH LIMITED

PROCEDURES SECTION 2I

FOREXCLEAR CLEARING SERVICE

position-keeping sub-accounts for each Indirect Gross Sub-Account (relating to each Indirect Clearing Client).

- (c) The ForexClear Service also provides for a separate account for each FXCCM's ForexClear Default Fund Contribution with the account code "F".
- (d) Only the "H" and "F" accounts are obligatory. The "C" account will be used in respect of any FXCCM which engages in ForexClear Client Clearing Business.

1.2.4 Branches

- (a) Submission of a static data form to LCH's Onboarding department by an FXCCM will also allow an FXCCM to be provided with one or more sub-accounts for any branch of that FXCCM (for position-keeping purposes) within that FXCCM's "H" position-keeping account.
- (b) Because the single account reflects the consolidated balances and liabilities of the FXCCM, the balances and liabilities associated with ForexClear Transactions submitted by FXDs and/or per branch will be provided as an estimate (if applicable).
- (c) Where a ForexClear Transaction is presented for clearing by a branch of an FXCCM, it is deemed to have been presented by, and in the name of, the relevant FXCCM.

1.2.5 Novation and Registration

- (a) A ForexClear Transaction must satisfy the applicable ForexClear Eligibility Criteria (set out in the Product Specific Contract Terms and Eligibility Criteria Manual as published on the Clearing House's website from time to time) at the Registration Time. Upon a ForexClear Transaction being submitted to the Clearing House for registration, the Clearing House will determine whether to accept or reject the ForexClear Transaction within the required timeframe under ~~all~~ Applicable Law. Where the Clearing House determines to accept the ForexClear Transaction, registration shall occur immediately and the ForexClear Transaction shall be automatically replaced with two separate ForexClear Contracts.
- ~~(b)~~ Prior to and as a condition to the registration of a ForexClear Contract, an FXCCM must transfer to the Clearing House all required Collateral in respect of its Liabilities or estimated Liabilities (as applicable, and taking into account MER Buffer and/or ForexClear Tolerance, if any).
- ~~(b)~~(c) If any FXCCM has not transferred sufficient Collateral in respect of its Liabilities or estimated Liabilities to the Clearing House (taking into account ~~any~~ MER Buffer and ~~MCE provided by the Clearing House/or~~ ForexClear Tolerance, if any) at the time of the ~~relevant~~ Incremental Risk Check (as defined herein), then ~~any submitted and unregistered~~

~~ForexClear Transaction that the FXCCM has been nominated to clear and that is, subject to such Incremental Risk Check Section 1.3.3(b)(ii), such ForexClear Transaction~~ will be rejected.

~~(d)~~ (d) Notwithstanding paragraph (c) above, if (i) the Clearing House registers a ForexClear Contract resulting from a ForexClear Transaction where one or both of the relevant FXCCMs has not provided sufficient Collateral with respect to its Liabilities or estimated Liabilities prior to registration, the FXCCMs shall be bound by the terms of the relevant ForexClear Contract(s) and (ii) if the Clearing House rejects a ForexClear Transaction for reasons of insufficient Collateral, the Clearing House shall not be liable to any FXCCM or any other person in connection with the rejection of such ForexClear Transaction.

~~(e)~~(e) Once ~~the~~ ForexClear Transaction has passed the Validation Checks (as defined in ~~paragraph (a) of Section 1.3.3 (Trade Validation and Registration))~~Section 1.3.3(a) and the Clearing House has determined to accept the ForexClear Transaction for registration, the Clearing House will send a message confirming the registration of the ForexClear Transaction as two ForexClear Contracts ~~and,~~ including a ~~date stamp~~date stamp of the relevant registration time ~~to the entities specified, in paragraph (a)(iii) of accordance with Section 1.3.3 (Trade Validation and Registration).~~1.3.3(a)(iii). For the purpose of the ForexClear Regulations, the time of dispatch of such message shall be the "Registration Time" of such ForexClear Contracts.

~~(f)~~(f) The definitive report of a registered ForexClear Contract will be shown on the "All Open Contracts" report issued by ForexClear Reporting.

~~(g)~~(g) If an FXCCM is declared a Defaulter, the Clearing House will not register any ForexClear Contract in the name of such Defaulter (except pursuant to the Default Rules). ForexClear Transactions in respect of ~~non-defaulting~~Non-Defaulting FXCCMs will continue to be registered in accordance with, and subject to, the Rulebook.

1.3 Trade Management; Trade Registration Facilitation

1.3.1 *Trade Capture:* After the execution of a ForexClear Transaction (a "trade"), each FXP who is a party to the trade will submit individual instructions to the ForexClear Approved Trade Source System for matching and clearing of the trade. FXPs are not required to submit a confirmation of any trade presented to the Clearing House for registration. Presentation of the matched trade terms through the ForexClear Approved Trade Source System will ensure that the agreed terms of the trade are recorded.

Once the ForexClear Approved Trade Source System receives the trade instructions from the FXPs who are parties to the trade, the ForexClear Approved Trade Source System matches both instructions. The ForexClear Approved Trade Source System validates the trade using the applicable ForexClear Eligibility Criteria and will, if appropriate, present a single message containing the names of the FXPs who are parties to the trade and the terms of

the trade to the Clearing House for registration and clearing, ~~(such matched trade being known as a "ForexClear Transaction").~~

The Clearing House will determine whether to accept or reject the ForexClear Transaction within the required timeframe under ~~all~~ Applicable Law. In respect of a ForexClear Transaction which is:

- (a) a Trading Venue Transaction, the Clearing House will notify the ForexClear Clearing Members, Trading Venue and ~~(, if the originating ForexClear Approved Trade Source System is different to the Trading Venue),~~ the originating ForexClear Approved Trade Source System of registration or rejection of the ForexClear Transaction ~~(as applicable);~~ ~~and/or~~
- (b) not a Trading Venue Transaction, the Clearing House will notify the ForexClear Clearing Members (via the originating ForexClear Approved Trade Source System or ClearLink API) of registration or rejection of the ForexClear Transaction ~~(as applicable);~~

in each case within the required timeframe under Applicable Law.

1.3.2 *The ForexClear Approved Trade Source Systems*

FXCCMs must not submit instructions to the Clearing House for trades which will not meet the ForexClear Eligibility Criteria. The Clearing House will register a ForexClear Transaction on the basis of the data provided to it by the ForexClear Approved Trade Source System and has no obligation to verify that the details received from the ForexClear Approved Trade Source System in respect of a ForexClear Transaction properly reflect the trade entered into by the relevant FXPs.

Application for ForexClear Approved Trade Source System status shall be made in accordance with the policies published from time to time on the Clearing House's website. A list of ForexClear Approved Trade Source Systems currently approved by the Clearing House is available on the Clearing House's website. Where the Clearing House approves any additional ForexClear Approved Trade Source System, it will notify FXCCMs via a member circular.

The Clearing House is not able to, and will not, verify the authorisation of the source of any details of any ForexClear Transaction reported to it for registration by the ForexClear Approved Trade Source System. The Clearing House shall have no liability in the event that any FXCCM suffers any loss through the unauthorised input of details into a system of a ForexClear Approved Trade Source System.

Notwithstanding the designation by the Clearing House of a system as a ForexClear Approved Trade Source System, the Clearing House makes no warranty (and will accept no liability) as to the effectiveness, efficiency, performance or any other aspect of the services provided by any ForexClear Approved Trade Source System or the timeliness or otherwise of the delivery of any ForexClear Transaction details by that ForexClear Approved Trade

Source System to the Clearing House. Such matters form part of the relationship between the FXCCM and the ForexClear Approved Trade Source System and the terms of such relationship may entitle the ForexClear Approved Trade Source System to suspend the ability of an FXCCM to make submissions from time to time.

The Clearing House accepts no liability for any error within or corruption of any data sent by the ForexClear Approved Trade Source System to the Clearing House or to an FXCCM or any delay in or failure of the transmission of such data to the Clearing House. In the event that the Clearing House registers any ForexClear Contract(s) on the basis of incorrect or corrupted data sent to it by a ForexClear Approved Trade Source System, the FXCCM(s) concerned shall be bound by the terms of such ForexClear Contract(s), unless the ForexClear Contract is subsequently cancelled in accordance with Regulation 92 (*Cancellation of ForexClear Contracts*).

1.3.3 Trade Validation and Registration

(a) Process Flow Description

- (i) The Clearing House performs a validation check on each trade submitted by FXPs to ensure that each such trade meets the applicable ForexClear Eligibility Criteria and the Counterparty Technical Validation Check (as defined below), Incremental Risk Checks (as defined below) required for ForexClear Transactions and, with respect to each ForexClear Option Transaction, ForexClear Spot Transaction, ForexClear Swap Transaction and ForexClear Deliverable Forward Transaction, a Settlement Exposure Limit Check (as described herein) (~~together~~collectively, the "**Validation Checks**").
- (ii) The Clearing House will create two trade records for a ForexClear Transaction which passes the Validation Checks and is accepted for clearing by the Clearing House: one for the ForexClear Contract between the Clearing House and the relevant FXCCM and the other for the ForexClear Contract between the Clearing House and the same or another relevant FXCCM.
- (iii) In respect of a ForexClear Transaction which is:
 - (A) a Trading Venue Transaction, the Clearing House will notify the ForexClear Clearing Members, Trading Venue and ~~(~~ if the originating ForexClear Approved Trade Source System is different to the Trading Venue~~)~~, the originating ForexClear Approved Trade Source System of registration or rejection of the ForexClear Transaction (as applicable); ~~and/or~~
 - (B) not a Trading Venue Transaction, the Clearing House will notify the ForexClear Clearing Members (via the

originating ForexClear Approved Trade Source System or ClearLink API) of registration or rejection of the ForexClear Transaction ~~(as applicable)~~.²

in each case within the required timeframe under all Applicable Law.

- (iv) As provided in paragraph 1.2.5(e) (*Novation and Registration*), in respect of messages confirming registration, the time of dispatch of such message shall be the Registration Time of that ForexClear Contract.
 - (v) The internal sub-account (i.e. FXCCM, branch, or FXD) into which each trade record is booked is derived from the BIC code within the message from the ForexClear Approved Trade Source System. The BIC links to the FXCCM reference data.
 - (vi) Both new trade records arising out of the ForexClear Transaction have the same unique ForexClear ID (the "**ForexClear ID**"). Any further events or actions are applied on the basis of this ForexClear ID, to ensure consistency.
- (b) "**Counterparty Technical Validation Check**" The counterparties to each trade must be (a) ~~are both~~the parties submitted in trade particulars ~~FXPs~~, (b) are each a Non-Defaulting FXCCM and (c) ~~are~~ approved by the Clearing House to clear the relevant trade type.
- (i) Valuation Date and Settlement Date: in respect of a ForexClear NDF Transaction, (A) the Valuation Date and Settlement Date for the ForexClear Transaction must fall on a valid Business Day for the Currency Pair to which the ForexClear Transaction relates; and (B) the Settlement Date must fall on a Business Day after the Valuation Date. FXCCMs should refer to the Relevant EMTA Template¹ or LCH G10 NDF Contract Template for further details of the relevant Business Days for determining the Valuation Date and the Settlement Date:²

Risk and Settlement Limit Checks

- (ii) The Clearing House will apply an "**Incremental Risk Check**" to each ~~individual~~ ForexClear Transaction which is not a Sub-Block Trading Venue Transaction. The Incremental Risk Check uses a suitable approximation methodology to estimate an FXCCM's Liabilities (including the new ForexClear Transaction) against available Collateral (taking into account ~~any~~ForexClear Tolerance and/or MER Buffer ~~and MCE~~ made available by the Clearing House, if any). However, any ForexClear Transaction submitted by ~~that an~~ FXCCM that is risk reducing (i.e. results in

¹ ~~As amended from time to time as per relevant EMTA Template.~~

² ~~As amended from time to time as per relevant EMTA Template.~~

a reduction of that FXCCM's Liabilities) will always pass the Incremental Risk Check, even if the FXCCM has not transferred sufficient Collateral in respect of its Liabilities to the Clearing House. The Clearing House will apply ~~an additional~~ **“Settlement Exposure Limit Check”** on a per currency basis to each ~~individual~~ ForexClear Spot Transaction, ForexClear Deliverable Forward Transaction, ForexClear Option Transaction and ForexClear Swap Transaction, as the case may be. The Settlement Exposure Limit Check uses an approximation methodology to assess an FXCCM's Settlement Exposure Amount for each Settlement Exposure Date against a pre-determined Settlement Exposure Limit.

- (iii) In the case of a ForexClear Settlement Event, the Clearing House will apply additional checks to each ForexClear Spot Transaction by reference to its impact on the Settlement Position Amount of the Impacted ForexClear Option Clearing Member.
 - (iv) Both FXCCMs to the ForexClear Transaction must pass the Incremental Risk Check and Settlement Exposure Limit Check in order for the Clearing House to register two ForexClear Contracts in those FXCCM's names.
 - (v) If either (or both) FXCCM(s) to a ForexClear Transaction fail(s) the Incremental Risk Check(s) and/or Settlement Exposure Limit Check(s), then the ForexClear Transaction will be rejected immediately and a notification sent in accordance with Section 1.3.3(a)(iii).
- (c) *Necessary Consent*
- (i) In the case of an FXCCM which has been nominated to register a ForexClear Transaction on behalf of a third party Executing Party other than an FXD, the Clearing House will (only where such ForexClear Transaction is not a Trading Venue Transaction) provide notification to such FXCCM of the relevant ForexClear Transaction and that it has been so nominated, via member reports, the ClearLink API or otherwise ("**Notification**"). Where an FXCCM is nominated to clear both ForexClear Contracts arising from the registration of a ForexClear Transaction in the capacities described in this paragraph, such FXCCM will receive two separate Notifications from the Clearing House in relation to such ForexClear Transaction. All Notifications shall be provided within the required timeframe under all Applicable Law. In all other cases, no Notification will be provided to any FXCCM.
 - (ii) In respect of a ForexClear Transaction that is not a Trading Venue Transaction, following receipt of a Notification, an FXCCM may choose to grant or refuse consent to register the ForexClear Transaction. It is a condition for registration of such

a ForexClear Transaction that an FXCCM grants a separate consent (each, a "**Necessary Consent**") in respect of each Notification received by it in relation to the registration of such ForexClear Transaction. The Clearing House has an automated system which it operates on each business day for the purposes of rejecting ForexClear Transactions which have been presented for clearing but in respect of which any Necessary Consent has not been notified to the Clearing House prior to the LCH Cut-off Time. The "LCH Cut-off Time" in respect of a ForexClear Transaction will be the expiry of the timeframe determined by the Clearing House. If an FXCCM has not notified the Clearing House of a Necessary Consent by the LCH Cut-off Time, it will be deemed to have rejected the relevant ForexClear Transaction. Any Necessary Consent of a ForexClear Transaction notified by an FXCCM to the Clearing House prior to the LCH Cut-off Time is irrevocable. Any Necessary Consent notified by an FXCCM to the Clearing House after the LCH Cut-off Time shall be invalid.

- (iii) In circumstances where the registration of a ForexClear Transaction is conditional upon one or more Necessary Consent(s) being notified by the applicable FXCCM(s), the relevant ForexClear Transaction shall be deemed to have been "submitted" to the Clearing House by each such FXCCM at the time when it notifies the Clearing House of its Necessary Consent. In all other circumstances, a ForexClear Transaction shall be "submitted" to the Clearing House by the applicable FXCCM upon being presented to the Clearing House for clearing by or on behalf of such FXCCM or by or on behalf of a ForexClear Dealer (acting in such capacity with respect to the relevant ForexClear Transaction) approved to clear ForexClear Transactions through the relevant FXCCM.
- (iv) The Clearing House will (where applicable) apply a "**Consent Validation Check**" in respect of a ForexClear Transaction presented for clearing that is not a Trading Venue Transaction in order to ensure that the Clearing House has received all required Necessary Consents, in accordance with Section 1.3.3(d)(ii).

(d) *Registration*

- (i) Once it is confirmed that a ForexClear Transaction has passed the Validation Checks, and the Clearing House has determined to accept the ForexClear Transaction for registration, the Clearing House registers the ForexClear Transaction as two ForexClear Contracts and changes the status for each ForexClear Transaction to "NOVATED".
- (ii) The Clearing House acknowledges the ForexClear Contract status and sends a message to the entities specified in Section

1.3.3(a)(iii) that the ForexClear Transaction is registered and "NOVATED".

1.3.4 *Trade Rejection*

Trades presented for registration that do not meet the ForexClear Eligibility Criteria or any other requirement for registration under the Rulebook, including a trade (a) presented by or on behalf of an FXCCM in respect of a third party Executing Party, other than an FXD where such trade was executed on a Trading Venue that was not at the time of execution of such trade an Eligible Trading Venue in respect of such FXCCM, (b) presented by or on behalf of an FXCCM that was executed on a trading venue or facility that had not at the time of the execution of such trade been approved by the Clearing House as a Trading Venue, (c) which contains invalid or incomplete message data, or (d) that is not a Sub-Block Trading Venue Transaction and with respect to which the Clearing House has not received sufficient Collateral (taking into account ~~any ForexClear Tolerance and/or MER Buffer and MCE provided by the Clearing House~~, if any) will, in each case, be rejected.

If a trade is presented to the Clearing House for registration and rejected, it may be re-presented for registration in the form of a new trade but with the same economic terms in accordance with, and subject to, the Rulebook and all Applicable Law, and such trade will, for the purposes of the Rulebook and upon such re-presentation, constitute a new trade.

1.3.5 *Package Transactions*

Subject to Clearing House availability, a ForexClear Clearing Member may, via an Approved Trade Source System, present to the Clearing House, in a single submission, a group of two or more ForexClear Transactions for simultaneous registration (such group of ForexClear Transactions being a “**Package Transaction**”). A Package Transaction must be identified to the Clearing House at the time of its presentation in the format prescribed by the Clearing House. Where the Package Transaction is not presented in the prescribed format, each constituent ForexClear Transaction within the Package Transaction will be rejected.

Where the Clearing House receives a Package Transaction for registration it shall treat each ForexClear Transaction that forms part of the Package Transaction as a new ForexClear Transaction in accordance with the Rulebook and, where each constituent ForexClear Transaction within the Package Transaction meets the registration requirements as set out in the Rulebook (including the provision of Collateral, where applicable), the Clearing House will simultaneously register all of the ForexClear Transactions within that Package Transaction. Where one or more of the constituent ForexClear Transactions does not meet the Clearing House’s registration requirements then all of the constituent ForexClear Transactions of the Package Transaction shall be rejected.

Where a constituent ForexClear Transaction of a Package Transaction is a US Trading Venue Transaction, it is a condition of registration that all of the

constituent ForexClear Transactions be US Trading Venue Transactions; where such condition is not met, all constituent ForexClear Transactions of the Package Transaction will be rejected. In respect of a Package Transaction comprising ForexClear Transactions that are not executed on any US Trading Venue, the Clearing House will send a Notification to the relevant ForexClear Clearing Member(s) for the acceptance of each such constituent ForexClear Transaction.

In respect of a Package Transaction submitted in a ForexClear Clearing Member's name, such ForexClear Clearing member's margin requirement will be assessed based on the net margin call for all of the constituent ForexClear Transactions of such Package Transaction.

The Clearing House may limit the number of ForexClear Transactions that may be included in a Package Transaction by way of member circular.

1.3.6 *Manual Trade Rejection, Novation and Cancellation (Exceptional Event)*

- (a) From time to time, as an exceptional event, it may be necessary for the Clearing House to: (i) reject a trade presented for registration; (ii) register a ForexClear Transaction; or (iii) accept or reject a cancellation request for a ForexClear Contract or a ForexClear Transaction, in each case, manually prior to a Margin and Settlement Run (e.g. in the case of a Default, when a ForexClear Transaction needs to be registered immediately to expedite the hedging and auction process or to reject a ForexClear Transaction received from an FXCCM which is a Defaulter).
- (b) The Clearing House acknowledges the action:
 - (i) in respect of trades being manually rejected or manually registered, by notifying the entities specified in Section 1.3.3(a)(iii) of such rejection or registration (as applicable); and
 - (c) in respect of a ForexClear Contract or a ForexClear Transaction being manually cancelled, by sending a message to the ForexClear Approved Trade Source System that it is "CANCELLED".

1.3.7 *Trade Cancellation*

- (a) The Clearing House accepts cancellation messages from FXPs against both non-novated trades (ForexClear Transactions) and novated trades (ForexClear Contracts).
- (b) Cancellation messages may be submitted via the ForexClear Approved Trade Source System (i), with respect to any ForexClear NDF Contract, until such ForexClear Contract is "**fixed**" – i.e. when its Settlement Rate has been determined on the relevant Valuation Date, (ii) with respect to any ForexClear Option Contract, until the end of day on the Business Day preceding the relevant Expiration Date and (iii) with respect to any ForexClear Spot Contract, ForexClear Swap Contract or ForexClear

Deliverable Forward Contract, until the end of day two Business Days immediately preceding the Settlement Date.

- (c) A successful cancellation message results in a "CANCELLED" status message if the ForexClear Transaction or the ForexClear Contract (as the case may be) is cancelled during the Opening Hours. The status messages are sent from the Clearing House to the FXCCM via the ForexClear Approved Trade Source System.
- (d) There is no ForexClear Contract or ForexClear Transaction amendment functionality.
- (e) *Process Flow Description*
 - (i) The Clearing House accepts trade cancellation instructions from the ForexClear Approved Trade Source System for ForexClear Transactions or ForexClear Contracts (as the case may be) that have previously been submitted to the ForexClear Service. Cancellation instructions must include the ForexClear ID.
 - (ii) The Clearing House checks that the cancellation instruction contains a valid ForexClear ID which relates to: (a) a ForexClear Transaction or ForexClear Contract (as the case may be) that has not been previously cancelled; and (b) in the case of a ForexClear NDF Contract only, a ForexClear Contract with respect to which the relevant Valuation Date has not yet occurred.
 - (iii) Where a trade has already been rejected (e.g. as a result of having failed a Counterparty Technical Validation Check), the ForexClear Service sends a "CANCEL REJECTED" message to the ForexClear Approved Trade Source System for the relevant FXPs.
 - (iv) All trade cancellation instructions must pass the Incremental Risk Check and Settlement Exposure Limit Check, where applicable. If any FXCCM has not transferred sufficient Collateral in respect of its Liabilities or estimated Liabilities to the Clearing House (taking into account ~~any ForexClear Tolerance and/or~~ MER Buffer ~~and MCE provided by the Clearing House~~, if any) at the time of the relevant Incremental Risk Check or Settlement Exposure Limit Check, as applicable, then any ForexClear trade cancellation instruction to which it is a party will be rejected immediately. However, any ForexClear trade cancellation instruction that is risk reducing (i.e. results in a reduction of that FXCCM's Liabilities) will always pass the Incremental Risk Check, even if the FXCCM has not transferred sufficient Collateral in respect of its Liabilities to the Clearing House.

- 1.3.8 *Valuation Date Event Management:* The Clearing House is the Calculation Agent and will store and apply the Settlement Rate Option and the Valuation Date for each ForexClear NDF Contract.

On the Valuation Date with respect to each ForexClear NDF Contract, the Settlement Rate will be retrieved as set forth in paragraph (a) below. The Market Data provider for Settlement Rates is Reuters.

ForexClear applies the relevant Settlement Rate to ForexClear NDF Contracts using the following criteria:

- (a) Settlement Rate Option source; and
- (b) Valuation Date.

The Clearing House applies the Settlement Rate to all relevant ForexClear NDF Contracts at a predefined time following its publication.

The Clearing House calculates the Settlement Currency Amount in the Settlement Currency per ForexClear NDF Contract. FXCCMs can retrieve the Settlement Rate and Settlement Currency Amount in the Settlement Currency via ForexClear Reporting (as defined in Section 1.7 (*ForexClear Reporting*)) on the ForexClear Service Portal and on MemWeb, which are internet services onto which information is loaded and can be accessed by FXCCMs.

- (c) *Process Flow Description*
 - (i) After the Registration Time for a ForexClear NDF Contract, the ForexClear Service links a Settlement Rate Option to it in accordance with the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable.
 - (ii) On the Valuation Date, the Clearing House uses the Settlement Rate for the Currency Pair for the ForexClear NDF Contract when it is published by Reuters, and calculates the Settlement Currency Amount for each ForexClear NDF Contract in the Settlement Currency by applying the relevant Settlement Rate Option as referenced in the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable.

- 1.3.9 If the Settlement Rate Option set out in the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable, is unavailable at the relevant time, Disruption Fallback alternatives for the determination of the Settlement Rate will apply as set out in the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable. Notwithstanding the foregoing, in the event the Clearing House determines (in its sole discretion) that a Settlement Rate Option is unavailable, the Clearing House will determine an alternative Settlement Rate Option.

- 1.3.10 *Settlement:* With respect to each ForexClear NDF Contract, the Settlement Currency Amount is calculated by the application of the Settlement Rate to the Notional Amount in accordance with the ForexClear NDF Contract Terms.

From (and including) the Registration Time to (and including) the business day immediately preceding the Settlement Date, changes in the daily value of open ForexClear NDF Contracts will have resulted in variation margin credits and debits or NPV Payments between the parties (as set out at Section 1.5.2 (*Variation Margin and NPV Payments*)). With respect to each ForexClear NDF Contract, on the business day immediately preceding the Settlement Date, the Clearing House nets the Settlement Currency Amount against the aggregate net variation margin or aggregate NPV Payments (as applicable) which have been paid/received through the term of the ForexClear NDF Contract, the result of which is a Net Settlement Amount ("**NSA**"), which will be reflected in the FXCCMs' cash accounts with the Clearing House on the Settlement Date. As such, with respect to each ForexClear NDF Contract, the transfer to the Clearing House of either (i) all the Collateral in respect of the variation margin in respect that ForexClear NDF Contract, or (ii) all the NPV Payments required pursuant to the ForexClear NDF STM Terms of that ForexClear NDF Contract shall satisfy the relevant party's obligation to pay the Settlement Currency Amount on the Settlement Date of such ForexClear NDF Contract. For the purpose of providing Nostro reconciliations, to the relevant parties, the Clearing House will provide Reporting (as defined in Section 1.7 (*ForexClear Reporting*)) which will reflect an entry for the "**Settlement Currency Amount**" and a separate entry for the reversal of the aggregate net variation margin or NPV Payments which have been paid/received through the term of the ForexClear NDF Contract. This paragraph applies even if the Settlement Date has been adjusted in accordance with the ForexClear NDF Contract Terms.

- 1.3.11 *Portfolio Management*: The Clearing House allows portfolios of ForexClear Contracts to be transferred between FXCCMs (e.g., in the event of merger, or where agreed between the relevant FXPs).

The portfolio transfer capability allows the transfer of:

- (a) A single ForexClear Contract.
- (b) Part of an FXCCM's portfolio (which includes the ability to transfer ForexClear Contracts to various other FXCCMs, e.g. Bank A to Bank B for USD/RUB, Bank A to Bank C for USD/KRW and Bank A to Bank D for USD/BRL).
- (c) Portfolio transfer (i.e. the transfer of all or just one of the portfolios belonging to an FXCCM).
- (d) Multiple portfolio transfers (i.e. the transfer of several portfolios of an FXCCM).

The Clearing House will carry out the portfolio transfer. For transfers under (b), (c) and (d), this can be on either (i) a ForexClear Contract by ForexClear Contract basis, or (ii) in respect of ForexClear NDF Contracts, on a Currency Pair basis.

Before the completion of a portfolio transfer, the Clearing House will perform a margin impact analysis of the transfer to the source and destination portfolios.

The Clearing House will advise the relevant FXCCM regarding any additional Collateral that may be required in order to complete the portfolio transfer.

- (e) *Legal Documentation:* The transfer of ForexClear Contracts will be documented in accordance with the standard legal documentation for the transfer of ForexClear Contracts provided by the Clearing House to FXPs. Any such transfer must be authorised by all relevant parties and executed by individuals with appropriate signing authority.

1.3.12 Reference Data

- (a) *Holiday Event Calendar:*

The ForexClear Service uses the SwapsMonitor Financial Calendar (as published by Swaps Monitor Publications, INC.) (“**SwapsMonitor Financial Calendar**”) in order to determine holidays. This requires all ForexClear Participants to be licensees of the SwapsMonitor Financial Calendar.

If a change is declared that affects the SwapsMonitor Financial Calendar that is referenced on ForexClear, then a corresponding calendar adjustment will be made to the ForexClear system, unless the Clearing House informs FXCCMs by notice on its website (at <https://www.lch.com/services/forexclear>, or such other web page as the Clearing House determines) that the relevant change will not apply to ForexClear Contracts. a corresponding calendar adjustment will be made to the ForexClear system. The Clearing House may temporarily close the ForexClear Service to process a calendar adjustment in its clearing system. FXCCMs will be notified in advance of the date, time and expected duration of such closure.

- (b) *Date Adjustment:*

As a result of the calendar adjustment process, (i) the Valuation Date and/or the Settlement Date of any affected ForexClear NDF Contracts will automatically be date adjusted in accordance with the provisions of the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable and (ii) the Settlement Date of any affected ForexClear Spot Contract, ForexClear Swap Contract, ForexClear Deliverable Forward Contract, or ForexClear Option Contract and the Premium Payment Date of any affected ForexClear Option Contract will automatically be date adjusted in accordance with the Following Business Day Convention, as detailed in the ISDA definitions.

The Clearing House will notify the FXCCMs via file download from the Clearing Member Reporting as to any ForexClear NDF Contract, ForexClear Spot Contract, ForexClear Swap Contract, ForexClear Deliverable Forward Contract, or ForexClear Option Contract affected and the date adjustments made.

1.3.13 *ForexClear Tolerance*

In order to facilitate the registration of ForexClear Contracts by FXCCMs, the Clearing House may, in its sole discretion, provide FXCCMs with temporary “tolerance” in the form of initial margin forbearance (“**ForexClear Tolerance**”). In the event an FXCCMs wishes to utilise ForexClear Tolerance, it must provide notice to the Clearing House (the form and manner of such notice shall be prescribed by the Clearing House from time to time). FXCCMs who are approved to utilise ForexClear Tolerance may choose not to utilise MER Buffer in connection with the registration of ForexClear Contracts (for the avoidance of doubt, the utilization of MER Buffer is compulsory for FXCCMs that do not opt-in to ForexClear Tolerance).

The Clearing House may apply ForexClear Tolerance between Margin and Settlement Runs in an amount equal to the value of the Collateral that would have been required to be transferred by the FXCCM to the Clearing House to cover the relevant Liabilities (or estimated Liabilities) to facilitate the registration of ForexClear Contracts. For the avoidance of doubt, ForexClear Tolerance is provided in the form of temporary initial margin forbearance and an FXCCM’s utilisation of ForexClear Tolerance does not give rise to any payment or transfer of Collateral by the Clearing House or result in any use of default fund resources (except following a Default).

The Clearing House will determine, in its sole discretion, the maximum value of the ForexClear Tolerance (which may be zero) that it will make available to an FXCCM from time to time (“**ForexClear Tolerance Limit**”). The Clearing House will notify each FXCCM of its ForexClear Tolerance Limit and will, as soon as reasonably practicable, notify an FXCCM following any adjustment to the amount of its ForexClear Tolerance Limit. Except where the Clearing House exercises its right to reduce an FXCCM’s ForexClear Tolerance Limit in accordance with the foregoing, each FXCCM utilising ForexClear Tolerance shall have an equal ForexClear Tolerance Limit.

The Clearing House may require an FXCCM to transfer Collateral to the Clearing House in respect of any utilisation of ForexClear Tolerance at any time and without prior notice to the FXCCM. Without limiting the foregoing, the Clearing House will call for Collateral to replenish the ForexClear Tolerance utilised by an FXCCM at (i) the last ITD/Ad-hoc Day Margin and Settlement Run and EOD Margin and Settlement Run of each business day and (ii) in the event an FXCCM utilises at least 75% of its ForexClear Tolerance during a business day, at the next relevant ITD/Ad-hoc Day Margin and Settlement Run. Any failure of an FXCCM to satisfy a call for Collateral relating to ForexClear Tolerance may give rise to a Default by such FXCCM.

The Clearing House will not apply ForexClear Tolerance for ForexClear Contracts with a Trade Date earlier than the previous business day.

1.3.14 *Minimum Excess Requirement Buffer*

To facilitate the intraday registration of ForexClear Contracts, at each EOD Margin and Settlement Run, the Clearing House will call from each FXCCM an

amount of Collateral in respect of its initial margin obligations in respect of that FXCCM's potential intraday Liabilities for the following day ("MER Buffer"), provided that the Clearing House shall not call MER Buffer from an FXCCM that (i) opted-in to ForexClear Tolerance in accordance with Section 1.3.13 and (ii) opted-out of MER Buffer (the form and manner of such "opt-out" notice shall be prescribed by the Clearing House from time to time).

The required amount of MER Buffer for an FXCCM is expressed as a percentage of the FXCCM's start-of-day portfolio initial margin, and is calibrated daily based on recent (or prospective) member activity such that higher levels of intraday trade volumes lead to a proportionally higher MER Buffer requirement and vice versa. The MER Buffer percentage is calculated as a given percentile of intraday peak relative initial margin changes over a given number of historical business days.

The parameters of MER Buffer are: MER percentile, MER lookback period, relative MER cap and absolute MER floor. The values of these parameters are calibrated based on the quantitative analysis of the FXCCMs' initial margin history across the ForexClear Service.

As ForexClear Contracts are registered in an FXCCM's name, the Clearing House will, in accordance with the Margin or Settlement Run process, calculate an FXCCM's intraday Liabilities (or, in the case of an Incremental Risk Check, the FXCCM's estimated Liabilities), taking into account any MER Buffer.

At each EOD Margin and Settlement Run, the Clearing House will recalculate and call the FXCCM's MER Buffer for the following day.

1.3.15 *Completion Margin.* The Clearing House shall calculate and call each FXCCM for "completion margin." Completion margin is a component of each FXCCM's initial margin obligation, and represents potential increases in an FXCCM's initial margin obligations due to position changes resulting from next-day fixing, with respect to ForexClear NDF Contracts, or next-day settlement, with respect to ForexClear Option Contracts. Completion margin is calculated as the incremental difference between an FXCCM's aggregate initial margin obligations on its ForexClear Contracts and its initial margin obligations in relation to ForexClear Contracts due to fix or settle the next business day, as applicable.

1.4 Market Data

1.4.1 *Sources used by ForexClear Service:* With respect to each ForexClear Contract, the ForexClear Service collates instrument quotes for the following from multiple market sources (as detailed in Section 1.4.2 (*Market Data Sources and Frequencies*)) in relation to each Currency Pair or ForexClear Currency Pair:

- (a) FX spot rates ("**FX Spot Rates**");
- (b) FX swap points ("**FX Swap Points**");
- (c) FX implied volatility points ("**FX Volatility Points**");

methodology is applied where an arbitrage exists on any reference volatility surfaces.

- (c) *Interest Rate Curve*: The Clearing House applies standard bootstrap method to build the Interest Rate Curve. Linear interpolation is applied on zero coupon curves.
- (d) *Curve Use*: End of day is defined as 22.00 local London time ("EOD"). The following EOD data is used in the calculation of risk analytics for an EOD Margin and Settlement Run (as defined in paragraph (b) of Section 1.6.1 (*Types of Margin or Settlement Runs*)):
 - (i) FX Spot Rates;
 - (ii) FX Swap Points; and
 - (iii) FX Volatility Points.

1.4.5 *Country Credit Spreads*: The Clearing House takes country credit spreads (in relation to Brazil, Russia, India, China, Chile, South Korea, Colombia, Indonesia, Malaysia, Philippines and Taiwan) from Bloomberg for use in risk multiplier calculations.

1.5 **Initial Margin, Variation Margin and NPV Payments**

1.5.1 *Product Valuation*

- (a) *ForexClear NDF Contract*: From (and including) the Registration Time to the EOD Margin and Settlement Run on the business day preceding the Valuation Date, each ForexClear NDF Contract is valued in USD using the current market rates and discounted from the future Settlement Date to its present value (being valued using the data submitted by FXCCMs, in accordance with Section 1.4.2 (*Market Data Sources and Frequencies*)).

At EOD on the Valuation Date, the Settlement Rate is used to value the ForexClear NDF Contract.

If Valuation Postponement applies, the ForexClear NDF Contract is valued using the current forward price (based on the data submitted by FXCCMs, in accordance with Section 1.4.2 (*Market Data Sources and Frequencies*)) to (and including) the date on which the Settlement Rate is determined in accordance with the ForexClear NDF Contract Terms.

In the event a Settlement Rate or market rate is unavailable, as determined by the Clearing House in its sole discretion, the Clearing House will determine an alternative Settlement Rate or market rate.

- (b) *ForexClear Spot Contracts, ForexClear Deliverable Forward Contracts and ForexClear Swap Contracts*: From (and including) the Registration Time to the EOD Margin and Settlement Run on the

FXCCM's credit worthiness, initial margin obligation level and/or stress testing exposures in accordance with LCH.Clearnet Credit Risk Policy.

- (c) *Liquidity Risk Margin ("LRM")*: LRM reflects the additional risk due to the FXCCM having concentrated risk exposures above set thresholds in a particular Currency Pair or ForexClear Currency Pair or tenor of ForexClear Contracts. The LRM is calculated in accordance with parameters set by the ForexClear Default Management Group (the "FXDMG").
- (d) *Sovereign Risk Margin ("SRM")*: SRM reflects the additional risk related to a potential country default or a change in a country's currency regime which would impact ForexClear Contracts transacted in certain Reference Currencies. The SRM calculation considers the probability of sovereign default occurring and the depreciation or appreciation risk of the Reference Currencies. The SRM sovereign default probability is calculated by assessing the three-month probability of default for the different sovereign countries, based on the country's 5-year credit default swap (CDS) spread.
- (e) *Settlement Management Margin ("SMM")*: SMM reflects the additional risk associated with a potential settlement failure. The SMM calculation considers the FXCCM's future settlement obligations in each of the relevant currencies and the potential cost of utilising and replenishing liquidity provisions, where required, to fulfil those settlement obligations.
- (f) *Additional Margin*: The Clearing House may require an FXCCM to transfer additional Collateral to the Clearing House (in addition to amounts of Collateral already transferred to the Clearing House in respect of any initial margin and variation margin obligations) as security for the performance by an FXCCM of its obligations to the Clearing House in respect of ForexClear Contracts to which such FXCCM is a party in accordance with Regulation 20 (*Margin and Collateral*). This may be required from time to time where, in the opinion of the Clearing House, the risk inherent in ForexClear Contracts to which such FXCCM is a party not adequately covered by the Collateral transferred in respect of the initial margin or any variation margin obligations. This may cover instances where stress testing losses under various scenarios provided in the ForexClear Default Rules have increased.
- ~~(g) *Minimum Excess Requirement Buffer ("MER Buffer")*: To facilitate the intraday registration of ForexClear Contracts, at each EOD Margin and Settlement Run, the Clearing House will call from each FXCCM an amount of Collateral in respect of the initial margin obligation referred to as "Minimum Excess Requirement Buffer" ("MER Buffer") in respect of that FXCCM's potential intraday Liabilities (as defined below at Section 1.6.2 (*Margin or Settlement Run Process*)) for the following day.~~

~~The required amount of MER Buffer for an FXCCM is expressed as a percentage of the FXCCM's start of day portfolio initial margin, and is calibrated daily based on recent member activity such that higher levels of intraday trade volumes lead to a proportionally higher MER Buffer requirement and vice versa. The MER Buffer percentage is calculated as a given percentile of intraday peak relative initial margin changes over a given number of historical business days.~~

~~The parameters of the MER model are: MER percentile, MER lookback period, relative MER cap and absolute MER floor. The values of these parameters are calibrated based on the quantitative analysis of the FXCCMs' initial margin history across the ForexClear Service.~~

~~As ForexClear Contracts are registered in an FXCCM's name, the Clearing House will, in accordance with the Margin or Settlement Run process, calculate an FXCCM's intraday Liabilities (or, in the case of an Incremental Risk Check, the FXCCM's estimated Liabilities), taking into account any MER Buffer.~~

~~At each EOD Margin and Settlement Run, the Clearing House will recalculate and call the FXCCM's MER Buffer for the following day.~~

~~1.5.7 Mutualised Credit Extension ("MCE"): If an FXCCM has insufficient Collateral to enable the registration of further ForexClear Contracts in its name, then the Clearing House may make available to an FXCCM intraday credit by way of a Mutualised Credit Extension ("MCE") to enable the FXCCM to register further ForexClear Contracts. An FXCCM may utilise MCE intraday on a one to one basis to the value of the Collateral in respect of initial margin that would have been required to cover that FXCCM's Liabilities (or, in the case of Incremental Risk Checks, the FXCCM's estimated Liabilities). The amount of the MCE made available to an FXCCM in aggregate during any one day must not exceed an amount that is the lesser of: (a) 50% of the ForexClear MCE Default Fund Buffer; or (b) the sum of the FXCCM's Collateral in respect of initial margin and ForexClear Contribution. The amount of the "**ForexClear MCE Default Fund Buffer**" is currently zero and therefore the Clearing House will not provide MCE to any FXCCM until further notice.~~

~~For the avoidance of doubt, MCE is provided in the form of intraday initial margin forbearance and an FXCCM's utilisation of MCE does not give rise to any payment or transfer of collateral by the Clearing House nor does it result in any use of the ForexClear Fund Amount (except in events of default).~~

~~All MCE credit extended on any given day shall be revoked at the close of business on such day (unless revoked earlier in accordance with the following paragraph). As part of each EOD Margin and Settlement Run, the Clearing House will call Collateral in respect of initial margin obligations from each FXCCM to replace any utilised MCE and that FXCCM's MCE will be reset for the following day (assuming such FXCCM has satisfied any margin calls). Any failure of an FXCCM to satisfy an initial margin call relating to the replacement of MCE constitutes a default by such FXCCM just as any failure by an FXCCM to satisfy any other type of initial margin call constitutes a default.~~

~~The MCE is made available at the Clearing House's sole discretion. In particular (but without limitation), the Clearing House may refuse to extend MCE to any or all FXCCMs on risk management grounds, and may at any time require an FXCCM to provide Collateral in respect of initial margin in place of any utilised MCE.~~

~~4.5.8~~1.5.7 *Initial Margin Management Events Service ("IMMES")*: IMMES aims to find risk and initial margin reducing ForexClear Contracts amongst participating FXCCMs. IMMES can be run on all Currency Pairs that are cleared through the ForexClear Service, although the primary focus will be on those Currency Pairs that contribute to the largest Collateral requirement.

FXCCMs who wish to obtain further information about, or to participate in, IMMES should contact ForexClear Risk on 0207 426 7527. To be eligible to participate in IMMES, an FXCCM must enter into an IMMES agreement with the Clearing House (the "**IMMES Agreement**").

1.6 General Margining Process

A "**Margin and Settlement Run**" is the process by which the Clearing House calculates an FXCCM's initial margin requirement (if any) and, during an EOD Margin and Settlement Run (i) in respect of each ForexClear CTM Contract, its variation margin requirement and PAI adjustment (if required) or (ii) in respect of each ForexClear STM Contract, its NPV Payment and PAA adjustment (if required) (together the "**Margin or Settlement Requirements**"), and in the case of (i) only, applies that FXCCM's Collateral to satisfy the Margin Requirements for that FXCCM in respect of the ForexClear Contracts within that FXCCM's portfolio.

1.6.1 *Types of Margin and Settlement Runs*: There are three types of Margin and Settlement Run:

(a) *ITD/Ad Hoc - Day Margin and Settlement Run*

(i) ITD/Ad-hoc London daytime Margin and Settlement Runs are initiated as and when dictated by the schedule published by the Clearing House and notified to FXCCMs from time to time (the "**Schedule**") or as necessary, and are performed in the time period during which a PPS call can be made (the "**ITD/Ad-hoc Day Margin and Settlement Run**"). PPS times are published on the Clearing House's website at: <http://www.lch.com/en/risk-collateral-management/collateral-management/protected-payments-system/pps-concentration-activities>.

(ii) ITD/Ad-hoc Margin Runs are calls in respect of the initial margin obligation only. The variation margin obligation, NPV Payment obligation, PAI and PAA are not included in ITD/Ad-hoc Margin Runs.

- (b) *EOD Margin and Settlement Run*
 - (i) The EOD Margin and Settlement Run is the final ITD/Ad-hoc Day Margin and Settlement Run that completes by 24:00 local London time on that business day (the "**EOD Margin and Settlement Run**").
 - (ii) EOD Margin and Settlement Runs are calls in respect of initial margin as well as (i) in the case of ForexClear CTM Contracts, variation margin obligations and PAI; and (ii) in the case of ForexClear STM Contracts, NPV Payment obligations and PAA.
- (c) *ITD / Ad Hoc - Night Margin Run*
 - (i) ITD/Ad-hoc London overnight Margin Runs are initiated as and when dictated by the Schedule or as necessary, and are performed in the time period during which a PPS call cannot be made (the "**ITD/Ad-hoc Night Margin Run**").
 - (ii) ITD/Ad-hoc Night Margin Runs are calls in respect of the initial margin obligation only. The variation margin obligation, NPV Payment obligation, PAI and PAA are not included in ITD/Ad-hoc Night Margin Runs.

1.6.2 *Margin and Settlement Run Process*

- (a) Margin and Settlement Runs cover all registered ForexClear Contracts with the status "**NOVATED**".
- (b) Margin and Settlement Runs will be carried out for each ForexClear Contract and ForexClear Transaction (as the case maybe) until (and including) the later of:
 - (i) EOD Margin and Settlement Run on the Settlement Date; or
 - (ii) EOD Margin and Settlement Run after the Settlement Rate is published.
- (c) During every Margin and Settlement Run the Clearing House calculates the Collateral required in respect of the initial margin obligations and (i) in the case of an FXCCM who is party to ForexClear CTM Contracts, the Collateral required in respect of the variation margin obligations and PAI required to cover that FXCCM's relevant open ForexClear CTM Contracts; or (ii) in the case of an FXCCM who is party to ForexClear STM Contracts, the NPV Payments and the PAA required in respect of that FXCCM's relevant open ForexClear STM Contracts (each a "**Liability**" and together the "**Liabilities**"). For these purposes, liabilities in respect of the open ForexClear Contracts and ForexClear Transactions registered in an FXCCM's Proprietary Account, each of the FXCCM's Client Accounts (other than Indirect Gross Accounts) and each Indirect Gross Sub-Account within an Indirect Gross Account of such FXCCM will be calculated separately.

- (d) Each FXCCM's Liability:
- (i) in respect of the open ForexClear Contracts registered in an FXCCM's Proprietary Account, is offset against that FXCCM's non-cash collateral account (being a sub-account of the FXCCM's "H" collateral account) (for Collateral in respect of initial margin only) or funds in that FXCCM's "H" house cash account (being a sub-account of the FXCCM's "H" collateral account) (for variation margin/PAI/initial margin); and
 - (ii) in respect of the open ForexClear Contracts registered in a particular FXCCM's Client Account, is offset against the relevant non-cash collateral account (being a sub-account of the FXCCM's Client Account) (for Collateral in respect of initial margin only) or funds in the relevant "C" client cash account (being a sub-account of the FXCCM's Client Account) (for variation margin/PAI/initial margin).
- (e) FXCCMs are informed via email of their Liabilities as a percentage of their current total Collateral (such percentage being shown as a percentage of the aggregate Collateral in their cash and non-cash collateral account(s)) and are directed to the ForexClear Service portal (being a secure website made available to FXCCMs) (the "**ForexClear Service Portal**") which provides reports (at the times specified in Section 1.7.1 (*Margin and NPV Payment Liability Reports*)) informing FXCCMs of their (i) total Liabilities under the ForexClear Service; (ii) current total Collateral posted with the Clearing House for the ForexClear Service ~~(including any MCE, if any);~~; and (iii) Liabilities as a percentage of their current total Collateral (such percentage being shown as a percentage of the aggregate Collateral in their cash and non-cash collateral account(s)).
- (f) If following a Margin and Settlement Run an FXCCM is required to provide additional Collateral, this is also indicated by email and via the ForexClear Service Portal. In the case of ITD/Ad-hoc Margin and Settlement Runs, where an FXCCM's Liabilities exceed its available Collateral ~~and any MCE~~, then the Clearing House will issue a margin call for the amount of the shortfall plus 50% of the FXCCM's MER Buffer.

1.7 ForexClear Reporting

For purposes of reporting obligations to the CFTC, FXCCMs may only report details of ForexClear Contracts, including terminations and modifications to a ForexClear Contract, to an Approved LCH SDR. A list of Approved LCH SDRs is available on the Clearing House's website. In the event an FXCCM wishes to report details of ForexClear Contracts to a swap data repository that is not an Approved LCH SDR, the FXCCM must provide the Clearing House with reasonable prior notice of the date on which it wishes to report to such swap data repository.

Appendix II
FCM Procedures



FCM PROCEDURES OF THE CLEARING HOUSE

LCH LIMITED

(a) *Relationship with Position-Keeping Accounts*

Position-keeping Account	Financial Account				
C	Client	C	LCH	ForexClear	Client Segregated Depository Account used for Initial Margin Flows
	Client	L	LCH	ForexClear	Client Segregated Depository Account used for Variation Settlement Flows
H	House	H			Proprietary Account

The C account is a Cleared Swaps Customer Account as defined in Part 22 of the CFTC Regulations.

(b) *Other Financial Accounts*

The Clearing House may, at its discretion, open further financial accounts.

(c) *Default Fund (DF) Account*

Each FCM Clearing Member's Contribution is held in a separate financial account. The Default Fund account code is "F". Each FCM Clearing Member's ForexClear Contribution is held in an account that is separate from any financial account containing such FCM Clearing Member's Contribution relating to any other Business Categories of FCM Contracts.

2.2.7 *Novation and Registration*

An NDF is an FCM ForexClear Transaction (i.e. eligible for registration as an FCM ForexClear Contract) if it satisfies the FCM ForexClear Product Eligibility Criteria (set out in Part B of Schedule 2 to the FCM Product Specific Contract Terms and Eligibility Criteria Manual) at the Registration Time. Upon an FCM ForexClear Transaction being presented to the Clearing House for registration, the Clearing House will determine whether to accept or reject the FCM ForexClear Transaction within the required timeframe under ~~all~~ Applicable Law. Where the Clearing House determines to accept the FCM ForexClear Transaction, registration shall occur immediately and the FCM ForexClear Transaction shall be automatically replaced by two separate FCM ForexClear Contracts.

Prior to ~~registering~~ and as a condition to the registration of an FCM ForexClear Contract (except where such FCM ForexClear Contract results from an FCM ForexClear Transaction that is a Sub-Block Trading Venue Transaction), the Clearing House will require the FX FCM in whose name such FCM

ForexClear Contract is to be registered to provide and maintain sufficient Margin for its Liabilities (as defined in Section 2.2.18) (or its estimated Liabilities) (taking into account any MER Buffer ~~(as defined in Section 2.2.12(b)) and any MCE (as defined in Section 2.2.12(c)) made available by the Clearing House, if any) as a precondition to registration and/or ForexClear Tolerance, if any).~~ This Margin check process is referred to as the “**Incremental Risk Check**” (as defined in Section 2.2.8(b)).

If any FX FCM ~~does~~has not ~~have~~transferred sufficient Margin for its Liabilities or estimated Liabilities (taking into account any MER Buffer and ~~MCE provided by the Clearing House/or ForexClear Tolerance, if any) at the time of the relevant Incremental Risk Check, then any presented and unregistered FCM ForexClear Transaction that the FX FCM has been nominated to clear and that is~~ subject to Section 2.2.8(c), such ~~Incremental Risk Check~~ForexClear Transaction will be rejected.

Once ~~the~~an FCM ForexClear Transaction has passed the Validation Checks (as defined in Section 2.2.8(a)), and the Clearing House has determined to accept the FCM ForexClear Transaction for registration, the Clearing House will send a message confirming the registration of the FCM ForexClear Transaction as two FCM ForexClear Contracts (or one FCM ForexClear Contract and one Non-FCM ForexClear Contract, as applicable) ~~and~~, including a date stamp ~~of the relevant registration time to the entities specified in accordance with Section 2.2.8(a)(iii) (Trade Validation and Registration).~~ For the purpose of the Part III of the FCM Regulations, the time of dispatch of such message shall be the “**Registration Time**” of such FCM ForexClear Contract(s).

The definitive report of a registered FCM ForexClear Contract will be shown on the “**All Open Contracts**” report issued by ForexClear Reporting (as defined in Section 2.2.23).

If an FX FCM is declared a Defaulter, the Clearing House will not register any ForexClear Contracts in the name of the Defaulter (except pursuant to the Default Rules). ForexClear Transactions in respect of ~~non-defaulting~~Non-Defaulting FX FCMs will continue to be registered in accordance with, and subject to, the FCM Rulebook.

(a) *Trade Capture*

Once the FCM Approved Trade Source System receives the trade instructions from the FXPs who are parties to the trade, the FCM Approved Trade Source System matches both instructions (a “**trade**”). The FCM Approved Trade Source System validates the trade using the FCM ForexClear Product Eligibility Criteria as set forth in Part B to Schedule 2 to the FCM Product Specific Contract Terms and Eligibility Criteria Manual (the “**FCM ForexClear Eligibility Criteria**”) and will, if appropriate, present a single message containing the names of the FXPs who are parties to the trade and the terms of the trade to the Clearing House for registration and clearing, ~~—~~ (such matched trade ~~being known as~~, an “**FCM ForexClear Transaction**”).

The Clearing House will determine whether to accept or reject the FCM ForexClear Transaction within the required timeframe under Applicable Law. In respect of an FCM ForexClear Transaction which is:

- (i) an FCM Trading Venue Transaction, the Clearing House will notify the FX FCMs, the FCM Trading Venue and, ~~if the originating FCM Approved Trade Source System is different to the FCM Trading Venue,~~ the originating FCM Approved Trade Source System of the registration or rejection of the FCM ForexClear Transaction ~~(as applicable); and/or~~
- (ii) not an FCM Trading Venue Transaction, the Clearing House will notify the FX FCMs (via the originating FCM Approved Trade Source System or ClearLink API) of registration or rejection of the FCM ForexClear Transaction ~~(as applicable);~~

in each case within the required timeframe under ~~all~~ Applicable Law.

(b) *ForexClear FCM Approved Trade Source Systems*

Application for approved trade source system status shall be made in accordance with the policies published from time to time on the Clearing House's website. A list of FCM Approved Trade Source Systems currently approved by the Clearing House is available on the Clearing House's website. Where the Clearing House approves any additional FCM Approved Trade Source System, it will notify FCM Clearing Members via member circular.

FCM ForexClear Transactions presented through an FCM Approved Trade Source System must be in an acceptable message format, as prescribed by the Clearing House.

The Clearing House is not able to, and will not, verify the authorization of the source of any details of any FCM ForexClear Transaction reported to it for registration by an FCM Approved Trade Source System. The Clearing House shall have no liability in the event that any FX FCM suffers any loss through the unauthorized input of details into a system of an FCM Approved Trade Source System.

Notwithstanding the designation by the Clearing House of any system as an FCM Approved Trade Source System, the Clearing House makes no warranty (and will accept no liability) as to the effectiveness, efficiency, performance or any other aspect of the services provided by any FCM Approved Trade Source System or the timeliness or otherwise of the delivery of any FCM ForexClear Transaction details by that FCM Approved Trade Source System to the Clearing House. Such matters form part of the relationship between the FCM Clearing Members and that FCM Approved Trade Source System and the terms of such relationship may entitle the FCM Approved Trade Source

System to suspend the ability of an FX FCM to make submissions from time to time.

FX FCMs must not submit instructions to the Clearing House for trades which will not meet the FCM ForexClear Eligibility Criteria. The Clearing House will process any FCM ForexClear Transaction reported to it by an FCM Approved Trade Source System on an “as is” basis, and subject to the FCM Regulations and these FCM Procedures, will register any such FCM ForexClear Transaction on the basis of the data provided to it by the FCM Approved Trade Source System and approved by the relevant FCM Clearing Member. The Clearing House has no obligation to verify that the details received, properly reflect the trade entered into by the relevant Executing Parties.

The Clearing House accepts no liability for any error within or corruption of any data sent by an FCM Approved Trade Source System to the Clearing House or to an FCM Clearing Member or any delay in or failure of the transmission of such data to the Clearing House. In the event that the Clearing House registers any FCM ForexClear Contract on the basis of incorrect or corrupted data sent to it by an FCM Approved Trade Source System and accepted by an FCM Clearing Member, the FCM Clearing Member concerned shall be bound by the terms of such FCM ForexClear Contract, unless the FCM ForexClear Contract is subsequently cancelled in accordance with FCM Regulation 49 (*Cancellation of FCM ForexClear Contracts*).

FCM Clearing Members shall ensure that transaction details accepted for registration are accepted by appropriately authorized personnel. Apart from the foregoing acceptance, the Clearing House is not able to, and will not, verify the authorization of the source of any details of any transaction reported to it for registration by any FCM Approved Trade Source System. The Clearing House shall have no liability in the event that any FCM Clearing Member suffers any loss through the unauthorized acceptance of an FCM Notification.

2.2.8 *Trade Validation and Registration*

- (a) *Process flow description*
 - (i) The Clearing House performs a validation check on each trade presented by FXPs to ensure that each such trade meets: (A) the FCM ForexClear Product Eligibility Criteria and the Counterparty Technical Validation Check (as defined in Section 2.2.8(b)); (B) where applicable, the Incremental Risk Checks (as defined in Section 2.2.8(c)); and (C) where applicable, the Acceptance Validation Checks (as defined in Section 2.2.8(d)), in each case, required for FCM ForexClear Transactions (~~together~~collectively, the “**Validation Checks**”).
 - (ii) The Clearing House will create two trade records for an FCM ForexClear Transaction which passes the Validation Checks

and is accepted for clearing by the Clearing House: one for the FCM ForexClear Contract between the Clearing House and the relevant FX FCM and the other for the FCM ForexClear Contract between the Clearing House and the same or another FX FCM (or, where applicable, the Non-FCM ForexClear Contract between the Clearing House and the relevant ForexClear Clearing Member).

- (iii) In respect of an FCM ForexClear Transaction which is:
- (A) an FCM Trading Venue Transaction, the Clearing House will notify the FX FCMs, FCM Trading Venue and ~~and~~ (if the originating FCM ForexClear Approved Trade Source System is different to the FCM Trading Venue) the originating FCM ForexClear Approved Trade Source System of registration or rejection of the FCM ForexClear Transaction ~~(as applicable); and/or~~
 - (B) not an FCM Trading Venue Transaction, the Clearing House will notify the FX FCMs (via the originating FCM ForexClear Approved Trade Source System or ClearLink API) of registration or rejection of the FCM ForexClear Transaction ~~(as applicable);~~

in each case within the required timeframe under all Applicable Law.

- (iv) As provided in Section 2.2.7, in respect of messages confirming registration, the time of dispatch of such message shall be the Registration Time of that FCM ForexClear Contract.
- (v) The account (H or C) and sub-account (if applicable) into which each trade record is booked is derived from the BIC/unique identifier code within the message from the FCM Approved Trade Source System. The BIC links to the FX FCM reference data.
- (vi) Both new trade records arising out of the ForexClear Transaction have the same unique ForexClear ID (the “**ForexClear ID**”). Any further events or actions are applied on the basis of this ForexClear ID, to ensure consistency.

- (b) ~~“Counterparty Technical Validation Check.” The Clearing House checks the following in respect of counterparties to each trade presented by FXPs for clearing (i) are both must be (a) the parties to the submitted in trade FXPs? (ii) is particulars, (b) are each a Non-Defaulting FX FCM in whose name an FCM ForexClear Contract is to registered not a Defaulter? (iii) is each FX FCM in whose name an FCM ForexClear Contract is to registered and (c) approved by the Clearing House to clear the relevant trade type? (together, the “Counterparty Technical Validation Check”).~~

- (c) *Incremental Risk Checks*

The Clearing House will apply an “**Incremental Risk Check**” to each ~~individual~~ FCM ForexClear Transaction that is not a Sub-Block Trading Venue Transaction. The Incremental Risk Check uses a suitable approximation methodology to estimate an FX FCM's Liabilities (including the new FCM ForexClear Transaction) against available Margin (taking into account ~~any~~ MER Buffer and ~~MCE made available by the Clearing House/or ForexClear Tolerance~~, if any). However, any FCM ForexClear Transaction presented by ~~that an~~ FX FCM that is risk reducing (i.e., results in a reduction of that FX FCM's Liabilities) will always pass the Incremental Risk Check, even if the FX FCM does not have sufficient Margin for its Liabilities.

Each relevant FX FCM must pass the Incremental Risk Check in order for the Clearing House to register two FCM ForexClear Contracts (or one FCM ForexClear Contract and one Non-FCM ForexClear Contract, as applicable).

If either (or both) FX FCM(s) fail(s) the Incremental Risk Check(s), then the FCM ForexClear Transaction will be rejected immediately and a notification sent in accordance with Section 2.2.8(a)(iii).

- (d) *FCM Acceptance*

- (i) In the case of an FX FCM which has been nominated to register an FCM ForexClear Transaction on behalf of a third party Executing Party, the Clearing House will (only where such FCM ForexClear Transaction is not an FCM Trading Venue Transaction) provide notification to such FX FCM of the relevant FCM ForexClear Transaction and that it has been so nominated, via member reports, the ClearLink API or otherwise (“**FCM Notification**”). Where an FX FCM is nominated to clear both FCM ForexClear Contracts arising from the registration of an FCM ForexClear Transaction in the capacities described in this paragraph, such FX FCM will receive two separate FCM Notifications from the Clearing House in relation to such FCM ForexClear Transaction. All FCM Notifications shall be provided within the required timeframe under ~~all~~ Applicable Law. In all other cases, no FCM Notification will be provided to any FX FCM.

- (ii) In respect of an FCM ForexClear Transaction that is not an FCM Trading Venue Transaction, following receipt of an FCM Notification, an FX FCM may choose to grant or refuse consent to register the ForexClear Transaction. It is a condition for registration of such an FCM ForexClear Transaction that an FX FCM grants a separate consent (each, an "**FCM Acceptance**") in respect of each FCM Notification received by it in relation to the registration of such FCM ForexClear Transaction. The Clearing House has an automated system which it operates on each business day for the purposes of rejecting FCM ForexClear Transactions which have been presented for clearing, but in respect of which any FCM Acceptance has not been notified to the Clearing House prior to the LCH Cut-off Time. The "**LCH Cut-off Time**" in respect of an FCM ForexClear Transaction will be the expiry of the timeframe determined by the Clearing House. If an FX FCM has not notified the Clearing House of an FCM Acceptance by the LCH Cut-off Time, it will be deemed to have rejected the relevant FCM ForexClear Transaction. Any FCM Acceptance of an FCM ForexClear Transaction notified by an FX FCM to the Clearing House prior to the LCH Cut-off Time is irrevocable. Any FCM Acceptance notified by an FX FCM to the Clearing House after the LCH Cut-off Time shall be invalid.
- (iii) In circumstances where the registration of an FCM ForexClear Transaction is conditional upon one or more FCM Acceptance(s) being notified by the applicable FX FCM(s), the relevant FCM ForexClear Transaction shall be deemed to have been "submitted" to the Clearing House by each such FX FCM at the time when it notifies the Clearing House of its FCM Acceptance. In all other circumstances, an FCM ForexClear Transaction shall be "submitted" to the Clearing House by the applicable FX FCM upon being presented to the Clearing House for clearing by or on behalf of such FX FCM.
- (iv) The Clearing House will (where applicable) apply an "**Acceptance Validation Check**" in respect of an FCM ForexClear Transaction presented for clearing that is not an FCM Trading Venue Transaction in order to ensure that the Clearing House has received all required FCM Acceptances, in accordance with this Section 2.2.8(d).

(e) *Registration*

Once it is confirmed that an FCM ForexClear Transaction has passed the applicable Validation Checks for the relevant FX FCMs, and the Clearing House has determined to accept the FCM ForexClear Transaction for registration, the Clearing House:

- (i) registers the FCM ForexClear Transaction as two FCM ForexClear Contracts (or one FCM ForexClear Contract and

one Non-FCM ForexClear Contract, as applicable) and changes the status for the FCM ForexClear Transaction to “NOVATED”; and

- (ii) acknowledges the FCM ForexClear Contract status and sends a notification in accordance with Section 2.2.8(a)(iii) that the FCM ForexClear Transaction is “NOVATED”.

(f) *Trade Rejection*

Trades presented for registration that do not meet the FCM ForexClear Product Eligibility Criteria or any other requirement for registration under the FCM Rulebook, including a trade (i) presented by or on behalf of an FCM ForexClear Clearing Member in respect of a third party Executing Party where such trade was executed on an FCM Trading Venue that was not, at the time of execution of such trade, an FCM Eligible Trading Venue in respect of such FCM ForexClear Clearing Member, (ii) presented by or on behalf of an FCM ForexClear Clearing Member that was executed on a trading venue or facility that had not, at the time of the execution of such trade, been approved by the Clearing House as an FCM Trading Venue, (iii) which contains invalid or incomplete message data, or (iv) that is not a Sub-Block Trading Venue Transaction and with respect to which the Clearing House has not received sufficient Margin (taking into account ~~any~~ MER Buffer and ~~MCE provided by the Clearing House/or ForexClear Tolerance~~, if any) will, in each case, be rejected.

If an FCM ForexClear Transaction is presented to the Clearing House for registration and rejected, such FCM ForexClear Transaction may be re-presented for registration in the form of a new FCM ForexClear Transaction, but with the same economic terms in accordance with, and subject to, the FCM Rulebook and ~~all~~ Applicable Law, and such FCM ForexClear Transaction will, for the purposes of the FCM Rulebook and upon such re-presentation, constitute a new FCM ForexClear Transaction.

(g) *Manual Trade Rejection, Novation and Cancellation (Exceptional Event)*

From time to time, as an exceptional event, it may be necessary for the Clearing House to (i) reject a trade presented for registration, (ii) register an FCM ForexClear Transaction, or (iii) accept or reject a cancellation request for an FCM ForexClear Contract or an FCM ForexClear Transaction, in each case, manually prior to a Margin Run (e.g. in the case of a Default, when an FCM ForexClear Transaction needs to be registered immediately to expedite the hedging and auction process or to reject an FCM ForexClear Transaction received from an FX FCM which is a Defaulter).

The Clearing House acknowledges the action:

- (i) in respect of trades being manually rejected or manually registered, by notifying the entities specified in Section 2.2.8(a)(iii) of such rejection or registration (as applicable); and
- (ii) in respect of trades being manually cancelled, by sending a message to the FCM Approved Trade Source System that it is “CANCELLED”.

(h) *Trade Cancellation*

The Clearing House accepts cancellation messages from Executing Parties against both non-novated trades (FCM ForexClear Transactions) and novated trades (FCM ForexClear Contracts).

With respect to any FCM ForexClear Contract, cancellation messages may be submitted via the FCM Approved Trade Source System until such FCM ForexClear Contract is “fixed” (i.e., when its Settlement Rate has been determined on the relevant Valuation Date).

A successful cancellation message results in a “CANCELLED” status message if the FCM ForexClear Transaction or the FCM ForexClear Contract (as the case may be) is cancelled during the Opening Hours. The status messages are sent from the Clearing House to the FX FCM via the FCM Approved Trade Source System.

(i) *Process flow description*

The Clearing House accepts trade cancellation instructions from the FCM Approved Trade Source System for FCM ForexClear Transactions or FCM ForexClear Contracts (as the case may be) that have previously been submitted to the FCM ForexClear Service. Cancellation instructions must include the ForexClear ID.

The Clearing House checks that the cancellation instruction contains a valid ForexClear ID which relates to: (a) an FCM ForexClear Transaction or FCM ForexClear Contract (as the case may be) that has not been previously cancelled; and (b) in the case of an FCM ForexClear Contract only, an FCM ForexClear Contract with respect to which the relevant Valuation Date has not yet occurred.

Where a trade has already been rejected (as a result of having failed a Counterparty Technical Validation Check), the FCM ForexClear Service sends a “CANCEL REJECTED” message to the FCM Approved Trade Source System for the relevant FXPs.

All trade cancellation instructions must pass the Incremental Risk Check. If any FX FCM does not have sufficient Margin for its Liabilities or estimated Liabilities (taking into account ~~any~~ MER Buffer and ~~MCE provided by the Clearing House/or ForexClear Tolerance~~, if any) at the time of the relevant Incremental Risk Check, then any ForexClear trade cancellation instruction to which it is a party

will be rejected immediately. However, any ForexClear trade cancellation instruction that is risk reducing (i.e. results in a reduction of that FX FCM's Liabilities) will always pass the Incremental Risk Check, even if the FX FCM does not have sufficient Margin for its Liabilities.

(j) *Trade Amendment*

No amendment of the financial terms of an FCM ForexClear Transaction or FCM ForexClear Contract is permitted. FX FCMs who wish to change the FCM Client information on a ForexClear Transaction should contact ForexClear Business Operations at 0207 426 3729 for further information.

(k) *Valuation Date Event Management*

The Clearing House is the Calculation Agent and will store and apply the Settlement Rate Option and the Valuation Date for each FCM ForexClear Contract.

On the Valuation Date with respect to each FCM ForexClear Contract, the Settlement Rate will be retrieved as set forth ~~in paragraph (j)~~ below. The Market Data provider for Settlement Rates is Reuters.

The FCM ForexClear Service applies the relevant Settlement Rate to FCM ForexClear Contracts using the:

- (i) Settlement Rate Option source code; and
- (ii) Valuation Date.

The Clearing House applies the Settlement Rate to all relevant FCM ForexClear Contracts at a predefined time following its publication.

The Clearing House calculates the Settlement Currency Amount in the Settlement Currency per FCM ForexClear Contract. FX FCMs can retrieve the Settlement Rate and Settlement Currency Amount in the Settlement Currency via ForexClear Reporting on the ForexClear Service Portal and on MemWeb, which are internet services onto which information is loaded and can be accessed by FX FCMs.

(l) *FX Package Transactions*

In certain circumstances an FCM Approved Trade Source System may present to the Clearing House, in a single submission, a group of two or more FCM ForexClear Transactions for simultaneous registration (such group of FCM ForexClear Transactions, an “**FX Package Transaction**”). An FX Package Transaction must be identified to the Clearing House at the time of its presentation in the format prescribed by the Clearing House. Where the FX Package Transaction is not presented in the prescribed format, each constituent FCM ForexClear Transaction within the FX Package Transaction will be rejected.

2.2.13 ***Additional Margin, ForexClear Tolerance, MER Buffer, ~~ACE~~Completion Margin and Intraday Margin Calls***

(a) *Additional Margin*

The Clearing House may require an FX FCM to furnish additional amounts of Margin (in addition to Initial Margin) as security for the performance by an FX FCM of its obligations to the Clearing House in respect of FCM ForexClear Contracts to which such FX FCM is a party in accordance with FCM Regulation 14 (*Margin and Collateral*). This may be required from time to time where, in the opinion of the Clearing House, the risk inherent in FCM ForexClear Contracts to which such FX FCM is a party is not adequately covered by Initial Margin. This may cover instances where stress testing losses under various scenarios provided in the ForexClear Default Fund Supplement have increased.

(b) *Minimum Excess Requirement Buffer (“MER Buffer”)*

To facilitate the intraday registration of FCM ForexClear Contracts, at each EOD Margin Run, the Clearing House will call from each FX FCM, separately in respect of its Proprietary Account and each of its FCM Client Sub-Accounts, an amount of IM ~~referred to as “Minimum Excess Requirement Buffer” (“MER Buffer”)~~ in respect of ~~that FX FCM’s~~ and its FCM Clients' potential intraday Liabilities (as defined below in Section 2.2.18) for the following day ~~(“MER Buffer”)~~, provided that the Clearing House shall not call MER Buffer from an FX FCM that (i) opted-in to ForexClear Tolerance in accordance with paragraph (c) below and (ii) opted-out of MER Buffer (the form and manner of such “opt-out” notice shall be prescribed by the Clearing House from time to time). MER Buffer is part of the FX FCM's Required Margin. An FCM's MER Buffer is calculated in respect of an FCM's Proprietary Account and each of its FCM Client Sub-Accounts, and Margin furnished in respect of MER Buffer is credited to each account (as applicable) as IM. Notwithstanding the foregoing, for purposes of calculating a given FCM's MER Buffer, the Clearing House may from time to time, and in its sole discretion, exclude an FX FCM's given FCM ForexClear Suspension Sub-Accounts from such calculation.

The required amount of MER Buffer for each applicable account of an FX FCM is expressed as a percentage of start-of-day portfolio IM for such account. The MER Buffer for each account is calibrated daily based on recent activity within the relevant account such that higher levels of intraday trade volumes lead to a proportionally higher MER Buffer requirement and vice versa. The MER Buffer percentage is calculated as a given percentile of intraday peak relative IM changes over a given number of historical business days.

The parameters of ~~the MER Buffer model~~ are: MER percentile, MER look-back period, relative MER cap and absolute MER floor. The

values of these parameters are calibrated based on the quantitative analysis of the FX FCM's IM history across the ForexClear Service.

As FCM ForexClear Contracts are registered in an FX FCM's relevant accounts, the Clearing House will, in accordance with the Margin Run process, calculate the FX FCM's intraday Liabilities (or, in the case of an Incremental Risk Check, the FX FCM's estimated Liabilities), taking into account any IM posted as MER Buffer in the applicable account.

At each EOD Margin Run, the Clearing House will recalculate and call the FCM's Required Margin, which includes MER Buffer for all accounts.

~~(e) Mutualized Credit Extension (“MCE”)~~

~~(c) If an FX FCM has insufficient Margin attributed~~ForexClear Tolerance

In order to an account to enable facilitate the registration of further FCM ForexClear Contracts in by FX FCMs, the Clearing House may, in its sole discretion, provide FX FCMs with temporary “tolerance” in the form of initial margin forbearance (“ForexClear Tolerance”). In the event an FX FCM wishes to utilize ForexClear Tolerance, it must provide notice to the Clearing House (the form and manner of such FCM Client Sub Account or its Proprietary Account, then the Clearing House may make available to an FX FCM intraday credit (in the form of intraday Initial Margin forbearance) by way of a Mutualized Credit Extension (“MCE”) to enable the FX FCM notice shall be prescribed by the Clearing House from time to register further time). FX FCMs who are approved to utilize ForexClear Tolerance may choose not to utilize MER Buffer in connection with the registration of FCM ForexClear Contracts. An FX FCM may utilize MCE intraday on a one to one basis (for the avoidance of doubt, the utilization of MER Buffer is compulsory for FX FCMs that do not opt-in to ForexClear Tolerance).

The Clearing House may apply ForexClear Tolerance between Margin Runs in an amount equal to the value of the IM Collateral that would have been required to be transferred by the FX FCM to the Clearing House to cover that FX FCM's the relevant Liabilities (or, in the case of Incremental Risk Checks, the FX FCM's estimated Liabilities). The amount of the MCE made available to an FX FCM in aggregate during any one day must not exceed an amount that is the lesser of: (a) 50 per cent. of the ForexClear MCE Default Fund Buffer; or (b) the sum of) to facilitate the FX FCM's IM and ForexClear Contribution. The amount of the “ForexClear MCE Default Fund Buffer” is currently zero and therefore the Clearing House will not provide MCE to any FX FCM until further notice.

registration of FCM ForexClear Contracts. For the avoidance of doubt, MCEForexClear Tolerance is provided in the form of intraday Initial

~~Margin~~temporary initial margin forbearance and an FX FCM's utilization of MCE~~FCM's utilization of ForexClear Tolerance~~ does not give rise to any payment or transfer of Collateral by the Clearing House ~~nor does it~~ result in any use of default fund resources (except following a Default).

The Clearing House will determine, in its sole discretion, the maximum value of the ForexClear Fund Amount (except in eventsTolerance (which may be zero) that it will make available to an FX FCM from time to time ("ForexClear Tolerance Limit"). The Clearing House will notify each FX FCM of its ForexClear Tolerance Limit and will, as soon as reasonably practicable, notify an FX FCM following any adjustment to the amount of default).

~~All MCE credit extended on any given day shall be revoked at the close of business on such day (unless revoked earlierits ForexClear Tolerance Limit. Except where the Clearing House exercises its right to reduce an FX FCM's ForexClear Tolerance Limit in accordance with the following paragraph). As part of each EOD Margin Runforegoing, each FXCCM utilizing ForexClear Tolerance shall have an equal ForexClear Tolerance Limit.~~

The Clearing House may require an FX FCM to transfer Collateral to the Clearing House in respect of any utilization of ForexClear Tolerance at any time and without prior notice to the FX FCM. Without limiting the foregoing, the Clearing House will call IM from each FX FCM to replace any utilized MCE and that FX FCM's MCE will be reset for the following day (assuming such FX FCM has satisfied any margin calls). for Collateral to replenish the ForexClear Tolerance utilized by an FX FCM at (i) the last ITD/Ad-hoc Day Margin Run and EOD Margin Run of each Business Day and (ii) in the event an FX FCM utilizes at least 75% of its ForexClear Tolerance during a business day, at the next relevant ITD/Ad-hoc Day Margin Run. Any failure of an FX FCM Clearing Member to satisfy an IMa call for Collateral relating to the replacement of MCE constitutes a default by such FCM Clearing Member just as any failure by an FCM Clearing Member to satisfy any other type of IM call constitutes a defaultForexClear Tolerance may give rise to a Default by such FX FCM.

~~The MCE is made available at the Clearing House's sole discretion. In particular (but without limitation), the Clearing House may refuse to extend MCE to any or all FX FCMs on risk management grounds, and may at any time require an FXCCM to provide IM in place of any utilized MCE.~~The Clearing House will not apply ForexClear Tolerance for FCM ForexClear Contracts with a Trade Date earlier than the previous Business Day.

(d) Completion Margin.

The Clearing House shall calculate and call each FX FCM for “completion margin.” Completion margin is a component of each FX FCM’s initial margin obligation, and represents potential increases in an FX FCM’s initial margin obligations due to position changes resulting from next-day fixing. Completion margin is calculated as the incremental difference between an FX FCM’s aggregate initial margin obligations on its FCM ForexClear Contracts and its initial margin obligations in relation to FCM ForexClear Contracts due to fix the next Business Day.

~~(d)~~(e) Intra-day Margin Calls

In accordance with the Clearing House's FCM Regulations, the Clearing House is entitled to make additional margin calls for furnishing of Margin on the same day (intra-day margin calls) where it is considered necessary. Intra-day margin calls can be called at any time throughout the business day (08:30 to 21:00 hours, London time). Intra-day margin calls will usually be made via the Protected Payments System (PPS) (see Section 2.2.24(c)).

In certain circumstances the Clearing House may wish to make a call for additional Margin after the closure of UK PPS facilities at 16:00 hours, London time. In this event the Clearing House will require payment of additional funds through PPS facilities in the USA (see Section 3.2). Members must ensure, in these circumstances, that they are in a position to fund such calls through their nominated US PPS account within one hour of the call.

2.2.14 ***Initial Margin Management Events Service (“IMMES”)***

IMMES aims to find risk and IM reducing FCM ForexClear Contracts and ForexClear Contracts among participating FXCCMs. IMMES can be run on all Currency Pairs that are cleared through the FCM ForexClear Service, although the primary focus will be on those Currency Pairs that contribute to the largest IM requirement. IMMES is available in respect of an FX FCM's house account only.

FX FCMs who wish to obtain further information about, or to participate in, IMMES should contact ForexClear Business Operations at 0207 426 7527. To be eligible to participate in IMMES, an FX FCM must enter into an IMMES agreement with the Clearing House (the “**IMMES Agreement**”).

(a) *Step-by-step details*

The Clearing House usually conducts the IMMES at least monthly.

A reminder that there is an IMMES run taking place is sent out the week before to each FXCCM which is a party to an IMMES

Agreement with LCH and each FXCCM is asked to confirm their participation.

On the day of the scheduled IMMES run, the Clearing House analyses all participating FXCCMs' profiles to find FCM ForexClear Contracts and ForexClear Contracts with equivalent and opposite delta values by tenor and Currency Pair to compile a list of offsetting suggested trades that are mutually beneficial in terms of IM reduction (the “**IMMES Trades**”).

The Clearing House then analyses the relevant FX FCM's FCM ForexClear Contract portfolios with the IMMES Trades and determines the change in NPV, IM, delta and zero yield sensitivity from the IMMES Trades.

The FXCCMs on either side of the trades are advised of the economic details of the IMMES Trades.

If the two FXCCMs agree to undertake the IMMES Trades, the Clearing House will then put them in touch with each other. The FXCCMs will enter into the bilateral IMMES Trades and submit them to the Clearing House through the FCM Approved Trade Source System for registration.

2.2.15 *Intra-Day Margin Call: Collateral Management*

(a) *General – Intra-day Margining*

Following an intra-day margin call (except as notified otherwise by an FX FCM at the time of an intra-day margin call), the Clearing House will deduct cash, in the appropriate currency, directly from the relevant FX FCMs PPS account to cover that intra-day margin call.

Cash payments in respect of intra-day Margin are accepted only in USD by the Clearing House.

Each FCM Clearing Member must ensure that it has sufficient cash funds in place with their PPS bank(s) in order to avoid any intra-day liquidity issues.

2.2.16 *General Margining Process*

A “**Margin Run**” is the process by which the Clearing House calculates an FX FCM's Initial Margin requirement (if any) and, during an EOD Margin Run, its Variation Settlement and PAA requirements (together, its “**Transfer Requirements**”) and applies that FX FCM's Margin to satisfy the Transfer Requirements for that FX FCM in respect of the FCM ForexClear Contracts within that FX FCM's portfolio.

2.2.17 *Types of Margin Runs*

There are three types of Margin Run:

(a) *ITD / Ad Hoc – Day Margin Run*

ITD/Ad-hoc London daytime Margin Runs are initiated as and when dictated by the schedule published by the Clearing House and notified to FX FCMs from time to time (the “**Schedule**”) or as necessary, and are performed in the time period during which a PPS call can be made (the “**ITD/Ad-hoc Day Margin Run**”). PPS times are published on the Clearing House's website at: <http://www.lch.com/risk-collateral-management/collateral-management/protected-payments-system>.

ITD/Ad-hoc Margin Runs are calls in respect of Initial Margin only. Variation Settlement and PAA are not included in ITD/Ad-hoc Margin Runs.

(b) *EOD Margin Run*

The EOD Margin Run is the final ITD/Ad-hoc Day Margin Run that completes by 24:00 hours, London time, on that business day (the “**EOD Margin Run**”).

EOD Margin Runs are calls in respect of Initial Margin as well as Variation Settlement, NSA and PAA.

(c) *ITD / Ad Hoc - Night Margin Run*

ITD/Ad-hoc London overnight Margin Runs are initiated as and when dictated by the Schedule or as necessary, and are performed in the time period during which a PPS call cannot be made (the “**ITD/Ad-hoc Night Margin Run**”).

ITD/Ad-hoc Night Margin Runs are calls in respect of Initial Margin only. Amounts that are anticipated to be owed in respect of Variation Settlement, NSA and PAA may be considered in the determination of the amount of Initial Margin called in such ITD/Ad-hoc Night Margin Run.

2.2.18 *Margin Run Process*

Margin Runs cover all registered FCM ForexClear Contracts with the status “NOVATED”.

Margin runs will be carried out for each FCM ForexClear Contract and FCM ForexClear Transaction (as the case may be) until (and including) the later of:

- (a) EOD Margin Run on the Settlement Date; or
- (b) EOD Margin Run after the Settlement Rate is published.

During every Margin Run the Clearing House calculates the Initial Margin required and (where applicable) the Variation Settlement and PAA required to cover each FX FCM's relevant open FCM ForexClear Contracts and FCM ForexClear Transactions (each a “**Liability**” and together the “**Liabilities**”).

Each FX FCM's Liability is offset against that FX FCM's non-cash Collateral account (being a sub-account of the FX FCM's financial account) (for IM only) or funds in that FX FCM's cash account (being a sub-account of the FX FCM's financial account) (for VS/PAA/IM). Initial Margin will always be a Liability (payable to the Clearing House) and Variation Settlement, NSA and PAA may be a cash posting or a Liability (payable by, or to, the Clearing House, respectively).

FX FCMs are informed via email of their Liabilities as a percentage of their current total cover (such percentage being shown as a percentage of the aggregate cover in their cash and non-cash Collateral account(s)) and are directed to the ForexClear Services portal (being a secure website made available to FXCCMs) (the “**ForexClear Service Portal**”) which provides reports (at the times specified in Section 2.2.23) informing FX FCMs of their (i) total Liabilities under the FCM ForexClear Service; (ii) current total cover posted with the Clearing House for the FCM ForexClear Service (including ~~any MCEMER Buffer and/or ForexClear Tolerance~~, if any); and (iii) Liabilities as a percentage of their current total cover (such percentage being shown as a percentage of the aggregate cover in their cash and non-cash Collateral account(s)).

If following a Margin Run an FX FCM is required to provide additional Collateral or funds, this is also indicated by email and via the ForexClear Service Portal. In the case of ITD/Ad-hoc Margin Runs, where an FX FCM's Liabilities exceed its available cover and any ~~MCEMER Buffer and/or ForexClear Tolerance~~, then the Clearing House will issue a margin call for the amount of the shortfall plus 50 per cent. of the FX FCM's MER Buffer amount.

2.2.19 **Compression**

- (a) Pursuant to FCM Regulation 49(1) (*Registration of FCM ForexClear Contracts; Compression; ForexClear Accounts*), an FCM Clearing Member may compress existing FCM ForexClear Contracts in accordance with that FCM Regulation. There are two options available to an FCM Clearing Member that wishes to compress FCM ForexClear Contracts:
 - (i) an FCM Clearing Member can request that all FCM ForexClear Contracts entered into (i) on behalf of a designated FCM Client and in respect of a particular FCM Client Sub-Account (including an FCM ForexClear Suspension Sub-Account), or (ii) on such FCM Clearing Member's own behalf, be considered for compression by the Clearing House. Such a request shall be reconsidered by the Clearing House automatically each day (and the results notified to the FCM Clearing Member after the applicable scheduled compression run) until the FCM Clearing Member notifies the Clearing House to discontinue such compression of FCM ForexClear Contracts. FCM Clearing Members should contact the Clearing House's

Appendix III
General Regulations



**GENERAL REGULATIONS OF
LCH LIMITED**

"ForexClear Swap STM Contract"

means a ForexClear Swap Contract that is either (i) registered at the Clearing House as a ForexClear Swap STM Contract pursuant to Regulation 91, (ii) converted into a ForexClear Swap STM Contract by the Clearing House pursuant to Regulation 106A, or (iii) a ForexClear Swap STM Contract through novation pursuant to Regulation 12(b), in each case the terms of which therefore include the ForexClear Swap STM Terms

"ForexClear Swap STM Terms"

means the part of the ForexClear Swap Contract Terms designated as the ForexClear Swap STM Terms by the Clearing House from time to time

"ForexClear Swap Transaction"

means a contract, meeting the applicable ForexClear Eligibility Criteria for registration as a ForexClear Swap Contract, entered into for and on behalf of two ForexClear Option Clearing Members, of which particulars are deemed to be presented to the Clearing House for registration in the name of those ForexClear Clearing Members in accordance with the Regulations.

"ForexClear Tolerance"

has the meaning assigned to it in the Procedures

"ForexClear Transaction"

means a ForexClear NDF Transaction, a ForexClear Spot Transaction, a ForexClear Deliverable Forward Transaction a ForexClear Option Transaction or a ForexClear Swap Transaction (as applicable)

"ForexClear Unfunded Contribution"

has the meaning assigned to it in Rule F8 of the ForexClear Default Fund Supplement

"ForexClear Unfunded Contribution Notice"

has the meaning assigned to it in Rule F8 of the ForexClear Default Fund Supplement

"ForexClear Voluntary Payment"

has the meaning assigned to it in Rule F10 of the ForexClear Default Fund Supplement

"ForexClear Voluntary Payment Notice"

has the meaning assigned to it in Rule F10 of the ForexClear Default Fund Supplement

"Fund Amount"

in relation to the Equities Business and the Listed Interest Rates Business, has the meaning given to the term "Fund Amount" in the Supplement relating to each such Business and includes such amounts and the ForexClear Fund Amount, the General Fund Amount, the RepoClear Segregated Fund Amount and/or the Rates Service Fund Amount as applicable

"Member" or "Clearing Member"

- (a) subject to (b) means an undertaking (including a firm or company) which is entitled to be party to Contracts with the Clearing House in accordance with a Clearing Membership Agreement and the Procedures or a Co-operating Clearing House, where so agreed with the Co-operating Clearing House (as applicable). For the avoidance of doubt, the terms "**Member**" and "**Clearing Member**" for the purposes of these Regulations, Default Rules and Procedures, do not mean a shareholder of LCH Limited or of any member of LCH Group
- (b) "Clearing Member" includes or means (as the case may be) FCM Clearing Member for the purpose of the Default Rules (including the Rates Service DMP Annex and the ForexClear DMP Annex), the FCM Default Fund Agreement and any other document, rule or procedure as specified by the Clearing House from time to time

"Member Compression Cycle"

means a Multilateral Compression Cycle requested by two or more SwapClear Clearing Members and agreed to by the Clearing House in relation to eligible SwapClear Contracts held by those requesting SwapClear Clearing Members. For the avoidance of doubt, a Member Compression Cycle will not involve any ACSP

"MER Buffer"

has the meaning assigned to it in the Procedures

"MiFID II"

means the recast Markets in Financial Instruments Directive (Directive 2014/65/EU), Regulation (EU) No. 600/2014 of the European Parliament and the Council of 15 May 2014 and all related implementing or supplementary legislation and technical standards, as amended from time to time

"Minimum ForexClear Contribution"

means USD 5,000,000

"Minimum Non-Tolerance SwapClear Contribution"

means £10,000,000 (which, for the avoidance of doubt, excludes the £3,000,000 minimum amount payable by an SCM in respect of the SwapClear Tolerance Contribution Amount);

"Minimum RepoClear Contribution"

means EUR 2,500,000

REGULATION 11 CLIENT CLEARING BUSINESS

- (a) The Services are provided by the Clearing House to Clearing Members. Any Clearing Member who wishes to offer Client Clearing Services in respect of a Service to its clients shall apply to the Clearing House and obtain the approval of the Clearing House before first offering such Client Clearing Services in respect of such Service. Any Client Clearing Services related services which are offered by a Clearing Member prior to obtaining the approval of the Clearing House shall not be treated as Client Clearing Services and the clients of the Clearing Member receiving such services shall not be treated as Clearing Clients. In accordance with the requirement under Article 39(7) of EMIR the Clearing House has published the Account Information Documents which together contain information regarding the levels of protection and account segregation which the Clearing House provides and the costs associated with such levels of segregation. The Account Information Documents are available on the Clearing House's website and are also made available to Clearing Members and Clearing Clients upon request.
- (b) Following the receipt of an application from a Clearing Member pursuant to paragraph (a) above, the Clearing House will confirm to a Clearing Member whether or not it is an Exempt Client Clearing Member.
- (c) Each Clearing Member which is designated by the Clearing House as an Exempt Client Clearing Member undertakes and agrees with the Clearing House on the following terms:
- (i) such Exempt Client Clearing Member shall pay or deliver (as applicable) to or to the order of the Clearing House each of the Account Balances relating to those of its Clearing Clients whose Relevant Contracts are:
- (A) transferred to; or
- (B) terminated and closed out and new contracts entered into on equivalent terms with,
- a Backup Clearing Member in accordance with the Client Clearing Annex (each such obligation of the Exempt Client Clearing Member being accelerated so as to become immediately due and payable at the time of the relevant transfer or termination and close out);
- (ii) such Exempt Client Clearing Member shall pay or deliver (as applicable) to or to the order of the Clearing House each of the Client Clearing Entitlements relating to those of its Individual Segregated Account Clearing Clients, Indirect Gross Account Clearing Clients, Custodial Segregated Clients, Affiliated Omnibus Segregated Clearing Clients and Identified Omnibus Segregated Clearing Clients, in each case, whose Relevant Contracts are closed out and liquidated in accordance with the Client Clearing Annex (each such obligation of the Exempt Client Clearing Member being accelerated so as to become immediately due and payable at the time of the relevant close out and liquidation); and

- (A) one or more Indirect Gross Accounts; and/or
 - (B) one or more Indirect Net Accounts;
- (ii) [*intentionally left blank*];
 - (iii) the Clearing Member shall, before providing the relevant Client Clearing Services to the relevant Clearing Client, ensure that each relevant Indirect Clearing Client has been provided with or has been directed to a copy of the Client Clearing End-User Notice; and
 - (iv) the Clearing Member acknowledges that a Clearing Client that is an Indirect Net Account Clearing Client or an Indirect Gross Account Clearing Client acting in respect of its Indirect Clearing Clients may also be an Omnibus Segregated Clearing Client, an Individual Segregated Account Clearing Client or a Custodial Segregated Client acting for its own account and that the provisions of the Rulebook shall apply separately in respect of each capacity in which a Clearing Client may act.
- (l) The fees and charges applied by the Clearing House to Clearing Members in respect of the provision, maintenance and administration of Individual Segregated Accounts, Indirect Gross Accounts, Custodial Segregated Accounts and each type of Omnibus Segregated Account shall be as set out in the Clearing House's Account Information Documents.
 - (m) The Total Required Margin Amount relating to each Client Account of a Clearing Member will be calculated by the Clearing House and the obligation to provide Collateral in respect of such margin obligations will be discharged by:
 - (i) if and to the extent that there is Collateral available in the relevant Client Account, deduction by the Clearing House of amounts from such Collateral;
 - (ii) if the relevant Client Account is an Individual Segregated Account, the Clearing House applying a Cross-ISA Client Excess Deduction;
 - (iii) if the relevant account is a Client Account opened in connection with ForexClear Client Clearing Business and there is insufficient Collateral available in that Client Account, the allocation by the Clearing House of MER Buffer and then ForexClear Tolerance, in each case to the extent available;
 - ~~(iii)(iv)~~ if the relevant account is a Client Account opened in connection with SwapClear Client Clearing Business and there is insufficient Collateral available in that Client Account, allocation by the Clearing House of Client Buffer (to the extent available);
 - ~~(iv)(v) where applicable,~~ if the relevant account is a Client Account opened in connection with SwapClear Client Clearing Business and there is insufficient Client Buffer available in relation to that Client Account, the Clearing House providing temporary tolerance in the form of SwapClear Tolerance; and

Appendix IV
FCM Regulations



FCM REGULATIONS OF THE CLEARING HOUSE

LCH LIMITED

Class	Parts 30 and 190 of the CFTC Regulations.
“Foreign Futures/Options Contract”	means the type of contract which is either (i) a contract for the purchase or sale of a commodity for future delivery made, or to be made, on or subject to the rules of a foreign board of trade, (ii) an option on any such contract or (iii) any similar type of contract, and which, in the case of any of the foregoing, requires an FCM to hold such contract (and maintain any related margin) pursuant to CFTC Rule 30.7 if cleared by an FCM for a 30.7 customer.
“Foreign Futures Product”	means a Product that constitutes a Foreign Futures/Options Contract. Such Products are: FCM Listed Interest Rates Contracts.
“ForexClear Clearing Member”	means a person who is designated as such by the Clearing House pursuant to the UK General Regulations and who is not an FCM Clearing Member.
“ForexClear Contribution”	means, in relation to the Default Rules, the meaning assigned to it in rule 16 of the Default Rules.
“ForexClear DMP”	has the meaning assigned to it in the ForexClear DMP Annex of the Default Rules.
<u>“ForexClear Tolerance”</u>	<u>has the meaning assigned to it in the FCM Procedures.</u>
“Futures Account Class”	means the account class for futures accounts (as defined in CFTC Regulation 190.01(a)(i)) for purposes of Part 190 of the CFTC Regulations and Section 4d(a) of the CEA.
“Futures/Options Contract”	means the type of contract which is either (i) a contract for the purchase or sale of a commodity for future delivery that is traded on or subject to the rules of an Exchange, (ii) an option on any such contract or (iii) any similar type of contract, and which, in the case of any of the foregoing, is required to be segregated (along with any related margin) pursuant to Section 4d(a) of the CEA if cleared by an FCM for a customer.
“Futures Product”	means a Product which constitutes a Futures/Options Contract.
“Governmental Authority”	means any: (a) governmental, inter-governmental, parliamentary or supranational body, entity, agency or department; or (b) regulatory, self-regulatory or other authority, in each case, which has jurisdiction over the Clearing House

Eligibility Criteria Manual.

“Margin”	means, with respect to a particular account or accounts of an FCM Clearing Member with the Clearing House, the Collateral value that is attributable to such account or accounts as margin for the margining of FCM Contracts in such account or accounts, as determined by the Clearing House in accordance with the FCM Rulebook.
“Member Compression Cycle”	means a Multilateral Compression Cycle requested by two or more Compression Clearing Members and agreed to by the Clearing House in relation to eligible FCM SwapClear Contracts held by those requesting Compression Clearing Members. For the avoidance of doubt, a Member Compression Cycle will not involve any ACSP.
“Multilateral Compression”	means the exercise in which some or all of the FCM SwapClear Contracts or Non-FCM SwapClear Contracts, as applicable, submitted by two or more Compression Clearing Members (either on their own behalf or on behalf of an Authorised Compression Client), as applicable, for inclusion in a Multilateral Compression Cycle are wholly terminated and, where relevant, replaced with other FCM SwapClear Contracts or Non-FCM SwapClear Contracts.
“Multilateral Compression Cycle”	means the process of Multilateral Compression in accordance with a Compression Proposal, whether by way of an ACSP Compression Cycle or a Member Compression Cycle.
“MCE”	has the meaning assigned to it in Section 2.2.12(e) of the FCM Procedures.
“MER”	Has the meaning assigned to it in Section 2.1.3(e) 2.2.13(b) of the FCM Procedures.
“Nominated FCM Client”	has the meaning assigned to it in the FCM Procedures.
“Non-FCM Clearing Member”	means either a SwapClear Clearing Member, a ForexClear Clearing Member or a Listed Interest Rates Clearing Member, as applicable.
“Non-FCM Contract”	means either a Non-FCM SwapClear Contract, a Non-FCM ForexClear Contract or a Non-FCM Listed Interest Rates Contract, as applicable.
“Non-FCM ForexClear Contract”	means a “ForexClear Contract” (as such term is defined in the UK General Regulations) and which is governed in accordance with the UK General Regulations.
“Non-FCM Listed Interest Rates Contract”	means a “Listed Interest Rates Contract” (as such term is defined in the UK General Regulations) and which is

REGULATION 15 MARGINING OF SWAP PRODUCT CLIENT ACCOUNTS: CERTAIN ADDITIONAL PROVISIONS; WITHOUT CLIENT EXCESS MODEL; WITH CLIENT EXCESS MODEL

The contents of this FCM Regulation 15 apply only with respect to the clearing and margining of Swap Products.

- (a) **FCM Buffer.** An FCM Clearing Member is permitted to furnish Collateral that is the property of such FCM Clearing Member (and not of its FCM Clients) to the Clearing House to be attributed to any of its FCM Omnibus Swaps Client Accounts with LCH as excess Margin for the benefit of all of its FCM Clients with positions registered or to be registered in such account, and the value of such Collateral as determined by the Clearing House in accordance with the FCM Rulebook (such value, the “**FCM Buffer**”) shall be recorded by the Clearing House as attributable to such FCM Clearing Member (for the benefit of its FCM Clients) in a sub-account of the applicable FCM Omnibus Swaps Client Account with LCH designated as an FCM Buffer sub-account (each such sub-account, with respect to each FCM Clearing Member, an “**FCM Buffer Sub-Account**”). The use and application of FCM Buffer in the With Client Excess Model and the Without Client Excess Model is further discussed below in paragraphs (e) and (f), respectively, and in the FCM Procedures.
- (b) **Unallocated Excess.**
- (i) Any Margin attributable to an FCM Omnibus Swaps Client Account with LCH that is not allocated to an FCM Client Sub-Account or the FCM Buffer Sub-Account therein (such Margin, “**Unallocated Excess**”) shall be credited by the Clearing House to the Unallocated Excess sub-account (the “**Unallocated Excess Sub-Account**”) of such FCM Omnibus Swaps Client Account with LCH. The Clearing House shall hold Unallocated Excess for the benefit of the FCM Clients corresponding to such FCM Omnibus Swaps Client Account with LCH as a class (the identities and amounts of which shall be recorded by such FCM Clearing Member and not the Clearing House in accordance with this FCM Regulation 15 and other applicable provisions of the FCM Rulebook), segregated in accordance with the CEA and CFTC Regulations, including Part 22 of the CFTC Regulations. The Clearing House shall treat and record the Unallocated Excess in respect of an FCM Omnibus Swaps Client Account with LCH on an unallocated basis, and the Clearing House shall not attribute any portions of such Unallocated Excess to the individual FCM Clients of such FCM Clearing Member (although the Unallocated Excess shall be held for the benefit of the applicable FCM Clients as a class (in accordance with Part 22 of the CFTC Regulations), the records of which are kept by the applicable FCM Clearing Member).
- (ii) Each FCM Clearing Member that maintains Unallocated Excess in any of its Unallocated Excess Sub-Accounts on behalf of its applicable FCM Clients shall ensure that its books and records accurately reflect at all times the FCM Client or FCM Clients to which such Unallocated Excess is attributable and the amount attributable to each such FCM Client.
- (iii) Subject to paragraph (v) below, the Clearing House shall not be permitted to, and shall not, at any time (x) apply any Unallocated Excess to the FCM

FCM Buffer. An FCM Clearing Member that is not a Defaulter may request the return of any of its FCM Buffer that is not, at such time, being used by the Clearing House in such manner to offset any such FCM Client Sub-Account Balance deficits.

(v) **Unallocated Excess.**

(A) An FCM Clearing Member is permitted to furnish Collateral on behalf of its FCM Clients to be applied as Margin directly to the relevant Unallocated Excess Sub-Account as set forth in the FCM Procedures. Any Margin furnished by an FCM Clearing Member in respect of an FCM Omnibus Swaps Client Account with LCH that is (1) not furnished in satisfaction of an outstanding margin call and (2) not accompanied by a new and compliant CVR, shall be automatically deemed to be furnished as Unallocated Excess and shall be credited to the applicable Unallocated Excess Sub-Account.

(B) An FCM Clearing Member may deliver a CVR to the Clearing House which has the effect of allocating all or a portion of the applicable Unallocated Excess into FCM Client Sub-Accounts and/or the FCM Buffer Sub-Account in the same FCM Omnibus Swaps Client Account with LCH; **provided, that** such a CVR delivery may not be used for purposes of allocating Unallocated Excess in order to satisfy a margin call.

(e) **Required Margin Increase in an FCM Client Sub-Account Subject to the Without Client Excess Model.** If the Required Margin applicable to the FCM Contracts registered to an FCM Client's FCM Client Sub-Account subject to the Without Client Excess Model is increased by the Clearing House and such increase cannot be immediately satisfied by Excess Margin in the corresponding FCM Client Sub-Account Balance, the FCM Client Sub-Account Balance shortfall will be satisfied in whole or in part (as applicable) by (x) the application of any Available FCM Buffer (*i.e.*, FCM Buffer that is not Encumbered FCM Buffer and that is credited to the FCM Buffer Sub-Account within the applicable FCM Omnibus Swaps Client Account with LCH) and (y) any credit extended by the Clearing House (in the Clearing House's sole discretion), including any SwapClear Tolerance ~~or MCE if applicable~~ or ForexClear Tolerance, as applicable.

If the FCM Client Sub-Account Balance shortfall referred to above cannot be fully satisfied with Available FCM Buffer and/or Clearing House credit as set forth above, the obligation of the FCM Clearing Member to satisfy such deficit shall be discharged by:

- (i) the applicable FCM Clearing Member furnishing additional Margin to the Clearing House on behalf of the applicable FCM Client; or
- (ii) if the obligation of the FCM Clearing Member to satisfy the FCM Client Sub-Account Balance deficit has not been fully discharged pursuant to clause (i) above, by other means (if any) available to the Clearing House in accordance with the FCM Rulebook.

- (f) **Required Margin Increase in an FCM Client Sub-Account Subject to the With Client Excess Model.** If the Required Margin applicable to the FCM Contracts registered to an FCM Client's FCM Client Sub-Account subject to the With Client Excess Model is increased by the Clearing House and such increase cannot be immediately satisfied by Excess Margin in the corresponding FCM Client Sub-Account Balance, the FCM Client Sub-Account Balance shortfall will be satisfied in whole or in part (as applicable) by (x) any Available FCM Buffer that is credited to the FCM Buffer Sub-Account within the applicable FCM Omnibus Swaps Client Account with LCH and (y) any credit extended by the Clearing House (in the Clearing House's sole discretion), including any SwapClear Tolerance— or ForexClear Tolerance, as applicable of MCE if applicable.

If the FCM Client Sub-Account Balance shortfall referred to above cannot be fully satisfied with Available FCM Buffer and/or Clearing House credit as set forth above, the obligation of the FCM Clearing Member to satisfy such deficit shall be discharged by:

- (i) the applicable FCM Clearing Member furnishing additional Margin to the Clearing House in respect of the applicable FCM Omnibus Swaps Client Account with LCH (which shall be allocated in accordance with the Assumed Allocation); or
- (ii) if the obligation of the FCM Clearing Member to satisfy the FCM Client Sub-Account Balance deficit has not been fully discharged pursuant to clause (i) above, by other means (if any) available to the Clearing House in accordance with the FCM Rulebook.

CHAPTER XII - FCM SWAPCLEAR REGULATIONS

REGULATION 46 REGISTRATION OF FCM SWAPCLEAR CONTRACTS; NOVATION AND POST-NOVATION COMPRESSION; SWAPCLEAR ACCOUNTS; PORTFOLIO TRANSFERS; BULK EVENTS

- (a) In order for an FCM to register an FCM SwapClear Contract in respect of the registration of an FCM SwapClear Transaction, the FCM must be currently approved as an FCM Clearing Member pursuant to these FCM Regulations. The Executing Parties to such FCM SwapClear Transaction shall be responsible for any give-up or other agreement mutually agreed to among the parties with respect to such transactions, as applicable. An FCM Clearing Member must present the particulars of an FCM SwapClear Transaction for registration as two FCM SwapClear Contracts or one FCM SwapClear Contract and one Non-FCM SwapClear Contract (as the case may be) in accordance with these FCM Regulations. Each FCM SwapClear Transaction involving an FCM Client shall be presented to the Clearing House for registration on behalf of such FCM Client by its FCM Clearing Member.
- (b) Once an FCM SwapClear Transaction has been presented to the Clearing House, the Clearing House shall (where applicable in accordance with paragraph (c) below and Section 2.1.3 of the FCM Procedures) request the consent of the relevant FCM Clearing Member with whom an FCM SwapClear Contract shall be registered as a result thereof to such registration. Upon the FCM Clearing Member providing its consent, such FCM SwapClear Transaction shall be deemed to have been submitted (as such term is defined in the FCM Procedures) by such FCM Clearing Member to the Clearing House for registration. Any such consent shall be provided in accordance with the FCM Procedures.
- (c) An FCM Clearing Member which has been nominated to clear the FCM Contract arising from the registration of an FCM SwapClear Transaction on behalf of a third party Executing Party will (only where such FCM SwapClear Transaction is not an FCM Trading Venue Transaction) be notified by the Clearing House of such FCM SwapClear Transaction and shall choose whether to grant or refuse consent to the registration of such FCM SwapClear Transaction and the FCM SwapClear Contract resulting from such FCM SwapClear Transaction. Where:
- (i) an FCM Clearing Member is an Executing Party to an FCM SwapClear Transaction and is to clear an FCM SwapClear Contract resulting from such FCM SwapClear Transaction; or
 - (ii) an FCM SwapClear Transaction is an FCM Eligible Trading Venue Transaction in respect of an FCM Clearing Member, and a third party Executing Party to such FCM SwapClear Transaction has nominated such FCM Clearing Member to clear an FCM SwapClear Contract resulting from such FCM SwapClear Transaction,

the consent of that FCM Clearing Member to the registration of the relevant FCM SwapClear Contract will occur automatically and without the need for any further action by such FCM Clearing Member.

FCM Regulations

- (d) Without prejudice to the Clearing House's rights under paragraph (g) of this FCM Regulation 46, an FCM Clearing Member shall be bound by an FCM SwapClear Contract registered in its name.
- (e) The Clearing House shall register or reject the registration of an FCM SwapClear Contract in respect of an FCM SwapClear Transaction presented for registration subject to, and in accordance with, these FCM Regulations, the FCM Procedures and all Applicable Law, where the following are conditions for registration of an FCM SwapClear Contract:
 - (i) both sides of the relevant FCM SwapClear Transaction have been properly presented and submitted for clearing by (or on behalf of) the Executing Parties;
 - (ii) the relevant FCM SwapClear Transaction meets the FCM SwapClear Product Eligibility Criteria prescribed in the FCM Product Specific Contract Terms and Eligibility Criteria Manual at the time the particulars of the FCM SwapClear Transaction are presented to the Clearing House and continues to meet such criteria at the Registration Time;
 - (iii) each FCM SwapClear Contract resulting from an FCM SwapClear Transaction is consented to by the relevant FCM Clearing Member in accordance with paragraph (c) above and Section 2.1.3 of the FCM Procedures;
 - (iv) the applicable FCM Clearing Member has furnished, upon request of the Clearing House and in accordance with FCM Regulation 14 and such other applicable provisions of the FCM Rulebook, all required Margin in respect of such FCM SwapClear Contract prior to registration (taking into account ~~MER~~ ~~and/or~~ SwapClear Tolerance, if any); provided that such Margin need not be furnished prior to registration as a condition to the registration of such FCM SwapClear Contract where such FCM SwapClear Contract results from an FCM SwapClear Transaction that is a Sub-Block Trading Venue Transaction; and
 - (v) all the conditions applicable (under the terms of the FCM Rulebook or the UK General Regulations, as the case may be) for the registration of the Non-FCM SwapClear Contract or the other FCM SwapClear Contract (as the case may be) deriving from the relevant FCM SwapClear Transaction have been satisfied.

If for any reason in respect of an FCM SwapClear Contract the other corresponding FCM SwapClear Contract or Non-FCM SwapClear Contract (as the case may be) is not registered by the Clearing House, the Clearing House shall de-register such FCM SwapClear Contract and shall not have any liability whatsoever to any FCM Clearing Member or to any other person (including any SwapClear Dealer (as such term is defined in the UK General Regulations)) in contract, tort (including negligence), trust, as a fiduciary or under any other cause of action in respect of any damage, loss, cost or expense of whatsoever nature suffered or incurred as a result of such de-registration.

CHAPTER XIII - FCM FOREXCLEAR REGULATIONS

**REGULATION 49 REGISTRATION OF FCM FOREXCLEAR CONTRACTS;
COMPRESSION; FOREXCLEAR ACCOUNTS**

- (a) In order for an FCM to register an FCM ForexClear Contract in respect of the registration of an FCM ForexClear Transaction, the FCM must be currently approved as an FCM Clearing Member pursuant to these FCM Regulations. The Executing Parties to such FCM ForexClear Transaction shall be responsible for any give-up or other agreement mutually agreed to among the parties with respect to such transactions, as applicable. An FCM Clearing Member must present the particulars of an FCM ForexClear Transaction for registration as an FCM ForexClear Contract in accordance with the FCM Rulebook. Each FCM ForexClear Transaction involving an FCM Client shall be presented to the Clearing House for registration on behalf of such FCM Client by its FCM Clearing Member. It is a condition for registration as an FCM ForexClear Contract that both sides of the underlying FCM ForexClear Transaction be presented for clearing (as one FCM ForexClear Contract and one Non-FCM ForexClear Contract, or as two FCM ForexClear Contracts, as the case may be).
- (b) Once an FCM ForexClear Transaction has been presented to the Clearing House, the Clearing House shall (where applicable in accordance with paragraph (c) below and Section 2.2.8 of the FCM Procedures) request the consent of the relevant FCM Clearing Member with whom an FCM ForexClear Contract shall be registered as a result thereof to such registration. Upon the FCM Clearing Member providing its consent, such FCM ForexClear Transaction shall be deemed to have been submitted (as such term is defined in the FCM Procedures) by such FCM Clearing Member to the Clearing House for registration. Any such consent shall be provided in accordance with the FCM Procedures.
- (c) An FCM Clearing Member which has been nominated to clear the FCM Contract arising from the registration of an FCM ForexClear Transaction on behalf of a third party Executing Party will (only where such FCM ForexClear Transaction is not an FCM Trading Venue Transaction) be notified by the Clearing House of such FCM ForexClear Transaction and shall choose whether to grant or refuse consent to the registration of such FCM ForexClear Transaction and the FCM ForexClear Contract resulting from such FCM ForexClear Transaction. Where:
- (i) an FCM Clearing Member is an Executing Party to an FCM ForexClear Transaction and is to clear an FCM ForexClear Contract resulting from such FCM ForexClear Transaction; or
 - (ii) an FCM ForexClear Transaction is an FCM Eligible Trading Venue Transaction in respect of an FCM Clearing Member, and a third party Executing Party has nominated such FCM Clearing Member to clear an FCM ForexClear Contract resulting from such FCM ForexClear Transaction,

the consent of that FCM Clearing Member to the registration of the relevant FCM ForexClear Contract will occur automatically and without the need for any further action by such FCM Clearing Member.

FCM Regulations

- (d) Without prejudice to the Clearing House's rights under paragraph (e) of this FCM Regulation 49, an FCM Clearing Member shall be bound by an FCM ForexClear Contract registered in its name.
- (e) The Clearing House shall register or reject the registration of an FCM ForexClear Contract in respect of an FCM ForexClear Transaction presented for registration subject to, and in accordance with, these FCM Regulations, the FCM Procedures and all Applicable Law, where the following are conditions for registration of such FCM ForexClear Contract:
- (i) both sides of the relevant FCM ForexClear Transaction have been properly presented and submitted for clearing by (or on behalf of) the Executing Parties;
 - (ii) the relevant FCM ForexClear Transaction meets the FCM ForexClear Product Eligibility Criteria prescribed in the FCM Product Specific Contract Terms and Eligibility Criteria Manual at the time the particulars of the FCM ForexClear Transaction are presented to the Clearing House and continues to meet such criteria at the Registration Time;
 - (iii) each FCM ForexClear Contract resulting from an FCM ForexClear Transaction is consented to by the relevant FCM Clearing Member (to the extent such consent is required) in accordance with paragraph (c) of this FCM Regulation 49 and the FCM Procedures;
 - (iv) the applicable FCM Clearing Member has furnished, upon request of the Clearing House and in accordance with FCM Regulation 14 and such other applicable provisions of the FCM Rulebook, all required Margin in respect of such FCM ForexClear Contract prior to registration (taking into account any available MER Buffer and ~~MCEForexClear Tolerance, if any~~); provided that such Margin need not be furnished prior to registration as a condition to the registration of such FCM ForexClear Contract where such FCM ForexClear Contract results from an FCM ForexClear Transaction that is a Sub-Block Trading Venue Transaction; and
 - (v) all the conditions applicable (under the terms of the FCM Rulebook or the UK General Regulations, as the case may be) for the registration of the Non-FCM ForexClear Contract or the other FCM ForexClear Contract (as the case may be) deriving from the relevant FCM ForexClear Transaction have been satisfied.

If for any reason in respect of an FCM ForexClear Contract the other corresponding FCM ForexClear Contract or Non-FCM ForexClear Contract (as the case may be) is not registered by the Clearing House, the Clearing House shall de-register such FCM ForexClear Contract and shall not have any liability whatsoever to any FCM Clearing Member or to any other person (including any ForexClear Dealer (as such term is defined in the UK General Regulations)) in contract, tort (including negligence), trust, as a fiduciary or under any other cause of action in respect of any damage, loss, cost or expense of whatsoever nature suffered or incurred as a result of such de-registration.

Appendix V
Default Rules

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LCH LIMITED
DEFAULT RULES

SCHEDULE 5
FOREXCLEAR DEFAULT FUND SUPPLEMENT

- F1. **In accordance** with and subject to Rule F2, the amount of each ForexClear Clearing Member's ForexClear Contributions shall be determined by the Clearing House as soon as practicable after each ForexClear Determination Date as appropriate on the basis of information available as at close of business on such ForexClear Determination Date and notified to such FXCCM as soon as practicable after such determination in accordance with the Procedures.
- F2. Each FXCCM's ForexClear Contribution (other than any ForexClear Unfunded Contribution or any Supplementary Contribution) shall be determined by the Clearing House in accordance with the following provisions:
- (a) determinations will be made by the Clearing House on the date that an FXCCM joins the ForexClear Service, and at the close of business on the first business day of each subsequent month, and otherwise in accordance with paragraph (f) below (each a "**ForexClear Determination Date**") **provided, however, that** following a Default, any such determinations and any such ForexClear Determination Date which might otherwise have occurred under this Rule F2 shall be suspended for the duration of the period (the "**ForexClear Default Period**") commencing on the date of such Default and terminating on the last to occur of the following dates:
 - (i) the date which is the close of business on the day falling 30 calendar days after the ForexClear Default Management Process Completion Date in relation to such Default (or, if such day is not a business day, the next succeeding business day); and
 - (ii) where, prior to the end of the period referred to in (i) above (or such period as has already been extended pursuant to this paragraph (ii)), one or more subsequent Defaults (each a "**Relevant Default**") occur, the date which is the close of business on the day falling 30 calendar days after the ForexClear Default Management Process Completion Date in relation to a Relevant Default which falls latest in time (or, if such day is not a business day, the next succeeding business day);
 - (b) On each business day, the Clearing House will determine a "**Combined Loss Value**" in respect of each of the 30 preceding business days. The Combined Loss Value in respect of a particular day will be the sum of the largest and the second largest stress-testing loss incurred on that day in relation to ForexClear Business (for a given scenario);
 - (c) the "**ForexClear Fund Amount**" ~~comprises the~~ shall equal the sum of: (i) the "ForexClear NDF Sub-Fund Amount", (ii) and the "ForexClear Non-NDF Sub-Fund Amount" and (iii) the "ForexClear Tolerance Amount". The ForexClear NDF Sub-Fund Amount and ForexClear Non-NDF Sub-Fund Amount shall be calculated in United States dollars ("**USD**") and, for a given ForexClear Determination Date, shall be (i) in relation to the ForexClear NDF Sub-Fund Amount, the largest of the 30 Combined Loss Values in respect of ForexClear NDF Contracts, and (ii) in relation to the ForexClear Non-NDF

Sub-Fund Amount, the largest of the 30 Combined Loss Values in respect of ForexClear Contracts other than ForexClear NDF Contracts, each as determined under paragraph (b) above plus 10 per cent. Each of the ForexClear NDF Sub-Fund Amount and ForexClear Non-NDF Sub-Fund Amount shall not be less than USD 70 million (the "**ForexClear Fund Floor**"). The "**ForexClear Tolerance Amount**" for a given ForexClear Determination Date shall equal the aggregate amount of ForexClear Tolerance provided by the Clearing House to all participating FXCCMs to facilitate the registration of ForexClear Contracts, provided that the ForexClear Tolerance Amount shall not exceed USD 500 million;

- (d) the "**ForexClear Margin Weight**" means the "**ForexClear NDF Margin Weight**" or the "**ForexClear Non-NDF Margin Weight**", as applicable. The FXCCM's **ForexClear NDF Margin Weight** shall be calculated by dividing the average daily initial margin obligation (as calculated under the Procedures or other arrangements applicable) which has applied to the FXCCM during the reference period in paragraph (b) above, in respect of all ForexClear NDF Contracts to which the FXCCM is a party, by the total of such average daily obligations applied to all Non-Defaulting FXCCMs. The FXCCM's **ForexClear Non-NDF Margin Weight** shall be calculated by dividing the average daily initial margin obligation (as calculated under the Procedures or other arrangements applicable) which has applied to the FXCCM during the reference period in paragraph (b) above, in respect of all ForexClear Contracts other than ForexClear NDF Contracts to which the FXCCM is a party, by the total of such average daily obligations applied to all Non-Defaulting FXCCMs;
- (e) each FXCCM's ForexClear Contribution comprises the "**ForexClear NDF Contribution**", ~~and the~~ "**ForexClear Non-NDF Contribution**" and its ForexClear Tolerance, as applicable. The FXCCM's **ForexClear NDF Contribution** shall be calculated by multiplying the **ForexClear NDF Sub-Fund Amount** by the FXCCM's **ForexClear NDF Margin Weight**, and shall be no less than the **Minimum ForexClear Contribution**. The FXCCM's **ForexClear Non-NDF Contribution** shall be calculated by multiplying the **ForexClear Non-NDF Sub-Fund Amount** by the FXCCM's **ForexClear Non-NDF Margin Weight**, and shall be no less than the **Minimum ForexClear Contribution**; and
- (f) subject to a suspension pursuant to paragraph (a) above, the Clearing House may recalculate the **ForexClear Fund Amount** on any business day if the **Combined Loss Value** differs by more than 25 per cent. from the figure on which the previous **ForexClear Contribution** determination was based.

F3. For the purposes of the calculations under Rule F2:

- (a) references to "ForexClear Clearing Members" or "FXCCMs" do not include references to Defaulting FXCCMs (apart from any Defaulting FXCCM in respect of which the Clearing House permits the application of Rule F2) or persons which were formerly FXCCMs but are not FXCCMs at the **ForexClear Determination Date** at which the relevant determination is made;
- (b) contributions shall be rounded upwards, if not already such a multiple, to the next integral multiple of one thousand US dollars;

- (c) no account shall be taken, in calculating initial margin or ForexClear Margin Weight under Rule F2 of any offsets applied in calculating initial margin obligations imposed on an FXCCM in respect of ForexClear Contracts, which may otherwise be permissible under the Procedures or other arrangements applicable;
 - (d) **provided that** the FXCCM is not a Defaulter, the amount of its ForexClear Contribution shall be calculated in accordance with and subject to Rule F2. The provisions of Rule F1, Rule F2, this Rule F3 and Rule F5 do not apply to a Defaulting FXCCM, unless the Clearing House so permits in any particular case; and
 - (e) notwithstanding Rule 25 of the Default Rules, if an FXCCM notifies the Clearing House on the ForexClear Default Management Process Completion Date that it wishes to resign from the ForexClear Service, such FXCCM, assuming all other requirements for termination of membership have been satisfied by the next following ForexClear Determination Date, shall cease to be an FXCCM for the purpose of Rule F2 on and from the date upon which its ForexClear Contribution is repaid to it by the Clearing House and such payment will be made by the Clearing House following the subsequent ForexClear Determination Date in accordance with the Procedures.
- F4. Without prejudice to any other requirements which the Clearing House may impose, the amount of the ForexClear Contribution of a New Member shall be the sum of (a) the Minimum ForexClear Contribution, ~~and~~ (b) any supplementary sum determined by the Clearing House in its discretion and notified to the New Member and (c) as applicable, its ForexClear Tolerance. The Clearing House shall determine the amount of such supplementary sum by reference to the actual or expected level of clearing activity of the New Member.
- F5. Upon determination of the amount of a ForexClear Contribution in accordance with Rule F2:
- (a) if the amount of the ForexClear Contribution of an FXCCM immediately before close of business on the relevant ForexClear Determination Date exceeds the amount of the FXCCM's ForexClear Contribution determined under Rule F2 as at close of business on that day, the excess shall be paid by the Clearing House to such FXCCM in USD in accordance with the Procedures;
 - (b) if the amount of the ForexClear Contribution of an FXCCM immediately before close of business on the relevant ForexClear Determination Date is the same as the amount of the FXCCM's ForexClear Contribution as so determined under Rule F2 as at close of business on that day, no sum shall then be payable by or to such FXCCM in respect of its Contribution; and
 - (c) if the amount of the ForexClear Contribution of an FXCCM immediately before close of business on the relevant ForexClear Determination Date is less than the amount of the FXCCM's ForexClear Contribution as so determined under Rule F2 as at close of business on that day, the shortfall shall be paid by