



VIA CFTC PORTAL

February 2, 2024

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

LCH Limited ("LCH") self-certification: Sale of collateral in default management

Dear Mr. Kirkpatrick,

Pursuant to Commodity Futures Trading Commission ("CFTC") Regulation §40.6(a), LCH, a derivatives clearing organization registered with the CFTC, is submitting for self-certification amendments to its rules ("LCH Rules") related to the sale of collateral in default management.

Part I: Explanation and analysis

Currently, following the default of a non-FCM clearing member, LCH is normally not permitted to sell non-cash collateral recorded to such member's client accounts during a pre-determined 'Porting Window', as defined in paragraph 4.1 of the Client Clearing Annex of the Default Rules (the **Collateral Liquidation Restriction**).

LCH is proposing to: (i) remove this restriction for Omnibus Segregated Accounts (each an **OSA**) and to require LCH to sell non-cash collateral as soon as practicable following a default; and (ii) require that LCH liquidate non-cash collateral as soon as practicable following the expiry of the Porting Window for Individual Segregated Accounts (each an **ISA**) and Indirect Gross Accounts. The changes in (i) are designed to facilitate the efficient transfer of OSAs to a 'Backup' non-defaulting clearing member. The changes in (i) and (ii) are designed to remove discretion on the part of LCH in determining when to sell collateral and thereby provide greater transparency to clients and members.

By selling the collateral recorded in an OSA as soon as practicable, the value of the liquidation proceeds will be crystalised earlier, making it easier for a potential back-up to determine whether to accept the porting client(s).

In addition, there are other amendments (i.e. in addition to those described above) that are included to remove language that could be considered duplicative and to more closely conform the rulebook provisions to the associated default procedures.

Part II: Description of the rule changes

LCH will amend the Default Rules, General Regulations, Procedure 2C, Procedure 2I and Procedure 2J to reflect the changes described above.

The changes to the LCH Rules are included as **Appendices I-V** in black line form. The changes will be effective not earlier than April 1, 2024.





Part III: Core Principle Compliance

LCH has reviewed the proposed rule changes against the requirements of the Core Principles and finds it will continue to comply with all requirements and standards set forth therein. Specifically, this rule change has potential relevance to Core Principles G (Default Rules & Procedures) and L (Public Information).

The changes described in this filing meet the objectives of Core Principle G. LCH's approach to default management including its overall rules and procedures continue to be designed to allow for the efficient, fair and safe management of events during which Clearing Members may become insolvent or default on obligations to LCH. LCH carefully considered these factors and determined that this update meets LCH's obligations under Core Principle G.

The changes described in this filing also ensure that LCH meets the objectives of Core Principle L, including that, in addition to the specified requirements of CFTC Regulation §39.21, LCH makes available any information that is relevant to participation in the clearing and settlement activities of LCH. LCH considered its public information requirements and believes amending the LCH Rules to include these updates meets the requirements of Core Principle L.

As such, LCH believes these changes are consistent with the requirements of Core Principle G on Default Rules & Procedures under CFTC Regulation §39.16 and Core Principle L on Public Information under CFTC Regulation §39.21.

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: https://www.lch.com/resources/rulebooks/proposed-rule-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 this proposal.

Certification

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

Definitions

Words which begin with a capital letter, but are not defined, in this document shall have the meaning specified in the General Regulations of the LCH Rules, which rulebook is located at www.lch.com.

Should you have any questions, please contact me at lavannyan.mahalingam@lseg.com.



LCH

Yours sincerely,

Lavannyan Mahalingam Regulatory Advisor

LCH Limited





Appendix I
Default Rules
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LCH LIMITED DEFAULT RULES

- (i) in respect of the Clearing Member, a bankruptcy petition is presented or a bankruptcy order is made or a voluntary arrangement is approved;
- (j) in respect of the Clearing Member, a receiver, manager, administrator or administrative receiver is appointed or a composition or scheme of arrangement is approved by the court;
- (k) an assignment or composition is made by the Clearing Member for the benefit of creditors or any of them;
- (l) a petition is presented for the winding up of the Clearing Member;
- (m) an order is made for the winding up of the Clearing Member, or a resolution is passed for the winding up of the Clearing Member (save for the purpose of its amalgamation or reconstruction);
- (n) in respect of the Clearing Member, a petition is presented or an order made for the appointment of an administrator;
- (o) the Clearing Member, being a partnership, is dissolved, or being a registered company, is dissolved or suffers its name to be struck off the register of companies;
- (p) any step analogous to those mentioned in paragraphs (i) and (o) is taken in respect of the Clearing Member in any jurisdiction;
- (q) any distress, execution or other process is levied or enforced or served upon or against any property of the Clearing Member; or
- (r) in respect of a Clearing Member (that is a Sponsored Member), the Clearing House has declared the default of one or more of its Agent Members and such Agent Member has, as a result, become unable to perform its obligations under Schedule 7 (*RepoClear Default Fund Supplement*).
- 6. The steps which may be taken by the Clearing House under Rule 3 in respect of the Defaulter or otherwise are:
 - (a) to register (i) an original contract, OTC Transaction or an FCM Transaction (as the case may be) in the name of the Defaulter or to decline to register an original contract, OTC Transaction or an FCM Transaction (as the case may be) in the name of the Defaulter or otherwise to exercise the Clearing House's discretion with regard to the Defaulter under (i) Regulation 16(c) (*Registration*) or (ii), in the case of an FCM Clearing Member, FCM Regulations 46(h) and 49(g) or other applicable provision in the FCM Rulebook, or (iii) in the case of a Sponsored Member, SC Regulation 12 (*Registration*) or other applicable provision of the SC Regulations;
 - (b) to effect a closing-out in respect of an open contract of the Defaulter (whether by the entering into of a closing-out contract or otherwise) and at the option of the Clearing House to settle such contracts or to effect the transfer or termination, close-out and cash-settlement of an open contract of the Defaulter by applying a price determined by the Clearing House in its discretion;

- (c) to settle any open contract of which settlement might have been requested by the Defaulter pursuant to Regulation 23(e) (*Daily Settlement or Marking to Market*), or 25 (*Other Modes of Settlement and Revaluation*) or, in the case of an FCM Clearing Member, FCM Regulation 16 (*Official Quotations and Reference Price; Settlement and Revaluation*) or in the case of a Sponsored Member, SC Regulation 18 (*Other modes of Settlement and Revaluation*);
- (d) to invoice a Contract, other than a SwapClear Contract, an FCM SwapClear Contract, a ForexClear Contract, an FCM ForexClear Contract or a Fixed Income Contract of the Defaulter back by way of compulsory settlement in accordance with Regulation 39 (*Invoicing Back*) at a price or premium determined under paragraph (d) of that Regulation, or in the case of an FCM Clearing Member, FCM Regulation 31 (*Invoicing Back*);
- (e) to sell any security deposited by or for the account of the Defaulter pursuant to (i) Regulation 20 (*Margin and Collateral*) (ii) or, in the case of a Defaulter who is an FCM Clearing Member, FCM Regulation 14 (*Margin and Collateral*), or (iii) in the case of a Defaulter who is a Sponsored Member, SC Regulation 15 (*Margin and Collateral*) or any agreement made between the Defaulter and the Clearing House by public or private sale for the account of the Defaulter without being obliged to obtain the Defaulter's consent or any order of a court of law, and to appoint any person to execute any document for such purpose in the name and on behalf of the Defaulter;
- (f) subject to the Procedures or the FCM Procedures (as applicable), to exercise an option of the Defaulter on its behalf notwithstanding that such exercise may take place on a day which is not a day prescribed for such exercise by any relevant Exchange Rules;
- (g) (i) to transfer an open contract, position or asset of the Defaulter to the account of another Clearing Member; (ii) to transfer an open contract from the account of another Clearing Member to the account of the Defaulter for the purposes of closing out an open contract registered in an account of the Defaulter or for any other reason which the Clearing House considers appropriate in the circumstances without requiring the consent of any relevant Exchange; or (iii) to close-out and terminate such an open contract and re-establish it with another Clearing Member, being a Clearing Member entitled and willing to have such open contract registered in its name;
- (h) to take such steps as may be desirable, including (i) crediting or debiting of accounts (including margin accounts); (ii) entry into new contracts; (iii) transfer of existing contracts; (iv) reversal of contracts; (v) termination, close-out and re-establishment of contracts; or (vi) any other step, to preserve as far as possible the position of any client of the Clearing Member. Where an open contract is transferred or closed-out, terminated, and re-established under Rule 6(g) above, without requiring the consent of the relevant Exchange, to transfer (whether by way of transfer or by way of termination, close-out and re-establishment of positions) to the Clearing Member to whom the open contract is transferred (or with whom the replacement open contract is re-established) such Collateral held by the Clearing House in connection with that account as the Clearing House may deem appropriate;

- (i) to tender (or submit a Delivery Notice) or to receive a tender (or a Delivery Notice) in the Defaulter's name;
- (j) to perform on an open contract subject to tender (or an FCM Exchange Contract Subject to Delivery Notice) or a delivery contract (or Physically-Settled FCM Exchange Contract) by either delivery of or by accepting delivery of the commodity which is the subject of such contract to or from, as the case may be, the Defaulter, its agent or a third party in any manner permitted by the terms of the Contract and the Exchange Rules (if any);
- (k) where the Defaulter is party to an open contract subject to tender (or an FCM Exchange Contract Subject to Delivery Notice), to declare the Defaulter's rights and liabilities in respect of performance thereof discharged, whereupon the provisions of Rule 7 shall apply to the Defaulter in respect of the open contract;
- (l) to make or to procure the making of one or more contracts, including (without limitation) original contracts, and contracts on an exchange that does not qualify as an Exchange, for the purpose of hedging market risk to which the Defaulter is exposed, and to register the same in the Defaulter's name under the Regulations, the FCM Regulations or the SC Regulations (as the case may be);
- (m) to enter into ATS Contracts for the purposes of engaging in Risk Mitigation or Liquidity Management pursuant to Schedule 4 (RepoClear DMP Annex) hereto:
- (n) to make or to procure the making of one or more contracts, whether or not in the terms of exchange contracts (or FCM Exchange Transactions), for the sale, purchase or other disposition of a commodity, and to register the same in the Defaulter's name under the Regulations;
- (o) to designate a currency as a currency of account and at the Defaulter's expense to convert any sum payable by or to the Defaulter in another currency into the currency of account;
- (p) to take any step which in the circumstances is open to the Clearing House under any applicable Exchange Rules including, without limitation, to transfer (whether by way of transfer or by way of termination, close-out and reestablishment) an open contract of the Defaulter to a Co-operating Clearing House to be registered at the Co-operating Clearing House in accordance with its rules;
- (q) without prejudice to any other right of the Clearing House under the Regulations, to take such action as the Clearing House may deem necessary for its protection in the name and at the expense of the Defaulter with regard to any open contract standing in its name;
- (r) in respect of Contracts standing in the Defaulter's name, to charge to its account the amount (or, if the amount is not finally known, the estimated amount) of any expenses incurred by the Clearing House with regard to or in consequence of the circumstances mentioned in Rule 3 or the steps which are or may be taken under this Rule, the Regulations, the FCM Regulations or the SC Regulations

- (as the case may be) and any expenses incurred with regard thereto under Rule 13;
- (s) to take any other step calculated by the Clearing House to complete the process set out in Rule 8;
- if the Defaulter is an Affected ForexClear Option Clearing Member, to take any step under Regulation 101 (ForexClear Option Service Liquidity Event) or Regulation 102 (ForexClear Option Service Liquidity Fund Contributions) of the Regulations with respect to the ForexClear Option Contracts, ForexClear Swap Contracts, ForexClear Deliverable Forward Contracts and/or ForexClear Spot Contracts then registered in the name of that Defaulter, and to the extent the Clearing House decides to take any such steps under Regulation 101 (ForexClear Option Service Liquidity Event) or Regulation 102 (ForexClear Option Service Liquidity Fund Contributions) in the circumstances described in this paragraph (s), those steps set out in Regulation 101 (ForexClear Option Service Liquidity Event) or Regulation 102 (ForexClear Option Service Liquidity Fund Contributions) shall be deemed to form part of these Default Rules as if they were set out in full herein; and
- (u) to obtain such advice or assistance, whether legal or otherwise, as the Clearing House may deem necessary and at the expense of the Defaulter for any matter arising out of or in connection with the default,

provided that:

- (i) in the case of all <u>Client Clearing Contracts of the Defaulter, in respect of its Client Clearing Business</u>, the Clearing House:
 - (A) shall act in accordance with the provisions of the Client Clearing Annex (which deals, amongst other things, with certain specific arrangements, procedures and steps for the transfer, termination, close-out and re-establishment or the close-out and/or settlement of such Client Clearing Contracts pursuant to this Rule 6); and
 - (B) may also take any of the other steps set out in this Rule 6 to the extent that they do not conflict with the steps set out in the Client Clearing Annex and, provided that:
 - (1) —in no circumstances will the Clearing House sell any security deposited as Collateral in a Custodial Segregated Client—Account of the Defaulter and forming part of the Clearing Member Current Collateral Balance in respect of such Custodial Segregated Client Account pursuant to (without limitation) paragraphs (e), (h), (p) or (r) of this Rule 6, the Client Clearing Annex to these Default Rules or otherwise for the duration of the Porting Window applicable to the such relevant Clearing—Custodial Segregated Client Account, other than:

- (I4) with the consent, to the selling of such securities, of the relevant Clearing Client for which such Custodial Segregated Account is held by the Defaulter (in the case of an Individual Segregated Account, an Indirect Gross Account or a Custodial Segregated Account) or all of the Clearing Clients grouped together in and comprising the relevant Omnibus Segregated Account (in the case of an Omnibus Segregated Account); or
- (II) (2)—where <u>sucha</u> Clearing Client—(in the case of an Individual Segregated Account, an Indirect Gross Account or a Custodial Segregated Account) or each of the Clearing Clients grouped together in and comprising the relevant Omnibus Segregated Account (in the case of an Omnibus Segregated Account) has appointed a Backup Clearing Member, in respect of <u>such Custodial Segregated Account</u>, who which is unable to accept, or otherwise rejects, a transfer of the <u>any of the relevant</u>-securities <u>forming as</u>-part of the <u>transfer of an Account</u> Balance <u>for such Custodial Segregated Account</u> in accordance with the provisions of the Client Clearing Annex,

the Clearing House may sell any such securities before the expiry of the Porting Window applicable to such Custodial Segregated Account to these Default Rules;

- (2) the Clearing House will sell all securities deposited as
 Collateral in an Omnibus Segregated Account of the
 Defaulter and forming part of the Clearing Member Current
 Collateral Balance in respect of such Omnibus Segregated
 Account as soon as reasonably practicable after the Default
 of such Defaulter; and
- (3) the Clearing House will sell all securities deposited as

 Collateral in an Individual Segregated Account or Indirect
 Gross Account of the Defaulter and forming part of the
 Clearing Member Current Collateral Balance in respect of
 such Client Account as soon as reasonably practicable after
 the expiry of the Porting Window applicable to such Client
 Account;
- (ii) in the case of SwapClear Contracts and/or Listed Interest Rates Contracts related to Rates Service Clearing House Business, the Clearing House: (A) shall act in accordance with the provisions of the Rates Service DMP Annex to these Default Rules (which deals, amongst other things, with certain specific arrangements, procedures and steps for the close-out and/or settlement of such SwapClear Contracts and/or Listed Interest Rates Contracts pursuant to this Rule 6); and (B) may also take any of the other steps set out in this Rule 6 to the extent that

they do not conflict with the steps set out in the Rates Service DMP Annex to these Default Rules;

- (iii) in the case of ForexClear Contracts related to ForexClear Clearing House Business and ForexClear Contracts which are Relevant Auction Contracts, the Clearing House: (A) shall act in accordance with the provisions of the ForexClear DMP Annex to these Default Rules (which deals, amongst other things, with certain specific arrangements, procedures and steps for the close-out and/or settlement of such ForexClear Contracts pursuant to this Rule 6); and (B) may also take any of the other steps set out in this Rule 6 to the extent that they do not conflict with the steps set out in the ForexClear DMP Annex to these Default Rules; and
- (iv) in the case of Fixed Income Contracts related to RepoClear Clearing House Business and Fixed Income Contracts which are Relevant Auction Contracts, the Clearing House: (A) shall act in accordance with the provisions of the RepoClear DMP Annex to these Default Rules (which deals, amongst other things, with certain specific arrangements, procedures and steps for the close-out and/or settlement of such Fixed Income Contracts pursuant to this Rule 6); and (B) may also take any of the other steps set out in this Rule 6 to the extent that they do not conflict with the steps set out in the RepoClear DMP Annex to these Default Rules.

7.

- (a) Where the Clearing House declares the Defaulter's rights and liabilities under an open contract subject to tender (or an FCM Exchange Contract Subject to Delivery Notice) discharged under Rule 6(k):
 - (i) those rights and liabilities and the rights and liabilities of the Clearing House under the open contract shall be discharged; and
 - (ii) there shall arise between the Defaulter and the Clearing House in respect of the open contract an obligation to account, as directed by the Clearing House, for a settlement amount determined by the relevant Board under this Rule.
- (b) The settlement amount referred to in Rule 7(a) shall be an amount which, at the request of the Clearing House, the relevant Board determines to represent adequate compensation (in the circumstances known to the Board) for the discharge of the mutual rights and liabilities of the Defaulter and the Clearing House under the open contract. The determination of the Board shall be conclusive. The Clearing House shall direct how the settlement amount is to be accounted for between the Defaulter and itself.
- (c) Neither the Clearing House nor any relevant Board or Exchange shall have any liability whatsoever for anything done or omitted in the determination of a settlement amount under this Rule.

the allocation of any available Agent Buffer standing to the relevant SM/AM Account in setting off any such amounts payable to the Clearing House.

For the purposes of Rule 8(a) above the Clearing House may assess the sum payable by or to the Defaulter in respect of any breach of the Regulations FCM Regulations or the SC Regulations (as the case may be) in such reasonable manner as it thinks fit; **provided**, **that** in the case of breaches of the FCM Regulations, the assessment by the Clearing House shall not be in violation of the CFTC Regulations (including Part 22 thereof).

With respect to any Unallocated Excess maintained in the Unallocated Excess Sub-Account of the Defaulter, the Clearing House shall not be permitted to apply any such Unallocated Excess to the obligations of the Defaulter to the Clearing House (on behalf of the Defaulter's FCM Clients or otherwise) or take any such Unallocated Excess into account for purposes of determining net sums under this Rule 8, except to the extent required or permitted by Applicable Law or directed by the applicable bankruptcy trustee or Regulatory Body in accordance with Applicable Law.

- 9. The sum, or each sum, finally payable by the Defaulter to the Clearing House or by the Clearing House to the Defaulter (including any sums payable to the Defaulter for the benefit of one or more of its FCM Clients), or the fact that no sum is finally payable by either such party to the other, as the case may be upon completion of the process set out in Rule 8, shall be forthwith certified by the Clearing House for the purposes of section 163 of the Companies Act 1989. The certificate of the Clearing House under this Rule shall be conclusive as to the discharge of the Defaulter's rights and liabilities in respect of the Contracts to which it relates. The Clearing House shall, as soon as practicable after issuing a Default Notice in respect of a Clearing Member, appoint a day on which any net sums certified under this Rule to be due to the Defaulter are to be paid by the Clearing House. The day so appointed may fall before or after the effective date of termination of the Defaulter's Clearing Membership Agreement but shall not fall on a day before the process specified in Rule 8 can be completed.
- 10. Following a Default by an FCM Clearing Member, the Clearing House will to the extent permitted by Applicable Law (including Part 190 of the CFTC Regulations and applicable bankruptcy law), credit Variation Settlement on a gross basis to each individual FCM Client Sub-Account.

11.

- (a) Where the Defaulter has more than one account with the Clearing House, the Defaulter's accounts shall be combined for the purpose of Rules 8 and 9 as follows:
 - (i) no account which is an FCM Client Sub-Account of an FCM Client may be combined with any other account, including any FCM Client Sub-Account of another FCM Client, any FCM Omnibus Client Account with LCH or any Proprietary Account; **provided that** in the event that an FCM Client were to have two FCM Client Sub-Accounts with the same Defaulter, and both such accounts cleared the same Product, then such FCM Client Sub-Accounts may be combined;

- (ii) no account which is an FCM Omnibus Client Account with LCH of the Defaulter may be combined with any other account, including any other FCM Omnibus Client Account with LCH or any Proprietary Account;
- (iii) an account which is a Proprietary Account of the Defaulter may be combined with any other Proprietary Accounts of the Defaulter and (if the Clearing House so elects) Treasury Accounts of the Defaulter (subject to Rule 11(d) of the Default Rules); and
- (iv) an account which is a Treasury Account of the Defaulter may only be combined with other Treasury Accounts and (if the Clearing House so elects) Proprietary Accounts of the Defaulter; and
- (v) no account which is an SM/AM Account of a Sponsored Member may be combined with any other account.

Notwithstanding the foregoing, in no circumstances may an account which is an Individual Segregated Account of the Defaulter, an Indirect Gross Account of the Defaulter, a Custodial Segregated Account of the Defaulter or an Omnibus Segregated Account of the Defaulter be combined with any other account of the Defaulter (except as provided under Rule 15(a)(ii)).

(b) For the purposes of this Rule 11, each Individual Segregated Account of the Defaulter, each Custodial Segregated Account of the Defaulter, each Omnibus Segregated Account of the Defaulter, each Indirect Gross Sub-Account within a particular Indirect Gross Account of the Defaulter, each FCM Client Sub-Account(s) of a particular FCM Client within a particular FCM Omnibus Swaps Client Account with LCH of the Defaulter, each FCM Omnibus Foreign Futures Client Account with LCH, each SM/AM Account with LCH shall constitute a separate "kind of account". Where the Defaulter has more than one kind of account with the Clearing House, the process set out in Rule 8 shall be separately completed in respect of each kind of account and . In the case of each kind of account of the Defaulter which is an Individual Segregated Account, an Indirect Gross Sub-Account or a Custodial Segregated Account, the sum finally payable in respect of that each kind of account following completion of the process set out in Rule 8 shall be separately certified under Rule 9. In the case of each kind of account of the Defaulter which is an Omnibus Segregated Account (other than a Non-Identified Client Omnibus Net Segregated Account or an Indirect Net Account), the sum finally payable in respect of that kind of account following completion of the process set out in Rule 8 will be allocated by the Clearing House (pro rata as it sees fit in its sole discretion) between the Clearing Clients in that Omnibus Segregated Account. Each sum so allocated to a Clearing Client shall be separately certified under Rule 9. In the case of each kind of account of the Defaulter which is a Non-Identified Client Omnibus Net Segregated Account or an Indirect Net Account, the sum finally payable in respect of that kind of account following completion of the process set out in Rule 8 will represent the aggregate entitlements of all Clearing Clients comprising that Client Account.

- (c) In Rule 8 any reference to the relevant "**kind of account**" means:
 - (i) with regard to a net sum produced by reference to Contracts registered in an Individual Segregated Account of the Defaulter, that Individual Segregated Account;
 - (ii) with regard to a net sum produced by reference to Contracts registered in an Indirect Gross Sub-Account of the Defaulter, that Indirect Gross Sub-Account:
 - (iii) with regard to a net sum produced by reference to Contracts registered in a Custodial Segregated Account of the Defaulter, that Custodial Segregated Account;
 - (iv) with regard to a net sum produced by reference to Contracts registered in an Omnibus Segregated Account of the Defaulter, that Omnibus Segregated Account;
 - (v) with regard to a net sum produced by reference to FCM SwapClear Contracts and/or FCM Portfolio Margined Contracts registered in one or more FCM Client Sub-Accounts of the Defaulter held in the name of one particular FCM Client, that FCM Client Sub-Account, or (if there is more than one) all such FCM Client Sub-Accounts (containing FCM SwapClear Contracts and/or FCM Portfolio Margined Contracts) of such particular FCM Client combined;
 - (vi) with regard to a net sum produced by reference to FCM ForexClear Contracts registered in one or more FCM Client Sub-Accounts of the Defaulter held in the name of one particular FCM Client, that FCM Client Sub-Account, or (if there is more than one) all such FCM Client Sub-Accounts (containing FCM ForexClear Contracts) of such particular FCM Client combined;
 - (vii) [INTENTIONALLY LEFT BLANK];
 - (viii) with regard to a net sum produced by reference to FCM Contracts registered in an FCM Omnibus Futures Client Account with LCH of the Defaulter, that FCM Omnibus Futures Client Account with LCH, or (if there is more than one) all such FCM Omnibus Futures Client Accounts with LCH of the Defaulter combined;
 - (ix) with regard to a net sum produced by reference to FCM Contracts registered in an FCM Omnibus Foreign Futures Client Account with LCH of the Defaulter, that FCM Omnibus Foreign Futures Client Account with LCH, or (if there is more than one) all such FCM Omnibus Foreign Futures Client Accounts with LCH of the Defaulter combined;
 - (x) with regard to a net sum produced by reference to Contracts registered in one or more Proprietary Accounts of the Defaulter, that Proprietary Account or those Proprietary Accounts combined and (if the Clearing

- House has elected in accordance with Rule 11(a)) any Treasury Accounts of the Defaulter;
- (xi) with regard to a net sum produced by reference to one or more Treasury Accounts of the Defaulter, that Treasury Account or those Treasury Accounts combined, and (if the Clearing House has elected in accordance with Rule 11(a)) any Proprietary Accounts; and
- (xii) with regard to a net sum produced by reference to Contracts registered in SM/AM Account with LCH of the Defaulter, that SM/AM Account..
- (d) Notwithstanding any provision of the Rulebook to the contrary, any loss which relates to a Treasury Account may not be treated as a Default Loss, whether or not Collateral has been applied in respect of such loss. Nothing in this Rule 11(d) requires the Clearing House to apply Collateral in respect of any such loss, except that the Clearing House may not apply Collateral in respect of any such loss to the extent that doing so would give rise to an Excess Loss.
- 12. Without further authorisation, permission or cooperation from the Defaulter (or a related Agent Member), the Clearing House may appoint any person to take or assist it in taking any step under these Rules or to complete or assist it in completing the process set out in Rule 8.
- 13. The Clearing House may co-operate, by the sharing of information and otherwise, with any Regulatory Body or relevant Exchange, any relevant office-holder acting in relation to the Defaulter or its estate and any other authority or body having responsibility for, or any Clearing Member having an interest in, any matter arising out of or connected with the circumstances mentioned in Rule 3.
- 14. In addition to such copy report as it supplies under section 162(3) of the Companies Act 1989, the Clearing House shall report to the Defaulter (and, if applicable, its related Agent Members), or any relevant office-holder acting in relation to the Defaulter or its estate, on steps taken in relation to the Defaulter under Rule 6.

Reduction of Losses on Default

- 15. Subject to: (i) any contrary provision of the Rulebook and/or (ii) any variation or modification in, or clarification of, the application of the resources described below set out in an Annex, where a Defaulter fails to pay any sum payable to the Clearing House, the Clearing House shall reduce or bear its loss in the manner provided by this Rule:
 - (a) first, to the extent the Clearing House determines appropriate, in applying any Collateral transferred to the Clearing House by or for the account of the Defaulter (including, where the Defaulter is a Sponsored Member, available Agent Buffer transferred to the Clearing House by the Defaulter's Agent Members in respect of the Defaulting Sponsored Member's collateral account as per Regulations 16(c) and (d)), any other sum owed to the Defaulter or its Agent Member (other than (i) any Contribution of the Defaulter or (ii) any ForexClear Option Service Liquidity Fund Contributions of the Defaulter) and any Collateral transferred to the Clearing House by a Custodial Segregated Client in respect of a Custodial Segregated Account of the Defaulter (together,

- terms of paragraph 2 of this Client Clearing Annex and the terms of such Rates Service DMP Annex.
- 11. Risk Neutralisation and the auction process relating to the Relevant Auction Contracts which are ForexClear Contracts shall be conducted in accordance with the provisions of the ForexClear DMP Annex, save that no hedging shall be undertaken in respect of any Relevant Contract relating to ForexClear Clearing Client Business until such time as the Clearing House has determined that the Relevant Contract in question will not be ported, from which time such contract shall be a Relevant Auction Contract and included in a Portfolio in accordance with the terms of paragraph 2 of this Client Clearing Annex and the terms of such ForexClear DMP Annex.
- 12. Risk Mitigation and the auction process relating to the Relevant Auction Contracts which are Fixed Income Contracts shall be conducted in accordance with the provisions of the RepoClear DMP Annex, save that no hedging shall be undertaken in respect of any Fixed Income Contract which is a Relevant Contract relating to RepoClear Client Clearing Business until such time as the Clearing House has determined that the Relevant Contract in question will not be ported, from which time such contract shall be a Relevant Auction Contract and included in a Portfolio in accordance with the terms of paragraph 2 of this Client Clearing Annex and the terms of such RepoClear DMP Annex.
- 13. Determination of the Account Balances, the Client Clearing Entitlements and the Aggregate Omnibus Client Clearing Entitlements will be undertaken by the Clearing House in accordance with its own records based on information provided to it by the Defaulter. The Clearing House shall be under no obligation to verify or to conduct any independent enquiry in respect of any such information and shall be entitled for all purposes to treat it as definitive. However, the Clearing House may, in its absolute discretion, adjust its records to reflect any matter which it believes should be taken into account in determining the Account Balances, the Client Clearing Entitlements and/or the Aggregate Omnibus Client Clearing Entitlements.
- 14. Nothing in the Default Rules this Client Clearing Annex shall give rise to a requirement for the Clearing House to take any action which would contravene the provisions of Applicable Law or of any United Nations, European Union or other sanctions or other similar measures implemented or effective with respect to a Clearing Client which is, or is controlled by or otherwise connected with, a person resident in, incorporated in or constituted under the laws of, or carrying on business in a country to which any such sanctions or other similar measures apply, or is otherwise the target of any such sanctions or other similar measures.
- 15. Subject to this paragraph and to paragraph 16 below, a person who is not a party to this Client Clearing Annex (the parties to this Client Clearing Annex for these purposes being the Clearing House and the Clearing Members) has no right under the Contracts (Rights of Third Parties) Act 1999 (the "**Third Parties Act**") to enforce any term of this Client Clearing Annex.
- 16. Clearing Clients of a Defaulter may enforce the terms of this Client Clearing Annex subject to and in accordance with Regulation 52 (*Exclusion of Liability*) and the provisions of the Third Parties Act.

- 17. Notwithstanding paragraph 16 above, the Clearing House will not require the consent of the Clearing Clients to rescind or to vary this Client Clearing Annex at any time.
- 18. A Clearing Client of a Defaulter may not assign or transfer or purport to assign or to transfer a right to enforce a term of this Client Clearing Annex under the Third Parties Act.

Auction Portfolios of the Defaulting FXCCM are transferred to those FXCCMs which have successfully bid for such Auction Portfolios in Auctions, or, if any Default occurs with respect to any other FXCCM prior to the end of a Loss Distribution Period, the rights and obligations arising out of the Auction Portfolios of any subsequent Defaulting FXCCM are transferred to those FXCCMs who have successfully bid for such Auction Portfolios in Auctions and (b) all payments required to be made by such FXCCMs and/or the Clearing House in respect of such Auction(s) have been made in full; or (ii) any business day on which the Clearing House determines that a Loss Distribution Trigger Event has occurred; PROVIDED THAT, in each case, the Loss Distribution Period shall not extend beyond the Loss Distribution Cut-Off Date.

"Loss Distribution Trigger Amount" means, in respect of any Loss Distribution Period and any Non-Defaulting FXCCM, an amount equal to either (i) twice the ForexClear Contribution of such Non-Defaulting FXCCM as at the last ForexClear Determination Date prior to the date when the Default occurred at the beginning of that Loss Distribution Period or \$200 million, whichever is the greater; or (ii) an amount as approved by the Requisite Non-Defaulting FXCCMs following a Revised Loss Distribution Proposal as described in paragraph (d) of this Rule F9.

"Loss Distribution Trigger Event" means, with respect to a Non-Defaulting FXCCM, the aggregate Cash Gainer Payment Currency Adjustments applied to Cash Payments during the Loss Distribution Period (as amended from time to time) exceeded that FXCCM's Loss Distribution Trigger Amount (as amended from time to time) on the immediately preceding Loss Distribution Day.

"Margin Account" means each Proprietary Account, Individual Segregated Account, Indirect Gross Sub-Account, Non-Identified Client Omnibus Net Segregated Account, Affiliated Client Omnibus Net Segregated Account, Identified Client Omnibus Net Segregated Account, Indirect Net Account, Omnibus Segregated Gross Sub-Account and FCM Client Sub-Account related to the ForexClear Service of an FXCCM.

"Payment Currency Adjustment to Cash Payment" means one or more Cash Gainer Payment Currency Adjustment to Cash Payment(s) and/or one or more Cash Loser Payment Currency Adjustment to Cash Payment(s).

"Pre Haircut Base Currency Gains, Losses and Realised Cash Flows by Cash Payment" means, in respect of each Cash Payment and any business day, the amount (converted, where applicable, into USD at the Rate of Exchange) which would be paid by the Clearing House to a Non-Defaulting FXCCM (expressed as a positive number) or by such FXCCM to the Clearing House (expressed as a negative number) on such business day in the absence of the application of the Distribution Haircut.

"Rate of Exchange" means, for any day, the applicable rate of exchange for converting one currency into another as determined by the Clearing House by reference to Reuters.

"Margin Account" means: (i) for a Rates Service Clearing Member, each Proprietary Account, Individual Segregated Account, Indirect Gross Sub-Account, Custodial Segregated Account, Non-Identified Client Omnibus Net Segregated Account, Identified Client Omnibus Net Segregated Account, Identified Client Omnibus Net Segregated Account, Indirect Net Account and Omnibus Gross Segregated Sub-Account; and (ii) for each FCM Rates Clearing Member, the Proprietary Account and each FCM Client—Omnibus Client Account with LCH (provided that, in respect of an FCM Omnibus SwapClear Client Swaps—Account with LCH, this term refers to each FCM Client Sub-Account contained therein).

"Omnibus Gross Segregated Sub-Account" means the sub-account allocated to each individual Omnibus Gross Segregated Clearing Client or each set of Combined Omnibus Gross Segregated Clearing Clients within an Omnibus Gross Segregated Account for the purposes of recording SwapClear Contracts referable to each such individual client or group of clients.

"Payment Currency Adjustment to Cash Payment" means one or more Cash Gainer Payment Currency Adjustment to Cash Payment(s) and/or one or more Cash Loser Payment Currency Adjustment to Cash Payment(s).

"Pre Haircut Base Currency Gains, Losses and Realised Cash Flows by Cash Payment" means, in respect of each Cash Payment and any business day, the amount (converted, where applicable, into pounds sterling at the Rate of Exchange) which would be paid by the Clearing House to a Non-Defaulting Rates Service Clearing Member (expressed as a positive number) or by such Rates Service Clearing Member to the Clearing House (expressed as a negative number) on such business day in the absence of the application of the Distribution Haircut.

"Rate of Exchange" means, for any day, the applicable rate of exchange for converting one currency into another as determined by the Clearing House by reference to Reuters.

"Rates Service Adjustment Amount" means in respect of the Margin Account(s) of any Non-Defaulting Rates Service Clearing Member and any Loss Distribution Day, an amount equal to the sum of the Cumulative Pre Haircut Base Currency Gains Losses and Realised Cash Flows in respect of such Margin Account(s) of such Rates Service Clearing Member less the sum of the Cumulative Actual Base Currency Gains, Losses and Realised Cash Flows in respect of such Margin Account(s) of such Rates Service Clearing Member, in each case in respect of the Loss Distribution Period in which such Loss Distribution Day falls.

"Requisite Non-Defaulting Rates Service Clearing Members" means on any business day in a Loss Distribution Period, Non-Defaulting Rates Service Clearing Members whose Rates Service Contributions represented 75% or more of the total size of the Rates Service Fund Amount (less the Contribution of any Defaulter(s)) as of the last Rates Service Determination Date prior to the date when the Default occurred.





Appendix II General Regulations Changed Pages

GENERAL REGULATIONS OF	
LCH LIMITED	

"Affiliated Omnibus Segregated Clearing Clients" means certain Omnibus Segregated Clearing Clients of a Clearing Member (i) whose identities have been recorded by the Onboarding department of the Clearing House and who are grouped together in a single Omnibus Segregated Account of the Clearing Member (ii) who are known to each other and (iii) who have elected to be grouped together in an Omnibus Segregated Account due to the existence of a common relationship between them (whether structural, economic, legal and/or otherwise) which is above and beyond the fact that they are grouped together in the relevant Omnibus Segregated Account.

"Agent Member"

has the meaning assigned to it in the SC Regulations

"Aggregate Excess Loss"

means, in relation to a Default, the aggregate amount of all Excess Losses attributable to all types of Relevant Business in which the Defaulter was engaged.

"Aggregate Omnibus Client Clearing Entitlement" has the meaning ascribed to it in Clause 9.3 of the Client Clearing Annex to the Default Rules

"Alternative Data"

has the meaning assigned to it in Section 2C1.27.2 of the

Procedures

"Annex"

means the Client Clearing Annex, the Rates Service DMP Annex, the RepoClear DMP Annex and the ForexClear

DMP Annex

"Applicable Law"

means any applicable statute, law, ordinance, regulation, rule and other instruments in force from time to time, including (i) the rules, codes or practice of a Governmental Authority or Regulatory Body, and (ii) sanctions and similar measures implemented or effective in respect of any person or assets-

Event"

"Automatic Early Termination has the meaning ascribed to such term in Rule 5 of the **Default Rules**

"Available Collateral Value"

means, in respect of

- (i) a Client Account (other than an Omnibus Gross Segregated Account or Individual Segregated Account), the value (as determined by the Clearing House) of the Clearing Member Current Collateral Balance of such Client Account, where any Client Buffer forming part of such Clearing Member Current Collateral Balance will have a zero value.
- an Individual Segregated Account, the value (as (ii) determined by the Clearing House) of the Clearing Member Current Collateral Balance of such Individual Segregated Account, after the application or deduction of any Cross-ISA Deduction (as applicable), where any Client Buffer forming part of such Clearing Member Current Collateral Balance will have a zero value, and
- (iii) a sub-account of an Omnibus Gross Segregated Sub-Account, the value (as determined by the Clearing House) of such portion of the Clearing Member Current Collateral Balance of the Omnibus Gross Segregated Account attributed to such sub-account by the Clearing House, where any part of such value that is reflective of Client Buffer forming part of such Clearing Member Current Collateral Balance will have a zero value

"Backup Clearing Member"

means the Clearing Member(s) (a) indicated by a Clearing Client as acting as such, and (b) notified to the Clearing House from time to time in an Appointment Notice and in accordance with the procedure determined by the Clearing House

"Backup Client"

means an Indirect Gross Account Clearing Client identified by a Clearing Member to the Clearing House for the purposes of a transfer of Related Contracts pursuant to a Client to Client Porting

"Backload Registration Cycle"

has the meaning assigned to it in the Procedures

"Backloaded Trade"

has the meaning assigned to it in the Procedures

"Base Liability"

means, in respect of

- (i) a Client Account (other than an Omnibus Gross Segregated Account), the Total Required Margin Amount of such account, disregarding the amount by which such liability is reduced by the use of SwapClear Tolerance, and
- (ii) a sub-account of an Omnibus Gross Segregated Sub-Account, the Total Required Margin Amount of such sub-account, disregarding the amount by which such liability is reduced by the use of SwapClear Tolerance

"Block IRS Trade"

means a trade the notional amount of which is at or above the minimum block size established by the CFTC pursuant to CFTC Regulation 43.6 for the interest rate asset class and in effect as of the date of submission of such trade to the Clearing House for registration

"Board"

means the board of directors or other governing body (whether called a board, a committee or otherwise) of an Exchange

"Bond Trade"

means a trading activity in which a RepoClear Participant offers to sell RepoClear Eligible Securities, and another RepoClear Participant offers to purchase those RepoClear Eligible Securities, and a trade subsequently ensues

"Bulk Event"

has the meaning as described in Regulation 60(f)

"Bulk Event Cycle"

has the meaning as described in Regulation 60(f)

"Bulk Threshold"

means the threshold (defined as a given number of SwapClear Contracts) established from time to time by the Clearing House in its sole and absolute discretion to distinguish Intra-Day Bulk Transfers from Intra-Day Non-Bulk Transfers and notified to SwapClear Clearing Members

"Business"

means any transactions, liabilities or obligations arising out of any contract and includes, in relation to the relevant Services, Equities Business, ForexClear Business, RepoClear Business and Rates Service Business.

"business day"

means in respect of a Cleared Exchange Contract, an OTC Contract (except where specified otherwise in the relevant OTC Contract Terms), an EquityClear Contract, and a Listed Interest Rates Contract (except where specified otherwise in the Listed Interest Rates Contract Terms) a day on which the Clearing House is open for business

"Omnibus CSD-Level Segregation"

means, in respect of an Authorised CSD and an account which the Clearing House has opened with such Authorised CSD, that the Clearing House holds Securities Collateral for a Clearing Member in such account together with (a) other Securities Collateral that the Clearing House holds for other Clearing Members, and/or (b) Sponsored Clearing Securities Collateral that the Clearing House holds for Agent Members and/or Sponsored Members

"Omnibus Gross Segregated Account"

means, in relation to a Relevant Client Clearing Business, an account opened within the Clearing House by a Clearing Member on behalf of a group of Omnibus Gross Segregated Clearing Clients which is designated by the Clearing House as an Omnibus Gross Segregated Account

"Omnibus Gross Segregated Clearing Clients"

means Affiliated Omnibus Segregated Clearing Clients or Identified Omnibus Segregated Clearing Clients (as applicable) in respect of whom the relevant Clearing Member clears Contracts with the Clearing House in an Omnibus Gross Segregated Account

"Omnibus Gross Segregated Sub-Account"

means, in respect of an Omnibus Gross Segregated Account in the name of a Clearing Member, a segregated sub-account of such Omnibus Gross Segregated Account, which is established on the books of the Clearing House for the purpose of recording Contracts that such Clearing Member has entered into with the Clearing House in respect of (i) the Omnibus Gross Segregated Clearing Client, or (ii) any of the Combined Omnibus Gross Segregated Clearing Clients (in each case) to which the sub-account is attributable

"Omnibus Segregated Account"

means an account opened within the Clearing House by a Clearing Member or an FCM which enables the relevant Clearing Member or FCM (as applicable) to distinguish its assets and positions from the assets and positions held for the account of its clients (or a group of clients). For the avoidance of doubt, the term includes Identified Client Omnibus Segregated Accounts, Affiliated Client Omnibus Segregated Accounts, Non-Identified Client Omnibus Net Segregated Accounts and Indirect Net Accounts

"Omnibus Segregated Account Balance"

means, in respect of an individual Identified Omnibus Segregated Clearing Client or an individual Affiliated Omnibus Segregated Clearing Client, such part of the Clearing Member Current Collateral Balance of the relevant Omnibus Segregated Account which is attributed by the Clearing House to the relevant client (together with any receivables, rights, intangibles and any other collateral or assets deposited or held with the Clearing House in connection with such an account)

"settlement price"

means one or more prices determined and issued by an Exchange in accordance with its Exchange Rules in respect of a delivery month or prompt date

In relation to a Contract other than an exchange contract, one or more prices determined in accordance with the Regulations or the Procedures.

"Settlement Service Provider"

means CLS Bank International or any other entity approved by the Clearing House from time to time for the provision to the Clearing House of settlement services in conection with settlement under the ForexClear Service not taking place through the Clearing House Protected Payment System

"Shortfall Ratio"

means, in respect of an SCM and

- (i) a Client Account (other than an Omnibus Gross Segregated Account) of such SCM, the ratio that the Margin Shortfall for such Client Account bears to aggregate Margin Shortfalls for all Client Accounts (other than Omnibus Gross Segregated Accounts) of such SCM and all Omnibus Gross Segregated Sub-Accountssub-accounts of each Omnibus Gross Segregated Account of such SCM, and
- (ii) a sub-account of an Omnibus Gross Segregated Sub-Account of such SCM, the ratio that the Margin Shortfall for such sub-account bears to aggregate Margin Shortfalls for all Client Accounts (other than Omnibus Gross Segregated Accounts) of such SCM and all Omnibus Gross Segregated Sub-Accounts of each Omnibus Gross Segregated Account of such SCM

"Single Omnibus Gross Segregated Clearing Client" means, in respect of an Omnibus Gross Segregated Account, an Omnibus Gross Segregated Clearing Client within such account that is not a Combined Omnibus Gross Segregated Clearing Client

"SONIA"

means the overnight rate as calculated by the Wholesale Market Broker's Association and appearing on the Reuters Screen SONIA Page (or, if such a rate is not available, such SONIA-linked rate as may be determined in light of market conditions at such time by the Clearing House and notified by the Clearing House to Clearing Members)

CHAPTER XI – NETTING AND DISTRIBUTION

REGULATION 45 NETTING

- (a) If at any time the Clearing House fails to make a payment or a delivery of an asset to a Member, other than a Defaulter, under a Contract for a period of 30 days from the date when the obligation to pay or deliver fell due then that Member may exercise its rights under paragraph (c) below.
- (b) If at any time the Clearing House commences a voluntary case or other procedure seeking or proposing liquidation, administration, receivership, voluntary arrangement or a scheme of arrangement, or other similar relief with respect to itself or to its debts under any bankruptcy, insolvency, regulatory, supervisory or similar law, or if any of the foregoing cases or procedures is commenced in relation to the Clearing House by any other person which results in liquidation or winding up of the Clearing House, or if the Clearing House takes corporate action to authorise any of the foregoing, in any such case other than for the purposes of corporate restructuring (including any consolidation, amalgamation or merger), then a Member, other than a Defaulter, may exercise the right given to it under paragraph (c) below.
- (c) A Member entitled to exercise rights under this paragraph may, at any time whilst any of the circumstances referred to in paragraph (a) or (b) giving rise to such rights continue, by notice in writing to the Clearing House, specify a Termination Date for the termination and liquidation of all Contracts to which it is a party in accordance with paragraph (d) below.
- (d) Upon the occurrence of a Termination Date:
 - (i) neither the Clearing House nor the Member shall be obliged to make any further payments or deliveries under any Contract between them which would, but for this Regulation 45, have fallen due for performance on or after the Termination Date, and any obligations to make further such payments or deliveries which would otherwise have fallen due shall be satisfied by settlement (whether by payment, set-off or otherwise) of the Termination Amount;
 - (ii) the Member shall (on, or as soon as reasonably practicable after, the Termination Date) determine (discounting if appropriate) in respect of each Contract its total loss or, as the case may be, gain, in each case expressed in the lawful currency of the United Kingdom (the "Base Currency"), (and, if appropriate, including any loss of bargain, cost of funding or, without duplication, loss or, as the case may be, gain as a result of the termination, liquidation, obtaining, performing or re-establishing of any hedge or related trading position), as a result of the termination, pursuant to this agreement, of each payment or delivery which would otherwise have been required to be made under such Contract (assuming satisfaction of each applicable condition precedent and having due regard to, if appropriate, such market quotations published on, or official settlement prices set by, a relevant exchange or clearing organisation, as may be available on, or immediately preceding, the date of calculation);

- (iii) any cash Collateral balance held by the Clearing House and/or the Member in respect of the other party's initial margin and/or variation margin obligations shall (to the extent not already due and payable) be accelerated so as to become immediately due and payable to the Member or Clearing House who provided such cash Collateral, and the Member shall (on, or as soon as reasonably practicable after, the Termination Date) determine the Base Currency Equivalent of such amount(s). For the purposes of this Regulation 45, the "Base Currency Equivalent" means, in respect of any amount denominated in the Base Currency, such Base Currency amount and, in respect of any amount denominated in a currency other than the Base Currency (the "Other Currency"), the amount in the Base Currency determined by the Member as being required to purchase such amount of such Other Currency as at the relevant Termination Date, with the Base Currency; and
- (iv) the Member shall treat each loss to it determined under paragraph (ii) above and the Base Currency Equivalent of any amount of cash Collateral due and payable to it as a positive amount and each gain by it determined under paragraph (ii) above and the Base Currency Equivalent of any amount of cash Collateral due and payable by it as a negative amount and, subject to paragraph (v), shall aggregate all of such amounts to produce a single, net positive or negative amount, denominated in the Base Currency (the "**Termination Amount**").
- (v) Where a Member has a Proprietary Account and one or more Client Accounts:
 - (A) the Member shall determine one or more net amounts under paragraph (iv): a separate net amount in respect of gains and losses arising on Contracts registered in each of its Client Accounts (other than an Indirect Gross Account and an Omnibus Gross Segregated Account) and any corresponding cash Collateral balances held by that Member or the Clearing House; a separate net amount in respect of gains and losses arising on Contracts registered in each of its Indirect Gross Sub-Accounts and Omnibus Gross Segregated Sub-Accounts and any corresponding cash Collateral balances held by that Member or the Clearing House; and a further separate net amount in respect of gains and losses arising on all Contracts registered in such Member's Proprietary Account (or Proprietary Accounts as combined) and any corresponding cash Collateral balances held by that Member or the Clearing House; and
 - (B) each of the net amounts determined under paragraph (A) shall constitute Termination Amounts.
- (vi) If a Termination Amount determined pursuant to paragraph (v) above is a positive amount, the Clearing House shall pay it to the Member and if any such Termination Amount is a negative amount, the Member shall pay it to the Clearing House, in either case in accordance with paragraph (vii). The Member shall notify the Clearing House of each such Termination Amount, and by which party it is payable, immediately after the calculation thereof.
- (vii) A Termination Amount shall, subject to Regulation 46, be paid in the Base Currency by the close of business on the business day following notification

pursuant to paragraph (vi) above (converted as required by Applicable Law into any other currency, any costs of such conversion to be borne by, and (if applicable) deducted from any payment to, the Clearing House). Any Termination Amount which is not paid on such day shall bear interest, at the average rate at which overnight deposits in the currency of such payment are offered by major banks in the London interbank market as of 11:00 hours (London time) (or, if no such rate is available, at such reasonable rate as the Member may select) plus 1 per cent. per annum, for each day for which any such sum remains unpaid.

(viii) For the purposes of any calculation required to be made under this Regulation, the Member may convert amounts denominated in any other currency into the Base Currency at such rate prevailing at the time of the calculation as it shall reasonably select.

The Member's rights under this Regulation 45 shall be in addition to, and not in limitation or exclusion of, any other rights which the Member may have (whether by agreement, operation of law or otherwise, including its rights under Regulation 10(i)).

- (e) If a Member is a Defaulter and either:
 - (i) no default management process has been commenced by the Clearing House in respect of such Member within 3 business days following a Default Notice being issued in respect of that Member; or
 - (ii) such default management process has been commenced within such period but that Member determines (acting reasonably) that the relevant default management process is unlikely to be completed,

then, provided that an event or circumstance as described in paragraph (a) (ignoring, for this purpose, the words "other than a Defaulter" in that paragraph) or (b) above has also occurred, the relevant Member shall be entitled to exercise the rights provided under paragraph (c) above, notwithstanding that it is a Defaulter.

- (f) Interpretation in Relation to FDICIA. The Clearing House and each Clearing Member intend that certain provisions of the General Regulations and the Procedures (including this Regulation 45) be interpreted in relation to certain terms that are defined in FDICIA, as follows:
 - (i) The Clearing House is a "clearing organization".
 - (ii) An obligation of a Clearing Member to make a payment to the Clearing House, or of the Clearing House to make a payment to a Clearing Member, subject to a netting contract, is a "covered clearing obligation" and a "covered contractual payment obligation".
 - (iii) An entitlement of a Clearing Member to receive a payment from the Clearing House, or of the Clearing House to receive a payment from a Clearing Member, subject to a netting contract, is a "covered contractual payment entitlement".
 - (iv) The Clearing House is a "member", and each Clearing Member is a "member".

REGULATION 48 INTERPRETATION OF THESE REGULATIONS; APPLICABLE LAW

- (a) In the event of inconsistency between the provisions of these Regulations and Exchange Rules, or between these Regulations and the rules or regulations or other contractual provisions of any trading platform or other undertaking, the provisions of these Regulations shall prevail.
- (b) The headings to these Regulations are for convenience only and shall not affect their interpretation.
- (c) Members shall at all times observe, interpret and give effect to the provisions of the Rulebook in a manner which promotes and maintains:
 - (i) the Clearing House's status as a recognised central counterparty under EMIR and a registered derivatives clearing organization under the United States Commodity Exchange Act and any other legal or regulatory status it has from time to time under any other Applicable Law;
 - (ii) the good reputation and integrity of the Clearing House and the Members; and
 - (iii) the Clearing House's obligations under EMIR and any other Applicable Law to act fairly and professionally in accordance with the best interests of Members and, where applicable, Clearing Clients and sound risk management.
- (d) Members shall perform their obligations and exercise their rights under the Rulebook in accordance with Applicable Law.
- Any requirement that a document is signed may be satisfied by an electronic signature or by electronic evidence of agreement, in each case in a form and manner that is acceptable to the Clearing House. This provision does not affect any other legal requirement that may apply to the form or manner of the execution of a document.
- (e)(f) Nothing in the Rulebook shall give rise to a requirement for the Clearing House to take any action which would contravene the provisions of Applicable Law.

REGULATION 57 COLLATERALISATION OF SWAPCLEAR CTM CONTRACTS

- (a) The net present value of each SwapClear CTM Contract shall be calculated by the Clearing House for the purposes of determining required variation margin in such manner and at such times as may be provided in the Procedures. Except as prescribed in the Procedures, the net present value calculated by the Clearing House may in no circumstances be called in question.
- (b) The Clearing House shall, at least daily:
 - (i) where the net present value of an outstanding SwapClear CTM Contract has moved in favour of the Clearing House since the last valuation, call on the SwapClear Clearing Member to transfer to the Clearing House cash in an amount equal to (A) the net present value to the Clearing House of the relevant SwapClear Contract minus (B) the current balance of cash Collateral provided to the Clearing House by such SwapClear Clearing Member in respect of its variation margin obligations in respect of that SwapClear CTM Contract; and
 - (ii) where the net present value of an outstanding SwapClear CTM Contract has moved in favour of the SwapClear Clearing Member since the last valuation, transfer to the SwapClear Clearing Member cash in an amount equal to (A) the net present value to the SwapClear Clearing Member of the relevant SwapClear CTM Contract minus (B) the current balance of cash Collateral provided to such SwapClear Clearing Member by the Clearing House in respect of its variation margin obligations in respect of that SwapClear CTM Contract,

provided that:

- (iii) (A) and/or (B), as used in sub-paragraphs (i) and (ii) above, may be negative numbers where the net present value of a SwapClear Contract has moved in favour of the party that was "out of the money" at the time of the preceding valuation;
- (iv) any time the calculation provided for in this Regulation 57 is performed for the first time in respect of any particular SwapClear CTM Contract that SwapClear CTM Contract shall for the purpose of sub-paragraphs (i) and (ii) above be deemed to have had a net present value of zero at the time of the preceding valuation; and
- (v) the calculations under this Regulation 57 shall disregard any amount previously determined to be payable by one party to the other pursuant to Regulation 57 but which has not yet been so transferred.
- (c) Cash provided by the Clearing House or a SwapClear Clearing Member under Regulation 57 is provided by way of title transfer and, other than where the provision of cash reduces a party's current balance of cash Collateral, for the purpose of collateralising the relevant party's obligations under the relevant SwapClear CTM Contract(s).
- (d) In respect of all SwapClear CTM Contracts, on every Business Day, the Clearing House shall aggregate:

- (i) the sums which would otherwise have been payable by the SwapClear Clearing Member to the Clearing House as cash Collateral (in respect of variation margin obligations) on such date, any coupon payments which would otherwise have been due on that date from the SwapClear Clearing Member to the Clearing House and any other sums which would otherwise have been payable by the SwapClear Clearing Member to the Clearing House on such date (including any amounts due in respect of an obligation to return cash Collateral and any settlement amounts payable under a SwapClear CTM Contract or a Portfolio Margined Contract and excluding any amounts which are to be Charged Cash Collateral); and
- (ii) the sums which would otherwise have been payable by the Clearing House to the SwapClear Clearing Member as cash Collateral (in respect of variation margin obligations) on such date, any coupon payments which would otherwise have been due on that date from the Clearing House to the SwapClear Clearing Member and any other sums which would otherwise have been payable by the Clearing House to the SwapClear Clearing Member on such date (including any amounts due in respect of an obligation to return cash Collateral which is not Charged Cash Collateral and any settlement amounts payable under a SwapClear CTM Contract or a Portfolio Margined Contract),

(in each case, which are payable in the same currency and which are payable in respect of the same Client Account (that is not an Indirect Gross Account or Omnibus Gross Segregated Account), Proprietary Account, or Indirect Gross Sub-Account or Omnibus Gross Segregated Sub-Account (as applicable)), and all such sums shall be automatically satisfied and discharged and only the excess of the larger aggregate amount over the smaller aggregate amount shall be payable by the party by whom the larger aggregate amount would otherwise have been payable.

(e) The parties acknowledge that the effect of Regulation 57(d) is that any settlement payment obligation of a Clearing Member (or of the Clearing House) under a SwapClear CTM Contract and any obligation of the Clearing House's (or of the Clearing Member) on the date of such settlement to return same-currency cash Collateral provided to it by way of variation margin in respect of that SwapClear CTM Contract will be netted against each other, with only the balance being payable in accordance with Regulation 57(d)

- (i) For the purpose of determining the Cumulative Net Present Value of a SwapClear STM Contract that has been converted from a SwapClear CTM Contract pursuant to this Regulation 57A the Trade Date of the SwapClear STM Contract that comes into existence immediately following such conversion shall be the Trade Date of the SwapClear CTM Contract that was so converted.
- (j) The payment of each of the amounts due and payable under the SwapClear STM Terms applicable to a SwapClear STM Contract shall be made in such manner and at such times as may be provided in the Procedures.
- (k) In respect of all SwapClear STM Contracts the Clearing House shall:
 - (i) on each Business Day (as such term is defined in the SwapClear STM Terms relating to that SwapClear STM Contract), and, to the extentif that the following amounts are payable in the same currency and in respect of the same Client Account (that is not an Indirect Gross Account or Omnibus Gross Segregated Account), Proprietary Account, or Indirect Gross Sub-Account or Omnibus Gross Segregated Sub-Account (as applicable), aggregate:
 - (A) the amounts (if any) payable by the SwapClear Clearing Member to the Clearing House on such Business Day in accordance with Regulation 57A(d);
 - (B) the Price Alignment Amount (if any) payable by the SwapClear Clearing Member to the Clearing House on such Business Day in accordance with Regulation 57A(g);
 - (C) the amounts (if any) of the coupon payment payable by the SwapClear Clearing Member to the Clearing House on such Business Day in accordance with the Procedures; and
 - (D) any other amounts which are payable by the SwapClear Clearing Member to the Clearing House on such Business Day (excluding any amounts which are to be Charged Cash Collateral),
 - on each Business Day (as such term is defined in the SwapClear STM Terms relating to that SwapClear STM Contract), and, if to the extent that the following amounts are payable in the same currency and in respect of the same Client Account (that is not an Indirect Gross Account or Omnibus Gross Segregated Account), Proprietary Account, or Indirect Gross Sub-Account or Omnibus Gross Segregated Sub-Account (as applicable), aggregate:
 - (A) the amounts (if any) payable by the Clearing House to the SwapClear Clearing Member on such Business Day in accordance with Regulation 57A(s);
 - (B) the Price Alignment Amount (if any) payable by the Clearing House to the SwapClear Clearing Member on such Business Day in accordance with Regulation 57A(g);
 - (C) the amounts (if any) of the coupon payment payable by the Clearing House to the SwapClear Clearing Member on such Business Day in

- accordance with the Procedures (excluding any amounts which are Charged Cash Collateral); and
- (D) any other amounts which are payable by the Clearing House to the SwapClear Clearing Member on such Business Day (excluding any amounts which are Charged Cash Collateral),

and the amount payable on a Business Day to one party (the **Payee**) by the other party (the **Payer**) under Regulation 57A(k)(i) or (ii) (as applicable) shall be reduced by setting-off such amount against the amount (the **Other Amount**) payable by the Payee to the Payer under Regulation 57A(k)(i) or (ii) (as applicable). To the extent the Other Amount is so applied, the Other Amount will be discharged promptly and in all respects.

- (l) On each Business Day the Clearing House shall, to the extentif that the following_a amounts are payable in the same currency and in respect of the same Client Account (that is not an Indirect Gross Account or Omnibus Gross Segregated Account), Proprietary Account, or Indirect Gross Sub-Account or Omnibus Gross Segregated Sub-Account (as applicable), aggregate or set off (as applicable):
 - (i) the amount that is payable by either the SwapClear Clearing Member or the Clearing House following the operation of the payment netting provision under Regulation 57(d); and
 - (ii) the amount that is payable by either the SwapClear Clearing Member or the Clearing House following the operation of the payment netting provision under Regulation 57A(k),

and only the resulting aggregate or net amount shall be payable by either the SwapClear Clearing Member or the Clearing House (as applicable). To the extent one amount (the "Smaller Amount") is applied and set off against another larger amount, such Smaller Amount will be discharged promptly and in all respects.

- (m) The Clearing House and the SwapClear Clearing Member agree that satisfaction of the payment obligation arising under the SwapClear STM Terms by either party shall discharge such obligation for the purpose of settling the then outstanding exposure under a SwapClear STM Contract.
- (n) A SwapClear Clearing Member (a "Converting SwapClear Clearing Member") or a Clearing Client (including an FCM Client) on its behalf may, from time to time, submit a request, in such form as permitted by the Clearing House from time to time in its sole discretion, or, in the case of a compression of the type described in Regulation 56(c)(iii) or Regulation 56(e)(iv)(A), a SwapClear Clearing Member or a Clearing Client (including an FCM Client) on its behalf shall be deemed to have submitted a written request (each such request, an "STM Conversion Request") to the Clearing House requesting that the Clearing House converts one or more of its open SwapClear CTM Contracts to SwapClear STM Contracts. Such request shall identify those SwapClear CTM Contracts (the "STM Conversion Contracts") which the SwapClear Clearing Member or a Clearing Client (including an FCM Client) on its behalf wishes to be converted to SwapClear STM Contracts. No open SwapClear CTM Contract shall be converted into a SwapClear STM Contract except as provided in this Regulation 57A or the Procedures.

REGULATION 104 FOREXCLEAR OPTION SERVICE - PAYMENT NETTING

The Clearing House shall, on each day:

(a) to the extent that if amounts are payable (ia) payable in the same currency, (iib) payable by a ForexClear Clearing Member to the Clearing House on such day under the ForexClear Contracts (other than ForexClear Non-Deliverable Contracts) then registered in the name of that ForexClear Clearing Member, and (iiie) payable to the Clearing House's account at the Settlement Service Provider, aggregate such amounts; and

(a)

(b) to the extent that if amounts are payable (ia) payable in the same currency, (iib) payable to a ForexClear Clearing Member by the Clearing House on such day under the ForexClear Contracts (other than ForexClear Non-Deliverable Contracts) then registered in the name of that ForexClear Clearing Member, and (iiie) payable from the Clearing House's account at the Settlement Service Provider, aggregate such amounts,

and the amount payable on a day to one party (the **Payee**) by the other party (the **Payer**) under Regulation 104(a)(ai) or (b)(bii) (as applicable) above shall be reduced by setting-off such amount against the amount (the **Other Amount**) payable by the Payee to the Payer under (ai) or (bii) (as applicable) above. To the extent the Other Amount is so applied, the Other Amount will be discharged promptly and in all respects.

- comes into existence immediately following such conversion shall be the Trade Date of the ForexClear CTM Contract that was so converted.
- (k) The payment of each of the amounts due and payable under the ForexClear STM Terms applicable to a ForexClear STM Contract shall be made in such manner and at such times as may be provided in the Procedures.
- (l) In respect of all ForexClear STM Contracts the Clearing House shall:
 - (i) on each business day (as such term is defined in the ForexClear STM Terms relating to that ForexClear STM Contract), and, if to the extent that the following amounts are payable in the same currency and in respect of the same Client Account (that is not an Indirect Gross Account or an Omnibus Gross Segregated Account), Proprietary Account, or Indirect Gross Sub-Account or Omnibus Gross Segregated Sub-Account (as applicable), aggregate:
 - (A) the amounts (if any) payable by the ForexClear Clearing Member to the Clearing House on such business day in accordance with Regulation 106A(c)(i), 106A(d)(i) and 106A(d)(iii);
 - (B) the Price Alignment Amount (if any) payable by the ForexClear Clearing Member to the Clearing House on such business day in accordance with Regulation 106A(h)(ii); and
 - (C) any other amounts which are payable by the ForexClear Clearing Member to the Clearing House on such business day under those ForexClear STM Contracts,
 - on each business day -and to the extent that if the following amounts are payable in the same currency and in respect of the same Client Account (that is not an Indirect Gross Account or an Omnibus Gross Segregated Account), Proprietary Account or Indirect Gross Sub-Account or Omnibus Gross Segregated Sub-Account (as applicable), aggregate:
 - (A) the amounts (if any) payable by the Clearing House to the ForexClear Clearing Member on such business day in accordance with Regulation 106A(c)(ii), 106A(d)(ii) and 106A(d)(iv);
 - (B) the Price Alignment Amount (if any) payable by the Clearing House to the ForexClear Clearing Member on such business day in accordance with Regulation 106(a)(h)(ii); and
 - (C) any other amounts which are payable by the Clearing House to the ForexClear Clearing Member on such business day under those ForexClear STM Contracts,

and only the excess of the larger amount over the smaller amount (when comparing the aggregate amounts payable under (i) and (ii) above) shall be payable by the party by whom the larger amount would otherwise have been payable. To the extent the smaller amount is so applied, the smaller amount will be discharged promptly and in all respects.





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Accounts or to otherwise satisfy the Total Required Margin Amounts of such Client Accounts.

- (b) The Clearing House will at all times (except as provided under paragraph (e)(i) below) calculate:
 - (i) in respect of each Client Account (other than an Omnibus Gross Segregated Account), the amount (if any) by which the Base Liability exceeds the Available Collateral Value for such Client Account; and
 - (ii) in respect of <u>each Omnibus Gross Segregated Sub-Account</u>the <u>sub account referable to a Single Omnibus Gross Segregated Clearing Client or a group of Combined Omnibus Gross Segregated Clearing Clients (as applicable)</u>, the amount (if any) by which the Base Liability exceeds the Available Collateral Value for such sub-account,

where each such amount calculated is the "Margin Shortfall" for the relevant Client Account or sub-account (as applicable).

- (c) The Clearing House will automatically, and without further reference to the relevant SCM, allocate Client Buffer of such SCM to:
 - (i) a Client Account (other than an Omnibus Gross Segregated Account) of such SCM, which has a Margin Shortfall, equal to the total amount of Client Buffer held on behalf of such SCM multiplied by the Shortfall Ratio for such Client Account, up to a maximum of such Margin Shortfall; and
 - (ii) the sub-account of an Omnibus Gross Segregated Account of such SCM, which has a sub-account with a Margin Shortfall, equal to the total amount of Client Buffer held on behalf of such SCM multiplied by the Shortfall Ratio for such sub-account, up to a maximum of such Margin Shortfall.
- (d) As part of the end of day margin and settlement call, the Clearing House will call each SCM for Collateral to cover the liabilities of its Client Accounts which are, at that point, being covered by Client Buffer.
- (e) The Clearing House will perform the allocation of Client Buffer in accordance with paragraph (c) above on an ongoing basis, except that:
 - (i) subject to paragraph (e)(ii) below, where the Clearing House calls an SCM for end of day margin and/or settlement payments in respect of a business day, all calculations of Margin Shortfalls and allocations of Client Buffer will be suspended and all existing allocations of Client Buffer, in respect of the Client Accounts of such SCM, will remain in force from the time (as determined by the Clearing House) at the end of the period, for which the Clearing House has determined such end of day

- (ii) the Client Accounts of an SCM which does not use Client Buffer will be adjusted, as and when necessary, in respect of shortfalls in Collateral following the Clearing House's daily margin and settlement calls; and
- (iii) the Client Accounts of an SCM which uses Client Buffer will be adjusted on an ongoing basis, after the allocation of Client Buffer by the Clearing House pursuant to paragraphs (c) and (e) above, such that in respect of:
 - (A) a Client Account (other than an Omnibus Gross Segregated Account), the Clearing House will allocate SwapClear Tolerance to such account equal to the amount (if any) by which the Margin Shortfall, in respect of such Client Account, exceeds the Client Buffer allocated to it; and
 - (B) a sub account of an Omnibus Gross Segregated Sub-Account, the Clearing House will allocate SwapClear Tolerance to such sub-account equal to the amount (if any) by which the Margin Shortfall, in respect of such sub-account, exceeds the Client Buffer allocated to the Omnibus Gross Segregated Account as a result of such Margin Shortfallit.
- (k) SwapClear Tolerance does not, for the avoidance of doubt, give rise to any payment or transfer of Collateral from the Clearing House or result in any use of Default Fund resources (except following a Default).
- (l) Notwithstanding paragraph (j) above, the Clearing House will determine, in its sole discretion, the maximum value of the SwapClear Tolerance (which may be zero) available to an SCM at a given time (the "SwapClear Tolerance Limit").
- (m) Notwithstanding paragraph (j) above, the Clearing House may adjust the value of such SwapClear Tolerance Limit and will notify each SCM of its SwapClear Tolerance Limit and of any adjustment to such SwapClear Tolerance Limit.
- (n) Notwithstanding paragraph (j) above, an SCM will ordinarily be required to transfer Collateral to the Clearing House in respect of its utilised SwapClear Tolerance in the margin and settlement call immediately following such use, provided that the Clearing House may require an SCM to transfer Collateral to the Clearing House in respect of utilised SwapClear Tolerance at any time and without prior notice.
- (o) The failure of an SCM to satisfy any call for Collateral in respect of utilised SwapClear Tolerance may give rise to a Default by such SCM.

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

1.6.3 Client Excess

A Clearing Member can transfer Client Excess in accordance with Section 1.10 of Procedure 4 (Margin and Collateral).

1.7 Variation Margin and NPV Payments

All SwapClear Transactions will, on submission to the Clearing House, be marked-to-market using the Clearing House's zero coupon yield curves. In accordance with Regulation 57 (*Collateralisation of SwapClear CTM Contracts*) and Regulations 57A (Settlement of SwapClear STM Contracts and Conversion to SwapClear STM Contract), the Clearing House will use these curves to calculate the net present value of the SwapClear Transaction to the Clearing House or, as the case may be, to an SCM.

In respect of each SwapClear Transaction that is settled-to-market daily in accordance with Regulations 57A, the obligation of either the relevant SCM or the Clearing House to pay to the other an amount in respect of the change in the net present value of a SwapClear Transaction shall, for the purposes of this Procedure, be referred to as the "NPV Payment".

A single separate calculation in respect of the variation margin and/or NPV Payment owed by or to the relevant SCM shall be performed for (i) an SCM's Proprietary Accounts, (ii) each Individual Segregated Account, Custodial Segregated Account and Omnibus Segregated Account (other than an Omnibus Gross Segregated Account), and (iii) each Indirect Gross Sub-Account within_an Indirect Gross Account, and (iv) each Omnibus Segregated Sub-Account within an Omnibus Gross Segregated Account.

In respect of each Omnibus Gross Segregated Clearing Client (other than a Combined Omnibus Gross Segregated Clearing Client) a single separate calculation in respect of the variation margin and/or NPV Payments owed by or to the relevant SCM shall be performed in respect of the SwapClear Contracts entered into by the relevant SCM on behalf of such Omnibus Gross Segregated Clearing Client.

In respect of a group of Combined Omnibus Gross Segregated Clearing Clients a single separate calculation in respect of the variation margin and/or NPV Payments owed by or to the relevant SCM shall be performed in respect of SwapClear Contracts entered into by the relevant SCM on behalf of such Combined Omnibus Gross Segregated Clearing Clients.

No offset between the "C" and the "H" accounts is allowed (except (i) pursuant to Rule 8(d) of the Default Rules or any Insufficient Resources Determination Rule, or (ii) in relation to the transfer of House Excess or Client Buffer in accordance with the Rulebook) and no offset between any Client Accounts is allowed (except pursuant to Rule 15(a)(ii) of the Default Rules, a Cross-ISA Client Excess Deduction or any Insufficient Resources Determination Rule).

Except as expressly provided herein, Collateral and/or NPV Payments (as applicable) that are provided pursuant to this Procedure must, subject to intra-day registration, be

The Clearing House will calculate all coupon payments for SwapClear Contracts that are non-deliverable interest rate swaps, including the Fixed Amount or Floating Amount payable under any such SwapClear Contract, in USD, and all amounts due or payable under such SwapClear Contracts must be paid in USD.

1.9 **Initial Margin**

The Clearing House will require SCMs to transfer Collateral in respect of their initial margin obligations, which are not discharged. This amount will be determined by the prevailing market conditions and the expected time to close out the portfolio. The Portfolio Approach to Interest Rate Scenarios (PAIRS) will be used to calculate initial margin requirements for SwapClear Contracts.

Separate initial margin calculations are performed for an SCM's Proprietary Accounts and for each Individual Segregated Account, Custodial Segregated Account, Omnibus Segregated Account (other than an Omnibus Gross Segregated Account), and Indirect Gross Sub-Account within an Indirect Gross Account and Omnibus Gross Segregated Sub-Account within an Omnibus Gross Segregated Account. In respect of each Omnibus Gross Segregated Clearing Client (other than a Combined Omnibus Gross Segregated Clearing Client) separate initial margin calculations are performed in respect of the SwapClear Contracts entered into by the relevant SCM on behalf of each such Omnibus Gross Segregated Clearing Client. In respect of a group of Combined Omnibus Gross Segregated Clearing Clients a single initial margin calculation is performed in respect of SwapClear Contracts entered into by the relevant SCM on behalf of each such group of Combined Omnibus Gross Segregated Clearing Clients.

No offset between the "C" and the "H" accounts is allowed (except (i) pursuant to Rule 8(d) of the Default Rules or any Insufficient Resources Determination Rule, or (ii) in relation to the transfer of House Excess or Client Buffer in accordance with the Rulebook) and no offset between any Client Accounts is allowed (except pursuant to Rule 15(a)(ii) of the Default Rules, a Cross-ISA Client Excess Deduction or any Insufficient Resources Determination Rule).

1.9.1 Margin Parameters

The Clearing House Risk Management Department uses appropriate yield curve scenarios, both in terms of shape and magnitude of movement, to capture potential losses based on an observed history - the primary component of the initial margin calculation. These scenarios will be continually monitored and reviewed periodically or on an ad hoc basis according to market conditions. However, in accordance with the Regulations, the Clearing House retains the right at its discretion to vary the rates for the whole market or for a specific SCM's Proprietary Account and/or Client Accounts.

1.9.2 *Counterparty Risk Multiplier*

The Clearing House reserves the right to require additional amounts of Collateral from a specific SCM or from all SCMs in accordance with Regulation 20 (*Margin and Collateral*).

Where the Nominated Accounts are Client Accounts, the Joint Rates Service Clearing Member must confirm to the Clearing House (in the form of a written representation) that the relevant Clearing Clients(s) have provided their consent to the operation of the Portfolio Margining Arrangements in respect of the relevant Client Accounts.

2.3.3 Recent Termination

Portfolio Margining Arrangements in respect of the Nominated Accounts have not, in the last 30 calendar days, been terminated in accordance with paragraph 2.2.5 above.

2.4 Eligible Accounts

2.4.1 Proprietary and Client Accounts

In order to be eligible for the Portfolio Margining Service, each of the Nominated Accounts must be either:

- (i) Proprietary Accounts which each reference the same legal entity; or
- (ii) Client Accounts which reference the same legal entity as the underlying Clearing Client(s) and meet the criteria set out in paragraph 2.4.2 below.

It is not possible to apply the Portfolio Margining Arrangements across a Proprietary Account and a Client Account.

2.4.2 Additional Eligibility Criteria in respect of Client Accounts

The Nominated Accounts must fall into one of the following pairings:

- (i) Individual Segregated Accounts held on behalf of the same Individual Segregated Account Clearing Client;
- (ii) the relevant sub-accounts of Omnibus Gross Segregated Sub-Accounts each of which is held on behalf of the same Omnibus Gross Segregated Clearing Client;
- (iii) an Individual Segregated Account held on behalf of an Individual Segregated Account Clearing Client and the relevant sub-account of an Omnibus Gross Segregated Sub-Account held on behalf of that Clearing Client;
- (iv) a_-Custodial Segregated Account held on behalf of a Custodial Segregated Client and an Individual Segregated Account held on behalf of that Clearing Client; or
- (v) a Custodial Segregated Account held on behalf_-of a_-Custodial Segregated Client and the relevant sub-account of an-Omnibus Gross Segregated_Sub--Account held on behalf of that Clearing Client.





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- 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 business day preceding the Settlement Date, each ForexClear Spot Contract, ForexClear Deliverable Forward Contract and ForexClear Swap Contract is valued in either USD or EUR using the current market rates and discounted from the future Settlement Date to its present value (using the data submitted by FXCCMs, in accordance with Section 1.5.2 (Market Data Sources and Frequencies)).
- (c) ForexClear Option Contracts: From (and including) the Registration Time to the Expiration Date, each ForexClear Option Contract is valued in USD or EUR using the Garman-Kohlhagen option pricing model (using the data submitted by FXCCMs, in accordance with Section 1.5.2 (Market Data Sources and Frequencies)).
- 1.5.2 Variation Margin and NPV Payments: A single separate calculation in respect of the variation margin or NPV Payment owed by or to the relevant FXCCM is performed for that FXCCM's Proprietary Account, each Client Account (other than an Indirect Gross Account and Omnibus Gross Segregated Account), and each Indirect Gross Sub-Account within an Indirect Gross Account and each Omnibus Gross Segregated Sub-Account within an Omnibus Gross Segregated Account. No offset between the Proprietary Accounts and Client Accounts accounts is allowed (except pursuant to Rule 8(d) of the Default Rules or any Insufficient Resources Determination Rule) and no offset between any Client Accounts is allowed (except pursuant to Rule 15(a)(ii) of the Default Rules, a Cross-ISA Client Excess Deduction or any Insufficient Resources Determination Rule).

The (i) variation margin requirement in respect of each ForexClear CTM Contract and (ii) the NPV Payments in respect of each ForexClear STM Contract are calculated at EOD as the change from the preceding business day in its net present value. The net sum of the variation margin requirements or NPV Payments (as applicable) with respect to all of the open ForexClear Contracts is credited or debited (separately for the relevant FXCCM's Proprietary Account, and each Client Account (except an Indirect Gross Account and Omnibus Gross Segregated Account of the relevant FXCCM), each Indirect Gross Sub-Account within an Indirect Gross Account and each Omnibus Gross Segregated Sub-Account within an Omnibus Gross Segregated Account) once a day, following the EOD Margin and Settlement Run.

Collateral in respect of variation margin (adjusted by PAI, as set out below) will be transferred each business day by or to each FXCCM in respect of all of its open ForexClear CTM Contracts. The variation margin will be calculated in, and must be paid in the ForexClear Margin or Settlement Currency applicable to that ForexClear CTM Contract. For the avoidance of doubt, in

- (D) PAA is calculated on the night of T, for MTM of T-1 for ForexClear Contracts up to the business day before their Settlement Date.
- (E) PAA is paid / received on morning of T+1 via PPS.
- (ii) Components:
 - (A) PAA Rate (annualised interest applied to an FXCCM's MTM).
 - (B) MTM.
 - (C) Accrual Factor (factor used to convert the PAA Rate from an annual rate to a daily rate, on a basis of a year of 360 days).
- (iii) So:
 - (A) $PAAT = PAAT Rate \times MTMT-1 \times Accrual Factor.$

The Clearing House uses the PAA Rate from the relevant EOD overnight index swap curves, which is sourced from the Clearing House.

- 1.5.6 *Initial Margin:* The Clearing House will require FXCCMs to transfer Collateral to the Clearing House in respect of their initial margin obligations. Each FXCCM's initial margin obligation will be calculated on an aggregate basis across its ForexClear Contracts within the ForexClear Non-Deliverable Service and ForexClear Deliverable Service.
 - (a) Calculation of Initial Margin: -Separate initial margin calculations are performed for an FXCCM's Proprietary Account, each Client Account (other than an Indirect Gross Account and an Omnibus Gross Segregated Account), and each Indirect Gross Sub-Account within an Indirect Gross Account and each Omnibus Gross Segregated Sub-Account within an Omnibus Gross Segregated Account. —No offset between the Proprietary Accounts and the Client Accounts is allowed (except pursuant to Rule 8(d) of the Default Rules or any Insufficient Resources Determination Rule) and no offset between any Client Accounts is allowed (except pursuant to Rule 15(a)(ii) of the Default Rules, a Cross-ISA Client Excess Deduction or any Insufficient Resources Determination Rule).

The initial margin obligation is calculated on a real-time (or near real-time) basis throughout each day. With respect to each FXCCM, it is calculated for the portfolio of open ForexClear Contracts and ForexClear Transactions using ForexClear's Portfolio Analysis and Risk ("FxPAR") margining model. FxPAR is based on a modified historical simulation expected shortfall methodology. All open ForexClear Contracts and ForexClear Transactions in each Currency Pair are re-valued under a series of FX rate and yield curve scenarios

- 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"), which PPS time period is available from the Clearing House on request.
 - (ii) ITD/Ad-hoc <u>Day</u> –Margin <u>and Settlement</u> 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 <u>Day</u> Margin <u>and Settlement</u> 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 and Settlement 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.
- During every Margin and Settlement Run the Clearing House (c) 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 FXCCM¹/₂s 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 Omnibus Gross Segregated Accounts), and each Indirect Gross Sub-Account within an Indirect Gross Account of such FXCCM and each Omnibus Gross Segregated Sub-Account within an Omnibus Gross Segregated 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, NPV Payments, PAI, PAA and 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

"Initial DMA" means a default management account established by the Clearing House, acting in its sole discretion, to which one or more Sets of Non-Porting Contracts are transferred (by book-entry) on the DMA Creation Date for such default management account.

"Latest DMA" means, in respect of a Daily Calculation Period, a DMA that exists at the end of such Daily Calculation Period, but which has not itself been combined with another DMA to form a separate Merged DMA.

"Merged DMA" means a default management account established by the Clearing House, acting in its sole discretion, which results from the combination of two or more DMAs.

"Non-Porting Client Account" means, in respect of a Defaulter, the Individual Segregated Account, Omnibus Gross Segregated Sub-Account, Indirect Net Account, Indirect Gross Sub-Account, Omnibus Net Segregated Account, Affiliated Client Omnibus Net Segregated Account, Identified Client Omnibus Net Segregated Account, Identified Client Omnibus Net Segregated Account or FCM Client Sub-Account (as applicable) of such Defaulter, to which the ForexClear Contracts that the Clearing House has determined will not be ported in accordance with the Client Clearing Annex or the FCM Rulebook are, or were, registered at the point of the Default of the Defaulter.

"**Pre-Default TMR**" means, in respect of an Affected Non-Porting Client Account of a Defaulter, the TMR for such Affected Non-Porting Client Account as at the end of day margin and settlement call for the business day before the day of Default of such Defaulter.

"Pre-Default TMR Ratio" means

- (i) in respect of an Initial DMA and an Affected Non-Porting Client Account referable to it, the ratio that the Pre-Default TMR of such Affected Non-Porting Client Account bears to the aggregate Pre-Default TMR of all Affected Non-Porting Client Accounts referable to such Initial DMA; or
- (ii) in respect of a Final DMA and an Affected Non-Porting Client Account referable to it, the ratio that the Pre-Default TMR of such Affected Non-Porting Client Account bears to the aggregate Pre-Default TMR of all Affected Non-Porting Client Accounts referable to such Final DMA.

"Pre-Merger TMR" means, in respect of a DMA that was combined with one or more other DMA(s) to form a Merged DMA, the TMR for such DMA as at the end of day margin and settlement call for the business day before the DMA Merger Date of such Merged DMA.

"Pre-Merger TMR Ratio" means, in respect of a DMA that was combined with one or more other DMA(s) to form a Merged DMA, the





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(ii) one or more collateral accounts.

1.4.3 Position Accounts

For identification purposes, each Listed Interest Rates Clearing Member is assigned a unique three-character mnemonic. A Listed Interest Rates Clearing Member's position and financial information are further identified by position-keeping accounts corresponding to a single character code: C for Listed Interest Rates Client Clearing Business and H for Listed Interest Rates Clearing House Business. The H account is obligatory. The C account will be used in respect of any Listed Interest Rates Clearing Member which engages in Listed Interest Rates Client Clearing Business.

1.4.4 Operational Accounts

The Clearing House will open operational accounts in respect of a Listed Interest Rates Clearing Member, which are used to record cash and securities balances and its Listed Interest Rates Contributions. The Clearing House may open and close such operational accounts, in its sole discretion, upon notice to the relevant Listed Interest Rates Clearing Members. Listed Interest Rates Operations will provide details of such accounts to a Listed Interest Rates Clearing Member upon request.

1.4.5 Listed Interest Rates Client Clearing Business

If a Listed Interest Rates Clearing Member engages in Listed Interest Rates Client Clearing Business, the Clearing House will maintain a client "C" position-keeping account and a client "C" collateral account for such Listed Interest Rates Clearing Member, which may have any number of segregated sub-accounts. Each Individual Segregated Account of the Listed Interest Rates Clearing Member will map onto one such segregated sub-account in the client "C" position-keeping account and one such segregated sub-account in the client "C" collateral account, each Indirect Gross Account of the Listed Interest Rates Clearing Member will map onto one such segregated sub-account in the client "C" position-keeping account and one such segregated sub-account in the client "C" collateral account, and each Omnibus Segregated Account will map onto one such segregated sub-account in the client "C" position-keeping account and one such segregated sub-account in the client "C" collateral account. In the case of Indirect Gross Accounts, the relevant segregated sub-accounts of the client "C" position-keeping account will be further segregated into positionkeeping sub-accounts for each Indirect Gross Sub-Account (relating to each Indirect Clearing Client). In the case of Omnibus Gross Segregated Accounts, the relevant segregated sub-accounts of the client "C" collateral account and "C" position-keeping account will be further segregated into sub-accounts for each Omnibus Gross Segregated Sub-Account (relating to an Omnibus Gross Segregated Clearing Client or a group of Combined Omnibus Gross Segregated Clearing Clients together, as applicable).

1.5 Margin and Collateral

1.5.1 *Initial Margin*

Separate initial margin calculations are performed for a Listed Interest Rates Clearing Member's Proprietary Account, each Client Account (other than an Indirect Gross Account and Omnibus Gross Segregated Account), and each Indirect Gross Sub-Account within an Indirect Gross Account and each Omnibus Gross Segregated Sub-Account within an Omnibus Gross Segregated Account. No offset between the Proprietary Accounts and the Client Accounts is allowed (except pursuant to Rule 8(d) of the Default Rules or any Insufficient Resources Determination Rule) and no offset between any Client Accounts is allowed (except pursuant to Rule 15(a)(ii) of the Default Rules, a Cross-ISA Client Excess Deduction or any Insufficient Resources Determination Rule).

Margin requirements in respect of Listed Interest Rates Contracts are calculated net per account (except in the case of an Indirect Gross Account, where the margin requirements are calculated net per Indirect Gross Sub-Account, and in the case of an Omnibus Gross Segregated Account, where the margin requirements are calculated net per Omnibus Gross Segregated Sub-Account), meaning that if long and short Listed Interest Rates Contracts are held in the same account in the same delivery month for futures, or the same series for options, the initial margin requirement is calculated by reference to the net position of such Listed Interest Rates Contracts.. The Clearing House will calculate an account's (or, in the case of an Indirect Gross Account, an Indirect Gross Sub-Account's, or, in the case of an Omnibus Gross Segregated Account, an omnibus Gross Segregated Sub-Account's) net position in respect of any Designated Listed Interest Rates Contract by reference to all trading in such Contract on Designated Rates Exchanges.

(a) Initial Margin Parameters

Initial margin parameters are set by the Clearing House after consultation with the relevant Rates Exchange(s). However, in accordance with the Regulations, the Clearing House retains the right at its discretion to vary the rates for the whole market or for a Clearing Member accounts.

Clearing Members will be notified by the Clearing House of alterations to initial margin parameters no later than the day before PPS Calls are made based on the new rates.

(b) Intra-day Margin Calls

In accordance with the Regulations the Clearing House is entitled to make additional margin calls for payment the same day (intra-day margin calls) where it considers necessary. Intra-day margin calls will be made via the Protected Payments System (see Section 1.3 of Procedure 3 (*Financial Transactions*)).

(c) Calculation of Initial Margin

(i) Value At Risk (VaR)

Initial margin obligations are re-calculated at the close of each business day using a VaR algorithm developed to calculate margin requirements on Listed Interest Rates Contracts.

Technical questions about this algorithm should be directed to the Clearing House Risk Management Department on +44 (0)20 7426 7520.

1.5.2 Variation Margin

All open contracts are marked to market daily by the Clearing House in accordance with the Listed Interest Rates Contract Terms. The official quotation is used as the market price. Profits or losses are either credited to or debited from a Clearing Member's Proprietary Account or Client Account (as applicable) or they form non-realised contingent liabilities or credits.

Separate variation margin calculations are performed for a Clearing Member¹¹s Proprietary Account, each Client Account (other than an Indirect Gross Account and Omnibus Gross Segregated Account), and each Indirect Gross Sub-Account within an Indirect Gross Account and each Omnibus Gross Segregated Sub-Account within an Omnibus Gross Segregated Account (as applicable). No offset between the Proprietary Accounts and the Client Account is allowed (except pursuant to -Rule 8(d) of the Default Rules or any Insufficient Resources Determination Rule), and no offset between any Client Accounts is allowed (except pursuant to Rule 15(a)(ii) of the Default Rules, a Cross-ISA Client Excess Deduction or any Insufficient Resources Determination Rule).

(a) Realised Margin

Realised margin is the calculated profit or loss arising from a comparison between the value of open positions at the relevant official quotations with the value of positions recorded by the Clearing House (i.e. the trade price for new trades and the previous day's official quotation for other positions). Realised margin is realised into postings to the relevant Proprietary Account or Client Account (as applicable).

(b) Variation Margin

Variation margin is realised into postings to the relevant Proprietary Account or Client Account (as applicable).

Contingent Variation Margin. Contingent variation margin is calculated with reference to the official quotation at which a Contract went to delivery and the underlying asset value or the next nearest futures delivery month official quotation, dependent on the terms of the Listed Interest Rates Contract or these Procedures. Contingent variation