

VIA CFTC PORTAL

28 December 2017

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

LCH Limited Self Certification: Rule Changes on Treatment of Variation Margin for Futures Commission Merchant Clearing Members and US SwapClear Clearing Members

Dear Mr Kirkpatrick

Pursuant to CFTC regulation §40.6(a), LCH Limited ("LCH"), a derivatives clearing organization registered with the Commodity Futures Trading Commission (the "CFTC"), is submitting for self-certification changes to its rules to (i) clarify that all variation margin payments associated with Contracts of Futures Commission Merchants Clearing Members ("FCM Clearing Members") are settlement payments and (ii) require that US-incorporated SwapClear Clearing Members ("SCM Clearing Members") enter into only SwapClear Contracts that provide for variation margin payments to be settlement payments ¹. The changes are in line with regulatory guidance published by the CFTC in October 2017².

Part I: Explanation and Analysis

LCH proposes to make changes to its rules to consolidate the rules that presently govern variation margin in respect of FCM SwapClear Contracts and FCM ForexClear Contracts into a single rule and to clarify that all variation margin payments to and from FCM Clearing Members in respect of such contracts constitute settlement payments, rather than transfers of collateral. The rules will state that, upon payment of amounts due in respect of such variation margin, the outstanding exposure of the relevant Contracts will be discharged.

LCH further proposes to make changes to its rules to limit the SwapClear Contracts cleared by US SCMs to SwapClear STM Contracts. The rules will state that all transfers of variation margin to or by US SCMs in respect of SwapClear STM Contracts will be settlement payments, rather than transfers of collateral.

¹ The changes do not apply to non-US SCM Clearing Members.

² http://www.cftc.gov/idc/groups/public/@lrlettergeneral/documents/letter/17-51.pdf



The rule changes do not affect the timing or the amounts of variation margin payments that Clearing Members and LCH currently pay to one another. Nor do the rule changes affect the timing or amounts of any other cash flows on Contracts. LCH has not changed, and does not expect to change, any aspect of its payment operations as a result of these rule changes, except that reporting will be revised to reflect the new terminology.

The rule changes will go live on, or after, January 16, 2018.

Part II: Description of Rule Changes

FCM Regulations

The majority of the changes are included in the FCM Regulations. Most significantly, FCM Regulations 47, 48 and 51, which currently require an FCM Clearing Member or LCH to pay or receive variation margin representing the change in the net present value of an FCM SwapClear Contract or FCM ForexClear Contract, have been consolidated into a single rule. Although these FCM Regulations had previously been substantively aligned, they were worded differently and employed different terminology. The consolidated rule, new FCM Regulation 47, clarifies that there is no substantive difference between variation margin transferred in connection with FCM SwapClear Contracts and variation margin transferred in connection with FCM ForexClear Contracts, and that all such variation margin is a settlement payment, rather than transfers of collateral.

The rule changes also include a number of new definitions supporting the treatment of variation margin as settlement payments. Importantly, the term "Variation Margin" has been replaced with the term "Variation Settlement", which is referenced throughout the FCM Regulations.

Similarly, the term "Price Alignment Interest" and certain instances of the word "interest" have been replaced with the term "Price Alignment Amount" ("PAA"). PAA replicates the economics of interest that is currently paid or received on a daily basis in connection with SwapClear CTM Contracts. Such interest, and consequently PAA, is a standard payment made in the cleared derivatives market to eliminate the basis risk that would otherwise arise among cleared swaps.

The new FCM Regulation 47, paragraphs (a) to (h), is summarised as follows:

At least once per Business Day, LCH will determine the change in net present value and PAA for each FCM SwapClear Contract and FCM ForexClear Contract. The time of determination is defined as the "NPV Determination Time". In respect of each FCM SwapClear Contract and FCM ForexClear Contract, LCH or the applicable FCM Clearing Member will be obligated to pay a Variation Settlement representing the change in net present value of such contract as well as a Price Alignment Amount. On every Business Day, LCH will aggregate and net the Variation Settlements, Price Alignment Amounts and coupon payments owing to and from an FCM Clearing Member in respect of such FCM Clearing Member's FCM SwapClear Contracts and FCM ForexClear Contracts. Such aggregation and netting will be conducted separately in respect of (i) the FCM Clearing Member's proprietary FCM SwapClear Contracts; (ii) the FCM Clearing Member's FCM SwapClear Contracts held in a client subaccount; and (iv) the FCM Clearing Member's FCM ForexClear Contracts held in a client subaccount.

Following such aggregation and netting, LCH or the applicable FCM Clearing Member will pay a net sum (a "Settlement Payment") in respect of each netting set of FCM SwapClear Contracts or FCM ForexClear Contracts. Each Settlement Payment shall be a settlement within the meaning of CFTC Rule 39.14, and final, irrevocable and unconditional no later than when the relevant FCM Clearing Member's PPS bank has performed its concentration function and transferred such Settlement Payment, and any time permitted for the recall of such Settlement Payment has expired. Each Settlement Payment shall also discharge the outstanding exposure, as of the NPV Determination Time, of the FCM SwapClear Contracts or FCM ForexClear Contracts in respect of which it is made. If the FCM Clearing Member's PPS bank pays or commits to pay a Settlement Payment by 9:00 UK time on the day



following the day on which LCH calls for such amount, the net present value of the relevant Contracts will reset to zero for purposes of the FCM Regulations as of the NPV Determination Time, which will generally be on the prior day. The same process applies where LCH is obligated to pay a Settlement Payment to an FCM Clearing Member. This, again, is a clarification of existing provisions.

The treatment of the Settlement Payment as "settlement" does not result in the termination of an FCM SwapClear Contract or FCM ForexClear Contract or the creation of a new such Contract at the time such payments are made or at the time the net present value of the Contract resets to zero. Neither such payments nor Variation Settlement nor Price Alignment Amounts are components of, or additions to, the contractually agreed payments comprising the "trade terms" of any FCM SwapClear Contract or FCM ForexClear Contract, such as premium, interest-equivalent amounts or upfront payments. Nor do any such payments affect the tenor, notional, payment dates, fixed rate or floating rate of such Contracts.

Lastly, FCM Regulation 47 clarifies that Variation Margin is not payable under FCM SwapClear Contracts or FCM ForexClear Contracts However, the rules do not prevent or restrict LCH from calling collateral to cover initial margin obligations.

In addition to definitional changes and new FCM Regulation 47, the rules contain a number of conforming changes. For instance, FCM Regulation 14, paragraph (m) clarifies that Settlement Payments shall not be subject to a security interest (such as is the case for initial margin and collateral).

Similarly, FCM Regulation 46, paragraph (q) (vii) clarifies that it is a condition precedent to the transfer of a SwapClear CTM Contract to an FCM Clearing Member that the transferring clearing member make any payment determined by LCH to be necessary to ensure that the net present value of the transferred contract is zero. This condition ensures that, following the transfer, variation margin in respect of such transferred Contract will be settlement.

Separately, the changes to FCM Regulation 37(d) clarify that, in the event LCH becomes insolvent or defaults, an FCM Clearing Member should include in its calculation of the Termination Amount³ owing either by or to the FCM Clearing Member the value of any of such FCM Clearing Member's Collateral held by LCH (which will be treated as a loss for the FCM Clearing Member) and any Collateral that the FCM Clearing Member is required to, but has not yet, delivered to the LCH (which will be treated as a gain for the FCM Clearing Member). FCM Regulation 37(d) already required the incorporation of these amounts into the calculation of the Termination Amount; however, this change is to avoid any doubt and to align the provision with the analogous provision of the General Regulations.

General Regulations

Regulation 57A includes a clarification of the definition of "SwapClear STM Contract". Also, a new paragraph (a) has been added to note that SwapClear Contracts registered by a SwapClear Clearing Member that is established under the laws of any state of the United States or under the federal laws of the United States shall be designated a SwapClear STM Contract.

FCM Procedures and Default Rules

The FCM Procedures and the Default Rules have been updated throughout with the relevant terminology related to the treatment of all variation margin payments received from FCM Clearing Member as settlement payments.

³ The Termination Amount is the net amount resulting from the termination or liquidation of all Contracts to which a FCM is party.



The texts of the changes are attached hereto as:

- Appendix I, FCM Regulations
- Appendix II, General Regulations
- Appendix III, FCM Procedures
- Appendix IV, Default Rules

Part III: Core Principle Compliance

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

Part IV: Public Information

LCH has posted a notice of pending certification with the CFTC and a copy of the submission on LCH's website at:

http://www.lch.com/rules-regulations/proposed-rules-changes.

Part V: Opposing Views

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

Certification

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

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

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Yours sincerely,

Chief Compliance Officer

LCH Limited



Appendix I

FCM Regulations



FCM REGULATIONS OF THE CLEARING HOUSE LCH LIMITED

"Applicable Law"

means any applicable statute, law, ordinance, regulation, rule and other instruments in force from time to time, including the rules, codes or practice of a Governmental Authority or Regulatory Body.

"Approved LCH SDR"

means any swap data repository approved by the Clearing House from time to time for the submission of swap data by FCMs.

"Assumed Allocation"

has the meaning assigned to it in FCM Regulation 15(d)(iii).

"Auction Portfolio"

has the meaning assigned to it in either (i) the Rates Service DMP Annex of the Default Rules or (ii) the ForexClear DMP Annex of the Default Rules, as applicable.

"Authorised Compression Client"

means an FCM Client that is party to relevant Compression Documentation and in respect of which the relevant Compression Clearing Member is authorised to provide and receive instructions (including the acceptance of a Compression Proposal) on behalf of such FCM Client and in respect of which the relevant ACSP notified the Clearing House that such FCM Clearing Member acts for such FCM Client.

"Available FCM Buffer"

means, at any given time, (i) with respect to FCM Buffer held in the FCM Buffer Sub-Account of an FCM Omnibus Swaps Client with LCH that is subject to the Without Client Excess Model, FCM Buffer credited therein that is not Encumbered FCM Buffer (as described in FCM Regulation 15(c)(ii)(A)), and (ii) with respect to FCM Buffer held in the FCM Buffer Sub-Account of an FCM Omnibus Swaps Client with LCH that is subject to the With Client Excess Model, FCM Buffer credited therein that is not being used by the Clearing House to offset Margin deficits in the relevant FCM Client Sub-Accounts (as described in FCM Regulation 15(d)(iv)).

"Backload Registration Cycle"

has the meaning assigned to such term in the FCM Procedures.

"Backloaded Trade"

has the meaning assigned to such term in the FCM Procedures.

"Base Currency"

has the meaning assigned to such term in FCM Regulation 37(d)(ii).

"Base Currency Equivalent"

has the meaning assigned to such term in FCM Regulation 37(d)(ix).

"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 margining, guaranteeing and/or securing (as Margin) FCM Contracts for such accounts, provided, that "Collateral" shall not include any Settlement Payment, to the extent such Settlement Payment is transferred in accordance with the FCM Regulations. The Clearing House will only credit deposited securities or other non-cash collateral or assets as Collateral to the extent such securities or other noncash collateral or assets are acceptable forms of collateral as set forth in the FCM Procedures or as otherwise explicitly permitted by the Clearing House. For the avoidance of doubt, Collateral will not include, and will not be comprised of, an FCM Clearing Member's Contribution.

"Commodity" or "commodity"

means any "commodity" (as such term is defined in Section 1a(9) of the CEA and CFTC Regulation 1.3(e)) that is the subject matter of an FCM Exchange Contract or an FCM Listed Interest Rates Contract.

"Contribution"

has the meaning assigned to it in the UK General Regulations, and as used herein refers to one or more of the Contributions of one or more FCM Clearing Members or Non-FCM Clearing Members, as the context may require.

"Compression Clearing Member"

has the meaning assigned to it in Regulation 46(m)

"Compression Documentation"

means such documentation as may be prescribed from time to time by the Clearing House and/or any ACSP (where applicable) in relation to a Multilateral Compression Cycle or a Compression Clearing Member's participation in Multilateral Compression services, including:

- (i) for a Member Compression Cycle, such agreements and documents as the Clearing House may require from all relevant Compression Clearing Members in relation to Multilateral Compression in accordance with the relevant Compression Proposal;
- (ii) for an ACSP Compression Cycle, such agreements and documents as may be required by the nominated ACSP and/or the Clearing House in order to allow a Compression Clearing Member to receive the services of the ACSP and participate in that ACSP Compression Cycle; and
- (iii) such other documentation as the Clearing House may prescribe from time to time in FCM Procedures, user manuals or other guidance documentation regarding Multilateral Compression.

"Compression Proposal"	means, in relation to any Multilateral Compression Cycle, the final statement as to the proposed set of Terminating FCM SwapClear Contracts and the proposed set of resulting Post-Multilateral Compression Contracts, and, in relation to a Compression Clearing Member, references to Compression Proposal shall relate to such Terminating FCM SwapClear Contracts and Post-Multilateral Compression Contracts to which such Compression Clearing Member is or will become party.
"Compression Time"	means, on the date designated by the Clearing House for a Multilateral Compression Cycle, the time at which the Clearing House effects a Multilateral Compression by terminating the Terminating FCM SwapClear Contracts and simultaneously registering the Post-Multilateral Compression Contracts in the names of the Compression Clearing Members participating in that Multilateral Compression Cycle in accordance with the Compression Proposal.
"Coupons"	has the meaning assigned to such term in the FCM Procedures
"cover"	means either Collateral, Margin or both, as the context may require as used in the FCM Rulebook.
"CVR" or "Collateral Value Report"	has the meaning assigned to it in FCM Regulation 15(d)(ii).
"Cumulative Variation Settlement"	has the meaning assigned to it in the FCM Procedures.
	has the meaning assigned to it in the FCM Procedures. has the meaning assigned to it in rule 4 of the Default Rules.
Settlement"	
Settlement" "Defaulter"	has the meaning assigned to it in rule 4 of the Default Rules.
Settlement" "Defaulter" "Default Notice"	has the meaning assigned to it in rule 4 of the Default Rules. has the meaning assigned to it in rule 3 of the Default Rules. means the Clearing House's Default Rules from time to time in force pursuant to part II of schedule 21 to the UK

Rates Contract" governed in accordance with the UK General Regulations.

"Non-FCM SwapClear

Contract"

means a "SwapClear Contract" (as such term is defined in the UK General Regulations) and which is governed in

accordance with the UK General Regulations.

"Non-Porting Client"

has the meaning assigned to it in the FCM Procedures.

"NPV Determination Time"

has the meaning assigned to such term in FCM Regulation 47(a).

"Official Quotation"

means a price determined by the Clearing House under FCM Regulation 15.

"Omnibus Collateral Value"

means, at any given time in respect of an FCM Omnibus Swaps Client Account with LCH, the aggregate Margin, as determined by the Clearing House in accordance with the FCM Rulebook, attributable to such FCM Omnibus Swaps Client Account with LCH (and regardless of whether such Margin is attributed to an FCM Client Sub-Account, the FCM Buffer Sub-Account or the Unallocated Excess Sub-Account).

"Open FCM Contract" or "open contract"

means an FCM Contract which has not been closed-out, settled or invoiced back in accordance with the FCM Regulations and the FCM Procedures. The terms "Open FCM Contract" and "open contract" shall not include a Closing-out Contract.

"Option"

means a right (but not the obligation) pursuant to an FCM Option Contract, to enter into a Cash-Settled FCM Contract or a Physically-Settled FCM Contract.

"Other Currency"

has the meaning assigned to such term in FCM Regulation 37(d)(ix).

"Other Specific Regulations"

means the Clearing House's Default Rules, Default Fund Rules, Settlement Finality Regulations and related Definitions and provisions relating to construction as published and amended by the Clearing House from time to time.

"Permitted Depository"

means (i) with respect to FCM Swaps Client Funds or Collateral held in connection with Swap Products, "Permitted Depository" as such term is defined in CFTC Regulations 22.1 and 22.4, (ii) with respect to FCM Futures Client Funds or Collateral held in connection with Futures Products, a depository qualified to hold customer funds in accordance with CFTC Regulation 1.49; and (iii) with respect to FCM Foreign Futures Client Funds or Collateral held in connection with Foreign Futures Products, a depository qualified to hold customer funds in accordance

with CFTC Regulations 30.7(b) and (d).

"Physically-Settled FCM Contract"

means an FCM Exchange Contract or an FCM Listed Interest Rates Contract between the Clearing House and an FCM Clearing Member: (i) for the sale and purchase of a commodity that is the result of the exercise of an Option pursuant to these FCM Regulations; or (ii) for the sale and purchase of a commodity for delivery on the date specified in the FCM Exchange Contract or the FCM Listed Interest Rates Contract or on the date agreed between the parties.

"Portfolios"

has the meaning assigned to it in either (i) the Rates Service DMP Annex of the Default Rules or (ii) the ForexClear DMP Annex of the Default Rules, as applicable.

"Porting Collateral"

has the meaning assigned to it in FCM Regulation 13(a)

"Porting Contracts"

has the meaning assigned to it in FCM Regulation 13(a)

"Post-Allocation Clearing Member"

means the FCM Clearing Member or Clearing Member associated with a Client Account, FCM Client Sub-Account or Proprietary Account to which part or all of an Unallocated FCM SwapClear Contract or Unallocated FCM ForexClear Contract, as the case may be, is to be allocated pursuant to an Allocation Notice or FCM Regulation 49(n), as the case may be.

"Pre-Allocation FCM Clearing Member"

has the meaning assigned to it in FCM Regulation 46(o)(i) or FCM Regulation 49(n)(i), as the case may be.

"Post-Multilateral Compression Contracts" means, in relation to a Compression Proposal, the FCM SwapClear Contracts or Non-FCM SwapClear Contracts, as applicable, registered as a result of Multilateral Compression in accordance with such Compression Proposal.

"Pre-Allocation Executing Party" or "Account Manager Executing Party" means an Executing Party, including an Account Manager Executing Party, which is not an FCM Clearing Member and which is authorized to present or submit Unallocated FCM SwapClear Transactions and/or Unallocated FCM ForexClear Transactions on its own behalf or on behalf of one or more FCM Clients.

"Premium"

means the consideration for the selling of an Option payable by the Buyer in accordance with these FCM Regulations and the FCM Procedures.

"Price"

means, in the case of an FCM Contract, the price calculated by the Clearing House in accordance with the FCM Regulations and the FCM Procedures.

"Price Alignment Amount"

or "PAA"	has the meaning assigned to it in the FCM Procedures.
"Product"	means a Swap Product, a Futures Product, or a Foreign Futures Product, as the context may require.
"Prompt Date"	has the meaning ascribed to it in: (i) the relevant Exchange Rules in respect of an FCM Exchange Contract; or (ii) the relevant provisions of the FCM Product Specific Terms and Eligibility Criteria Manual in respect of an FCM Listed Interest Rates Contract.
"Proprietary Account"	means the house account with the Clearing House opened in the name of an FCM Clearing Member to which FCM Contracts made by the FCM Clearing Member for its own account are registered and to which monies in respect of such FCM Contracts are credited.
"Protected Payments System" or "PPS"	has the meaning assigned to it in the FCM Procedures.
"Rate X and Rate Y"	means, in relation to an FCM SwapClear Transaction or an FCM SwapClear Contract, the outstanding payment obligations of each party to the transaction, such that Rate X comprises the outstanding payment obligations of one party to the other and Rate Y comprises the outstanding payment obligations of the other party to the first party.
"Rates Exchange"	means any trading platform approved as such from time to time by the Clearing House in respect of the FCM Listed Interest Rates Clearing Service.
"Rates Exchange Rules"	means the rules, regulations, administrative procedures, Memorandum and Articles of Association or by-laws which regulate a Rates Exchange and the market administered by it as notified from time to time to the Clearing House.
"Rates Exchange Match"	means, in respect of a Rates Exchange, a match on such Rates Exchange of Rates Exchange Particulars submitted by, or on behalf of, two FCM Listed Interest Rates Clearing Members, or an FCM Listed Interest Rates Clearing Member and a Listed Interest Rates Clearing Member, which is made either:
	(i) other than through an order book of the Rates Exchange; or
	(ii) through an order book of the Rates Exchange, and
	in each case:
	(a) which the Clearing House and the Rates Exchange

	specified in FCM Regulation 5(e).
"Retiring Member"	means at any time any FCM Clearing Member or, as the context may require, any former FCM Clearing Member: (i) who has given notice to terminate its FCM Clearing Member status to the Clearing House; or (ii) in respect of whom the Clearing House has terminated or given notice to terminate its FCM Clearing Member status, in each case in accordance with Section 17 of the FCM Clearing Membership Agreement and the FCM Procedures.
"Risk Neutralisation"	has the meaning assigned to it in either (i) the Rates Service DMP Annex of the Default Rules or (ii) the ForexClear DMP Annex of the Default Rules, as applicable.
"Rules Change Committee"	means the decision-making body of the Clearing House that will oversee and implement all material alterations, amendments or extensions to the FCM Rulebook or the FCM Clearing Membership Agreement in accordance with its terms of reference
"Second Listed Interest Rates Clearing Member"	has the meaning assigned to it in FCM Regulation 54.
"Seller"	means an FCM Clearing Member (or the Clearing House where the context so requires) who is a seller under the terms of, as applicable, an FCM Option Contract, a Physically-Settled FCM Contract or an FCM Contract Subject to Delivery Notice.
"Settlement Finality Regulations"	means the Clearing House's Settlement Finality Regulations from time to time in force.
<u>"Settlement Payment"</u>	has the meaning assigned to it in FCM Regulation 47(d).
"Settlement Price"	means, in relation to an FCM Contract, one or more prices determined in accordance with the FCM Regulations or the FCM Procedures.
"Standard Terms"	means those parts of the FCM Contract Terms designated as Standard Terms by the Clearing House from time to time.
"Strike Price"	means the price specified in an FCM Option Contract which becomes the price of the commodity under the relevant FCM Contract upon the exercise of the FCM Option Contract, in accordance, as applicable, with the relevant Exchange Rules, the FCM Regulations and/or the FCM Procedures.
"Sub-Block Trading Venue Transaction"	means a transaction, identified by the Clearing House as having been executed on an FCM Trading Venue, the notional amount of which is below the minimum block size

"Swap Product"

determined by the Clearing House in its sole and absolute discretion and published on the Clearing House's website in respect of the particular transaction and in effect as of the date of presentation of such transaction to the Clearing House for registration.

means a Product which constitutes a Cleared Swap. Such Products are: (1) FCM SwapClear Contracts and (2) FCM ForexClear Contracts.

"SwapClear Contract"

has the meaning assigned to it in the General Regulations but which shall not, unless stated otherwise, include an FCM SwapClear Contract.

"SwapClear Contribution"

means, in relation to the Default Rules, the meaning assigned to it in rule 16 of the Default Rules.

"SwapClear Clearing Member"

means a person who is designated as such by the Clearing House pursuant to the UK General Regulations and who is not an FCM Clearing Member.

"SwapClear CTM Contract"

has the meaning assigned to it in the General Regulations.

"SwapClear DMP"

has the meaning assigned to it in the SwapClear DMP Annex

of the Default Rules.

"SwapClear Tolerance"

has the meaning assigned to it in Section 2.1.3(c) of the FCM

Procedures.

"Terminating FCM SwapClear Contracts" means, in relation to any Compression Proposal, the FCM SwapClear Contracts that will be terminated and replaced with Post-Multilateral Compression Contracts in accordance with Regulation 46(m).

"Termination Amount"

has the meaning assigned to such term in FCM Regulation 37(d)(iii)Regulation 37(d)(iv).

"UK General Regulations"

means the Clearing House's Default Rules and the Settlement Finality Regulations, and the Clearing House's General Regulations from time to time in force.

"UK General Procedures"

means the Clearing House's "**Procedures**" as such term is defined in the UK General Regulations, which are applicable to the UK General Regulations.

"Unallocated Excess"

has the meaning assigned to such term in FCM Regulation

15(b).

"Unallocated Excess Sub-Account" has the meaning assigned to such term in FCM Regulation

15(b).

"Unallocated FCM

has the meaning assigned to such term in FCM Regulation

SwapClear Transaction"

MarginSettlement"

ForexClear Contract" 49(n)(ii).

"Unallocated FCM has the meaning assigned to such term in FCM Regulation ForexClear Transaction" 49(n)(i).

"Unallocated FCM has the meaning assigned to such term in FCM Regulation 46(o)(ii). SwapClear Contract"

"Unallocated FCM has the meaning assigned to such term in FCM Regulation 46(o)(i).

means the amount payable by an FCM Clearing Member to "Variation

the Clearing House or by the Clearing House to an FCM Clearing Member, as applicable, in respect of, and in the amount of, the Clearing House's variation margin requirements (as published from time to time by the Clearing House) in respect of an FCM Contract and with reference to the change in the NPV of such FCM Contract over a particular period of time has the meaning assigned to such

term in FCM Regulation 47(b).

"Withdrawal Date" means the date upon which the Clearing House determines to

withdraw the FCM SwapClear Service or the FCM ForexClear Service, as applicable, in accordance with these

FCM Regulations and the FCM Procedures.

has the meaning assigned to it in FCM Regulation 15(d). "With Client Excess Model"

"Without Client Excess has the meaning assigned to it in FCM Regulation 15(c). Model"

Any reference in these FCM Regulations or the FCM Procedures to statutes, laws or regulations (or to specific provisions within them) thereof shall be to such statutes, laws or regulations (or to specific provisions within them) as amended, modified, supplemented or replaced from time to time.

Any reference to a Regulatory Body includes any successor or replacement Regulatory Body.

Reference to writing contained in these FCM Regulations or the FCM Procedures shall include typing, printing, photography, email, or any other mode of representing or reproducing words in a visible form.

Words importing the singular shall, where the context permits, include the plural and viceversa.

The words "include", "includes" or "including" are to be deemed followed by the words "without limitation".

Any reference to time contained in these FCM Regulations or the FCM Procedures shall, unless otherwise stated, be to London time. Times are shown using the twenty four hour clock.

CHAPTER VGOLLATERAL AND VALUATIONS

REGULATION 14 MARGIN AND COLLATERAL

- (a) The Clearing House may in accordance with the FCM Procedures require an FCM Clearing Member to furnish it with Margin, and to keep the Clearing House furnished with sufficient Margin at all times, in an amount determined by the Clearing House in accordance with these FCM Regulations and the FCM Procedures, as security for the performance by such FCM Clearing Member of its obligations to the Clearing House in respect of all FCM Contracts from time to time to be registered in its name as Open FCM Contracts pursuant to these FCM Regulations. The obligation upon an FCM Clearing Member to furnish Margin to the Clearing House pursuant to this paragraph shall be **in addit**ion to any other obligation of the FCM Clearing Member to furnish Margin or make any other payment to the Clearing House pursuant to these FCM Regulations. For the avoidance of doubt, margining requirements and policies may vary among each Business Category of FCM Contract and among each Product therein.
- (b) If insufficient monies are standing to the credit of an FCM Clearing Member's account, or if any Collateral deposited by an FCM Clearing Member as Margin is determined by the Clearing House in accordance with the FCM Procedures to be insufficient, such Margin as the Clearing House requires an FCM Clearing Member to furnish to it pursuant to paragraph (a) above, FCM Regulation 46 or FCM Regulation 49 or any other FCM Regulation shall be furnished by the FCM Clearing Member in such form and manner and by such time or times as may be prescribed by the FCM Procedures.
- The Clearing House shall be entitled to assume that all Collateral furnished by (c) (i) an FCM Clearing Member to the Clearing House pursuant to these FCM Regulations or under the terms of any agreement made with the FCM Clearing Member are the sole legal and beneficial property of the FCM Clearing Member or are furnished or deposited for the purposes of these FCM Regulations with the legal and beneficial owner's unconditional consent and with the authority granted to the FCM Clearing Member to repledge such property to the Clearing House. An FCM Clearing Member may not furnish Collateral to or with the Clearing House otherwise than in conformance with this paragraph. It shall be accepted by every person (including FCM Clients) subject to or dealing on the terms of these FCM Regulations that an FCM Clearing Member has such person's unconditional consent to furnish to the Clearing House any securities or other assets of such person in the FCM Clearing Member's possession as Collateral for purposes of the FCM Rulebook.
 - (ii) Each FCM Clearing Member represents and warrants to the Clearing House as at each date on which such FCM Clearing Member furnishes Collateral to the Clearing House pursuant to these FCM Regulations (A) that such FCM Clearing Member is the sole legal and beneficial owner of such Collateral or, as the case may be, such Collateral is so furnished or deposited with the legal and beneficial owner's unconditional consent and with the authority granted to the FCM Clearing Member to repledge such property to the Clearing House, and (B) that the provision to the Clearing House of such Collateral pursuant to

- (m) Creation of Security Interest. Each FCM Clearing Member hereby grants the Clearing House a first priority security interest in and a first priority and unencumbered first lien upon any and all Collateral, Margin, cash, securities, receivables, rights and intangibles and any other collateral or assets deposited with or transferred to the Clearing House, or otherwise held by the Clearing House (including all property deposited in or attributable to a Proprietary Account, an FCM Omnibus Client Account with LCH, an LCH Client Depository Account, or any amounts owing to an FCM Clearing Member or a Proprietary Account), but excluding any Settlement Payment), in each case to the extent transferred in accordance with the FCM Regulations, including all substitutions for and proceeds of, any such property, in connection with any FCM Contracts cleared for such FCM Clearing Member or its FCM Clients, as security for unconditional payment and satisfaction of the obligations and liabilities of the FCM Clearing Member to the Clearing House under the FCM Rulebook, but excluding any property deposited in or transferred to the Clearing House in respect of an FCM Clearing Member's Contribution(s) to the default funds of the Clearing House.
- (n) The FCM Clearing Member agrees to take any and all actions, including but not limited to the execution of any and all documents, requested by the Clearing House in order to perfect, maintain or enforce the security interest granted to the Clearing House hereunder.
- (o) The Clearing House may exercise any and all rights available to it with respect to the security interest granted hereunder, in accordance with the FCM Regulations and Applicable Law.
- (p) Notwithstanding any other provision of this FCM Regulation 14(p), in no event shall the Clearing House's security interests in the property attributable to an FCM Clearing Member's FCM Omnibus Client Account with LCH be security for, or be exercised to satisfy, any obligations or liabilities of (i) such FCM Clearing Member other than in connection with obligations or liabilities relating to such FCM Clearing Member's FCM Omnibus Client Accounts with LCH or (ii) an FCM Client by application of Margin attributable to the FCM Client Sub-Account of a different FCM Client.
- Provided that the Clearing House is not subject to the procedures of FCM Regulation (q) 37 and is not otherwise insolvent, the Clearing House will, notwithstanding Section 9-207 of the New York Uniform Commercial Code, have the right to sell, pledge, rehypothecate, assign, invest, use or otherwise dispose of, or otherwise use in its business any cash Collateral it holds on behalf of an FCM Clearing Member with respect to such FCM Clearing Member's Proprietary Account, free from any claim or right of any nature whatsoever of the relevant FCM Clearing Member, including any equity or right of redemption by such FCM Clearing Member, subject only to any restrictions under Applicable Law (including bankruptcy law). Except to the extent otherwise specified for in the FCM Rulebook, the Clearing House shall retain any and all income, distributions, returns, profits or any other monies received with respect to any such investments or use. For purposes of determining the amount of Collateral held pursuant to the FCM Rulebook by the Clearing House with respect to an FCM Clearing Member's Proprietary Account, the Clearing House will be deemed to continue to hold all such Collateral and to receive any distributions or proceeds

to the FCM Clients of the FCM Clearing Member to the extent such FCM Clients have FCM Contracts attributed to such FCM Omnibus Futures Client Account with LCH. An FCM Clearing Member may withdraw Excess Margin from an FCM Omnibus Futures Client Account with LCH subject to FCM Regulation 9(b) (and in accordance with any other applicable provisions of the FCM Rulebook). Even where an FCM Clearing Member has not requested the return of its Excess Margin held in an FCM Omnibus Futures Client Account with LCH, the Clearing House may, in its discretion, elect at any time to return any such Excess Margin to the applicable FCM Clearing Member. Upon withdrawal or return of Excess Margin from an FCM Omnibus Futures Client Account with LCH, the treatment of any residual interest the FCM Clearing Member may have in such withdrawn collateral will be subject to and governed by FCM Regulation 7(l) and the relevant CFTC Regulations. avoidance of doubt, Excess Margin in an FCM Omnibus Futures Client Account with LCH shall not be applied to satisfy obligations of the relevant FCM Clearing Member in its proprietary capacity.

- (iii) Foreign Futures Products. An FCM Clearing Member is permitted to maintain Excess Margin with the Clearing House in respect of its FCM Omnibus Foreign Futures Client Accounts with LCH. Excess Margin held in an FCM Omnibus Foreign Futures Client Account with LCH of an FCM Clearing Member shall be treated as belonging to the FCM Clients of the FCM Clearing Member to the extent such FCM Clients have FCM Contracts attributed to such FCM Omnibus Foreign Futures Client Account with LCH. An FCM Clearing Member may withdraw Excess Margin from an FCM Omnibus Foreign Futures Client Account with LCH subject to FCM Regulation 9(b) (and in accordance with any other applicable provisions of the FCM Rulebook). Even where an FCM Clearing Member has not requested the return of its Excess Margin held in an FCM Omnibus Foreign Futures Client Account with LCH, the Clearing House may, in its discretion, elect at any time to return any such Excess Margin to the applicable FCM Clearing Member. Upon withdrawal or return of Excess Margin from an FCM Omnibus Foreign Futures Client Account with LCH, the treatment of any residual interest the FCM Clearing Member may have in such withdrawn collateral will be subject to and governed by FCM Regulation 7(l) and the relevant CFTC Regulations. For the avoidance of doubt, Excess Margin in an FCM Omnibus Foreign Futures Client Account with LCH shall not be applied to satisfy obligations of the relevant FCM Clearing Member in its proprietary capacity.
- (bb) Excess Margin in Proprietary Accounts. An FCM Clearing Member is permitted to maintain Excess Margin with the Clearing House in respect of its Proprietary Accounts. In accordance with the FCM Procedures, an FCM Clearing Member that is not a Defaulter may request the return of any such Excess Margin and upon such request the Clearing House shall return such Excess Margin, except the Clearing House may determine not to return such Excess Margin where an unsatisfied margin call or obligation of the FCM Clearing Member under the FCM Regulations or Procedures is outstanding in respect of one or more of such FCM Clearing Member's FCM Omnibus Client Accounts with LCH, including in respect of any FCM Client Sub-Account therein. Even where an FCM Clearing Member has not requested the return of its Excess Margin held in a Proprietary Account, the Clearing House may, in

- its discretion, elect at any time to return any such Excess Margin to the applicable FCM Clearing Member.
- (cc) FCM Portfolio Margining Service. The Clearing House shall provide the FCM Portfolio Margining Service subject to and in accordance with the terms of the FCM Procedures. The FCM Portfolio Margining Service may require the transfer of Futures Products or Foreign Futures Products from an FCM Clearing Member's FCM Omnibus Futures Client Account with LCH or FCM Omnibus Foreign Futures Client Account with LCH to such FCM Clearing Member's FCM Omnibus SwapClear Client Account of LCH.

CHAPTER XNETTING AND DISTRIBUTION

REGULATION 37 NETTING

- (a) If at any time the Clearing House fails to make a payment to an FCM Clearing Member, other than a Defaulter, under an FCM Contract for a period of 30 days from the date when the obligation to pay fell due, then that FCM Clearing 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 authorize any of the foregoing, in any such case other than for the purposes of corporate restructuring (including any consolidation, amalgamation or merger), then an FCM Clearing Member, other than a Defaulter, may exercise the right given to it under paragraph (c) below.
- (c) An FCM Clearing Member entitled to exercise rights under this paragraph may, at any time while any of the circumstances referred to in paragraph (a) or (b) above 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 FCM 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 FCM Clearing Member shall be obliged to make any further payments under any FCM Contract between them which would, but for this FCM Regulation 37, have fallen due for performance on or after the Termination Date, and any obligations to make further payments which would otherwise have fallen due shall be satisfied by settlement (whether by payment, set-off or otherwise) of the Termination Amount;
 - the FCM Clearing Member shall (on, or as soon as reasonably practicable after, the Termination Date) determine (discounting if appropriate) in respect of each FCM Contract its total loss or, as the case may be, gain, in each case expressed in the lawful currency of the United States or the currency of the relevant FCM Contract where agreed by the Clearing House and the FCM Clearing Member (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 which would otherwise have been required to be made under such FCM Contract; and
 - (iii) the FCM Clearing Member shall (on, or as soon as reasonably practicable after, the Termination Date) determine the amount of its Collateral held by the Clearing House, which amount shall be treated as a loss for purposes of this FCM Regulation 37(d), and the amount of any Collateral required to be delivered by

- the FCM Clearing Member to the Clearing House and not yet so delivered, which amount shall be treated as a gain for purposes of this FCM Regulation 37(d); and
- (iv) the FCM Clearing Member shall treat each loss to it, determined as above, as a positive amount and each gain by it, so determined, as a negative amount and, subject to paragraph (ivy) below, shall aggregate all of such amounts to produce a single, net positive or negative amount, denominated in the Base Currency (the "Termination Amount").
- (v) (iv) Where an FCM Clearing Member has a Proprietary Account and one or more FCM Omnibus Client Accounts with LCH:
 - the FCM Clearing Member shall determine a number of net amounts under paragraph (d)(iii) (d)(iv) as applicable: (1) separate net amounts in respect of gains and losses arising on FCM Contracts registered to each FCM Client Sub-Account carried by such FCM Clearing Member (i.e., on an FCM Client by FCM Client basis with respect to Swaps Products); (2) one net amount in respect of gains and losses arising on FCM Contracts registered in the FCM Clearing Member's FCM Omnibus Futures Client Accounts with LCH on a combined basis; (3) one net amount in respect of gains and losses arising on FCM Contracts registered in the FCM Clearing Member's FCM Omnibus Foreign Futures Client Accounts with LCH on a combined basis; and (4) one net amount in respect of gains and losses arising on FCM Contracts registered in the FCM Clearing Member's Proprietary Accounts on a combined basis; and
 - (B) each of the net amounts determined under paragraph (iv)(A) (v)(A) above shall constitute Termination Amounts.
- (vi) (v)—If a Termination Amount determined pursuant to paragraph (d)(iv)—(d)(v) above is a positive amount, the Clearing House shall pay it to the FCM Clearing Member and if any such Termination Amount is a negative amount, the FCM Clearing Member shall pay it to the Clearing House, in either case in accordance with paragraph (vi)(v). The FCM Clearing Member shall notify the Clearing House of each such Termination Amount, and by which party it is payable, immediately after the calculation thereof.
- (vii) (vii) A Termination Amount shall, subject to FCM Regulation 38, be paid in the Base Currency by the close of business on the Business Day following notification pursuant to paragraph (v) (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 FCM Clearing Member may select) plus 1% 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 FCM Regulation 37, the FCM Clearing 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.
- Any amount determined in FCM Regulation 37(d)(iii) shall be expressed in the Base Currency Equivalent. For the purposes of this FCM Regulation 37, 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 FCM Clearing Member as being required to purchase such amount of such Other Currency as at the relevant Termination Date, with the Base Currency.

The FCM Clearing Member's rights under this FCM Regulation 37 shall be in addition to, and not in limitation or exclusion of, any other rights which the FCM Clearing Member may have (whether by agreement, operation of law or otherwise, including its rights under FCM Regulation 9(i)).

- (e) If an FCM Clearing Member is a Defaulter and either:
 - (i) no default management process has been commenced by the Clearing House in respect of such FCM Clearing Member within 3 business days following a Default Notice being issued in respect of that FCM Clearing Member; or
 - (ii) such default management process has been commenced within such period but that FCM Clearing 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) 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) <u>Interpretation in Relation to FDICIA.</u> The Clearing House and each FCM Clearing Member intend that certain provisions of the FCM Rulebook (including this FCM Regulation 37) be interpreted in relation to certain terms that are defined in FDICIA, as follows:
 - (i) The Clearing House is a "clearing organization" and a "financial institution".
 - (ii) An obligation of an FCM Clearing Member to make a payment to the Clearing House, or of the Clearing House to make a payment to an FCM Clearing Member, subject to a netting contract, is a "covered clearing obligation" and a "covered contractual payment obligation".
 - (iii) An entitlement of an FCM Clearing Member to receive a payment from the Clearing House, or of the Clearing House to receive a payment from an FCM Clearing Member, subject to a netting contract, is a "covered contractual payment entitlement".

- (iv) The Clearing House is a "member", and each FCM Clearing Member is a "member".
- (v) The amount by which the covered contractual payment entitlements of an FCM Clearing Member or the Clearing House exceed the covered contractual payment obligations of such Clearing Member or the Clearing House after netting under a netting contract is its "net entitlement".
- (vi) The amount by which the covered contractual payment obligations of an FCM Clearing Member or the Clearing House exceed the covered contractual payment entitlements of such Clearing Member or the Clearing House after netting under a netting contract is its "net obligation".
- (vii) The FCM Regulations and the FCM Procedures, including this Regulation 37, constitute a "netting contract".
- (viii) The provisions of this these FCM Regulations and the FCM Procedures providing for the use and liquidation of Collateral, including Regulation 37this FCM Regulation 37, each constitute a "security agreement of arrangement or other credit enhancement related to one or more netting contracts between any 2 members of a clearing organization".
- (ix) For purposes of this Regulation 37FCM Regulation 37, the term "payment" means "a payment of United States dollars, another currency, or a composite currency, and a noncash delivery, including a payment or delivery to liquidate an unmatured obligation".

REGULATION 40 INTERPRETATION OF THESE FCM REGULATIONS; APPLICABLE LAW; CLEARING HOUSE DATA

- (a) In the event of inconsistency between the provisions of these FCM Regulations and the rules or regulations or other contractual provisions of any trading platform or other undertaking the provisions of these FCM Regulations shall prevail.
- (b) The headings to these FCM Regulations are for convenience only and shall not affect their interpretation.
- (c) FCMs 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 FCMs; and
 - (iii) the Clearing House's obligations under EMIR and any Applicable Law to act fairly and professionally in accordance with the best interests of FCMs and, where applicable, FCM Clients and sound risk management.
- (d) FCMs shall perform their obligations and exercise their rights under the Rulebook in accordance with Applicable Law.
- (e) Each FCM warrants and undertakes that (i) it shall not undertake any activities that would amount to, or facilitate or otherwise result in another person committing, tax evasion and (ii) it shall maintain reasonable procedures designed to prevent any employees, agents or other persons who perform services for it or on its behalf from undertaking any such activities. Each FCM shall give written notice to the Clearing House forthwith of any apparent breach of this clause and shall forthwith on demand supply to the Clearing House any information requested by the Clearing House related to the FCM's compliance with this clause.
- (f) FCMs <u>Clearing Members</u>, FCM Clients and the service providers of FCMs <u>Clearing Members</u> and FCM Clients may use Clearing House Data solely for the purposes of risk management and settlement activities in relation to FCM Contracts and positions held for the account of an FCM Client. FCMs <u>Clearing Members</u> may only disclose the Clearing House Data:
 - (i) to (A) FCM Clients for whom the FCM <u>Clearing Member</u> provides Client Clearing Services and/or the service providers of such FCM Clients and (B) the service providers of the FCM <u>Clearing Member</u>, **provided** that, in each case, the FCM <u>Clearing Member</u> shall require by way of written contract that each relevant FCM Client and/or service provider shall only use Clearing House Data for the purposes of the FCM Client's or <u>FCM'sFCM Clearing Member's</u>, as applicable, risk management and settlement activities in relation to FCM

- Contracts and positions held for the account of an FCM Client referencing the relevant Clearing House Data; and
- (ii) where required or requested to do so by law or by a regulatory authority or for the purposes of commencing, or defending, an arbitration or court proceeding.
- (g) Without prejudice to paragraph (f) above and Section 2.1.1(e) of the FCM Procedures, FCMs shall not, and shall require by way of written contract that any third party receiving Clearing House Data as a result of such FCM's disclosure shall not, use any Clearing House Data for any other purpose, including:
 - (i) the creation or development of any new or derived data or data product; or
 - (ii) "provision of a benchmark", "use of a benchmark" or "contribution of input data" under Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014 (Text with EEA relevance).

- (f) The Clearing House shall be deemed to register an FCM SwapClear Contract, in accordance with this FCM Regulation 46 in the name of an FCM Clearing Member, at the time prescribed in the FCM Procedures ("Registration Time"). At the Registration Time, the FCM Clearing Member, and the FCM Client if applicable, will be deemed to be bound by the relevant FCM SwapClear Contract on the terms entered into between the FCM Clearing Member and the Clearing House automatically and without any further action by such FCM Clearing Member or FCM Client, which such terms shall, without limitation, incorporate all applicable terms of these FCM Regulations and of Schedule 1 to the FCM Product Specific Contract Terms and Eligibility Criteria Manual.
- If at any time after registration of an FCM SwapClear Contract, the Clearing House (g) determines that the corresponding FCM SwapClear Transaction of which details were presented for registration did not, at the Registration Time, meet the FCM SwapClear Product Eligibility Criteria in existence at the Registration Time (an "Ineligible FCM SwapClear Transaction"), the Clearing House shall, immediately following the next margin run following such determination, set aside both FCM SwapClear Contracts (or, the FCM SwapClear Contract and the Non-FCM SwapClear Contract, if applicable) arising from such Ineligible FCM SwapClear Transaction. Upon an FCM SwapClear Contract being set aside under this paragraph (any such FCM SwapClear Contract, an "Ineligible FCM SwapClear Contract"): (i) the Clearing House will notify the FCM Clearing Member party to such Ineligible FCM SwapClear Contract via the FCM Approved Trade Source System through which details of the relevant Ineligible FCM SwapClear Transaction were originally presented to the Clearing House that such Ineligible FCM SwapClear Contract has been set aside; and (ii) such Ineligible FCM SwapClear Contract shall immediately be deemed to be terminated and shall thereafter have no force or effect. Where an Ineligible FCM SwapClear Contract is set aside pursuant to this paragraph, all payments (including Variation MarginSettlement Payments) (if any) paid by the Clearing House or by an FCM Clearing Member (or SwapClear Clearing Member, if applicable) in respect of such Ineligible FCM SwapClear Contract up to and including the time when such Ineligible FCM SwapClear Contract was set aside shall be retained by the receiving party upon termination as a termination payment. Without prejudice to FCM Regulation 44 and its obligations under this FCM Regulation 46, the Clearing House (and each other member of the LCH Group and their respective officers, employees and agents) shall have no liability whatsoever to any person arising out of or in respect of the registration by it in error or otherwise of an Ineligible FCM SwapClear Contract.
- (h) Where the FCM Procedures so provide, the Clearing House may require the FCM Clearing Members in whose names one or more FCM SwapClear Contracts are to be registered to furnish it with Margin as a condition of registration of such FCM SwapClear Contract(s), and such Margin shall be furnished to the Clearing House in accordance with FCM Regulation 14 and such other applicable provisions in the FCM Rulebook.
- (i) Notwithstanding anything to the contrary in the FCM Rulebook, the Clearing House may decline to register an FCM SwapClear Transaction in the name of an FCM Clearing Member where it considers such action advisable for its own protection or the protection of the relevant market, **provided that** the Clearing House may (subject to the provisions of the FCM Rulebook) register any FCM SwapClear Contract which

- or (ii) does not relate to an Unallocated FCM SwapClear Contract; or (iii) seeks to allocate part of all of an Unallocated FCM SwapClear Contract to a Proprietary Account of a SwapClear Clearing Member other than the Pre-Allocation FCM SwapClear Clearing Member, then such Allocation Notice shall be ineligible and shall be rejected by the Clearing House. For the avoidance of doubt, the Post-Allocation Clearing Member(s) need not be the same as the Pre-Allocation FCM Clearing Member. Unless or until the Clearing House receives an eligible Allocation Notice, the Unallocated FCM SwapClear Contract shall remain in the Pre-Allocation FCM Clearing Member's FCM SwapClear Suspension Sub-Account and subject to the rules of the Clearing House.
- (v) Following receipt of an eligible Allocation Notice, the Clearing House shall (following acceptance from the relevant Post-Allocation Clearing Member(s) and the Pre-Allocation FCM Clearing Member, in the same manner as a new FCM SwapClear Transaction is accepted in accordance with the FCM Procedures):
 - (A) close out the outstanding Unallocated FCM SwapClear Contract and simultaneously register two or more (as applicable) FCM SwapClear Contracts to the same FCM SwapClear Suspension Sub-Account, and these newly registered FCM SwapClear Contracts shall have the same Economic Terms as the Unallocated FCM SwapClear Contract except that they shall have lower notional values corresponding to the allocation instructions provided in the Allocation Notice (which notional values shall, in the aggregate, equal the notional value of the Unallocated FCM SwapClear Contract) - for the purpose of the foregoing, if the Allocation Notice has not allocated the full notional value of the Unallocated FCM SwapClear Contract, one of the FCM SwapClear Contracts so registered by the Clearing House shall be a new Unallocated FCM SwapClear Contract with a notional value equal to that portion of the Unallocated FCM SwapClear Contract that has not been allocated; and
 - (B) following the actions described in paragraph (A) above, transfer one or more of the newly registered FCM SwapClear Contracts resulting from the cancellation of the Unallocated FCM SwapClear Contract to the applicable Client Segregated Sub-Accounts, Client Account or Proprietary Account in accordance with the Allocation Notice. Following the transfer of one or more of the newly registered FCM SwapClear Contracts, any remaining FCM SwapClear Contract that has not been transferred shall thereafter be the Unallocated FCM SwapClear Contract.

Where an Allocation Notice directs the entire notional amount of an Unallocated FCM SwapClear Contract to be allocated to a single Client Segregated Sub-Account, Client Account or the Proprietary Account, then the Clearing House shall not take the steps described in sub-paragraphs (A) and (B) above and shall instead transfer the Unallocated FCM SwapClear Contract

to the applicable Client Segregated Sub-Account, Client Account or Proprietary Account following receipt of the Allocation Notice.

Where the transfer is from an FCM SwapClear Suspension Sub-Account to a Client Account, the relevant FCM SwapClear Contract shall be converted to a SwapClear Contract.

By a Pre-Allocation FCM Clearing Member delivering an eligible Allocation Notice to the Clearing House, that Pre-Allocation FCM Clearing Member shall be deemed to represent and warrant that it has been properly authorized by the Pre-Allocation Executing Party to allocate the relevant Unallocated FCM SwapClear Contract or, where the allocation is to such Pre-Allocation FCM Clearing Member's Proprietary Account, in accordance with paragraph (vii) below. Where the Clearing House receives an ineligible Allocation Notice, the Unallocated FCM SwapClear Transaction to which it relates shall remain in the FCM SwapClear Suspension Sub-Account.

- (vi) Subject to paragraph (viii) below, the transfer of an Unallocated FCM SwapClear Contract from the FCM SwapClear Suspension Sub-Account to a Client Segregated Sub-Account, Client Account or Proprietary Account shall be final. In no event can Unallocated FCM SwapClear Contracts be further allocated once they are transferred from the FCM SwapClear Suspension Sub-Account.
- (vii) Where an Unallocated FCM SwapClear Contract has been registered to an FCM SwapClear Suspension Sub-Account and is not allocated by the Pre-Execution Allocating Party or in such other circumstances that the Clearing House considers appropriate, the Pre-Allocation FCM Clearing Member may submit an Allocation Notice to the Clearing House requesting the transfer of the relevant Unallocated FCM SwapClear Contract to that FCM Clearing Member's Proprietary Account. An FCM Clearing Member, through requesting such transfer, shall be deemed to represent that such transfer is in accordance with Applicable Law and regulation and the FCM'sFCM Clearing Member's contractual rights against the Pre-Allocation Executing Party or, if applicable, the Pre-Allocation Executing Party's underlying customer(s).
- (viii) Where an Unallocated FCM SwapClear Contract has been erroneously allocated to a Client Segregated Sub-Account or Client Account the Clearing House will, in response to a written request from a Post-Allocation Clearing Member and subject to acceptance of the transfer by the relevant Pre-Allocation FCM Clearing Member, transfer an FCM SwapClear Contract or SwapClear Contract (as applicable) to the FCM SwapClear Suspension Sub-Account from which that FCM SwapClear Contract was allocated. Following such transfer, the FCM SwapClear Contract shall be treated as an Unallocated FCM SwapClear Contract except that the provisions of FCM Regulation 46(o)(iv) shall not apply to it, such that an over-allocation will not be ineligible and will result in the allocation of the notional amount prescribed in an Allocation Notice. Any transfer pursuant to this FCM Regulation 46(o)(viii) must be requested within three Business Days of the original allocation to the relevant Client Segregated Sub-Account or Client Account. Through

- with any obligations, liabilities or otherwise as appropriate and permissible under Applicable Law;
- (v) an FCM Clearing Member, acting for its own account or for the account of an FCM Client, may not effect Permitted Transfers in accordance with paragraphs (d) of (e) of Section 1.15.2 of UK SwapClear Procedure 2C;
- (vi) for the avoidance of doubt:
 - (A) any Permitted Transfers effected pursuant to this paragraph (p) remain subject to the provisions of: (I) FCM Regulation 13(g), (h) and (i); and (II) the CEA, the FCM Procedures and the CFTC Regulations regarding segregation of assets; and
 - (B) any Permitted Transfer from the Proprietary Account of a Carrying Clearing Member that is an FCM Clearing Member to the Proprietary Account of a Receiving Clearing Member that is an FCM Clearing Member may only occur where both FCM Clearing Members are Affiliates of each other.
- Where the Receiving Clearing Member is an FCM Clearing Member and the (vii) Permitted Transfer involves one or more SwapClear CTM Contracts, it shall be a condition precedent to the Permitted Transfer that the Carrying Clearing Member has paid to the Clearing House, or the Clearing House has paid to the Carrying Clearing Member (as applicable), any cash settlement amount that the Clearing House determines (in its sole and absolute discretion) must be paid to ensure that the net present value of the SwapClear CTM Contract shall be equal to zero immediately prior to the completion of the Permitted Transfer. Such amounts shall be determined and paid by the relevant party in accordance with the FCM Procedures. The Clearing House may, in its sole and absolute discretion, apply any Collateral (as defined in the UK General Regulations) held by it in respect of a SwapClear CTM Contract to satisfy (in whole or in part) the Carrying Clearing Member's obligation to pay the amount (if any) required under this FCM Regulation 46(q)(vii) in relation to that SwapClear CTM Contract. Any Collateral (as defined in the UK General Regulations) held by the Carrying Clearing Member in respect of such a SwapClear CTM Contract shall be applied to satisfy (in whole or in part) the Clearing House's obligation to pay the amount (if any) required under this FCM Regulation 46(q)(vii) in relation to that SwapClear CTM Contract.
- (r) **Bulk Events.** Each of the following processes constitutes a "**Bulk Event**" and will be processed together by the Clearing House in one individual bulk event cycle (each, a "**Bulk Event Cycle**") at such times as determined by the Clearing House in its sole discretion:
 - (i) ACSP Compression Cycle;
 - (ii) Backload Registration Cycle; and

(iii) Intra-Day Bulk Transfer.

The Clearing House may call for additional Collateral in respect of initial and/or variation—margin to be deposited inor to secure the FCM Clearing Member's obligations in respect of additional Variation Settlement to be paid, in each case, in such amounts and at such times as the Clearing House, in its sole discretion, requires prior to processing a given Bulk Event Cycle. Any Collateral so called and deposited shall be reserved and made available solely in connection with the relevant Bulk Event Cycle. In the event the Clearing House calls and reserves additional Collateral for a given Bulk Event Cycle and, subsequently, one or more Bulk Events in that given Bulk Event Cycle is cancelled by the Clearing House, in its sole and absolute discretion, all Bulk Events in that given Bulk Event Cycle shall be cancelled. The Clearing House reserves the right to cancel any Bulk Event and/or Bulk Event Cycle in its sole and absolute discretion. The Clearing House shall publish the Bulk Event Cycle schedule on its website, as amended from time to time.

REGULATION 47 COLLATERALIZATION DAILY SETTLEMENT OF FCM SWAPCLEAR CONTRACTS AND FCM FOREXCLEAR CONTRACTS

- (a) The <u>Clearing House shall, at least once per Business Day, determine (i) the change in the</u> net present value, <u>if any,</u> of each FCM SwapClear Contract <u>shall be calculated by the Clearing House and FCM ForexClear Contract and (ii) the Price Alignment Amount, if any, payable on such Business Day in respect of each such Swap Product, <u>in each case</u> in such manner and at such times as may be provided in the FCM Procedures. Except as prescribed in the FCM Procedures, <u>the net present value calculated by the Clearing House such determinations</u> may in no circumstances be called in question. <u>The time at which the Clearing House determines the change in the net present value and Price Alignment Amount, if any, in respect of a Swap Product is referred to herein as the "NPV Determination Time".</u></u>
- (b) The At least once per Business Day and in accordance with the FCM Procedures, the Clearing House shall, at least daily, call on the FCM Clearing Member to pay to it cash in respect of such FCM Clearing Member's Variation Margin obligations, representing the unless there has not been a change in the net present value of the applicable Swap Product, pay a settlement payment to, or require a settlement payment from, an FCM Clearing Member in respect of each FCM SwapClear Contracts and FCM ForexClear Contract registered in such FCM Clearing Member's name: (each, a "Variation Settlement"). Each Variation Settlement shall be an amount of cash equal to the change from the preceding NPV Determination Time (or in the event that no NPV Determination Time has occurred in respect of a Swap Product, the change from the time of registration of such Swap Product) in the net present value of the applicable FCM SwapClear Contract or FCM ForexClear Contract.
- (c) If the value of any The Clearing House shall also pay to, or receive from, each applicable FCM Clearing Member the Price Alignment Amount, if any, in respect of the Cumulative Variation Settlement of each FCM SwapClear Contract changes such that the amount of cash Margin payable by an and FCM ForexClear Contract registered in such FCM Clearing Member's under paragraph (b) of this FCM Regulation 47 exceeds the obligation to which it relates, an amount shall become payable from the Clearing House to the FCM Clearing Member equal to the excessname, in accordance with the FCM Procedures.
- (d) In respect of <u>suchthe FCM SwapClear Contracts and FCM ForexClear Contracts registered in an FCM Clearing Member's name</u>, on every Business Day, the Clearing House shall aggregate the amounts in item (i) below and (separately) the amounts in item (ii) below, in each case to the extent payable in the same currency and as provided below:
 - (i) the sums which would otherwise have been Variation Settlements, Price Alignment Amounts, any coupon payments and other amounts not in respect of Collateral payable by the FCM Clearing Member to the Clearing House as eash (in respect of Variation Margin) on such date and any coupon payments due on that date; and
 - (ii) the sums which would otherwise have been Variation Settlements, Price Alignment Amounts, any coupon payments and other amounts not in respect of

<u>Collateral</u> payable by the Clearing House to the FCM Clearing Member as eash (in respect of Variation Margin) on such date and any coupon payments due on that date,

and, in respect of each currency, if the aggregate amount that would otherwise have been payable by one party exceeds the aggregate amount that would otherwise have been payable by the other party, then the obligations of each party under this FCM Regulation 47 Regulation 47 shall be automatically satisfied and discharged on payment by the party by whom the larger aggregate amount would have been payable to the other party of the excess of the larger aggregate amount over the smaller aggregate amount (such excess, a "Settlement Payment"). All aggregation and netting pursuant to this FCM Regulation 47 Regulation 47 in respect of an FCM Clearing Member's portfolio of FCM SwapClear Contracts and FCM ForexClear Contracts shall be calculated separately, in respect of each currency, with respect to (i) FCM SwapClear Contracts held in that the FCM Clearing Member's Proprietary Account; (ii) FCM ForexClear Contracts held in the FCM Clearing Member's Proprietary Account and with respect to the; (iii) FCM SwapClear Contracts held on behalf of each of that the FCM Clearing Member's FCM Clients in each applicable FCM Client Sub-Account; and (iv) FCM ForexClear Contracts held on behalf of each of the FCM Clearing Member's FCM Clients in each applicable FCM Client Sub-Account.

Payment of a Settlement Payment shall be settlement (within the meaning of CFTC Rule 39.14) and shall be final, irrevocable and unconditional no later than when, in accordance with the FCM Procedures, (i) the relevant FCM Clearing Member's PPS bank has performed its concentration function (being the transfer of net funds from the PPS bank to a central account in the name of the Clearing House), (ii) such PPS bank has made the relevant payments and (iii) any time permitted by the relevant payment settlement system for the recall of any such payments has expired.

REGULATION 48 THE APPLICABLE RATE FOR, AND THE NET PRESENT VALUE OF, AN FCM SWAPCLEAR CONTRACT

- The Clearing House may determine the applicable rate for, and the net present value of, anand each FCM Clearing Member agree that payment of a Settlement Payment (or application of Eligible FCM Buffer to the obligation to pay such amounts in accordance with FCM Procedure 4.9.2) shall discharge the outstanding exposure, as of the NPV Determination Time, of the FCM SwapClear Contracts for the purposes of these FCM Regulations and the FCM Procedures in such manner and at such times as may be prescribed in the FCM Procedures. Except as prescribed in the FCM Procedures, neither the applicable rate nor the net present value determined by the Clearing House may in any circumstances be challenged or FCM ForexClear Contracts in respect of which such Settlement Payment is received (or Eligible FCM Buffer is applied).
- If an FCM Clearing Member owes a Settlement Payment in respect of a netting set of (g) FCM SwapClear Contracts or FCM ForexClear Contracts and such FCM Clearing Member's PPS bank pays or commits to pay such amount to the Clearing House (or the Clearing House applies Eligible FCM Buffer to such Settlement Payment obligation in accordance with FCM Procedure 4.9.2) by 9:00 London time on the Business Day following the day on which the Clearing House calls for such Settlement Payment, the net present value of such FCM SwapClear Contracts or FCM ForexClear Contracts shall, for purposes of the FCM Regulations, reset to zero as of the NPV Determination Time. If the Clearing House owes a Settlement Payment in respect of a netting set of FCM SwapClear Contracts or FCM ForexClear Contracts and such FCM Clearing Member's PPS bank pays or commits to pay such amount to the relevant FCM Clearing Member by 9:00 London time on the Business Day following the day on which such Settlement Payment is calculated, the net present value of such FCM SwapClear Contracts or FCM ForexClear Contracts shall, for purposes of the FCM Regulations, reset to zero as of the NPV Determination Time. For the avoidance of doubt, any commitment to pay a Settlement Payment is not to be regarded as satisfaction of the obligation to pay such Settlement Payment.
- (h) Notwithstanding anything to the contrary in FCM Regulation 14, neither the Clearing House nor any FCM Clearing Member shall be obligated to make any payment by way of variation margin in respect of an FCM SwapClear Contract or FCM ForexClear Contract, nor shall any Settlement Payment constitute Collateral for purposes of these Regulations. This FCM Regulation 47 shall be without prejudice to the Clearing House's other rights to require Collateral to be transferred to it under FCM Regulation 14 (including, but not limited to, its right to require Collateral to be transferred to it in respect of an FCM Clearing Member's Initial Margin obligations in respect of an FCM SwapClear Contract or FCM ForexClear Contract).

REGULATION 48 [RESERVED]

- (f) Without prejudice to the Clearing House's rights under paragraph (e) of this FCM Regulation 49, an FCM ForexClear Transaction, particulars of which are submitted for registration as an FCM ForexClear Contract, must meet the FCM ForexClear Product Eligibility Criteria at the time the particulars of the FCM ForexClear Transaction are presented to the Clearing House and must continue to meet such criteria at the Registration Time in order to be registered as an FCM ForexClear Contract, at which time the FCM ForexClear Contracts (or the FCM ForexClear Contract and the Non-FCM ForexClear Contract, as the case may be) shall replace and supersede such corresponding FCM ForexClear Transaction.
- (g) The Clearing House shall be deemed to register an FCM ForexClear Contract, in accordance with this FCM Regulation 49 in the name of an FCM Clearing Member at the Registration Time. At the Registration Time, the FCM Clearing Member, and the FCM Client if applicable, will be deemed to be bound by the relevant FCM ForexClear Contract on the terms entered into between the FCM Clearing Member and the Clearing House automatically and without any further action by such FCM Clearing Member or FCM Client, which such terms shall, without limitation, incorporate all applicable terms of these FCM Regulations and of Schedule 2 to the FCM Product Specific Contract Terms and Eligibility Criteria Manual.

(h) Ineligible Registered FCM ForexClear Transactions

- (i) If at any time after registration of an FCM ForexClear Contract, the Clearing House determines that the corresponding FCM ForexClear Transaction of which details were submitted for registration did not, at the Registration Time, meet the FCM ForexClear Product Eligibility Criteria in existence at the Registration Time (such an FCM ForexClear Transaction, an "Ineligible FCM ForexClear Transaction"), the Clearing House shall, as soon as practicable thereafter set aside such FCM ForexClear Contracts (or the FCM ForexClear Contract and the Non-FCM ForexClear Contract, as the case may be).
- (ii) Ineligible FCM ForexClear Transactions. Upon an FCM ForexClear Contract being set aside under sub-clause (i) above (such set aside contract, an "Ineligible FCM ForexClear Contract"), the Clearing House will notify the FCM Clearing Member party to such Ineligible FCM ForexClear Contract via the ForexClear Matcher that such Ineligible FCM ForexClear Contract has been set aside. The following shall take effect immediately upon the delivery of such notice: (A) such Ineligible FCM ForexClear Contract shall be deemed to be terminated at the time of the notification and shall thereafter have no force or effect; (B) all Variation MarginSettlement Payments (if any) paid by the Clearing House or by an FCM Clearing Member in respect of such Ineligible FCM ForexClear Contract shall be retained by the receiving party upon termination; (C) where there is a difference between the value of the Ineligible FCM ForexClear Contract as atof the last margin runprior determination of its net present value under FCM_Regulation 47_and the value (as determined by the Clearing House) of that Ineligible FCM ForexClear Contract at the time of the next official settlement rate for the relevant currency pair, then a payment shall be made between the FCM Clearing Members (or one FCM Clearing Member and one Non-FCM Clearing Member, as the case may be) to the original Ineligible FCM ForexClear Transaction equal to such difference; and (D) these

REGULATION 51 VARIATION MARGIN[RESERVED]

- (a) The Clearing House shall, at least daily and in accordance with and at the times stated in the FCM Procedures, pay to, or require payment from, an FCM Clearing Member cash for Variation Margin in respect of any FCM ForexClear Contracts registered on behalf of such FCM Clearing Member. The amount paid represents the change from the preceding Business Day in the net present value of all FCM ForexClear Contracts registered in such FCM Clearing Member's name.
- (b) The net present value of each FCM ForexClear Contract shall be calculated by the Clearing House 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 challenged.
- (c) The Clearing House pays to (or receives from) each applicable FCM Clearing Member interest on cash received (or paid) by the Clearing House, calculated in accordance with the Procedures, in respect of open FCM ForexClear Contracts.
- (d) All payments by an FCM ForexClear Clearing Member made pursuant to this FCM Regulation 51 to the Clearing House shall be reflected in the relevant FCM Omnibus ForexClear Client Account with LCH.
- (e) This FCM Regulation 51 is without prejudice to the Clearing House's right to require Margin to be provided to it under FCM Regulation 14.



Appendix II

General Regulations



GENERAL REGULATIONS OF LCH LIMITED

"SwapClear Excess Loss"

means the net sum or aggregate of net sums certified to be payable by a Defaulter by a Rule 19 Certificate in respect of SwapClear Business less (a) the proportion of the Capped Amount applicable to SwapClear Business under Rule 15(c) of the Default Rules and (b) any sums then immediately payable in respect of SwapClear Business Default Losses owed by such Defaulter by any insurer or provider of analogous services under any policy of insurance or analogous instrument written in favour of the Clearing House

"SwapClear Regulations"

means those Regulations which apply to SwapClear Contracts as specified in Regulation 54

"SwapClear Segregated Fund Amount"

means the amount as determined in accordance with Rule S2(b) of the SwapClear Default Fund Supplement

"SwapClear Service"

the service provided by the Clearing House under the SwapClear Regulations

"SwapClear STM Contract"

means a SwapClear Contract that (i) is either registered at the Clearing House as a SwapClear STM Contract pursuant to Regulation 55(b), (ii) is designated a SwapClear STM Contract by the Clearing House pursuant to Regulation 57A, (iii) is converted into a SwapClear STM Contract by the Clearing House pursuant to Regulation 57A, or (iv) is a SwapClear STM Contract through novation pursuant to Regulation 12(b), in each case the terms of which therefore include the SwapClear STM Terms.

"SwapClear STM Terms"

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

"SwapClear Tolerance"

has the meaning assigned to it in Section 1.3.3 (Trade Registration Facilitation: SwapClear Tolerance, Client Buffer and MER (Minimum Excess Requirement)) of Procedure 2C (SwapClear Clearing Service) of the Clearing House's Procedures

"SwapClear Tolerance Utilisation"

means, in respect of each SCM, the value of the SwapClear Tolerance utilised by that SCM at any particular time, as determined by the Clearing House in its sole discretion

"SwapClear Transaction"

means any transaction the details of which are presented to the Clearing House via an Approved Trade Source System for the purpose of having such transaction registered at the Clearing House as two SwapClear Contracts or one SwapClear Contract and one FCM SwapClear Contract (as the case may be), regardless of whether such transaction (a) is an existing swap transaction, (b) was entered into in anticipation of clearing, or (c) is contingent on clearing

REGULATION 57A SETTLEMENT OF SWAPCLEAR STM CONTRACTS AND CONVERSION TO SWAPCLEAR STM CONTRACTS

- (a) Each SwapClear Contract registered in the name of a SwapClear Clearing Member that is established under the laws of any state of the United States or under the federal laws of the United States shall be designated a SwapClear STM Contract.
- (a)(b) Notwithstanding anything to the contrary in Regulation 20, neither the Clearing House nor a SwapClear Clearing Member shall be obliged to make any payment by way of variation margin in respect of a SwapClear STM Contract. This Regulation 57A shall be without prejudice to the Clearing House's other rights to require Collateral to be transferred to it under Regulation 20 (including, but not limited to, its right to require Collateral to be transferred to it in respect of a SwapClear Clearing Member's initial margin obligations in respect of a SwapClear STM Contract).
- (b)(c) The Clearing House shall, at least once per Business Day, determine (i) the change in the net present value of each SwapClear STM Contract, and (ii) the Price Alignment Amount payable on such Business Day, in each case in such manner and at such times as may be provided in the Procedures. Immediately upon the Clearing House making each such determination of the net present value of a SwapClear STM Contract, an NPV Reset shall occur with respect to that SwapClear STM Contract.
- (e)(d) Upon the occurrence of an NPV Reset in relation to a SwapClear STM Contract:
 - (i) if the Clearing House has determined that the net present value of the SwapClear STM Contract has increased since the immediately preceding NPV Reset, an amount of cash denominated in the currency of the SwapClear STM Contract (as specified in the Economic Terms relating to that SwapClear STM Contract) equal to the amount of such increase shall immediately become due and payable by the SwapClear Clearing Member to the Clearing House under the SwapClear STM Terms;
 - (ii) if the Clearing House has determined that the net present value of the SwapClear STM Contract has decreased since the immediately preceding NPV Reset, an amount of cash denominated in the currency of the SwapClear STM Contract (as specified in the Economic Terms relating to that SwapClear STM Contract) equal to the amount of such decrease shall immediately become due and payable by the Clearing House to the SwapClear Clearing Member under the SwapClear STM Terms;
 - (iii) if the Clearing House has determined that the net present value of the SwapClear STM Contract has not changed since the immediately preceding NPV Reset, neither the Clearing House nor the SwapClear Clearing Member shall be obliged to make any payment; and
 - (iv) the net present value of the SwapClear STM Contract shall for all purposes be equal to zero.
- (d)(e) The SwapClear Clearing Member and the Clearing House hereby agree that:



Appendix III

FCM Procedures



FCM PROCEDURES OF THE CLEARING HOUSE LCH LIMITED

(e) An FCM Clearing Member that is a financial company as such term is defined in 12 U.S.C. § 5381(a)(11) is further required: (i) from the date of entry into the FCM Clearing Membership Agreement (and the grant of any related security interest to the Clearing House), to maintain the FCM Clearing Membership Agreement continuously as an official record of that FCM Clearing Member; and (B) from the date of submission of an FCM Transaction for clearing (and the grant of any related security interest to the Clearing House), maintain each agreement evidencing each such FCM Transaction continuously as an official record of that FCM Clearing Member.

1.2 Criteria for FCM Clearing Member Status

1.2.1 *General*

The Clearing House imposes certain criteria and requirements in relation to FCM Clearing Member status. The relevant criteria have, in all cases, been established by the Clearing House so as to be non-discriminatory and objective and so as to ensure fair and open access by FCM Clearing Members (whether existing or potential) to the Clearing House.

The relevant criteria are without prejudice to the provisions of the FCM Clearing Membership Agreement and the FCM Default Fund Agreement which must be executed by the applicant, and must equally be met by FCM Clearing Members.

The Clearing House may, in its sole discretion, refuse an application for membership where it considers it appropriate to do so in accordance with its internal risk management policies and procedures as amended from time to time. Where the Clearing House refuses an application it will provide a written justification for such refusal. FCM Clearing Members are referred to the Clearing House's website at http://www.lch.com for further information about the relevant internal risk management policies and procedures.

FCM Clearing Member status may be granted on a conditional basis before any Clearing House requirements have been fully met or before related Exchange or FCM Approved Trade Source System membership requirements are met, but cannot be operational until such requirements are satisfied.

The applicant, any controller of the applicant, and those of its staff who exercise an executive or managerial role, must have a high standard of integrity and a level of knowledge, as determined by and acceptable to the Clearing House, of the nature, risks and obligations of trading in the markets and contracts they wish to clear.

The applicant must satisfy the minimum net capital requirements, as set out in the FCM Regulations or such greater amounts as may be required by the Clearing House.

The applicant must open a Protected Payments System (PPS) bank account at one or more of the bank branches participating in the PPS system:

(i) in London in each currency including in US dollars and GBP; and

(ii) in the USA in US dollars, and

execute all necessary documentation (see Protected Payments System section of the LCH website for further information) in order to manage and open its House and Client accounts.

FCM Clearing Members are required to have contingency payment arrangements in place to ensure that they can continue to meet their margin and Settlement Payment obligations in the event of failure of their nominated PPS bank(s). During the application process, the Clearing House will require the applicant to provide evidence of these arrangements and will test these prior to the applicant becoming an FCM Clearing Member. The FCM Clearing Member will be required to provide evidence of their contingency payment arrangements on an ongoing basis at the Clearing House's request.

The applicant must maintain a back office:

- (i) remote from both the trading floor and/or trading desks;
- (ii) with adequate systems (including but not limited to computer and communications systems) and records;
- (iii) with an adequate number of administrative staff fully conversant with procedures for the management of business transacted in the markets and contracts cleared by the Clearing House and in which the FCM Clearing Member participates; and
- (iv) with such equipment (including technology and connectivity) as may be stipulated by the Clearing House or by any relevant Exchange(s).

Applicants for FCM Clearing Member status and FCM Clearing Members must at all times respond promptly to enquiries or requests for information made by the Clearing House. Such enquiries may require applicant FCM Clearing Members to demonstrate compliance with the applicable FCM clearing membership criteria and/or Applicable Law.

FCM Clearing Members are required to promptly notify or pre-notify the Clearing House of any changes which may result in non-compliance with the Clearing Member status criteria as stated in these FCM Procedures.

Termination of FCM Clearing Member Status: In the event that an FCM Clearing Member wishes to retire from FCM Clearing Member status, it may do so by giving written notice to the Clearing House not less than three months ahead of the proposed termination date. By the close of business on the proposed termination date, the Retiring Member shall ensure that all FCM Contracts registered in the Retiring Member's name have been closed-out or transferred so as to ensure that there are no open FCM Contracts to which the

2. PRODUCT-SPECIFIC PROCEDURES

Section 2 of these FCM Procedures contains certain requirements and procedures that are specific to individual Products cleared by the Clearing House. The clearing of FCM SwapClear Contracts is discussed in Section 2.1, the clearing of FCM ForexClear Contracts is discussed in Section 2.2 and the clearing of FCM Listed Interest Rates Contracts is discussed in Section 2.3.

The use of words such as "margin", "margin account", "margin call" and "margin run", which are used to reflect terminology commonly used by the Clearing House, shall not be deemed to affect the intent of the Clearing House, any FCM Clearing Member or any FCM Client as to the legal characterization of transfers of Settlement Payments, Variation Settlement, Price Alignment Amount, daily settlement amounts or other similar amounts.

2.1 **SWAPCLEAR**

2.1.1 The Clearing Process

The FCM SwapClear Service is an interface that processes and stores all FCM SwapClear Transactions received from an FCM Approved Trade Source System.

(a) FCM SwapClear Service Functions

The following functions are performed within the FCM SwapClear Service:

- (i) processing and settlement of coupon payments;
- (ii) processing and settlement of consideration (fee) payments;
- (iii) calculation of initial and variation margin and Variation Settlement requirements;
- (iv) calculation of MER amounts and SwapClear Tolerance Limits;
- (v) calculation of Price Alignment Interest Amount;
- (vi) adjustment of cash payments to conform with opening days and the SwapClear calendars;
- (vii) allocation and designation of trades to a position-keeping account; and
- (viii) reporting of registered trades.

FCM SwapClear Transactions presented via an FCM Approved Trade Source System (i.e. new trades presented for intra-day registration or existing trades presented for overnight registration – see Section 2.1.3(e)) will, subject to meeting all requirements prescribed by the Clearing House, be processed and stored within the FCM SwapClear

clearing system. Information regarding FCM SwapClear Contracts and margin reporting will be disseminated via the Clearing House's FCM Clearing Member Reporting (see Section 2.1.1(c)).

(b) Clearing House System Requirements

An FCM Clearing Member must, in order to present FCM SwapClear Transactions to the Clearing House, be a user of an FCM Approved Trade Source System.

(c) SwapClear FCM Clearing Member Reporting

There are three methods of notification to FCM Clearing Members of FCM SwapClear Contract registrations and other information:

- (i) Report 001;
- (ii) via the FCM Approved Trade Source System; and
- (iii) via ClearLink API.

An end-user report generation and analytical capability is provided by the Clearing House to FCM Clearing Members. All FCM SwapClear reports will be disseminated via the Clearing House's secure password access FCM Clearing Member-only website. These reports are the definitive record as to registration by the Clearing House.

The Clearing House is not liable for any corruption or alteration of messages or loss of data which may take place within any FCM Approved Trade Source System.

FCM Clearing Members will be able to customize and produce reports either to print locally or to download in machine-readable data-file format. Queries about the FCM Clearing Member-only website should be directed to the Clearing House's Service Desk at +44 (0)20 7426 7200.

The terminology used in a report in respect of Margin, Variation Settlement, daily settlement amounts or Price Alignment Amount may reflect terminology commonly used in the industry. Such terminology shall not affect the interpretation or construction of any provisions or terms of the FCM Regulations or FCM Procedures.

(d) Clearing House Reporting

The Clearing House (acting, where applicable, through the entity to which it has elected to delegate the relevant reporting obligations) shall, to the extent required by (and in line with the requirements of) Applicable Law (including Parts 43 and 45 of the CFTC Regulations, and applicable requirements under English law), report to one or more data or trade repositories (including swap data repositories) or similar

The Clearing House will notify FCM Clearing Members in the event that the FCM SwapClear clearing system is scheduled for closure for operational or other reasons (including compression runs).

(c) FCM SwapClear Clearing System Calendars

The FCM SwapClear clearing system uses the SwapsMonitor Financial Calendar for its processing. This will require all FCM Clearing Members to be licensees of the SwapsMonitor Financial Calendar. The calendars, as applicable to the FCM SwapClear clearing system, will be available online for inspection and for file download from FCM Clearing Member Reporting (see Section 2.1.1(c)).

2.1.3 Registration

(a) Submission for Registration

Prior to and as a precondition to the registration of an eligible FCM SwapClear Transaction, the relevant FCM Clearing Member must provide notice to and receive approval from the Clearing House (or have previously provided such notice and received such approval), in such form as determined by the Clearing House in its sole discretion, with respect to each type of FCM SwapClear Transaction to be presented for registration (be it with respect to tenor, currency or other eligibility criteria). Notwithstanding anything herein to the contrary, if (i) notification pursuant to this paragraph is not received by the Clearing House, (ii) the relevant FCM Clearing Member does not receive approval from the Clearing House pursuant to this paragraph, or (iii) approval granted pursuant to this paragraph has been rescinded by the Clearing House, the Clearing House may, in its sole discretion, reject the registration of any relevant FCM SwapClear Transaction.

The Clearing House receives details of a new eligible FCM SwapClear Transaction using agreed format messages via an FCM Approved Trade Source System. The FCM Approved Trade Source System will send these trades to the Clearing House once they have been bilaterally agreed by two Executing Parties, or otherwise executed by or on behalf of two Executing Parties on an FCM Trading Venue, and will confirm which FCM Clearing Member(s) has been elected to register the FCM SwapClear Transaction.

(b) *Conditions to Registration*

In respect of an FCM SwapClear Transaction that is not an FCM Trading Venue Transaction, following receipt of information from the FCM Approved Trade Source System, the Clearing House will notify the relevant FCM Clearing Member, via member reports, the ClearLink API or otherwise, that a third party Executing Party has elected it to register the FCM SwapClear Transaction with the Clearing House (the "FCM Notification"). Where an FCM Clearing Member has been elected to clear both FCM SwapClear Contracts resulting from the

registration of an FCM SwapClear Transaction in the capacities described in this paragraph, such FCM Clearing Member will receive two separate FCM Notifications from the Clearing House in relation to such FCM SwapClear Transaction. All FCM Notifications shall be provided within the required timeframe under all Applicable Law. In all other cases, no FCM Notifications will be provided to any FCM Clearing Member.

Following receipt of an FCM Notification, an FCM Clearing Member may choose to grant or refuse consent to register the FCM SwapClear Transaction.

It is a condition for registration of such FCM SwapClear Transaction that an FCM Clearing Member provides a separate consent (each, an "FCM Acceptance") in respect of each FCM Notification received by it in relation to the registration of such FCM SwapClear Transaction. The Clearing House has an automated system which it operates on each business day for the purposes of rejecting FCM SwapClear Transactions which have been presented for clearing but in respect of which any necessary FCM Acceptance has not been notified to the Clearing House prior to the LCH Cut-off Time. The "LCH Cut-off **Time**" in respect of an FCM SwapClear Transaction will be the expiry of the timeframe determined by the Clearing House. If an FCM Clearing Member has not notified the Clearing House of an FCM Acceptance prior to the LCH Cut-Off Time, it will be deemed to have rejected the relevant FCM SwapClear Transaction. Any FCM Acceptance provided prior to the LCH Cut-Off Time shall be irrevocable and any FCM Acceptance provided following the LCH Cut-Off Time shall be invalid.

In circumstances where the registration of an FCM SwapClear Transaction is conditional upon one or more FCM Acceptances(s) being notified by the applicable FCM Clearing Member(s), the relevant FCM SwapClear Transaction shall be deemed to have been "submitted" to the Clearing House by each such FCM Clearing Member at the time when it notifies the Clearing House of its FCM Acceptance. In all other circumstances, an FCM SwapClear Transaction shall be "submitted" to the Clearing House by the applicable FCM Clearing Member upon being presented to the Clearing House for clearing by or on behalf of such FCM Clearing Member.

In accordance with Section 2.1.3(e) of these FCM Procedures, it is a precondition for registration of an FCM SwapClear Contract resulting from an FCM SwapClear Trading Venue Transaction other than a Sub-Block Trading Venue Transaction that the applicable FCM Clearing Member has complied with all requirements to furnish sufficient Margin (taking into account MER and/or available SwapClear Tolerance, if any) in respect of such FCM SwapClear Contract, any amounts due in respect of such FCM SwapClear Contract and any other amounts required by the Clearing House to register the FCM SwapClear

<u>Contract (collectively "Required Registration Amounts")</u> to the Clearing House as of the time of its "submission" or "deemed submission" of the FCM SwapClear Transaction to which the FCM SwapClear Contract relates.

In exceptional circumstances, where an FCM Clearing Member experiences technical issues such that it is unable to accept or reject an FCM Notification, it may contact the Clearing House via email to request that an FCM SwapClear Transaction to which an FCM Notification relates be accepted or rejected on its behalf. In such circumstances, and unless the Clearing House notifies the FCM Clearing Member otherwise, the Clearing House will manually accept or reject the FCM SwapClear Transaction on behalf of the requesting FCM Clearing Member and will confirm registration or rejection of the FCM SwapClear Transaction via email. In the event that an FCM Clearing Member requests the manual acceptance or rejection of an FCM SwapClear Transaction it shall ensure that such acceptance is requested by appropriately authorized personnel. The Clearing House shall have no liability in the event that an FCM Clearing Member suffers a loss through the unauthorised manual acceptance or rejection of an FCM SwapClear Transaction.

(c) Trade Registration Facilitation: SwapClear Tolerance and Minimum Excess Requirement ("MER")

In order to facilitate the registration of new FCM SwapClear Transactions by FCM Clearing Members, the Clearing House may require the furnishing of additional Margin from those FCM Clearing Members participating in the MER Arrangements (as defined below) at the relevant time and may offer SwapClear Tolerance on a daily basis, as further described below.

The Clearing House will set MER requirements (where applicable) and SwapClear Tolerance Limits (as defined below) based on a number of factors, including an FCM Clearing Member's credit rating and risk profile, an analysis of the incremental risk registered by an FCM Clearing Member during an historic look-back period and, in the case of the overall value of the SwapClear Tolerance which may be made available to an FCM Clearing Member, whether the FCM Clearing Member is a participant in the MER Arrangements at the relevant time. However, the Clearing House sets MER requirements and SwapClear Tolerance Limits in its sole discretion, and may modify its methodologies at any time or may vary it across different FCM Clearing Members.

SwapClear Tolerance:

If an FCM Clearing Member has not furnished sufficient Margin to enable the registration of an FCM SwapClear Contract, then the Clearing House may provide such FCM Clearing Member with

Clearing Member concerned shall be bound by the terms of such FCM SwapClear Contract. The Clearing House shall use its reasonable endeavors to assist the relevant FCM Clearing Members in reregistering the trade on the correct basis but the Clearing House shall not be liable to the FCM Clearing Member or anyone else with regard to the registration (or lack of registration or re-registration) of any such FCM SwapClear Contract.

(e) Registration of New Trades and Backloaded Trades

(i) New Trades:

The following section does not apply to Backloaded Trades, which are dealt with in Section 2.1.3(e)(ii) below.

As a precondition of registering an FCM SwapClear Contract resulting from an FCM SwapClear Transaction other than a Sub-Block Trading Venue Transaction, the Clearing House will require the FCM Clearing Member in whose name such FCM SwapClear Contract is to be registered to furnish to the Clearing House sufficient Margin and other Required Registration Amounts in respect of such FCM Contract as of the time of its "submission" or "deemed submission" of such FCM SwapClear Transaction. In determining whether sufficient Margin for registration is available, the Clearing House will take into account any Available FCM Buffer, MER and SwapClear Tolerance. Available FCM Buffer or MER will always be applied prior to taking into account any available SwapClear Tolerance. In respect of an FCM SwapClear Contract resulting from an FCM SwapClear Transaction that is a Sub-Block Trading Venue Transaction, the FCM Clearing Member in whose name such FCM SwapClear Contract is registered shall furnish the Clearing House with sufficient Margin and other Required Registration Amounts in respect of such FCM SwapClear Contract at such time after the registration of such FCM SwapClear Contract as the Clearing House shall require.

Notwithstanding the foregoing: (A) if the Clearing House registers an FCM SwapClear Contract resulting from an FCM SwapClear Transaction that is not a Sub-Block Trading Venue Transaction where one or both of the relevant FCM Clearing Members has not furnished sufficient Margin or other Required Registration Amounts prior to registration, the FCM Clearing Members shall be bound by the terms of the FCM SwapClear Contract relating thereto arising under FCM Regulation 45 and any other applicable provision of the FCM Rulebook; and (B) if the Clearing House rejects an FCM SwapClear Transaction that is a Sub-Block Trading Venue Transaction for insufficient Margin or failure to furnish other Required Registration Amounts, the Clearing House shall not be liable to any FCM Clearing Member or anyone else with regard to the registration (or lack of

registration or re-registration) of any such FCM SwapClear Transaction.

Upon an FCM SwapClear Transaction being presented to the Clearing House for registration, the Clearing House will determine whether to accept or reject the FCM SwapClear Transaction within the required timeframe under all Applicable Law.

Where the Clearing House determines to accept the FCM SwapClear Transaction, registration shall occur immediately and the FCM SwapClear Transaction shall be automatically replaced with (as applicable) (i) two separate FCM SwapClear Contracts, one between the relevant FCM Clearing Member and the Clearing House and the other between the same or another FCM Clearing Member and the Clearing House, or (ii) one FCM SwapClear Contract between the relevant FCM Clearing Member and the Clearing House and one SwapClear Contract between the relevant SwapClear Clearing Member and the Clearing House.

The SwapClear clearing system will respond, after processing, with a message confirming the registration. The registration notification message will be sent using the SwapClear Clearing Member reporting system and/or the FCM Clearing Member reporting system (including by way of the originating FCM Approved Trade Source System). The definitive report of a registered FCM SwapClear Contract will be shown within the FCM Clearing Member reporting system on the FCM Clearing Member reporting account.

(ii) Backloaded Trades:

An FCM SwapClear Transaction that has a Trade Date of greater than ten calendar days prior to the date of presentation of such FCM SwapClear Transaction to the Clearing House for registration is considered a backloaded trade by the Clearing House (a "Backloaded Trade"). Due to the nature of Backloaded Trades, FCM Clearing Members should note that a relatively large amount of eover is Required Registration Amounts (including Margin) are required in order to register such trades. The Clearing House provides the facility for FCM Clearing Members to load such eligible existing FCM SwapClear Transactions, through an FCM Approved Trade Source System. Where the Clearing House approves additional FCM Approved Trade Source Systems for these purposes, it will notify FCM Clearing Members via member circular. Backloading requires bilateral agreement between the relevant Executing Parties and acceptance by the FCM Clearing Member(s) and the SwapClear Clearing Member, if any, of the full particulars required by the Clearing House for each such FCM SwapClear Transaction.

At least once every Business Day, the Clearing House will carry out a process for the registration of Backloaded Trades (each, a "Backload")

Registration Cycle") which have been presented for clearing or with respect to which the Clearing House has received the one or more FCM Acceptances, if any. Following each Backload Registration Cycle, the Clearing House will calculate the increase in Required Margin as well as any other Required Registration Amounts required to be furnished to register the Backloaded Trade(s) and will notify each relevant FCM Clearing Member (the "Backload Margin Call"). The Backload Margin Call will be for the entire amount of additional Collateral calculated by the increase in required Margin and any other Required Registration Amounts required in connection with the Backloaded Trades, and the Backload Margin Call cannot be satisfied by and will not take into account SwapClear Tolerance (i.e. SwapClear Tolerance is not available for this purpose) or any available MER Cover or FCM Buffer (other than that which has been expressly allocated for that purpose, as described in the paragraph below). In connection with a Backload Margin Call, following the time that an FCM Clearing Member is required to furnish the Clearing House with the Margin and other Required Registration Amounts associated with such Backload Margin Call (the "Backload Margin Call Deadline"), the Clearing House will issue such FCM Clearing Member with a subsequent margin call to furnish Margin and any other Required Registration Amounts in respect of any SwapClear Tolerance utilisation as of the time of the Backload Margin-Call Deadline (if any).

Where an individual FCM Clearing Member determines that the Backloaded Trade(s) that it is presented for registration will lead to an aggregate change in the net present value of its portfolio of FCM SwapClear Contracts in excess of a threshold amount (the "Individual Backload Value Threshold") as published by the Clearing House from time to time, it shall notify the Clearing House before the end of the Business Day preceding the Backload Registration Cycle. In the event that the Clearing House does not receive such notification and the change in net present value of the FCM Clearing Member's portfolio of FCM SwapClear Contracts is in excess of the Individual Backload Value Threshold the Clearing House may, in its sole discretion, exclude that FCM Clearing Member from the Backload Registration Cycle or postpone or cancel the entire Backload Registration Cycle.

Where an FCM Clearing Member notifies the Clearing House of a change in net present value in excess of the Individual Backload Value Threshold, the Clearing House shall inform the FCM Clearing Member whether it will be required to pre-fund the Backload Margin Call and, if so, how it should be delivered such that it will be made available for a Backload Registration Cycle.

In the event that the aggregate Backload Margin Call required from all FCM Clearing Members participating in a Backload Registration Cycle is in excess of a pre-determined threshold amount (the "Aggregate Backload Margin Threshold") as published by the Clearing House

from time to time, the Clearing House may postpone or cancel the relevant Backload Registration Cycle.

Where the Clearing House postpones or cancels a Backload Registration Cycle it shall notify those FCM Clearing Members that were intending to participate in the Backload Registration Cycle.

Backloaded Trades received by the Clearing House in advance of a Backload Registration Cycle will be 'parked' until the next Backload Registration Cycle (whether that Backload Registration Cycle is on the same Business Day or the following Business Day).

In order for the registration of the Backloaded Trades included in a Backload Registration Cycle to complete, Collateral <u>and any other Required Registration Amounts</u> from each FCM Clearing Member (and each SwapClear Clearing Member, if applicable) which is party to a Backloaded Trade within that Backload Registration Cycle must be furnished as required to the Clearing House in advance.

A Backloaded Trade which has been presented for clearing (or with respect to which the Clearing House has received the one or more FCM Acceptances, if any) shall be deemed to have been submitted by the FCM Clearing Member(s) or the FCM Clearing Member and the SwapClear Clearing Member (as the case may be) for registration by the Clearing House at such time that the Clearing House determines that sufficient Collateral has and other Required Registration Amounts have been furnished to register that Backloaded Trade.

For any FCM SwapClear Transaction which is a Backloaded Trade, where one leg is to be registered as a Non-FCM SwapClear Contract, the UK General Regulations and UK General Procedures will apply with respect to such registration of the Non-FCM SwapClear Contract.

The Clearing House shall publish the following via member circular:

- (A) times of Backload Registration Cycles;
- (B) the Individual Backload Value Threshold; and
- (C) the Aggregate Backload Margin Threshold.
- (f) Notification

In respect of an FCM SwapClear Transaction which is:

(i) an FCM Trading Venue Transaction, the Clearing House will notify the FCM Clearing Members, the FCM Trading Venue and (if the FCM Approved Trade Source System is different to the FCM Trading Venue) the originating FCM Approved Trade

Source System of registration or rejection of the FCM SwapClear Transaction (as applicable); and

(ii) not an FCM Trading Venue Transaction, the Clearing House will notify the FCM Clearing Members (via the originating FCM Approved Trade Source System or the ClearLink API) of registration or rejection of the FCM SwapClear Transaction (as applicable),

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

(g) Rejected Trades

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

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

(h) Package Transactions

In certain circumstances an FCM Clearing Member may, via an FCM Approved Trade Source System, present to the Clearing House, in a single submission, a group of two or more FCM SwapClear Transactions for simultaneous registration (such group of FCM SwapClear Transactions, a "Package Transaction"). A Package Transaction must be identified to the Clearing House at the time of its presentation in the format prescribed by the Clearing House. Where the Package Transaction is not presented in the prescribed format, each

constituent FCM SwapClear Transaction within the Package Transaction will be rejected.

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

Where a constituent FCM SwapClear Transaction of a Package Transaction is an FCM Eligible Trading Venue Transaction, it is a condition of registration that all of the constituent FCM SwapClear Transactions of such Package Transaction be FCM Eligible Trading Venue Transactions. Where such condition is not met, all constituent FCM SwapClear Transactions of the Package Transaction will be rejected. In respect of a Package Transaction comprising FCM SwapClear Transactions that are not executed on an FCM Trading Venue, the Clearing House will send an FCM Notification to the relevant FCM Clearing Member(s) for the acceptance of each such constituent FCM SwapClear Transaction.

In respect of a Package Transaction presented in an FCM Clearing Member's name, such FCM Clearing Member's Margin requirement to furnish Margin and other Required Registration Amounts will be assessed based on the net Margin call for all of the constituent FCM SwapClear Transactions of such Package Transaction. Where one or more of the constituent FCM SwapClear Transactions in a Package Transaction is not a Sub-Block Trading Venue Transaction, the relevant FCM Clearing Member is required to provide the Clearing House with sufficient Collateral prior to registration of the entire Package Transaction as a condition thereto (taking into account, with respect to Collateral, MER and/or SwapClear Tolerance, if any).

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

2.1.4 Allocation Notices

In respect of an Allocation Notice, the Clearing House will notify the relevant Pre-Allocation FCM Clearing Member and Post-Allocation FCM Clearing Member via member reports, the ClearLink API or

behalf of an FCM Client acknowledges that the Clearing House shall have no liability for any direct or indirect consequence of the use or assignment of such additional trade identifiers.

Any request for the Clearing House to approve an agent or designee for the purposes of this Section 2.1.5 must be made in writing and using the Clearing House's standard documentation. Through making a request, an FCM Clearing Member, either on its own behalf or on behalf of an FCM Client, is deemed to represent and warrant that the individual making the request is appropriately authorized to do so.

Notwithstanding anything in this Section 2.1.5 of the FCM Procedures, the Clearing House trade identifiers and records in relation to FCM SwapClear Contracts shall be the definitive version for all purposes involving the Clearing House or any service or product offered by it, and shall prevail over any versions otherwise maintained by or on behalf of any FCM Clearing Member.

2.1.6 Financial Accounts

FCM Clearing Member accounts have financial accounts associated with them. These are, *inter alia*, used to record cash balances and securities/ documentary credits. Information contained within position-keeping accounts is consolidated into financial accounts, as follows:

(a) Relationship with Position-Keeping Accounts

Position- keeping Account	Financial Account		
Н	House	Н	Proprietary Account
С	Client	C	LCH SwapClear Client Segregated Depository Account used for Initial Margin Flows
	Client	L	LCH SwapClear Client Segregated Depository Account used for Variation MarginSettlement Flows

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

(b) Other Financial Accounts

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

(c) Default Fund (DF) Account

Each FCM Clearing Member's Contribution is held in a separate financial account. The DF account code is "F".

2.1.7 FCM SwapClear Contract Valuation

(a) Net Present Value

The Clearing House will calculate the Net Present Value (NPV) of each eligible FCM SwapClear Contract using the Clearing House's zero coupon yield curves.

It is a condition of registration that sufficient Margin and other Required Registration Amounts, as determined by the Clearing House, is are furnished to the Clearing House to cover the Clearing House's Margin requirement for each FCM SwapClear Transaction (taking into account, for these purposes, MER and/or SwapClear Tolerance, if any) and other amounts required by the Clearing House to register the FCM SwapClear Contract, except that such MarginRequired Registration Amounts shall not be required to be furnished prior to registration as a condition thereto if such FCM SwapClear Transaction is a Sub-Block Trading Venue Transaction.

All FCM SwapClear Contracts credited to an FCM Clearing Member will, on submission to the Clearing House, be marked-to-market, in accordance with FCM Regulation 46 (Collateralization47 (Daily Settlement of FCM SwapClear Contracts). The NPV so and FCM ForexClear Contracts). The amount of Variation Settlement determined to be owing pursuant to FCM Regulation 47 must, subject to Intra-day Registration (see Section 2.1.3(e))2.1.3(e)) and the netting provisions of FCM Regulation 47, be paid by the FCM Clearing Member or the Clearing House, as applicable, in cash in the currency of the FCM SwapClear Contract. Where an FCM SwapClear Transaction is registered intra-day, and the NPVchange in net present value is covered with non-cash Collateral, the Clearing House will, the following Business Day, require payment of the full cash amount of Variation Settlement, subject to the netting provisions of FCM Regulation 47.

(b) Zero Coupon Yield Curve Construction

The Clearing House will determine, at its sole discretion, appropriate instruments, points and market prices for the construction of zero coupon curves and portfolio valuation. Details of the construction method and Instruments used are available on request from the Clearing House Risk Management Department at +44 (0)20 7426 7549, but may be subject to change without prior notification.

(c) Official Quotations

OIS	18:15
GBP	
OIS	17:15

Zero coupon yield curves used for daily marking to market will be published on the Clearing House's Member Reporting website after the end of each Business Day.

(d) Variation Margin Settlement

On the date of registration, the Net Present Value of an FCM SwapClear Contract will be eredited to or debited from the applicable FCM Clearing Member's financial accounts in cash in denomination eurrencycalculated in accordance with Section 2.1.7(a).

On all subsequent days, the change in the Net Present Value from one Business Day to the next will be credited to or debited from such FCMcalculated by the Clearing Member's financial accounts in cash in denomination currency House.

Separate Variation MarginSettlement calculations are performed in respect of an FCM Clearing Member's house "H" account and in respect of an FCM Clearing Member's client "C" account. No offset between the "C" and the "H" accounts is permitted. The Clearing House shall make or receive a separate Variation MarginSettlement payment in respect of each house "H" account and each client "C" account (subject to the netting provisions of FCM Regulation 47 and the Default Rules) of each FCM Clearing Member.

(e) Price Alignment Interest Amount (PAIA)

In order to compensate for the payment of changes in NPV on a daily basis for FCM SwapClear Transactions cleared through the Clearing House, the Clearing House will for each FCM Clearing Member either charge interest on cumulative variation margin received, or pay interest on cumulative variation margin paid (see Section 3.5.2). In a negative interest rate environment, where PAI rates are negative, the Clearing House will pay interest on cumulative amounts received in respect of variation margin obligations and charge interest on cumulative amounts paid. PAI or pay Price Alignment Amount in accordance with Section 3.5.2. PAA is debited, credited and netted in accordance with FCM Regulation 47 and the Clearing House's normal practices.

2.1.8 Coupon Payments

(a) Calendars and Coupons

- (iv) EUR-EONIA-OIS-COMPOUND
- (v) CAD-CORRA-OIS-COMPOUND
- (vi) JPY-TONA-OIS-COMPOUND
- (vii) USD-Federal Funds-H.15-LIBOR-BBA
- (viii) AUD-AONIA-OIS-COMPOUND
- (e) Calculation of Compounded Amount

Depending on whether the FCM SwapClear Contract is submitted under ISDA 2000 or ISDA 2006 Definitions, the Clearing House will calculate the compounded floating amount payable by an FCM Clearing Member on a Payment Date as an amount calculated in accordance with Articles 6.1 to 6.3 inclusive of the relevant definitions.

(f) Calculation of FRA Discounting (Article 8.4 of the 2006 ISDA Definitions)

Where FRA Discounting is specified for CAD, CHF, CZK, DKK, EUR, HUF, JPY, NOK, PLN, SEK, USD, ZAR the FRA Amount will be calculated in accordance with formulae found in the relevant definitions.

(g) Business Day and Business Day Convention

In determining whether a day is a Business Day the Clearing House will only apply the Financial Centers specified in the matched FCM SwapClear Transaction message. The Clearing House will in the event of non-business days apply the Business Day Conventions as specified in the matched FCM SwapClear Transaction message.

(h) Payment of Coupons

After adjusting coupons, in accordance with the appropriate Business Day and Business Day Conventions, the Clearing House will, subject to the netting provisions of FCM Regulation 47, credit or debit FCM Clearing Members' Accounts with the appropriate Fixed or Floating Amount with a value date matching the Coupon Payment Date. In the event of SwapClear being closed on a Coupon Payment Date it will pay the Fixed and Floating Amounts on the next Business Day following the Coupon Payment Date.

(i) Calculation Periods

In respect of any Calculation Period that is a not a whole calendar month (a stub period), the applicable rate for the Reset Date in respect of that Calculation Period shall be determined by the Clearing House with reference to the rate(s) specified in the matched format message.

Each FCM Clearing Member who makes available a representative to serve on the Rates Service DMG agrees, and shall procure that, to the extent applicable, its representatives agree to be bound by and to ensure that it and any of its executives or directors serving on the Rates Service DMG complies with Schedule 2. covering confidentiality, non-disclosure and other terms.

(f) Procedures for Liquidation of FCM Rates Contracts of FCM Clients

Upon the default of an FCM Rates Clearing Member, the Clearing House has the power and authority, pursuant to the FCM Rulebook, the CEA and the CFTC Regulations, to liquidate the FCM Rates Contracts of FCM Clients which, pursuant to the FCM Rulebook, would be conducted in accordance with the Rates Service DMP Annex. This section sets forth certain supplementary procedures (in addition to the Default Rules and other applicable provisions of the FCM Rulebook) that will apply under such circumstances.

In certain circumstances the Clearing House may deem, in its sole discretion, that the FCM Rates Contracts of one or more FCM Clients should be liquidated. Such determination may result from factors including: (i) the Clearing House determining that the FCM Client poses too great a risk to the Clearing House and should therefore be liquidated, (ii) the Clearing House becoming aware of the FCM Client becoming insolvent or otherwise failing in its obligations to the defaulting FCM Clearing Member, (iii) the relevant FCM Client requesting that it be liquidated, or (iv) a request or instruction from a Regulatory Body, whether orally or in writing. In the event of such liquidation the Clearing House shall establish a notional account reflecting such FCM Client's FCM Rates Contracts for purposes of allocating losses arising from the liquidation of such contracts (such account, a "Hedged Account"). The Clearing House may establish one or more separate Hedged Account(s) for FCM Rates Contracts that are non-transferable and will be subject to liquidation and, if applicable, may reference in each such Hedged Account the FCM Rates Contracts that are to be liquidated, regardless of the FCM Clients for which such FCM Rates Contracts are held. The provisions of this section shall apply equally to any such Hedged Account. Additionally, no FCM Contracts other than FCM Rates Contracts will be referenced in a Hedged Account established for liquidating FCM Rates Contracts.

An FCM Client whose FCM Rates Contracts are referenced in a Hedged Account is referred as a "Non-Porting Client". The Clearing House shall hold the relevant Collateral in respect of: (a) the FCM SwapClear Contracts of Non-Porting Clients (segregated as belonging to each such applicable Non-Porting Client in accordance with the CFTC Regulations and Part 22 thereof) in the relevant FCM Omnibus SwapClear Client Account with LCH: and (b) the FCM Listed Interest Rates Contract of Non-Porting Clients in the relevant FCM Omnibus Listed Interest Rates Client Account with LCH, in each case until the

liquidation of the entire relevant Hedged Account and all FCM Rates Contracts and other positions therein, as described below. At the time that the FCM Rates Contracts of a Non-Porting Client are first referenced in a Hedged Account, any outstanding and accrued but unpaid Variation MarginSettlement, daily settlement amounts or PAA in respect of such FCM Rates Contracts shall be discharged as of the time such FCM Rates Contracts are referenced in such Hedged Account, by (i) in the event that Variation Margin is Settlement, daily settlement amounts or PAA are accrued but unpaid in favor of the Clearing House, debiting (x) the FCM Client Sub-Account of such FCM Client (in respect of FCM SwapClear Contracts) or (y) the FCM Omnibus Listed Interest Rates Client Account with LCH (in respect of FCM Listed Interest Rates Contracts), or (ii) in the event that Variation Margin is Settlement, daily settlement amounts or PAA are accrued but unpaid in favor of the FCM Client, crediting (x) the FCM Client Sub-Account of such FCM Client (in respect of FCM SwapClear Contracts) or (y) the FCM Omnibus Listed Interest Rates Client Account with LCH (in respect of FCM Listed Interest Rates Contracts).

- (i) Administration of a Hedged Account. The Clearing House may enter into hedge transactions and liquidate and/or auction the FCM Rates Contracts and hedges for the account of the Hedged Account, and may take related actions with respect to a Hedged Account (and the positions referenced therein), in its sole discretion as permitted by the FCM Rulebook, the CEA and the CFTC Regulations, or as directed by an applicable Regulatory Body.
- (ii) Allocation of Gains and Losses in a Hedged Account to Non-Porting Clients. The Clearing House will allocate losses and gains (including further variation margin changes Settlement, daily settlement amounts or PAA, hedging costs including the gains and losses associated with hedging transactions, and liquidation/auction costs and losses) to Non-Porting Clients in a Hedged Account in accordance with the following provisions:
 - (A) At the time an FCM Client becomes a Non-Porting Client, such Non-Porting Client is assigned a separate risk factor in respect of its FCM SwapClear Contracts (if any) and its set of FCM Listed Interest Rates Contacts (if any) (each, an "Account Class Risk Factor"). The value of each Account Class Risk Factor is calculated as the proportion of such Non-Porting Client's hypothetical (where applicable) Required Margin in respect of each set of contracts in a given currency bears to the aggregate hypothetical Required Margin of all contracts that are referenced in the Hedged Account in that currency at the time such FCM Client became a Non-

(v) Restrictions. For the avoidance of doubt, it is not possible to apply the FCM Portfolio Margining Service:

- (A) to Nominated FCM Clients that are not the same legal entity (*e.g.*, to affiliated Nominated FCM Clients); or
- (B) between positions held in an FCM Joint Rates Service Clearing Member's Proprietary Account and any positions recorded in any FCM Omnibus Client Account with LCH of such FCM Clearing Member.
- (d) FCM Portfolio Margining Arrangements
 - (i) FCM Portfolio Margining Calculation Tool. The Clearing House has developed a risk management tool that identifies portfolio-margining opportunities as between FCM SwapClear Contracts and FCM Portfolio Margining Eligible FCM Listed Interest Rates Contracts held on behalf of the same Nominated FCM Client ("Portfolio Margining Calculation Tool"). FCM Joint Rates Service Clearing Members participating in the FCM Portfolio Margining Service will receive certain information in relation to the operation of the Portfolio Margining Service, as described in more detail in paragraph 2.1.19(e) below.

A list of FCM Portfolio Margining Eligible FCM Listed Interest Rates Contracts is published on the Clearing House's website from time to time.

- (ii) FCM Portfolio Margining Process.
 - (A) At a predetermined time following the close of the FCM Listed Interest Rates Clearing Services on each business day, the Clearing House will run the FCM Portfolio Margining Calculation Tool. The FCM Portfolio Margining Calculation Tool will identify, in respect of each Nominated FCM Client, any off-setting positions between FCM SwapClear Contracts and FCM Portfolio Margining Eligible FCM Listed Interest Rates Contracts, including any FCM Portfolio Margining Eligible FCM Listed Interest Rates Contracts that are FCM Portfolio Margined Contracts (the "Identified Off-Setting FCM Listed Interest Rates Contracts").
 - (B) The FCM Portfolio Margining Calculation Tool is a risk management tool that is not designed to provide FCM Joint Rates Service Clearing Members participating in the FCM Portfolio Margining Service with optimal margining treatment or reduce margin calls. Accordingly, makes the Clearing House representations or assurances as to the impact of the FCM Portfolio Margining Calculation Tool on a

participating FCM Clearing Member's margin calls. Furthermore, the Clearing House accepts no liability in respect of the operation of the FCM Portfolio Margining Service of the FCM Portfolio Margining Calculation Tool. The provision and operation of the FCM Portfolio Margining Calculation Tool is subject to FCM Regulation 44.

- (iii) Transfer of Identified Off-Setting FCM Listed Interest Rates Contracts. Once identified in accordance with subparagraph (d)(ii)(A) above:
 - (A) any Identified Off-Setting FCM Listed Interest Rates Contracts that are not FCM Portfolio Margined Contracts will be transferred from the relevant FCM Omnibus Listed Interest Rates Client Account with LCH to the relevant FCM Client Sub-Account of the FCM Omnibus SwapClear Client Account with LCH, at which point they will become FCM Portfolio Margined Contracts;
 - (B) any FCM Portfolio Margined Contracts that are not identified as Identified Off-Setting FCM Listed Interest Rates Contracts as part of the relevant cycle, will be transferred from the relevant FCM Client Sub-Account of the FCM Omnibus SwapClear Client Account with LCH to the relevant FCM Omnibus Listed Interest Rates Client Account with LCH, at which point they will cease to be FCM Portfolio Margined Contracts; and
 - (C) the Clearing House's records will evidence the time of the transfers referred to in (A) and (B) above.
- (iv) Treatment of FCM Portfolio Margined Contracts in the FCM Client Sub-Account of the FCM Omnibus SwapClear Client Account with LCH.
 - (A) FCM Portfolio Margined Contracts will continue to be treated as FCM Listed Interest Rates Contracts. For the avoidance of doubt, the payment of variation margin in respect of FCM Portfolio Margined Contracts shall continue to represent a daily settlement amount as opposed to a collateralisation amount.
 - (B) For the avoidance of doubt, FCM Portfolio Margined Contracts are not eligible for compression runs.
 - (C) For so long as an FCM Listed Interest Rates Contract is an FCM Portfolio Margined Contract, any lifecycle events in connection with such FCM Portfolio Margined

(b) Position-Keeping Accounts

FCM Clearing Member Accounts:

The account types are: H for house business (Proprietary Account); and C for segregated client business (FCM Omnibus ForexClear Client Account with LCH). An FCM Clearing Member's FCM ForexClear Contract positions are also recorded within the FCM ForexClear Clearing System in ForexClear accounts.

All registered FCM ForexClear Contracts will be identifiable to FCM Clearing Members via ForexClear Reporting (see Section 2.2.22). All registered FCM ForexClear Contracts will be maintained only in ForexClear accounts (identified as such by a unique three letter mnemonic) and separate from all accounts containing FCM Contracts attributable to other Business Categories of FCM Contracts (**provided that** FCM Contracts attributable to any Business Categories of FCM Contracts and related Collateral may be physically commingled in the same depository accounts, subject to the requirements of the Rulebook to properly segregate all FCM Client assets). Each FCM ForexClear Contract will also be assigned a unique trade identifier. The FCM Clearing Member Reporting functionality also allows each FCM Clearing Member to identify all FCM ForexClear Contracts registered in its name.

Sub-accounts within the FX FCM's Proprietary Account may be set up (e.g., for branches). Each such sub-account will carry the unique Bank Identifier Code ("**BIC**") (or equivalent unique identifier) of the relevant branch.

Sub-accounts within the FX FCM's Proprietary Account will be associated with the House financial account of the FX FCM and information contained across the Proprietary Account sub-accounts is consolidated into the House financial account of each FX FCM.

(c) Clients

Where an FX FCM enters into an agreement with an FCM Client in accordance with FCM Regulation 7(a) (FCM Client Business and Proprietary Account Trading), the FX FCM must submit an "FCM Client Static Data" form to the Clearing House's membership department. Positions of an FCM Client will be identifiable in ForexClear Reporting through that FCM Client's BIC/unique identifier.

2.2.6 Financial Accounts

FCM Clearing Member accounts have financial accounts associated with them. These are, *inter alia*, used to record cash balances and securities/documentary credits. Information contained within position-keeping accounts is consolidated into financial accounts, as follows:

(a) Relationship with Position-Keeping Accounts

		_
Client	C	LCH ForexClear Client
		Segregated Depository
		Account used for Initial
		Margin Flows
Client	L	LCH ForexClear Client
		Segregated Depository
		Account used for Variation
		MarginSettlement Flows
House	Н	Proprietary Account
	Client Client	Client L

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

(b) Other Financial Accounts

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

(c) Default Fund (DF) Account

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

2.2.7 *Novation and Registration*

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

Prior to registering an FCM ForexClear Contract (except where such FCM ForexClear Contract results from an FCM ForexClear Transaction that is a Sub-Block Trading Venue Transaction), the Clearing House will require the

Service sends a "CANCEL REJECTED" message to the FCM Approved Trade Source System for the relevant FXPs.

All trade cancellation instructions must pass the Incremental Risk Check. If any FX FCM does not have sufficient Margin for its Liabilities or estimated Liabilities (taking into account any MER Buffer and MCE provided by the Clearing House, if any) at the time of the relevant Incremental Risk Check, then any ForexClear trade cancellation instruction to which it is a party will be rejected immediately. However, any ForexClear trade cancellation instruction that is risk reducing (i.e. results in a reduction of that FX FCM's Liabilities) will always pass the Incremental Risk Check, even if the FX FCM does not have sufficient Margin for its Liabilities.

(i) Trade Amendment

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

(k) Valuation Date Event Management

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

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

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

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

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

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

(l) FX Package Transactions

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

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

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

In respect of an FX Package Transaction presented in an FX FCM's name, such FX FCM's Margin requirement <u>and other Required Registration Amounts</u> will be assessed <u>on a net basis</u> based on the net Margin call for all of the constituent FCM ForexClear Transactions of such FX Package Transaction.

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

(m) Valuation Date Event Management: Process flow description

After the Registration Time for an FCM ForexClear Contract, the FCM ForexClear Service links a Settlement Rate Option to it in accordance

with the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable.

On the Valuation Date, the Clearing House uses the Settlement Rate for the Currency Pair for the FCM ForexClear Contract when it is published by Reuters, and calculates the Settlement Currency Amount for each FCM ForexClear Contract in the Settlement Currency by applying the relevant Settlement Rate Option as referenced in the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable.

If the Settlement Rate Option set out in the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable, is unavailable at the relevant time, Disruption Fallback alternatives for the determination of the Settlement Rate will apply as set out in the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable.

(n) Settlement

With respect to each FCM ForexClear Contract, the Settlement Currency Amount is calculated by the application of the Settlement Rate to the Notional Amount in accordance with the FCM ForexClear Contract Terms (see Part A of Schedule 2 to the FCM Product Specific Contract Terms And Eligibility Criteria Manual).

From (and including) the Registration Time to (and including) the Business Day immediately preceding the Settlement Date, changes in the daily value of open FCM ForexClear Contracts will have resulted in VM credits and debits between the parties (as set out in Section 2.2.10(b)). With respect to each FCM ForexClear Contract, on the Business Day immediately preceding the Settlement Date, the Clearing House netssubtracts from the Settlement Currency Amount against the aggregate net VM which has been paid/received through the termthe Cumulative Variation Settlement of the FCM ForexClear Contract, the result of remainder after which is a Net Settlement Amount ("NSA"), which will be reflected in the FX FCMs' cash accounts with the Clearing House on the Settlement Date. As such, with respect to each FCM ForexClear Contract, the payment in full of all the VMVariation Settlement required during the term of such FCM ForexClear Contract shall satisfy the relevant party's obligation to pay the Settlement Currency Amount on the Settlement Date of such FCM ForexClear Contract. For the purpose of providing Nostro reconciliation, to the relevant parties, the Clearing House will provide Reporting (as defined in Section 2.2.22 of these FCM Procedures) which will reflect an entry for the "Settlement Currency Amount" and a separate entry for the reversal of the aggregate netCumulative Variation Margin which has been paid/received through the termSettlement of the FCM ForexClear Contract. This paragraph applies even if the Settlement Date has been adjusted in accordance with the FCM ForexClear Contract Terms.

(o) Reference Data

Holiday Event Calendar:

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

If a change is declared that affects the SwapsMonitor Financial Calendar that is referenced on FCM ForexClear, then a corresponding calendar adjustment will be made to the FCM ForexClear system, unless the Clearing House informs FXCCMs by notice on its website (at www.lch.com/asset-classes/foreign-exchange/products, or such other web page as the Clearing House determines) that the relevant change will not apply to FCM ForexClear Contracts..

The Clearing House may temporarily close the FCM ForexClear Service to process a calendar adjustment in its clearing system. FX FCMs will be notified in advance of the date, time and expected duration of such closure.

Date Adjustment:

As a result of the calendar adjustment process, the Valuation Date and/or the Settlement Date of any affected FCM ForexClear Contracts will automatically be date adjusted in accordance with the provisions of the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable.

The Clearing House will notify the FX FCMs via file download from the Clearing Member Reporting as to the FCM ForexClear Contracts affected and the date adjustments made.

2.2.9 Market Data

(a) Sources used by FCM ForexClear Service

The FCM ForexClear Service collates instrument quotes for the following from multiple market sources (as detailed in Section 2.2.9(b)) in relation to each Currency Pair:

- (i) FX spot rates ("**FX Spot Rates**");
- (ii) FX swap points ("FX Swap Points");
- (iii) Settlement Rate Option;

- (iv) Interest rate curves (see Section 2.2.9(e) below) ("Interest Rate Curves");
- (v) USD LIBOR Curve;
- (vi) PAIA rates ("PAIA Rates"); and
- (vii) Country credit spreads (see Section 2.2.9(f) below) ("Country Credit Spreads"),

together, "Market Data".

FX Spot Rates and FX Swap Points are received by the Clearing House via a live link from all eligible FXCCMs (including FX FCMs) during the Opening Hours (as defined in Section 2.2.4(b)).

(b) Market Data Sources and Frequencies

The Clearing House receives the following updated raw prices:

FX Spot Rates:

- (i) Source FXCCMs (including FX FCMs).
- (ii) Frequency every time updated by FXCCMs (including FX FCMs) up to a maximum rate of once every five minutes.

FX Swap Points:

- (i) Source all FXCCMs (including FX FCMs).
- (ii) Frequency every time updated by FXCCMs (including FX FCMs) up to a maximum rate of once every five minutes.
- (iii) Tenors as shown in the table below.

Tenor
S/N
1 week
1 month
2 months
3 months
6 months
12 months
24 months

Settlement Rate Options:

(i) Source - Reuters.

(ii) Frequency - when published (as referenced in the Relevant ETMA Template or given LCH G10 NDF Contract Template, as applicable).

Interest Rate Curves:

- (i) Source internal Clearing House
- (ii) Frequency at each SwapClear margin run.

Country Credit Spreads:

- (i) Source Bloomberg.
- (ii) Frequency when published.

USD LIBOR Curve:

- (i) Source SwapClear.
- (ii) Frequency at each SwapClear margin run.

PAIA rates:

- (i) Source LCH Treasury.
- (ii) Frequency Daily.
- (c) [Not Used]
- (d) Market Data Provision to FX FCMs

Market Data used in a Margin Run is made available to FX FCMs via ForexClear Reporting (as defined in Section 2.2.22).

(e) Curve Building in ForexClear

FX Curve (Zero Coupon/Market Rate Curve):

The Clearing House builds for each Currency Pair an FX curve (zero coupon/market rate curve) using the FX Spot Rates, FX Swap Points and the USD LIBOR Curve based on interpolation techniques agreed through the ForexClear Risk & Trading Working Group (a group comprising the Clearing House's and FXCCM's (including FX FCM) risk and trading representatives) ("RTWG"). The USD LIBOR Curve is used for discounting; the FX curve is used for capitalization of forward cash flows.

Interest Rate Curve:

The Clearing House applies the linear interpolation method to build the Interest Rate Curve. Linear interpolation is applied on zero coupon curves.

Curve Use:

End of day is defined as 22.00 hours, London time ("**EOD**"). The following EOD data is used in the calculation of risk analytics for an EOD Margin Run (as defined in Section 2.2.16(b)):

- (i) FX Spot Rates; and
- (ii) FX Swap Points.
- (f) Country Credit Spreads

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

2.2.10 FCM ForexClear Contract Valuation

(a) Net Present Value ("NPV")

From (and including) the Registration Time to the EOD Margin Run on the business day preceding the Valuation Date, each FCM ForexClear Contract is valued in USD using the current market rates and discounted from the future Settlement Date to its present value.

On the Valuation Date, the Settlement Rate is used to value the FCM ForexClear Contract.

If Valuation Postponement applies, the FCM ForexClear Contract is valued using the current forward price to (and including) the date on which the Settlement Rate is determined in accordance with the ForexClear Contract Terms.

(b) *Variation* MarginSettlement ("VMS")

VMS for each FCM ForexClear Contract is calculated at EOD as the change from the preceding business day in its NPV. With respect to each FX FCM, the net sum of the VMS for all open FCM ForexClear Contracts is, subject to the netting provisions of FCM Regulation 47, credited to or debited from such FX FCM once a day, following the EOD Margin Run.

Cover for VMS (adjusted by PAI, as set out below) willwill, subject to the netting provisions of FCM Regulation 47, be paid each business day

by or to each FX FCM in respect of all of its open FCM ForexClear Contracts. The VMS will be calculated in, and must be paid in, USD.

With respect to each FCM ForexClear Contract, VMS is calculated every business day from (and including) the Registration Time to (and including) the EOD on the business day immediately preceding the Settlement Date.

Separate Variation MarginSettlement calculations are performed in respect of an FCM Clearing Member's house "H" account and in respect of an FCM Clearing Member's client "C" account. No offset between the "C" and the "H" accounts is permitted. The Clearing House shall make or receive a separate Variation MarginSettlement payment with respect to each house "H" account and each client "C" account (subject to the netting provisions of FCM Regulation 47 and the Default Rules).

(c) Reporting Breakdown

ForexClear margin reports show the portfolio of open FCM ForexClear Contracts of each FX FCM by Currency Pairs and in the Settlement Currency (i.e., USD).

(d) Price Alignment Interest Amount ("PAIA")

The effect of daily cash VMS movements results in the need for PAIA. Without this adjustment, the pricing of FCM ForexClear Contracts would differ from identical uncleared trades, as cash earned from favorable daily price moves would be priced into the product.

(e) PAIA Calculation Methodology

PAIA is calculated at EOD on each business day from (and including) the first business day after the Trade Date to (and including) the business day immediately preceding the Settlement Date.

In this Section 2.2.10(e) 2.2.10(e), "T" means any given business day; "T-1" means the business day immediately preceding T; "T+1" means the business day immediately following T; and "MTM" means the total value (expressed in USD) of an FXCCM's portfolio open of FCM ForexClear Contracts after valuation Cumulative Variation Settlement" or "CVS" means, in respect of a Swap Product, a value equal to the aggregate of the amounts of Variation Settlement that have become owing from the FCM Clearing Member to the Clearing House in respect of such Swap Product minus the aggregate of the amounts of Variation Settlement that have become owing from the Clearing House to the FCM Clearing Member in respect of such Swap Product; provided that any such amounts shall only be counted to the extent the FCM Clearing Member or Clearing House, as applicable, has discharged its obligation to transfer such amounts in accordance with Section 2.2.10(b) at close of business on any business dayFCM

<u>Regulation 47</u>. The Clearing House calculates PA<u>IA</u> in USD once a day at EOD.

Principles:

- (i) MTMCVS is calculated at EOD on T-1.
- (ii) Change in MTM (net VM Variation Settlement in respect of an FX FCM's portfolio of open ForexClear Contracts) is paid/received, subject to the netting provisions of FCM Regulation 47, on the morning of T.
- (iii) PAIA Rate for T to be applied is known at EOD T.
- (iv) PAIA is calculated on the night of T, for MTMCVS of T-1 for FCM ForexClear Contracts up to the business day before their Settlement Date.
- (v) PAIA is paid / received on morning of T+1 via PPS.

Components:

- (i) PAIA Rate (annualized interest applied to an FX FCM's MTM).
- (ii) MTMCumulative Variation Settlement of the FX FCM's portfolio open FCM ForexClear Contracts.
- (iii) Accrual Factor (factor used to convert the PAIA Rate from an annual rate to a daily rate, on a basis of a year of 360 days).

So:

(i) PAIA T = PAITA T Rate x MTMT-CVS T-1 x Accrual Factor.

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

(f) VM/PAI Adjustment

With respect to each FX FCM, the Clearing House makes the following adjustment to the VM at EOD:

- (i) if, with respect to its portfolio of open FCM ForexClear Contracts, such FX FCM has (to but excluding the relevant EOD) paid an amount in VM greater than the amount of VM it has received, such FX FCM will receive PAI; and
- (ii) if, with respect to its portfolio of open FCM ForexClear Contracts, such FX FCM has (to but excluding the relevant EOD) received

an amount in VM greater than the amount of VM it has paid, such FX FCM will pay PAI.

2.2.11 Initial Margin ("IM")

The Clearing House will require FX FCMs to furnish it with IM. This amount will be calculated within the day and at EOD on each business day as part of each Margin Run. With respect to each FX FCM, it is calculated for the portfolio of open FCM ForexClear Contracts and FCM ForexClear Transactions using ForexClear's Portfolio Analysis and Risk ("FxPAR") margining model. FxPAR is based on a modified filtered historical simulation value-at-risk methodology. All open FCM ForexClear Contracts and FCM ForexClear Transactions in each Currency Pair are re-valued under a series of cross portfolio yield curve scenarios to estimate the potential portfolio profit and loss and therefore the IM requirement.

These scenarios will be continually monitored and reviewed periodically or on an ad hoc basis according to market conditions. FX FCMs will usually be notified by the Clearing House of alterations to margin parameters no later than the day before calls are made based on the new parameters. Further details of this method are available upon request from the ForexClear Risk team.

FxPAR uses the historical (5 year) data submitted by FXCCMs pursuant to Section 2.2.9, which is adapted to current market prices.

Separate Initial Margin calculations are performed for an FX FCM's house "H" and client "C" accounts and, within a "C" account, separately in respect of each FCM Client Sub-Account therein. No offset between the "C" and "H" accounts is permitted.

The Clearing House reserves the right to require additional amounts of Margin from a specific FX FCM or from all FX FCMs in accordance with FCM Regulation 14 (*Margin and Collateral*).

(a) Credit Risk Multiplier ("CRiM")

The CRiM applied will consider the FX FCM's credit worthiness, Initial Margin level and/or stress testing exposures in accordance with LCH Credit Risk Policy.

(b) Liquidity Risk Multiplier ("**LRMM**")

Where an FXCCM has an exposure above set thresholds in a particular Currency Pair or tenor of FCM ForexClear Contracts, the LRMM is applied and additional IM is charged. The LRMM is calculated in accordance with parameters set by the ForexClear Default Management Group (the "FXDMG") according to tenor and notional concentration. The thresholds are reviewed quarterly and use prevailing perceptions of market conditions as seen by the FXDMG.

LRMM increases IM called due to concentrated Currency Pair exposure by tenor of FCM ForexClear Contracts. Additional IM is called to mitigate the risk of a position not being closed out in seven days and/or the extra hedging costs that may be incurred.

The Clearing House calculates and applies LRMM as part of each Margin Run, based on the IM for each Currency Pair in the FX FCM's house position-keeping account.

(c) Sovereign Risk multiplier ("SRM")

An SRM is applied when there is a perceived risk of sovereign default or a change in a country's currency regime which would impact FCM ForexClear Contracts transacted in certain Reference Currencies. The SRM takes into account:

- (i) the probability of sovereign default or a regime change event occurring; and
- (ii) the depreciation or appreciation risk of the Reference Currencies.

The SRM sovereign default probability is calculated by assessing the three month probability of default for the different sovereign countries, based on the country's 5-year credit default swap (CDS) spread. The probability of a regime change event is estimated based on historical events and publicly available data for the different sovereign countries. The country CDS spreads are reviewed and updated weekly.

The Clearing House calculates and applies the SRM as part of each Margin Run, for each Currency Pair in the FX FCM's house position-keeping account.

2.2.12 Additional Margin, MER Buffer, MCE and Intraday Margin Calls

(a) Additional Margin

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

(b) Minimum Excess Requirement Buffer ("MER Buffer")

To facilitate the intraday registration of FCM ForexClear Contracts, at each EOD Margin Run, the Clearing House will call from each FX FCM, separately in respect of its Proprietary Account and each of its FCM Client Sub-Accounts, an amount of IM referred to as "Minimum Excess Requirement Buffer" ("MER Buffer") in respect of that FX FCM's and its FCM Clients' potential intraday Liabilities (as defined below in Section 2.2.17) for the following day. MER Buffer is part of the FX FCM's Required Margin. An FCM's MER Buffer is calculated in respect of an FCM's Proprietary Account and each of its FCM Client Sub-Accounts, and Margin furnished in respect of MER Buffer is credited to each account (as applicable) as IM. Notwithstanding the foregoing, for purposes of calculating a given FCM's MER Buffer, the Clearing House may from time to time, and in its sole discretion, exclude an FX FCM's given FCM ForexClear Suspension Sub-Accounts from such calculation.

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

The parameters of the MER Buffer model are: MER percentile, MER look-back period, relative MER cap and absolute MER floor. The values of these parameters are calibrated based on the quantitative analysis of the FX FCM's IM history across the ForexClear Service.

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

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

(c) Mutualized Credit Extension ("MCE")

If an FX FCM has insufficient Margin attributed to an account to enable the registration of further FCM ForexClear Contracts in such FCM Client Sub-Account or its Proprietary Account, then the Clearing House may make available to an FX FCM intraday credit (in the form of intraday Initial Margin forbearance) by way of a Mutualized Credit Extension ("MCE") to enable the FX FCM to register further FCM ForexClear Contracts. An FX FCM may utilize MCE intraday on a one-to-one basis to the value of the IM that would have been required

will deduct cash, in the appropriate currency, directly from the relevant FX FCMs PPS account to cover that intra-day margin call.

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

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

2.2.15 General Margining Process

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

2.2.16 Types of Margin Runs

There are three types of Margin Run:

(a) ITD / Ad Hoc – Day Margin Run

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

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

(b) EOD Margin Run

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

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

(c) ITD / Ad Hoc - Night Margin Run

ITD/Ad-hoc London overnight Margin Runs are initiated as and when dictated by the Schedule or as necessary, and are performed in the time

period during which a PPS call cannot be made (the "ITD/Ad-hoc Night Margin Run").

ITD/Ad-hoc Night Margin Runs are calls in respect of Initial Margin only. <u>Amounts that are anticipated to be owed in respect of Variation MarginSettlement</u>, NSA and PAIA are included in may be considered in the determination of the amount of Initial Margin called in such ITD/Ad-hoc Night Margin Runs, but only as a component of IM.

2.2.17 Margin Run Process

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

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

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

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

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

FX FCMs are informed via email of their Liabilities as a percentage of their current total cover (such percentage being shown as a percentage of the aggregate cover in their cash and non-cash Collateral account(s)) and are directed to the ForexClear Services portal (being a secure website made available to FXCCMs) (the "ForexClear Service Portal") which provides reports (at the times specified in Section 2.2.22) informing FX FCMs of their (i) total Liabilities under the FCM ForexClear Service; (ii) current total cover posted with the Clearing House for the FCM ForexClear Service (including any MCE, if any); and (iii) Liabilities as a percentage of their current total cover (such percentage being shown as a percentage of the aggregate cover in their cash and non-cash Collateral account(s)).

If following a Margin Run an FX FCM is required to provide additional Collateral or funds, this is also indicated by email and via the ForexClear Service Portal. In the case of ITD/Ad-hoc Margin Runs, where an FX FCM's Liabilities exceed its available cover and any MCE then the Clearing House will

shall provide the Clearing House with an FCM Client Full Transfer Form (see Schedule 2.2B), signed on behalf of the relevant FCM Client. Such form shall confirm that all FCM ForexClear Contracts attributable to the applicable FCM Client shall be transferred pursuant to this procedure. Where a Receiving Clearing Member submits an FCM Client Full Transfer Form, it must confirm whether or not the FCM Client also wishes to transfer the Collateral held by the Clearing House in respect of the transferring FCM ForexClear Contracts. Following receipt of an FCM Client Full Transfer Form, the Clearing House shall notify the Carrying Clearing Member that a request has been received to transfer FCM ForexClear Contracts. All full transfers shall take place in accordance with the timing and notice requirements set out in Section 2.2.19(d).

In the event that any of the applicable conditions set forth in FCM Regulation 13 (*Transfer*) are not satisfied, and the Carrying Clearing Member notifies the Clearing House that they have not been satisfied using the Carrying Member Response Form (see Schedule 2.2C) the Clearing House shall not proceed with the transfer of the FCM ForexClear Contracts or the transfer of Collateral (when applicable).

Following receipt of a Full Transfer Form, the Carrying Clearing Member shall not be permitted to register additional FCM ForexClear Contracts on behalf of the FCM Client whose FCM ForexClear Contracts are subject to transfer, until such transfer (and the transfer of the related Collateral, if applicable) is actually effected or is rejected.

(c) Collateral Transfers

Where a Receiving Clearing Member notifies the Clearing House that an FCM Client wishes to transfer Collateral from a Carrying Clearing Member to a Receiving Clearing Member, the Clearing House shall notify the Carrying Clearing Member of such transfer in accordance with the timetable below.

Following such notification and upon request from the Clearing House, the Carrying Clearing Member shall confirm to the Clearing House (using the Carrying Member Response Form at Schedule 2.2C) which Collateral is attributable to the transferring FCM Client and the associated FCM ForexClear Contracts. In the event that the Carrying Clearing Member fails to do so in accordance with the timetable below, the Clearing House shall transfer sufficient cash or non-cash Collateral attributed to the FCM Clearing Member's FCM Omnibus ForexClear Client Account with LCH (such Collateral as selected in the Clearing House's sole discretion) to enable the transfer. Following the Clearing House's determination of the Collateral that is to be transferred, it shall notify the Carrying Clearing Member and the Receiving Clearing Member of the Collateral that will be transferred in accordance with the timetable below.

In the event that any of the applicable conditions set forth in FCM Regulation 13 (*Transfer*) are not satisfied, and the Carrying Clearing Member notifies the Clearing house that they have not been satisfied using the Carrying Member Response Form the Clearing House shall not proceed with the transfer of the related Collateral. In such circumstances, the Clearing House will notify the Receiving FCM Clearing Member that the associated Collateral will not be transferred and, in order to proceed with the transfer of the associated FCM ForexClear Contracts, the Receiving FCM Clearing Member will have to provide the Clearing House with sufficient Margin in respect of the transferring FCM ForexClear Contracts.

In the event that the Clearing House transfers Collateral pursuant to these FCM Procedures and the FCM Regulations, it will also transfer the aggregate Variation MarginSettlement and next day Variation MarginSettlement and Net Settlement Amount associated with the transferring FCM ForexClear Contracts.

(d) Timetable for FCM Client Transfer

Time (all references below are to New York time, unless stated otherwise)	Partial Transfer	Full Transfer (with Collateral)	Full Transfer (without Collateral)
Day 0: 15:00	_	from Receiving Clearing Member of FCM Full	Deadline for receipt from Receiving Clearing Member of FCM Full Transfer Form.
Day 1: 16:00	notification by the Clearing House to the Carrying Clearing Member and the Receiving Clearing Member	notification by the Clearing House to the Carrying Clearing Member and the Receiving Clearing Member that it intends to transfer FCM ForexClear	Clearing House to the Carrying Clearing Member and the Receiving Clearing Member that it intends to transfer FCM ForexClear Contracts

Time (all references below are to New York time, unless stated otherwise)	Partial Transfer	Full Transfer (with Collateral)	Full Transfer (without Collateral)
Day 3: 14:00	Clearing House will publish to the Carrying Clearing Member and the Receiving Clearing Member the relevant transfer reporting in relation to the transferred FCM ForexClear Contracts.	publish to the Carrying Clearing Member and the Receiving Clearing Member the relevant transfer reporting in relation to the	publish to the Carrying Clearing Member and the Receiving Clearing Member the relevant transfer reporting in relation to the

The timings and processes listed in the table above may be amended from time to time by the Clearing House in its full discretion via member circular.

2.2.20 Proprietary Account Position Transfers

The FCM ForexClear Clearing System provides functionality for the transfer of positions from an FCM Clearing Member's Proprietary Account. Any such transfer may only occur if the Receiving Clearing Member is an affiliate of the Carrying Clearing Member.

Before the completion of a portfolio transfer, the Clearing House will perform a margin impact analysis of the transfer to the source and destination portfolios. The Clearing House will advise the relevant FX FCM regarding any additional collateral that may be required in order to complete the portfolio transfer. An FCM Clearing Member who wishes to effect a position transfer to another FCM Clearing Member should contact the Clearing House's Risk Management Department. Transfers will only be effected once adequate cover has been provided by both parties to the transfer.

2.2.21 FCM Clearing Member's Client Fund Transfer

The FCM ForexClear Clearing System provides functionality for the transfer of FCM ForexClear Contract whereby an FCM Client has incorrectly booked the FCM ForexClear Contract to a fund, and wishes to re-locate the FCM ForexClear Contract to an alternative fund within the accounts of the same FCM Clearing Member.

Transfers can only occur based upon the below rules:

- (a) A valid request has been received by the Clearing House from the applicable FCM Clearing Member on behalf of the FCM Client, as per Schedule 2.2B.
- (b) The FCM ForexClear Contract is registered by the Clearing House, and sufficient Margin has been furnished to cover the FCM ForexClear Contract.
- (c) Transfers are only handled within the accounts of a single FCM Clearing Member (i.e., not a transfer between two FCM Clearing Members).

Transfer requests received by ForexClear Operations prior to 15:00 London time will be managed and included in the 18:00 London time margin run. The transfer of the FCM ForexClear Contract will occur **provided that** sufficient Margin is held for the FCM Clearing Member and outstanding payments of Variation Settlement and other obligations have been made as necessary.

2.2.22 ForexClear Reporting

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

FXCCMs must inform their respective FCM Clients of the list of Approved LCH SDRs, and inform such FCM Clients that the Clearing House is only able to report details of an FCM ForexClear Contract to an Approved LCH SDR.

The Clearing House produces a suite of treasury reports for members across each of the Clearing House services. Some of these reports are cross-service reports and others are specific to the ForexClear Service (including the FCM ForexClear Service), thus an FX FCM will receive reports in respect of the FCM ForexClear Service and may also receive cross-service reports where it is a member of another service. Follow this link to the information available from the LCH website: Banking Reports.² The terminology used in a report in respect of Margin, Variation Settlement or Price Alignment Amount may reflect terminology commonly used in the industry. Such terminology shall not affect the interpretation or construction of any provisions or terms of the FCM Regulations or FCM Procedures.

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² http://www.lchclearnet.com/Images/banking_report_tcm6-48011.pdf

In respect of the FCM ForexClear Service, on each business day the Clearing House will provide two sets of reports to FX FCMs: (1) Banking Reports; and (2) reports direct from the FCM ForexClear Service (together "ForexClear Reporting"). These Procedures reference the FCM ForexClear Service specific reports. Each day's report will remain available for download by FX FCMs from the FCM ForexClear Service Portal for five days.

The Clearing House (acting, where applicable, through the entity to which it has elected to delegate the relevant reporting obligations) shall, to the extent required by (and in line with the requirements of) Applicable Law (including Parts 43 and 45 of the CFTC Regulations, and applicable requirements under English law), report to one or more data or trade repositories (including swap data repositories) or similar body the details of all FCM ForexClear Transactions and FCM ForexClear Contracts, including any modifications or terminations without duplication and no later than the working day following the conclusion, modification or termination of such contract. In order to avoid any such duplication of reports, each FX FCM acknowledges and agrees that it will not report the details referred to in this paragraph to the bodies referred to in this paragraph, unless otherwise agreed with the Clearing House.

(a) Margin Liability Reports

Reports detailing Liabilities are provided to FX FCMs following every scheduled Margin Run in accordance with Section 2.2.17 and where additional Collateral or other payment has been called by the Clearing House. Additionally, a report, including sensitivities, is provided at ForexClear Contracts level. A report will also be provided detailing an FX FCM's Margin utilization level. If an FX FCM's Liabilities exceed its total available Margin, ForexClear will alert the FX FCM.

(b) Market Data Reports

Reports detailing Market Data are provided to FX FCMs following every scheduled Margin Run. They include reports of Market Data and Settlement Rate used in the valuation of FCM ForexClear Contracts and reports of Market Data shifts for each historic scenario used in IM calculations.

(c) Trade Reports

Reports are **provided that** enable FX FCMs to monitor their firms' trading events and positions in respect of ForexClear. Reports on open FCM ForexClear Contracts and on cancelled FCM ForexClear Transactions and FCM ForexClear Contracts are generated at EOD and reports on transferred FCM ForexClear Contracts are made on an ad hoc basis.

(d) Trade Fixing and Settlement Reports

Reports are published on each business day detailing the FCM ForexClear Contracts to which the Settlement Rate has been applied on

that business day (the "NDF Fixings" report), FCM ForexClear Contracts that have been settled during that current business day (the "Settlements Today" report) and FCM ForexClear Contracts that will settle the next business day (the "NDF's Fixed with Settlement Tomorrow" report).

(e) Fees Reports

Reports on trading volumes on a daily and monthly basis are provided to FX FCMs. Monthly reports are provided on the last business day of each month. They include the full trading volumes on which the monthly transaction fees will be charged to those FX FCMs choosing to have tariffs levied per transaction.

(f) Banking Reports

Follow this link for a full list of Banking reports.3

(g) Real-time Reporting

A near real-time view of member liabilities, Collateral pledged, Margin and credit utilization will be available from the ForexClear Service Portal (referred to in Section 2.2.17).

In accordance with CFTC Part 45 requirements (where the FX FCM has a reporting obligation), FX FCMs must provide the Clearing House (i) the USI of the original swap that is submitted to the Clearing House for registration and (ii) the LEI of the original swap SDR (i.e., "OriginalSwapRepository" or equivalent field) to enable the Clearing House to accurately report the termination of the original swap to the appropriate SDR.

2.2.23 Treasury Operations & Collateral Management

(a) Cover Distribution

The Clearing House nets each FX FCM's Liabilities (i.e., margins, settlements, PAA and multipliers) and then the total of Cash collateral and non-cash Collateral are applied to offset those net Liabilities. This process is known as cover distribution ("Cover Distribution"). FX FCMs can choose whether cash or non-cash Collateral should be applied first. At the end of this process, if an FX FCM has a shortfall, a PPS (as defined in Section 2.2.23(c) below) call for additional Collateral, settlement or PAA is made. Conversely, any excess cash remaining after the final overnight Margin Run can, if requested before 09:30 hours be repaid to the FX FCM.

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³ http://www.lchclearnet.com/membership/ltd/training_and_education/reference_guide_request_form.asp

(b) Cover Distribution Notification

FX FCMs are informed via email of their: Liabilities as a percentage of their current total cover (such percentage being shown as a percentage of the aggregate cover in their cash and non-cash Collateral account(s)) and are directed to the ForexClear Service Portal which provides reports (at the times specified in Section 2.2.22) informing FX FCMs of their (i) total Liabilities under the ForexClear Service; (ii) current total cover posted with the Clearing House for ForexClear; and (iii) Liabilities as a percentage of their current total cover (such percentage being shown as a percentage of the aggregate cover in their cash and non-cash Collateral account(s)).

The reports accessed via the ForexClear Service Portal will enable FX FCMs to log in and examine the underlying data.

(c) Protected Payment System

The Clearing House operates the Protected Payments System ("**PPS**") for transferring funds to and from its FX FCMs to cover their <u>MarginTransfer</u> Requirements. This is similar to a direct debit arrangement where the PPS bank confirms that any Clearing House-specified call is met.

FX FCMs are obliged to hold an account with a UK PPS bank in USD, as well as a USD account with a PPS bank in the USA.

Follow the link below for a list of PPS banks operating in the UK and US:

List of PPS Banks⁴

(d) Acceptable Forms of Collateral Cover

Follow the link below for a detailed description of acceptable collateral and processes applicable from time to time:

Risk Management/LCH/Acceptable Collateral⁵

(e) Interest and Accommodation

Interest is paid to FX FCMs on cash Collateral held by the Clearing House. The London Deposit Rate ("LDR") is applied.

A utilization fee, known as an accommodation charge, is charged on securities lodged at the Clearing House to cover liabilities. For an

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⁴ http://www.lchclearnet.com/risk_management/ltd/pps/

⁵ http://www.lchclearnet.com/Images/Section4_tcm6-43748.pdf

of that Auction. Where the Clearing House does not receive a bid that was made by a ForexClear Clearing Member for operational, technological or other similar reasons and as a result of which a bid does not reach the Clearing House, the Clearing House will be unable to accept a bid and shall not be liable for any failure to accept such bid.

(c) Affiliate Bidding

ForexClear Clearing Members are entitled to bid for an Auction Portfolio on behalf of an affiliated ForexClear Clearing Member or an affiliated FCM Clearing Member. Where a ForexClear Clearing Member makes a bid and that ForexClear Clearing Member has an affiliated ForexClear Clearing Member or FCM Clearing Member that does not make a bid, the Clearing House shall not (unless instructed otherwise in accordance with the paragraph below) assume that the bidding ForexClear Clearing Member has made the relevant bid on behalf of a non-bidding, affiliated ForexClear Clearing Member or FCM Clearing Member.

A ForexClear Clearing Member may notify the Clearing House, in advance of an Auction, that it wishes to bid on behalf of an affiliated ForexClear Clearing Member. Where it wishes to do so, the ForexClear Clearing Member should contact the Clearing House's Membership Department (membership@lch.com; +44 (0)207 426 7949).

(d) Outsourcing

Pursuant to Section 1 (*Membership*) of these FCM Procedures, an FX FCM may appoint a third party to fulfill one or both of the Clearing House's FCM clearing membership criteria to: (i) participate in a ForexClear "fire drill" run by the Clearing House; and (ii) participate in the ForexClear DMP operated by the Clearing House. Where an FX FCM chooses to outsource one or both of these functions it must appoint and maintain at least three LCH Approved Outsourcing Agents.

The following entities are eligible for appointment as an LCH Approved Outsourcing Agent:

- (i) a ForexClear Clearing Member
- (ii) an FX FCM;
- (iii) an FCM Client; or
- (iv) any other entity that the Clearing House deems appropriate in its sole discretion.

Where an FX FCM wishes to appoint a third party to carry out any obligation on its behalf, it should contact the Clearing House's Membership Department with the:

- (A) details of the third party entity that the FX FCM wishes to appoint as an LCH Approved Outsourcing Agent. Such information should include details of the applicant's regulatory status;
- (B) evidence of the existence of a legally binding agreement between the FX FCM Clearing Member and the third party; and
- (C) such other information that the Clearing House reasonably considers necessary for the purposes of determining whether an entity should be approved as an LCH Approved Outsourcing Agent.

Following the receipt of all of the information above, the Clearing House shall determine, in its sole discretion, whether to approve the third party as an LCH Approved Outsourcing Agent. In making its determination, the Clearing House shall consider the third party's ability to demonstrate that it has the necessary operational infrastructure and appropriate asset class expertise.

Where an FX FCM successfully appoints an LCH Approved Outsourcing Agent, that FX FCM may be subject to increased Margin Transfer Requirements to cater for the additional time required to invoke an outsourcing process in the event of a default

FX FCMs should note that LCH Approved Outsourcing Agents may be subject to a more rigorous driving test and fire-drill than FX FCM (i.e., required to demonstrate an ability to price and bid a greater number of trades at tighter pricing tolerances and within more onerous timeframes). In addition, the Clearing House may require an FX FCM, that has appointed an LCH Approved Outsourcing Agent, to participate in an ad-hoc fire-drill or driving test with such notice as the Clearing House deems appropriate in its sole discretion.

The Clearing House reserves the right to revoke an entity's status as an LCH Approved Outsourcing Agent, in its sole discretion and without notice. In the event of such a revocation, the relevant FX FCM shall be required to assume those responsibilities that were previously outsourced. Such revocation may occur where the Clearing House considers that there is an insufficient number of third party entities that are providing outsourced default management services (usually a minimum of five providers at any one time).

Other than in exceptional circumstances and in the Clearing House's sole discretion, an LCH Approved Outsourcing Agent may not act on behalf of more than three clearing members.

The appointment of an LCH Approved Outsourcing Agent does not absolve an FX FCM of its obligations under the ForexClear DMP (including its obligation to participate in an Auction) and an LCH Approved Outsourcing Agent's participation in the ForexClear DMP on behalf of an FX FCM, in the event of a default, shall not extend beyond the provision of operational and other ancillary support to that FX FCM.

(e) ForexClear DMG

The necessary involvement of FX FCMs and the ForexClear DMG (which, as defined in the Default Rules, refers to the advisory Default Management Group established by the Clearing House pursuant to the terms of the ForexClear DMP Annex to the Default Rules) in the ForexClear DMP entails the assessment and dissemination of information that could give rise to conflicts of interest. To ensure that such potential conflicts are demonstrably contained, Schedule 2.2D establishes binding obligations of confidentiality, anonymity and the extent of dissemination of information on FX FCMs (and their executives or directors who participate from time to time in the ForexClear DMG) and on the Clearing House.

Each FX FCM who makes available a representative to serve on the ForexClear DMG agrees, and shall procure that, to the extent applicable, its representatives agree to be bound by and to ensure that it and any of its executives or directors serving on the ForexClear DMG complies with Schedule 2.2D covering confidentiality, non-disclosure and other terms.

(f) Procedures for Liquidation of FCM ForexClear Contracts of FCM Clients

Upon the default of an FCM Clearing Member, the Clearing House has the power and authority, pursuant to the FCM Rulebook, the CEA and the CFTC Regulations, to liquidate the FCM ForexClear Contracts of FCM Clients which, pursuant to the FCM Rulebook, would be conducted in accordance with the ForexClear DMP Annex. This section sets forth certain supplementary procedures (in addition to the Default Rules and other applicable provisions of the FCM Rulebook) that will apply under such circumstances.

In certain circumstances the Clearing House may deem, in its sole discretion, that one or more of the FCM ForexClear Contracts attributable to an FCM Client's FCM Client Sub-Account should be liquidated. Such determination may result from factors including: (i) the Clearing House determining that the FCM Client poses too great a risk to the Clearing House and should therefore be liquidated, (ii) the

Clearing House becoming aware of the FCM Client becoming insolvent or otherwise failing in its obligations to the defaulting FCM Clearing Member, (iii) the relevant FCM Client requesting that it be liquidated, or (iv) a request or instruction from a Regulatory Body, whether orally or in writing. In the event of such liquidation the Clearing House shall transfer (either physically or by book-entry) such FCM Client's FCM ForexClear Contracts to be liquidated into an account at the Clearing House established for purposes of liquidating the FCM ForexClear Contracts of FCM Clients of the defaulter (such account, a "Hedged Account"). The Clearing House shall establish a separate Hedged Account for each currency of FCM ForexClear Contracts that are nontransferable and will be subject to liquidation and will include in such Hedged Account the FCM ForexClear Contracts in the applicable currency that are to be liquidated, regardless of the FCM Clients for which such FCM ForexClear Contracts are held. The provisions of this section shall apply equally to any such Hedged Account. Additionally, no FCM Contracts other than FCM ForexClear Contracts will be transferred into a Hedged Account established for liquidating FCM ForexClear Contracts.

An FCM Client whose FCM ForexClear Contracts are transferred into a Hedged Account is referred as a "Non-Porting Client". Clearing House shall hold the relevant Collateral in respect of Non-Porting Client (segregated as belonging to each such applicable Non-Porting Client in accordance with the CFTC Regulations and Part 22 thereof) in its applicable FCM Omnibus ForexClear Client Account with LCH of the Defaulter until the liquidation of the entire Hedged Account and all FCM ForexClear Contracts and other positions therein, as described below. At the time that the FCM ForexClear Contracts of a Non-Porting Client are transferred into a Hedged Account, any outstanding and accrued but unpaid Variation MarginSettlement and PAA in respect of such FCM ForexClear Contracts shall be discharged as of the time such FCM ForexClear Contracts are transferred into the Hedged Account, by (i) in the event that Variation MarginSettlement or PAA is accrued but unpaid in favor of the Clearing House, debiting the relevant FCM Client Sub-Account of such FCM Client, or (ii) in the event that Variation MarginSettlement or PAA is accrued but unpaid in favor of the FCM Client, crediting the relevant FCM Client Sub-Account of such FCM Client.

(i) Administration of a Hedged Account. The Clearing House may enter into hedge transactions and liquidate and/or auction the FCM ForexClear Contracts and hedges for the account of the Hedged Account, and may take related actions with respect to a Hedged Account (and the positions held therein), in its sole discretion as permitted by the FCM Rulebook, the CEA and the CFTC Regulations, or as directed by an applicable Regulatory Body.

- (ii) Allocation of Gains and Losses in a Hedged Account to Non-Porting Clients. The Clearing House will allocate losses and gains (including further *Variation marginSettlement and PAA changes, hedging costs including the gains and losses associated with hedging transactions, and liquidation/auction costs and losses) to Non-Porting Clients in a Hedged Account in accordance with the following provisions:
 - (A) At the time an FCM Client becomes a Non-Porting Client, such Non-Porting Client is assigned a risk factor (a "**Risk Factor**") which is equal to such Non-Porting Client's Required Margin with respect to its FCM ForexClear Contracts that are transferred into the Hedged Account at the time such FCM Client became a Non-Porting Client (*i.e.*, at the time of transfer into the Hedged Account).
 - (B) On the first day that FCM Clients become Non-Porting Clients, gains and losses in the Hedged Account on such day shall be allocated on a *pro rata* basis among such Non-Porting Clients based on their individual Risk Factors. The allocation of gains and losses on subsequent days shall be made in the same manner until the occurrence of a day (if applicable) in which additional Non-Porting Clients are included in the Hedged Account. Additional Non-Porting Clients that are included in the Hedged Account on a subsequent day, until further additional Non-Porting Clients are included in the Hedged Account on a further subsequent day, are referred to as "New Non-Porting Clients".
 - (C) On a day when one or more New Non-Porting Clients are included in the Hedged Account, the Clearing House shall calculate a combined risk factor (the "Existing Non-Porting Clients Combined Risk Factor") in respect of the Non-Porting Clients that were previously included in the Hedged Account and are not New Non-Porting Clients (such existing Non-Porting Clients, "Existing Non-Porting Clients"). The Existing Non-Porting Clients Combined Risk Factor shall be based on the amount of Required Margin associated with the Hedged Account with respect to all positions (including all FCM ForexClear Contracts, hedges or other positions) held in the Hedged Account, at the beginning of the day on which New Non-Porting Clients are included in the Hedged Account (i.e., at a time prior to the transfer of the FCM ForexClear Contracts of New Non-Porting Clients into the Hedged Account). For the avoidance of doubt, the Existing Non-Porting Clients Combined Risk Factor is calculated without respect to

functionality also allows each FCM Listed Interest Rates Clearing Member to identify all FCM Listed Interest Rates Contracts registered in its name.

(b) Financial Accounts

FCM Listed Interest Rates Clearing Member position-keeping accounts have financial accounts associated with them. These are, among other things, used to record cash balances, securities/documentary credits and unrealized margin.

An FCM Listed Interest Rates Clearing Member's financial accounts are identified by a single character code: "C" for 30.7 customer business.

Information contained within position-keeping accounts is consolidated into financial accounts, as follows:

(i) Relationship with Position-Keeping Accounts

Position-keeping accounts	Financial account
C 30.7 customer (used for Initial Margin flows)	C

The C Account is a 30.7 customer account which is part of the Foreign Futures Account Class.

By permitting a transaction to be allocated to a position-keeping account, an FCM Listed Interest Rates Clearing Member is also deemed to be designating that transaction for the associated financial account.

(ii) Other Financial Accounts. Subject to approval by the Clearing House, further financial accounts, used only to record financial balances, may be opened as follows:

	Code
Additional Margin account (FCM Client), used for holding additional cash in relation to FCM Client business.	Е
LCH 30.7 customer secured account (used for Variation Margindaily settlement flows)	L

(iii) Default Fund (DF) Account. Each FCM Listed Interest Rates Clearing Member's Contribution is held on a separate financial

account, in accordance with the Default Fund Rules. The Default Fund account code is F.

2.3.5 Margin and Collateral

(a) Initial Margin

The Clearing House will require FCM Listed Interest Rates Clearing Members to furnish it with Initial Margin. Initial Margin requirements in respect of an FCM Listed Interest Rates Clearing Member's FCM Omnibus Listed Interest Rates Client Account with LCH are calculated on a gross basis for each FCM Client equal to the sum of the Initial Margin that would be required by the Clearing House as if each such FCM Client was an FCM Listed Interest Rates Clearing Member. The Clearing House reserves the right to require additional amounts of Margin from a specific FCM Listed Interest Rates Clearing Member or from all FCM Listed Interest Rates Clearing Members in accordance with FCM Regulation 14.

(i) Initial Margin Parameters

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

FCM Listed Interest Rates 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.

(ii) Intra-Day Margin Calls

In accordance with the FCM 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 FCM Procedure 3.2).

(iii) Calculation of Initial Margin

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 FCM 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.

(b) Variation Daily Settlement Amounts and Contingent Margin

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

(i) Realised Margin Daily Settlement Amounts

Realised margin is daily settlement amounts are 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 daily settlement amounts are realised into postings to the FCM Omnibus Listed Interest Rates Client Account with LCH.

(ii) 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 FCM Listed Interest Rates Contract or these FCM Procedures. Contingent variation—margin is calculated for FCM Listed Interest Rates Contracts which are subject to delivery of an underlying asset.

(iii) Option Variation Margin Daily Settlement Amounts

Option variation margin is daily settlement amounts are the value of unexpired options, calculated with reference to the official quotation. Bought and sold options generate credit and debit option variation margindaily settlement amounts respectively.

(c) Additional Margin

In accordance with FCM Regulation 14 (*Margin and Collateral*), the Clearing House may call additional amounts of Collateral (on top of the amounts of Collateral previously transferred to the Clearing House in respect of initial margin and variation margindaily settlement obligations) as security for the performance by an FCM Listed Interest Rates Clearing Member of its obligations to the Clearing House in respect of FCM Listed Interest Rates Contracts registered in its name.

This may be required from time to time where, in the opinion of the Clearing House, the risk inherent in FCM Contracts held by the FCM Listed Interest Rates Clearing Member is not adequately covered by the Collateral in respect of the initial or variation margindaily settlement obligations. This may cover instances where stress losses under various scenarios are larger than the pre-defined thresholds of the default fund. The Clearing House may only apply such additional Collateral against the FCM Contracts generating such losses, and may not apply it as a credit in respect of initial margin obligations generally.

(d) Official Quotations

Official Quotations are based on the "Daily Settlement Price (DSP)" and are supplied by the relevant Rates Exchange (or, in respect of Designated FCM Listed Interest Rates Contracts, by the Clearing House) at the close of business each day. Should the relevant Rates Exchange fail to determine DSPs, the Clearing House will determine these as necessary. This will be done at the Clearing House's discretion and announced as soon as possible.

(e) Settlement

(i) Cash Settlement

Cash settlement is a final settlement derived from the difference between the expiry price and the previous business day's official quotation or such other quotation as is specified in the relevant Rates Exchange Rules and the FCM Listed Interest Rates Contract Terms. This is debited from or credited to the FCM Omnibus Listed Interest Rates Client Account with LCH.

(ii) Delivery

Deliverable contracts, as specified by the relevant Rates Exchange Rules and the FCM Listed Interest Rates Contract Terms, remaining open at expiry, or as notified via early delivery notice, are settled by physical delivery of the underlying at the Final Settlement Price (FSP), as determined by the relevant FCM Listed Interest Rates Contract Terms.

2.3.6 Trade and Position Management

(a) Allocations

FCM Listed Interest Rates Novation Transactions and Rates Exchange Matches can be allocated to an FCM Listed Interest Rates Clearing Member's Position Keeping Accounts in a number of different ways based on the information provided:

(v) Margin

The Clearing House continues to require Collateral in respect of initial and contingent variation—margin requirements on open delivery contracts.

(vi) Delivery System

The "Delivery System" is the Clearing House Delivery System for deliverable FCM Listed Interest Rates Contracts, which allows users to send and receive data to and from the Clearing House.

FCM Clearing Members must submit delivery information using the Delivery System GUI.

When using the Delivery System GUI, FCM Clearing Members must always ensure that they allow sufficient time to input their delivery details within the deadlines prescribed in these procedures. Failure to do so will constitute late delivery of documentation and may be subject to disciplinary action. Clearing Members experiencing connection difficulties should contact Client Services on +44 7426 7651.

(vii) Seller's Delivery Notice

Sellers must submit a *Delivery Notice* to the Clearing House via the Delivery System.

(viii) Delivery Failure – Designated FCM Listed Interest Rates Contracts Only

This paragraph 2.3.9(a)(viii) applies only in respect of Designated FCM Listed Interest Rates Contracts. For all other FCM Listed Interest Rates Contracts, the treatment of delivery failures is set out in the relevant Rates Exchange Rules.

Where the seller does not make delivery, or the buyer make payment, this will constitute a "delivery failure" within the meaning of FCM Regulation 65. A delivery failure may occur for any reason whatsoever, including, without limitation:

- (A) the failure of the Clearing House's clearing system to effect settlement of such delivery or payment;
- (B) any error, failure, closure or suspension of the Clearing House's clearing system;
- (C) a failure by any third party to make any required transfer of such deliverable bonds to seller or any settlement

Deliveries under the Gilt contract must be made or taken via an account at Euroclear UK and Ireland (EUI).

Clearing House Delivery Account Details. Details of the Clearing House's account at Euroclear UK and Ireland (EUI) are as follows: Clearing House account number 5172.

(ii) Delivery Communication and the Delivery System

Delivery documentation must be submitted using The Delivery System. When using The Delivery System, FCM Clearing Members must always ensure they allow sufficient time to input their delivery details within the deadlines prescribed in these procedures. Failure to do so will constitute late delivery of documentation and may be subject to disciplinary action. FCM Clearing Members experiencing difficulties should contact Client Services on +44 7426 7651.

(iii) Consideration Value Calculation

The amount due to Sellers and payable by Buyers is calculated in accordance with the Gilt contract terms (all values in GBP):

Consideration value per lot = (1000 x FSP x Price Factor) + Initial Accrued + (Daily Accrued x Delivery Days in Month)

Consideration Calculation Example

FSP(N) = 107.41 Price Factor = 1.2554334 Initial Accrued = 1746.58 Daily Accrued = 17.1233 Delivery Days in Month = 10

Single lot value = $(1000 \times 107.41 \times 1.2554334) + 1746.58 + 1.2554334$

(17.1233 x 10)

= 136,763,914494

Consideration value per lot = 136,763.91

The Clearing House establishes the consideration amount by calculating the full value of **1** lot using the formula (i.e. up to 7 decimal places on the price factor and 5 on the FSP) and rounding to the nearest whole penny (.5 rounded down). This **per** lot value is then multiplied by the number of lots to establish the total consideration value.

(iv) Delivery Timetable (Except for Last Notice Day)

DAY	TIME LONG GILT	ACTION	
		SELLERS	BUYERS
Notice Day	By 11:00	Sellers submit Seller's Delivery Notices in Synαpse and the Delivery System	
		Synαpse position keeping deadline	Synαpse position keeping deadline
	By 11:30	FSP established	FSP established
	By 12:00		Allocation of lots to Buyers
		Delivery Positions for Futures Report available	Delivery Positions for Futures Report available
	By 15:00		Deliverable gilts allocated to Buyers
Notice Day + 1	By 05:00	The Clearing House makes Account Sales and Delivery Instructions report available	The Clearing House makes Invoices and Delivery Instructions report available
	From 09:00	Seller to commence matching	Buyer to commence matching
	By 12:30	All deliveries must be matched in Euroclear UK & Ireland	All deliveries must be matched in Euroclear UK & Ireland
Settlement Day (Notice day + 2)	By 13:00	Gilts delivered against payment	Gilts received against payment
S + 1		The Clearing House releases Collateral in respect of initial and variationcontingent margin	The Clearing House releases Collateral in respect of initial and variation contingent margin

(v) Delivery Timetable (Last Notice Day)

DAY	TIME LONG GILT	ACTION	
		SELLERS	BUYERS
Last Notice Day (the business day following the last trading	By 10:00	Sellers submit <i>Seller's Delivery Notices</i> to The Delivery System	

DAY	TIME LONG GILT	ACTION	
		SELLERS	BUYERS
day)			
		Synαpse position keeping deadline	Synαpse position keeping deadline
	By 11:00		Allocation of lots and gilts to Buyers
	By 15:00	The Clearing House makes Account Sales and Delivery Instructions report available	The Clearing House makes Invoices and Delivery Instructions report available
		Seller to commence matching	Buyer to commence matching
	By 17:30	All deliveries must be matched in Euroclear UK & Ireland	All deliveries must be matched in Euroclear UK & Ireland
Settlement Day (Last Notice Day + 1)	By 13:00	Gilts delivered against payment	Gilts received against payment
S + 1		The Clearing House releases Collateral in respect of initial and variationcontingent margin	The Clearing House releases Collateral in respect of initial and variation contingent margin

(vi) Long Gilt Delivery Procedures

(A) Last Trading, Notice and Settlement Day Definitions

The First and Last Notice Day, and Settlement Day, are defined in the FCM Listed Interest Rates Contract Terms for the Long Gilt contract.

(B) Notice Day

By 11:00 hours - Long Gilt

Deliverable positions are based on FCM Clearing Members' positions at the close of business the previous day. The positions may be transferred or settled to establish the deliverable.

On each business day during the notice period, a Seller may input an 'Early Delivery Notification' to Synαpse

FCM Clearing Members must have successfully matched all trades with the Clearing House in Euroclear UK & Ireland.

Failure to match with the Clearing House contravenes Clearing House Procedures.

The Clearing House informs the operations personnel of the relevant Rates Exchange of any outstanding matching problems after this time.

(F) Settlement Day

Settlement day means the second business day after the notice day or, where the notice day is the Last Notice Day, settlement day will be the next business day after the Last Notice Day.

The Seller must ensure that their Euroclear UK & Ireland priority settings and cap permit their trades to settle before the Clearing House settlement deadline.

By 13:00 hours

Gilts will have passed from the Seller's Euroclear UK & Ireland account to the Clearing House's Euroclear UK & Ireland account (5172) and subsequently to the Buyer's Euroclear UK & Ireland account on Settlement Day.

The Buyers and the Clearing House's settlement bank will effect payment by the end of the day across Real Time Gross Settlement (RTGS) accounts at the Bank of England.

The Clearing House releases Collateral in respect of initial and contingent variation margin for successfully completed deliveries.

(c) German Government Bond (Euro Bund)

The following abbreviations are used in these procedures:

- DVP means delivery versus payment;
- RVP means receipt versus payment;
- Delivery and receipt versus payment means a transfer of Bunds, against payment of the consideration amount specified in the FCM Listed Interest Rates Contract Terms for German Government Euro Bund Contracts;

FCM Procedures FCM Listed Interest Rates

(iv) Delivery Timetable

DAY	TIME	TIME	ACTIO	ON
	LONDON	CET*	SELLERS	BUYERS
Last trading day	11:30	12:30	Trading ceases	Trading ceases
(LTD)				
	12:00	13:00	FSP established	FSP established
	17:00	18:00	Synαpse Position Keeping deadline	Synαpse Position Keeping deadline
			Sellers submit Sellers Delivery Notice	
	17:30	18:30	The Clearing House performs delivery allocation	The Clearing House performs delivery allocation
	18:00	19:00	The Clearing House makes Account Sales and Delivery Instruction Report available.	The Clearing House makes Invoices and Delivery Instruction Report available.
S - 1 (LTD + 1)	10:00	11:00	Sellers submit DVP instructions to their custodian bank	Buyers submit RVP instructions to their custodian bank
	14:00	15:00	Sellers match the Clearing House instruction entered into delivery centre	Buyers match the Clearing House instruction entered into delivery centre
S (LTD + 2)	Following standard delivery cycles	Following standard delivery cycles	The Clearing House receives confirmation of delivery	The Clearing House receives confirmation of delivery
S + 1 (LTD + 3)			The Clearing House releases Collateral in respect of initial and variation contingent margin	The Clearing House releases Collateral in respect of initial and variation contingent margin

^{*} CENTRAL EUROPEAN TIME INCLUDES FRANKFURT TIME WHERE QUOTED IN THE FCM LISTED INTEREST RATES CONTRACT TERMS, RELEVANT RATES EXCHANGE RULES AND CLEARING HOUSE DELIVERY PROCEDURES.

- 161 - October 2017

(E) S Settlement Day (LTD + 2)

By 08:00 hours Central European time

The Seller's delivery system or agent shall have transferred Bunds to the Clearing House's account at the relevant delivery system, against payment. The Clearing House shall have transferred Bunds to the Buyer's account at the relevant delivery system against payment.

During Euroclear/Clearstream Luxemburg Overnight Processing

Where the Clearing House is taking delivery of Bunds, via Euroclear or Clearstream Luxemburg, and a Seller fails to deliver Deliverable Bonds to the Clearing House in the overnight processing cycle of Euroclear or Clearstream Luxemburg, the Clearing House will invoke automatic borrowing procedures, subject to supply.

All costs arising as a result of failure to deliver to the Clearing House in the Euroclear/ Clearstream Luxemburg overnight processing cycle will be passed to the defaulting Seller.

During Clearstream Frankfurt standard cycle

Where the Clearing House is taking delivery of Bunds via one of its Clearstream Frankfurt agents, and a Seller fails to deliver to the Clearing House Deliverable Bonds in the standard cycle, the Clearing House will attempt to borrow stock.

All costs arising as a result of failure to deliver to the Clearing House (in the standard cycle) will be passed to the defaulting Seller.

(F) S+1 The first Frankfurt working day immediately following Settlement Day (LTD + 3)

The Clearing House releases Collateral in respect of initial and contingent variation—margin for successfully completed deliveries.

(d) German Government Bond (BOBL)

The following abbreviations are used in these procedures:

- DVP means delivery versus payment;
- RVP means receipt versus payment;

FCM Procedures FCM Listed Interest Rates

(iv) Delivery Timetable

DAY	TIME	TIME	ACTION	
	LONDON	CET*	SELLERS	BUYERS
Last	11:30	12:30	Trading ceases	Trading ceases
trading day (LTD)	12:00	13:00	FSP established	FSP established
	17:00	18:00	Synαpse Position Keeping deadline	Synαpse Position Keeping deadline
			Sellers submit Sellers Delivery Notice	
	17:30	18:30	The Clearing House performs delivery allocation	The Clearing House performs delivery allocation
	18:00	19:00	The Clearing House makes the Account Sales and Delivery Instructions Report available	The Clearing House makes the Invoices and Delivery Instructions Report available
S - 1 (LTD + 1	10:00	11:00	Sellers submit DVP instructions to their custodian bank	Buyers submit RVP instructions to their custodian bank
	14:00	15:00	Sellers match the Clearing House instruction entered into delivery centre	Buyers match the Clearing House instruction entered into delivery centre
S	Following	Following	The Clearing House receives confirmation of	The Clearing House receives confirmation
(LTD + 2)	standard delivery cycles	standard delivery cycles	delivery	of delivery
	denvery cycles	denivery cycles		
S + 1 (LTD + 3)			The Clearing House releases Collateral in respect of initial and variation contingent margin	The Clearing House releases Collateral in respect of initial and variation contingent margin

^{*} CENTRAL EUROPEAN TIME INCLUDES FRANKFURT TIME WHERE QUOTED IN THE FCM LISTED INTEREST RATES

- 168 - December 2017

(E) S Settlement Day (LTD + 2)

By 08:00 hours Central European time

The Seller's delivery system or agent shall have transferred Bonds to the Clearing House's account at the relevant delivery system, against payment. The Clearing House shall have transferred Bonds to the Buyer's account at the relevant delivery system against payment.

During Euroclear/Clearstream Luxemburg Overnight Processing

Where the Clearing House is taking delivery of Bonds, via Euroclear or Clearstream Luxemburg, and a Seller fails to deliver Deliverable Bonds to the Clearing House in the overnight processing cycle of Euroclear or Clearstream Luxemburg, the Clearing House will invoke automatic borrowing procedures, subject to supply.

All costs arising as a result of failure to deliver to the Clearing House in the Euroclear/ Clearstream Luxemburg overnight processing cycle will be passed to the defaulting Seller.

During Clearstream Frankfurt standard cycle

Where the Clearing House is taking delivery of Bonds via one of its Clearstream Frankfurt agents, and a Seller fails to deliver to the Clearing House Deliverable Bonds in the standard cycle, the Clearing House will attempt to borrow stock.

All costs arising as a result of failure to deliver to the Clearing House (in the standard cycle) will be passed to the defaulting Seller.

(F) S+1 The first Frankfurt working day immediately following Settlement Day (LTD + 3)

The Clearing House releases Collateral in respect of initial and contingent variation margin for successfully completed deliveries.

(e) German Government Bond (Schatz)

The following abbreviations are used in these procedures:

- DVP means delivery versus payment;
- RVP means receipt versus payment;

FCM Procedures FCM Listed Interest Rates

(iv) Delivery Timetable

DAY	TIME	TIME	ACTION	
	LONDON	CET*	SELLERS	BUYERS
Last	11:30	12:30	Trading ceases	Trading ceases
trading day (LTD)	12:00	13:00	FSP established	FSP established
	17:00	18:00	Synαpse Position Keeping deadline	Synαpse Position Keeping deadline
			Sellers submit Sellers Delivery Notice	
	17:30	18:30	The Clearing House performs delivery allocation	The Clearing House performs delivery allocation
	18:00	19:00	The Clearing House makes the Account Sales and Delivery Instructions Report available	The Clearing House makes the Invoices and Delivery Instructions Report available
S - 1 (LTD + 1	10:00	11:00	Sellers submit DVP instructions to their custodian bank	Buyers submit RVP instructions to their custodian bank
	14:00	15:00	Sellers match the Clearing House instruction entered into delivery centre	Buyers match the Clearing House instruction entered into delivery centre
S (LTD + 2)	Following standard delivery cycles	Following standard delivery cycles	The Clearing House receives confirmation of delivery	The Clearing House receives confirmation of delivery
S + 1 (LTD + 3)			The Clearing House releases Collateral in respect of initial and variation contingent margin	The Clearing House releases Collateral in respect of initial and variationcontingent margin

(E) S Settlement Day (LTD + 2)

By 08:00 hours Central European time

The Seller's delivery system or agent shall have transferred Bonds to the Clearing House's account at the relevant delivery system, against payment. The Clearing House shall have transferred Bonds to the Buyer's account at the relevant delivery system against payment.

During Euroclear/Clearstream Luxemburg Overnight Processing

Where the Clearing House is taking delivery of Bonds, via Euroclear or Clearstream Luxemburg, and a Seller fails to deliver Deliverable Bonds to the Clearing House in the overnight processing cycle of Euroclear or Clearstream Luxemburg, the Clearing House will invoke automatic borrowing procedures, subject to supply.

All costs arising as a result of failure to deliver to the Clearing House in the Euroclear/ Clearstream Luxemburg overnight processing cycle will be passed to the defaulting Seller.

During Clearstream Frankfurt standard cycle

Where the Clearing House is taking delivery of Bonds via one of its Clearstream Frankfurt agents, and a Seller fails to deliver to the Clearing House Deliverable Bonds in the standard cycle, the Clearing House will attempt to borrow stock.

All costs arising as a result of failure to deliver to the Clearing House (in the standard cycle) will be passed to the defaulting Seller.

(F) S+1 The first Frankfurt working day immediately following Settlement Day (LTD + 3)

The Clearing House releases Collateral in respect of initial and contingent variation—margin for successfully completed deliveries.

3. FINANCIAL TRANSACTIONS

3.1 Accounts

3.1.1 *Overview*

FCM Clearing Member accounts have financial accounts associated with them. These are, *inter alia*, used to record cash balances and securities Collateral

Refer to Sections 2.1.6, 2.2.6 and 2.3.4 of these FCM Procedures for a full description of financial accounts.

The Clearing House and FCM Clearing Members are permitted to physically commingle the Collateral relating to Swap Products and to physically commingle the Collateral relating to Futures Products. However, Collateral relating to Swap Products and Collateral relating to Futures Products must be segregated (both physically and in bookkeeping accounts) from one another in accordance with the CEA and CFTC Regulations.

3.1.2 Margin Account Postings

Transactions posted to a Margin account include but are not limited to:

- (a) PPS calls and pays;
- (b) option premiums;
- (c) prompt day delivery amounts;
- (d) interest and accommodation charges;
- (e) Clearing House fees, charges and rebates;
- (f) exchange fees, levies and rebates;
- (g) amounts credited or debited in respect of <u>vV</u>ariation <u>marginSettlement</u>, <u>pPrice aAlignment interest, NPVAmount</u> and coupons;
- (h) cash settlement; and
- (i) settlement differences.

Details of collateral balances, valuations and instructions are also available using the CMS.

3.1.3 *Ledgers*

Each Margin account may comprise one or more ledgers, including:

(a) non-cover ledger (which is used to record (i) Coupons received on securities held as Collateral, (ii) NPV Variation Settlement and coupon payments relating to FCM SwapClear Contracts which are forward rate

agreements, (iii) fees, charges, levies and rebates, and (iv) interest on cash balances and Price Alignment Amount); and

(b) cover ledger (which is used to record all other items).

Liabilities arising from trading activity are recorded against the relevant Margin account only.

3.1.4 Financial Transaction Reporting

Banking reports are generated each day and provide members with data relating to but not limited to: liabilities by market, cash balances, non-cash balances, cash posting and interest rates.

All reports are available via the Member Reporting Web Site (Member Live site) and can be downloaded via the user interface or directly to Member back-office systems via an SFTP connection.

Details of valuations, cover instructions and cash and non-cash balances are available through the Clearing Management System.

A "Banking Reports Reference Pack" can be requested from the LCH Client Training Team. This contains definitions and examples of each of the available reports.

Details of cover balances, valuations and instructions are also available using the on-line Collateral Management System (CMS).

3.2 Protected Payments System (PPS)

The Clearing House operates a direct debit system, known as the Protected Payments System (PPS), for the transfer of funds to and from FCM Clearing Members. PPS is a recognized interbank payments system overseen by the Bank of England.

PPS is operated in both London ("UK PPS") and in the United States (where it is known as "US PPS"). In this Section, a day on which PPS is open is referred to as a "working day".

FCM Clearing Members should note that the PPS (both in London and in the US) is a system for facilitating payment to the Clearing House of moneys due from FCM Clearing Members to the Clearing House and vice versa. The giving of a commitment by a participating Bank through PPS to make any payment, and the receipt of that commitment by the Clearing House is not to be regarded as satisfaction of any payment due to the Clearing House.

Each FCM Clearing Member remains fully responsible for the payment to the Clearing House of all moneys due to the Clearing House as required, *inter alia*, by the FCM Clearing Membership Agreement, clearing extension documentation and the applicable provisions of the FCM Rulebook. Payment is only completed when the funds have been credited for value to the relevant Clearing House bank account, and any time

permitted by the relevant payment settlement system for the recall of any such payment has expired.

3.2.1 **PPS Mandates**

(a) Introduction

An FCM Clearing Member is required to maintain a PPS bank account(s) in the currency or currencies in which it makes Contributions, and for each currency in which it incurs settlements, at one or more of the bank branches participating in the PPS system in London. Different banks may be used for different currencies.

Each FCM Clearing Member is required to maintain at least one US dollar PPS account with at least one of the US PPS banks (please refer to the following link for details):

www.lch.com/risk_management/ltd/pps/

FCM Clearing Members are responsible at all times for ensuring that their PPS bank accounts have sufficient funds or credit lines to be able to meet margin calls from the Clearing House and other obligations due to the Clearing House.

Any bank charges connected with the holding of any PPS bank accounts or related to any activity on that account must be paid by the FCM Clearing Member holding the relevant account PPS mandates.

The GBP non-segregated PPS account will, *inter alia*, be used to process Contributions for all services other than the ForexClear Service. For ForexClear Service, the USD non-segregated PPS account is used.

Where applicable, all PPS accounts that hold FCM Client Funds must be segregated in accordance with the FCM Regulations and the applicable provisions of the CEA and CFTC Regulations, including but not limited to Part 1, Part 22 and Part 190 of such regulations. Furthermore, PPS accounts that contain FCM Client Funds held with respect to Futures/Options Contracts may not contain FCM Client Funds held with respect to Cleared Swaps, unless permitted under the CEA or CFTC Regulations.

Each FCM Clearing Member is required to complete a standard form UK PPS Mandate and/or US PPS Mandate (copies are available from treasury.ops.uk@lchclearnet.com) for each bank branch at which they wish to operate an account before clearing can commence. The original of the mandate must be signed by a person with the appropriate authority within the FCM Clearing Member institution and then forwarded to the relevant bank. A copy must also be forwarded at the same time to the Clearing House Membership Department.

(i) Use of UK PPS and US PPS

These FCM Procedures indicate which part of the PPS system will be used in the normal course of events for making PPS calls. Generally UK PPS will be used for Morning PPS calls (including Contributions to the default fund), remitting surplus cash balances to an FCM Clearing Member, and for making intra-day margin calls up to 16:00 London time. However FCM Clearing Members should be aware that the Clearing House reserves the right to direct a Morning PPS call or intra-day margin calls before 16:00 London time to an FCM Clearing Member's US PPS account in exceptional circumstances (an "Exceptional PPS Call"). The Clearing House will use all reasonable commercial efforts to notify the FCM Clearing Member in advance of issuing any such Exceptional PPS Call.

(j) Contingency Payment Arrangements

FCM Clearing Members are required to have contingency payment arrangements in place to ensure that they can continue to meet their margin, Variation Settlement, PAA and other obligations in the event of failure of their nominated PPS bank. During the application process, the Clearing House will require the applicant to provide evidence of these arrangements and will test these prior to the applicant becoming an FCM Clearing Member. The FCM Clearing Member will be required to provide evidence of their contingency payment arrangements on an ongoing basis at the Clearing House's request.

(k) Recovery from Insolvent PPS Banks

In the event that payment is not completed by the relevant PPS bank, due to insolvency rather than technical failure, and the affected FCM Clearing Member(s) make alternative payments, should the Clearing House make a recovery from the estate of the PPS bank, it will credit such recovery, net of costs, to the accounts of the affected FCM Clearing Members in proportion to the amount of the original missed payment.

3.3 Acceptable Forms Of Cover

The Clearing House accepts certain types of securities and cash in the Clearing House's prescribed form as Collateral against liabilities of the relevant FCM Clearing Member.

Please refer to the following link for further details:

http://www.lch.com/risk management /ltd/acceptable collateral.asp

The Clearing House may vary, at its discretion, the standard requirements and valuation procedures set out in this Section, either generally or in a particular case, without giving prior written notice to FCM Clearing Members. Further, the Clearing

FCM Clearing Members may make the following choices:

- (i) whether to have cash Collateral applied before or after non-cash Collateral;
- (ii) whether to apply collateral to liabilities in a different currency; and
- (iii) whether to apply cash to liabilities in a different currency.

3.4.2 Cash currency preference

FCM Clearing Members may nominate the sequence of cash Collateral distribution.

In the absence of a nominated sequence of currency preferences, an FCM Clearing Member's liabilities will be covered by cash in the same currency as the liability. This means that a GBP liability will be covered in GBP cash, a EUR liability will be covered in EUR cash and so forth. Any further liabilities in the relevant currency will be covered by cash called via PPS.

FCM Clearing Members may define their own sequence of cash currency utilization for each mnemonic and each account type (i.e. House or Client). The sequence does not have to be on a like for like basis and an FCM Clearing Member may choose any eligible currency to cover its liability (for example, a GBP liability can be covered in EUR cash).

Any changes to an FCM Clearing Member's nominated currency sequence, or a request to excess cash currency balances in a particular currency, should be notified to the Clearing House by providing a minimum of two business days' notice.

3.4.3 Record of cover provided

Charges and interest shall be calculated in accordance with the information published on the website of the Clearing House.

3.4.4 Use of a Defaulter's cover

Post-default the Clearing House is entitled to realize and/or apply a Defaulter's cover in whatever order it deems appropriate.

3.5 Interest, PAA and Accommodation Charge Structure

3.5.1 Cash Balance Interest Rate

The Clearing House applies interest to FCM Clearing Member's cleared cash balances. The following rates are applied:

(a) LDR – London Deposit Rate – the rate at which the Clearing House will pay or charge interest on credit cash balances (excluding Contributions). The LDR calculation methodology utilizes published

market rates minus a spread. The current spread rates are published on the LCH website at the following link: http://www.lch.com/fees/ltd/custody_services.asp;

- (b) CDR Client Deposit Rate the rate at which the Clearing House will pay or charge interest on credit cash balances on Client financial accounts. The CDR calculation methodology utilizes published market rates minus a spread. The current spread rates are published on the LCH website at the following link: http://www.lch.com/fees/ltd/custody_services.asp; and
- (c) Default Fund Rate.

Rates are available from the Member Reporting Website.

The Clearing House reserves the right to alter the basis of calculating each above listed interest rates. Any alteration will be effective on the date notified.

Where the Clearing House provides FCM Clearing Members with at least three days written notice (which may be way of member circular), the Clearing House may increase or decrease the LDR by up to 10bps. The foregoing shall not apply in the event of extreme market conditions, during which the Clearing House may freely and without notice increase or decrease the LDR for up to five consecutive Business Days.

Where the Clearing House provides FCM Clearing Members with two weeks' written notice (which may be way of member circular), the Clearing House may increase or decrease the CDR. In the event of extreme market conditions, the Clearing House may freely and without notice increase or decrease the CDR for up to five consecutive Business Days.

3.5.2 Price Alignment Interest Amount (PAIA) Rate

To minimize the impact of daily cash Variation MarginSettlement payments on the pricing of interest rate swaps and inflation swaps, the Clearing House will charge interest on cumulative Variation Margin received by the FCM Clearing Member and pay interest on cumulative Variation Margin paid in by the FCM Clearing Member or pay PAA in respect of these instruments. In a negative interest rate environment where PAI rates are negative the Clearing House will pay interest on cumulative amounts received by an FCM Clearing Member in respect of variation margin obligations and charge interest on cumulative amounts paid to an FCM Clearing Member. This interest element is known as price alignment interest.

The calculation of PAIA shall use the interestPAA rates specified as below. The amount of PAIA for each currency shall be calculated as:

The amount of NPV Cumulative Variation Settlement in such currency from the previous Business Day's close of business multiplied by:

- (a) The relevant interest PAA rate in effect for that day; divided by
- (b) 360; or in the case of AUD, CAD, GBP, HKD, JPY, NZD, PLN, SGD and ZAR, 365.

In the case of the currencies marked below with an asterisk, the Clearing House, as provided in FCM Regulation 36(b) (Alteration of FCM Regulations and the FCM Procedures), specifies that it will not change the PAIA rate without the consent of all SwapClear Clearing Members and applicable FCM Clearing Members holding open contracts in such currencies.

Currency	PA <mark>IA</mark> Rate				
USD*	The rate used shall be the Effective Federal Funds rate, the rate published by the Board of Governors of the Federal Reserve System as such rate appears on Reuters page "FEDFUNDS1" or Telerate 120 or on any successor page(s) thereto.				
EUR*	The rate used shall be the EONIA rate, the rate published by the European Banking Federation and ACI – The Financial Market Association as such rate appears on Reuters page "EONIA" or Telerate 247 or on any successor page(s) thereto.				
GBP*	The rate used shall be the SONIA rate, the rate published by the Wholesale Markets Broker Association as such rate appears on Reuters page "SONIA" or on any successor page(s) thereto.				
JPY*	The rate used shall be the Mutan call rate, the rate published by the Bank of Japan as such rate appears on Reuters page "TONAR" or on any successor page(s) thereto.				
CHF*	The rate used shall be the SARON rate, the rate published by SIX Swiss Exchange Ltd. as such rate appears on Reuters page "SARON.S" or any successor page(s) thereto.				
AUD	The rate used shall be the "AONIA" rate, the rate published by the Reserve Bank of Australia – as such rate appears on Reuters page "RBA30" or any successor page(s) thereto.				
CAD	The rate used shall be the "CORRA" rate, the rate published by the Bank of Canada website – as such rate appears on Reuters page "CORRA" or any successor page(s) thereto.				
DKK	The rate used shall be the "DKKOIS" rate, the rate published by the Danish Central Bank – as such rate appears on Reuters page "DKNA14" or any successor page(s) thereto.				

Currency	PA <mark>IA Rate</mark>				
HKD	The rate used shall be the "HONIX" rate, the rate published by the Hong Kong Brokers Association – as such rate appears on Reuters page "HONIX" or any successor page(s) thereto.				
NZD	The rate used shall be the "NZIONA" rate, the rate published by the Reserve bank of New Zealand – as such rate appears on Reuters page "RBNZ02" or any successor page(s) thereto.				
PLN	The rate used shall be the "POLONIA" rate, the rate published by the National Bank of Poland – as such rate appears on Reuters page "NBPS" or any successor page(s) thereto.				
SEK	The rate used shall be the "SIOR" rate, the rate published by the OMX Exchange – as such rate appears on Reuters page "SIOR" or any successor page(s) thereto.				
ZAR	The rate used shall be the SFX ZAR OND rate, the rate published by SAFEX JIBAR – as such rate appears on Reuters page "SFXROD" or any successor page(s) thereto.				
CZK	The rate used shall be the "CZEONIA" rate, the rate published by the Czech National Bank – as such rate appears on Reuters page "CZEONIA" or any successor page(s) thereto.				
HUF	The rate used shall be the "HUFONIA" rate, the rate published by the National Bank of Hungary – as such rate appears on Reuters page "HUFONIA" or any successor page(s) thereto.				
SGD	The rate used shall be the "SONAR" rate, the rate published by the Association of Banks in Singapore – as such rate appears on Reuters page "ABSIRFIX01" or any successor page(s) thereto.				
NOK	The rate used shall be the NOK sight deposit rate, the rate published by Norges Bank – as such rate appears on Reuters page "NOINTR=ECI" or any successor page(s) thereto				

For currency NOK, PAIA is calculated using an appropriate overnight deposit rate for the currency.

Notwithstanding the foregoing, in the event the interest rate source used for the calculation of PAIA is unavailable, as determined in the Clearing House's sole discretion, the Clearing House may use an alternative interest rate without the consent of such SwapClear Clearing Members and/or FCM Clearing Members.

3.5.3 Interest Structure

Application of Collateral		Type of Collateral				
	Credit Variation Margin	Securities	Cash	Foreign Cash	Forward Cash	
Initial & Variation margin after offset	No charge or payment	Accommod ation Charge Payable	Pay relevant rate	pay relevant rate of Collateral currency	No charge or payment	
Excess or Surplus	No charge or payment	No charge or payment	Pay relevant rate	Pay relevant rate	No charge or payment	

Note:

- 1 "Foreign Cash" means cash in a currency other than that of the liability.
- 2 "Forward Cash" means cash which has been credited to an account for later value (e.g., an amount called via PPS for next-day value).
- This Section 3.5.3 only applies to Proprietary Accounts of FCM Clearing Members.
- 4 Applicable Accommodation Charges are available on the Clearing House's website.

3.5.4 Payment of Interest and Charges

Interest, <u>PAA</u> and accommodation charges are charged monthly, from the first calendar day to the last calendar day of the current month. Interest and accommodation charges (other than PAI) are calculated on a daily basis and the resulting monthly total is posted to FCM Clearing Members' cover accounts for value at close of business on the second business day of the following month. A VAT invoice is also issued on the third business day of each month detailing the interest, <u>PAA</u> and accommodation charges applicable for the previous month. Separate invoices are issued for each currency which can be found on the Member Reporting Website.

VAT is charged where relevant, dependent on contract and accommodation charges, at current rates. On foreign currency amounts VAT is charged in sterling on the converted value of any relevant charges. The sterling Collateral account shows separate postings for sterling VAT amounts arising from foreign currency charges.

The net invoice value for each currency is posted to the relevant Collateral account for value on the second working day of the month succeeding the month in which the charges arose.

The invoice provides detail in respect of:

- (a) interest due to be credited or debited; and
- (b) PAA; and
- (c) (b)-accommodation charges;

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return of FCM Buffer or Unallocated Excess, and any other information reasonably requested by the Clearing House. The end of day report delivered to the FCM Clearing Member by the Clearing House shall constitute conclusive evidence of the amount of any FCM Buffer or Unallocated Excess returned to such FCM Clearing Member during that day, unless the Clearing House determines such report contained an error and subsequently delivers an amended report or other notice to the FCM Clearing Member in respect of such amounts.

FCM Regulation 15 (*Margining of Swap Product Client Accounts*) contains additional provisions relating to FCM Buffer, Encumbered FCM Buffer and Unallocated Excess.

Upon written request from an FCM Clearing Member (including via email), the Clearing House will apply Margin attributable to (A) an FCM Clearing Unallocated Excess Sub-Account and/or (B) all of an FCM Clearing Member's FCM Client Sub-Accounts to its FCM Buffer Sub-Account. In requesting such transfer, the FCM Clearing Member shall be deemed to represent and warrant that such reapplication of Margin: (1) is in accordance with applicable law and regulation; and (2) has been requested by an individual that is appropriately authorized to make the request. Any request from an FCM Clearing Member to reapply Margin must: (i) in the case of a request for reapplication pursuant to sub-clause (A) above, contain the specific details of the amount of Margin to be reapplied; (ii) only request the reapplication where such reapplication reflects the true characterization of the Margin held by the Clearing House (in particular, the reapplication of Margin pursuant to this paragraph should only be requested where the relevant Margin is the property of the FCM Clearing Member); (iii) in the case of a request for reapplication of Margin pursuant to sub-clause (B) above, request the reapplication of Margin attributed to all of the relevant FCM Clearing Member's FCM Client Sub-Accounts since the start of that given Business Day; and (iv) include such other information that the Clearing House may require. The reapplication of Margin shall be effected by the Clearing House in its sole and absolute discretion and in accordance with predefined parameters, and shall become effective from such time that the reapplication is reflected in the Clearing House's books and records.

4.9.2 Use of FCM Buffer as Variation Margin Settlement

Notwithstanding anything to the contrary herein, an FCM Clearing Member may elect to have Eligible FCM Buffer that the Clearing House holds at the end of each Business Day applied to its obligation to pay USD denominated Variation MarginSettlement Payment obligations only with respect to its C account. In the event of such election in accordance with this Section 4.9.2, the Clearing House may apply on each Business Day the full amount of Eligible FCM Buffer to the Variation Margin due from the relevant FCM Clearing Member's . Any amount of Variation Marginobligation to pay such amounts. Any Settlement Payment that remains outstandingowing following such application shall remain payable by the FCM Clearing Member in accordance with the FCM Rulebook. Upon the application by the Clearing Member of

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Eligible FCM Buffer in accordance with this Section 4.9.2, the relevant FCM Clearing Member shall be deemed to acknowledge that Eligible FCM Buffer so applied by the Clearing House no longer constitutes FCM Buffer and the Clearing House shall be deemed to acknowledge that any USD denominated Variation MarginSettlement Payment due to it with respect to the relevant FCM Clearing Member's C account shall be deemed to be reduced by an amount equal to Eligible FCM Buffer so applied.

An FCM Clearing Member that wishes to make an election to have Eligible FCM Buffer applied in accordance with this Section 4.9.2 or to cancel a previous election to do so should contact the Clearing House's Client Services team (ratesclientservices@lch.com) and provide any other information reasonably requested by the Clearing House. Elections and cancellations in accordance with this Section 4.9.2 become effective upon the FCM Clearing Member receiving confirmation in writing of the election or cancellation from the Clearing House. Elections and cancellations received by the Clearing House (a) prior to 16:00 London time on a Business Day are typically processed that Business Day and (b) after 16:00 London time on a Business Day are typically processed the following Business Day.

Through making an election or cancellation in accordance with this Section 4.9.2, an FCM Clearing Member is deemed to represent and warrant that (a) it is not a Defaulter and (b) the individual making the request on behalf of the relevant FCM Clearing Member is appropriately authorized to do so.

For the purposes of this Section 4.9.2 and with respect to an FCM Clearing Member, "Eligible FCM Buffer" means, on the relevant Business Day, the lesser of: (i) its FCM Buffer that is not Encumbered FCM Buffer at the end of such Business Day; and (ii) the total USD cash held by the Clearing House in the LCH Swaps Client Segregated Depository Account at the end of such Business Day.

For the purposes of this Section 4.9, references to FCM Clearing Member shall mean an FCM Clearing Member who provides FCM SwapClear Clearing Services.

4.10 Collateral Value Reports

In accordance with FCM Regulation 15(d) (*Margining of Swap Product Client Accounts*), an FCM Clearing Member that has elected to adopt the LSOC With Excess Model is required to provide the Clearing House with an eligible CVR (Collateral Value Report as defined in the FCM Regulations) at least once per Business Day.

4.10.1 Contents of the Collateral Value Report

The CVR should contain details of the following:

(a) **FCM Client Sub-Account Balance**: The value of Margin delivered for and on behalf of each FCM Client and its respective FCM Client Sub-Account.



Appendix IVDefault Rules



LCH LIMITED DEFAULT RULES

- Subject to Delivery Notice) or a delivery contract (or a Physically-Settled FCM Exchange Contract);
- (h) the Clearing Member fails to pay any sum due and payable, or is otherwise in default under the terms of any agreement or threatens to suspend payment or to default under the terms of any agreement;
- (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 4546(h) and 4849(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 reestablish 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

- 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 MarginSettlement on a gross basis to each individual FCM Client Sub-Account.
- (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:

11.

- (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.

(xi) eleventh, by recourse to the Listed Interest Rates Unfunded Contributions of each Listed Interest Rates Clearing Member who is not a Joint Rates Service Clearing Member and the total value of the Listed Interest Rates Unfunded Contributions that would be callable but have not been called by the Clearing House from the relevant Listed Interest Rates Clearing Members in respect of the relevant Default in accordance with Rule L5 of Part B to the Rates Service Supplement.

For the purposes of this paragraph 2.9, all references to the risk associated with the Listed Interest Rates Contracts of a Non-Defaulting SCM denominated in a particular currency, shall be references to such risk as determined by the Clearing House in its sole discretion on the basis of Worst Case Loss.

3. Default Management in respect of Rates Service Client Clearing Business and FCM SwapClear Client Business

- 3.1 The Rates Service DMP in respect of any contract which is a Rates Service Contract in respect of Rates Service Client Clearing Business shall involve the stages described in the Client Clearing Annex (which such stages, for the avoidance of doubt, will result in a Rates Service Contract in respect of Rates Service Client Clearing Business being dealt with in accordance with Rule 0 above in the event that it cannot be ported by the Clearing House).
- 3.2 The Rates Service DMP in respect of any contract which is an FCM SwapClear Contract forming part of a Defaulter's FCM Rates Service shall be conducted in accordance with FCM Regulation 13(e) (*Transfer*). The provisions of Default Rule 10 shall also apply.

4. Transfer of Cash Flows and Registration of Positions

- 4.1 Following the disposal of an OTC Auction Portfolio or a Basis Portfolio by way of Auction (and notwithstanding that other OTC Auction Portfolios and/or Basis Portfolios of the Defaulting SCM may not yet have been auctioned) the Clearing House, will, with the co-operation of the Non-Defaulting SCMs, transfer to the Non-Defaulting SCM whose bid won the relevant OTC Auction Portfolio or Basis Portfolio (as the case may be) the rights and obligations, from the Defaulting SCM, arising out of the positions which that Non-Defaulting SCM has successfully bid for under the Rates Service Default Management Process. Such transfer may take place by way of registration of new positions with the Clearing House in the name of the relevant Non-Defaulting SCM, or novation of rights and obligations to the relevant Non-Defaulting SCM. All such registrations shall be made in a way that recognises the Collateral paid or received in respect of variation margin and any amounts paid or received in respect of settlement in relation to the Rates Service Contracts of the Defaulting SCM representing such new positions.
- 4.2 In order to effect the transfer of positions, the Clearing House shall prescribe such procedures and timetable as it considers reasonably appropriate in the circumstances. SCMs will be required to exercise best endeavours to comply with such requirements as may be established by the Clearing House, after consultation with the Rates Service DMG, to effect the transfer of positions, including but not limited to the payment of any sums due as a result of the winning bid and the provision of Collateral in an

ForexClear Determination Date prior to the date when the relevant Default occurred;

- (c) the Clearing House may, by the delivery of one or more further ForexClear Unfunded Contribution Notices, require each Non-Defaulting FXCCM to pay one or more further ForexClear Unfunded Contributions in respect of the same Default, **provided that** the total value of the ForexClear Unfunded Contributions payable by an individual FXCCM in respect of a particular Default (determined in accordance with paragraph (b) above) may not exceed the value of the ForexClear Contribution of such FXCCM as at the last ForexClear Determination Date prior to the date when the relevant Default occurred; and
- (d) following a Default in respect of which ForexClear Unfunded Contributions were paid (the "First Default"), the Clearing House may require the payment of further ForexClear Unfunded Contributions in respect of subsequent Defaults (which, for the avoidance of doubt, can never be a First Default), provided that ForexClear Unfunded Contributions will not be payable in respect of any more than three Defaults in any six month period (commencing on the date of delivery of the first ForexClear Unfunded Contribution Notice in respect of the First Default).

FXCCMs will be required to deposit the full amount of their ForexClear Unfunded Contributions (without exercising any rights of set-off or counterclaim) with the Clearing House on the business day following the receipt of a ForexClear Unfunded Contribution Notice.

For the avoidance of doubt, references to "FXCCMs" for the purposes of this Rule F8 include any FXCCM (other than a Defaulting FXCCM) who is: (i) a Retiring Member but whose status as a Clearing Member has not yet been terminated; and (ii) a Resigning Member whose resignation from the ForexClear Service is not yet effective.

F9. ForexClear Loss Distribution Process

Where, after a Default, the Clearing House determines that the ForexClear Excess Loss resulting from the Default will exceed the amounts to be applied to it under Rules 15(a) to 15(h) of the Default Rules, the Clearing House may implement the process (the "ForexClear Loss Distribution Process") described in this Rule F9.

(a) For the purposes of this Rule F9 and Rule F11, the following definitions will apply:

"Actual Base Currency Gains, Losses and Realised Cash Flows by Cash Payment" means, in respect of each Cash Payment and any business day, the sum of the Pre Haircut Base Currency Gains, Losses and Realised Cash Flows by Cash Payment and any Cash Gainer Base Currency Adjustment to Cash Payment or Cash Loser Base Currency Adjustment to Cash Payment.

"Auction Portfolio" has the meaning assigned to it in the ForexClear DMP Annex.

- "Available Resources" means, in respect of any Loss Distribution Period, the amounts available to the Clearing House for application in meeting any loss suffered or incurred by the Clearing House in accordance with Rules 15(a) to 15(h) of the Default Rules as at the relevant Last Call Prior to Default.
- "Cash Gain" means, in respect of any Cash Gainer and any Loss Distribution Day, the amount of positive Cumulative Pre Haircut Base Currency Gains Losses and Realised Cash Flows in respect of such Cash Gainer in respect of such Loss Distribution Day.
- "Cash Gainer" means, in respect of any Loss Distribution Day, each Margin Account in respect of which the value of the Cumulative Pre Haircut Base Currency Gains Losses and Realised Cash Flows on such Loss Distribution Day is greater than zero.
- "Cash Gainer Payment Currency Adjustment to Cash Payment" has the meaning set out in paragraph (b)(i) of this Rule F9.
- "Cash Loser" means, in respect of any Loss Distribution Day, each Margin Account in respect of which the value of the Cumulative Pre Haircut Base Currency Gains Losses and Realised Cash Flows on such Loss Distribution Day is equal to or less than zero.
- "Cash Loser Base Currency Adjustment to Cash Payment" has the meaning set out in paragraph (b)(ii) of this Rule F9.
- "Cash Loser Payment Currency Adjustment to Cash Payment" has the meaning set out in paragraph (b)(ii) of this Rule F9.
- "Cash Payment" means, in respect of any business day, the aggregated amount 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) in respect of a Cash Payment Type in a Cash Payment Currency on such business day.
- "Cash Payment Currency" means each of the currencies in which payments made between the Clearing House and an FXCCM may be denominated.
- "Cash Payment Type" means each of the Price Alignment Interest (as defined in the ForexClear Procedures), <u>Price Alignment Amount</u>, consideration (fee) payments, <u>Variation Settlement</u> and cash Collateral in respect of the variation margin obligations payable in respect of a Margin Account of a Non-Defaulting FXCCM.
- "Cumulative Actual Base Currency Gains, Losses and Realised Cash Flows" means in respect of each Margin Account of each Non-Defaulting FXCCM and any business day, the sum of the Cumulative Actual Base Currency Gains, Losses and Realised Cash Flows by Cash Payments payable on such Margin Account.

"Cumulative Actual Base Currency Gains, Losses and Realised Cash Flows by Cash Payment" means, in respect of each Cash Payment and any business day, the aggregate amount, if any, 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) in respect of Actual Base Currency Gains, Losses and Realised Cash Flows by Cash Payment from but excluding the relevant Last Call Prior to Default to and including such business day.

"Cumulative LCH Transfer Cost" means, on any business day during any Loss Distribution Period, the sum of any LCH Transfer Cost for each day from but excluding the relevant Last Call Prior to Default to and including such business day.

"Cumulative Pre Haircut Base Currency Gains Losses and Realised Cash Flows" means, in respect of each Margin Account of each Non-Defaulting FXCCM and any business day, the sum of the Cumulative Pre Haircut Base Currency Gains Losses and Realised Cash Flows by Cash Payments payable on such Margin Account.

"Cumulative 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 sum of the Pre Haircut Base Currency Gains, Losses and Realised Cash Flows by Cash Payment for such Cash Payment for each day from but excluding the relevant Last Call Prior to Default to and including such business day.

"Distribution Haircut" or "DH" means, on each Loss Distribution Day, the fraction determined by the Clearing House in accordance with the following formula:

DH(t) = LUL(t) / TCG(t)

where:

"LUL" means the LCH Uncovered Loss; and

"TCG" means the Total Cash Gains.

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

"Last Call Prior to Default" means the most recent business day prior to the day of the relevant Default on which transfers of Collateral and/or other

<u>payments</u> required to be made by Non-Defaulting FXCCMs to the Clearing House were made in full.

"LCH Transfer Cost" means the cost (converted, where applicable, into USD at a rate of exchange determined by the Clearing House in its sole discretion) to the Clearing House of transferring the rights and obligations arising out of the Auction Portfolios of a Defaulting FXCCM to those FXCCMs who have successfully bid for such Auction Portfolios in Auctions.

"LCH Uncovered Loss" means, in respect of the Clearing House on any business day in any Loss Distribution Period, the amount calculated in accordance with the following formula:

LCH UncoveredLoss(t) = Max(0, (TCPH(t) + CLC(t) - TAR))

where:

"TCPH" means the Total Cumulative Pre Haircut Base Currency Gains losses and Realised Cash Flows;

"CLC" means the Cumulative LCH Transfer Cost;

"TAR" means the Total Available Resources; and

the LCH Uncovered Loss as at the Last Call Prior to Default shall be zero.

"Loss Distribution Cut-Off Date" means, with respect to a Loss Distribution Period, the day falling ten (10) business days from the date of commencement of the ForexClear Loss Distribution Process or such earlier or later business day as determined pursuant to paragraph (d) of this Rule F9.

"Loss Distribution Day" means any business day in a Loss Distribution Period on which the Clearing House, in consultation with the ForexClear DMG, prior to calling for Collateral in respect of margin or other payment in respect of settlement on such business day, determines that the LCH Uncovered Loss for that business day is greater than zero.

"Loss Distribution Period" means the period from, but excluding, the day on which a Default occurs with respect to an FXCCM to (but excluding) the earlier of: (i) the business day on which (a) the rights and obligations arising out of the 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

- House as if they were amounts paid in respect of the ForexClear Contributions by those FXCCMs from whom ForexClear Voluntary Payments were accepted.
- F11. Where, following the process for inviting ForexClear Voluntary Payments in accordance with Rule F10, the Clearing House makes a determination (an "Insufficient Resources Determination") that it is clear that the Clearing House does not have sufficient resources to meet its obligations and liabilities arising in respect of those ForexClear Contracts to which it is party with Non-Defaulting FXCCMs, the following provisions shall have effect:
 - (a) All outstanding ForexClear Contracts shall be closed out as of the clearing day following the date the Insufficient Resources Determination was made and any further obligations to make any payments under or in respect of such ForexClear Contracts shall cease. The closing prices used shall be mid prices calculated by the Clearing House in accordance with the methodology used by it to carry out end of day margin runs in respect of the outstanding ForexClear Contracts. Where such data is not available to the Clearing House, the closing price shall be the last price used by the Clearing House to calculate the variation margin or Variation Settlement requirement for the position to be closed out.
 - (b) On the basis of the close out values established for each outstanding ForexClear Contract, an account shall be taken (as at the time of close out) of what is due in respect of each FXCCM, from that FXCCM to the Clearing House and from the Clearing House to that FXCCM, as well as all other amounts owing under or in respect of ForexClear Contracts and any other amounts that may be due in respect of the ForexClear Service (including for these purposes, a proportionate share of any amounts owed generally to or from the Clearing House), and the sums due from the FXCCM shall be set off against the sums due from the Clearing House and only the balance of the account shall be payable. For the avoidance of doubt, amounts in respect of ForexClear Contracts shall include, but shall not be limited to, returns of cash Collateral provided in respect of variation margin associated therewith and the repayment of any Net Cash Gainer Payment Currency Adjustment to Cash Payments made in the ForexClear Default Period to which the Insufficient Resources Determination relates (and in respect of which paragraph 5(e) of Rule F9 shall be specifically disapplied), but shall exclude the repayment of any cash Collateral provided to the Clearing House in respect of initial margin or any outstanding ForexClear Contributions.

To the extent that the aggregate of all of the amounts owed to the Clearing House by FXCCMs plus all of those other resources applicable to the ForexClear Business under Rules 15(a) to 15(h) of the Default Rules that have not been applied towards a ForexClear Excess Loss is less than the aggregate of the amounts owed to FXCCMs by the Clearing House, each amount owed to FXCCMs by the Clearing House shall be reduced *pro rata* the shortfall.

(c) The Clearing House shall determine any amounts due to each FXCCM in respect of the repayment of cash Collateral provided in respect of initial margin obligations and outstanding ForexClear Contributions to be repaid. The claim

CS4. Rates Service Loss Distribution Process

Where, after a Default, the Clearing House determines that the Rates Service Excess Loss resulting from the Default will exceed the amounts to be applied to it under Rules 15(a) to 15(g) of the Default Rules, the Clearing House may implement the process (the "Rates Service Loss Distribution Process") described in this Rule CS4.

- (a) For the purposes of this Rule CS4 and for Rule CS5 the following definitions will apply:
 - "Actual Base Currency Gains, Losses and Realised Cash Flows by Cash Payment" means, in respect of each Cash Payment and any business day, the sum of the Pre Haircut Base Currency Gains, Losses and Realised Cash Flows by Cash Payment and any Cash Gainer Base Currency Adjustment to Cash Payment or Cash Loser Base Currency Adjustment to Cash Payment.
 - "Auction Portfolio" has the meaning assigned to it in the Rates Service DMP Annex.
 - "Available Resources" means, in respect of any Loss Distribution Period, the amounts available to the Clearing House for application in meeting any loss suffered or incurred by the Clearing House in accordance with Rules 15(a) to 15(g) of the Default Rules as at the relevant Last Call Prior to Default.
 - "Cash Gain" means, in respect of any Cash Gainer and any Loss Distribution Day, the amount of positive Cumulative Pre Haircut Base Currency Gains Losses and Realised Cash Flows in respect of such Cash Gainer in respect of such Loss Distribution Day.
 - "Cash Gainer" means, in respect of any Loss Distribution Day, each Margin Account in respect of which the value of the Cumulative Pre Haircut Base Currency Gains Losses and Realised Cash Flows on such Loss Distribution Day is greater than zero.
 - "Cash Gainer Base Currency Adjustment to Cash Payment" has the meaning set out in paragraph (b)(i) of this Rule CS4.
 - "Cash Gainer Payment Currency Adjustment to Cash Payment" has the meaning set out in paragraph (b)(i) of this Rule CS4.
 - "Cash Loser" means, in respect of any Loss Distribution Day, each Margin Account in respect of which the value of the Cumulative Pre Haircut Base Currency Gains Losses and Realised Cash Flows on such Loss Distribution Day is equal to or less than zero.
 - "Cash Loser Base Currency Adjustment to Cash Payment" has the meaning set out in paragraph (b)(ii) of this Rule CS4.
 - "Cash Loser Payment Currency Adjustment to Cash Payment" has the meaning set out in paragraph (b)(ii) of this Rule CS4.

"Cash Payment" means, in respect of any business day, the aggregated amount 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) in respect of a Cash Payment Type in a Cash Payment Currency on such business day.

"Cash Payment Currency" means each of the 17 currencies in which payments made between the Clearing House and an SCM may be denominated.

"Cash Payment Type" means each of (i) the Price Alignment Amount, Price Alignment Interest, coupon payments, consideration (fee) payments and cash Collateral in respect of the variation margin obligations payable in respect of a Margin Account relating to the SwapClear Business of a Non-Defaulting Rates Service Clearing Member; and (ii) consideration (fee) payments, payments under Section 4.1 of the SwapClear STM Terms—and, daily settlement amounts and Variation Settlement payable in respect of a Margin Account relating to the Listed Interest Rates Business of a Non-Defaulting Rates Service Clearing Member.

"Cumulative Actual Base Currency Gains, Losses and Realised Cash Flows" means in respect of each Margin Account of each Non-Defaulting Rates Service Clearing Member and any business day, the sum of the Cumulative Actual Base Currency Gains, Losses and Realised Cash Flows by Cash Payments payable on such Margin Account.

"Cumulative Actual Base Currency Gains, Losses and Realised Cash Flows by Cash Payment" means, in respect of each Cash Payment and any business day, the aggregate amount, if any, 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) in respect of Actual Base Currency Gains, Losses and Realised Cash Flows by Cash Payment from but excluding the relevant Last Call Prior to Default to and including such business day.

"Cumulative LCH Transfer Cost" means, on any business day during any Loss Distribution Period, the sum of any LCH Transfer Cost for each day from but excluding the relevant Last Call Prior to Default to and including such business day.

"Cumulative Pre Haircut Base Currency Gains Losses and Realised Cash Flows" means, in respect of each Margin Account of each Non-Defaulting Rates Service Clearing Member and any business day, the sum of the Cumulative Pre Haircut Base Currency Gains Losses and Realised Cash Flows by Cash Payments payable on such Margin Account.

"Cumulative 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 sum of the Pre Haircut Base Currency Gains, Losses and Realised Cash Flows by Cash Payment for such Cash Payment for each day

House will by notice in writing (a "Rates Service Voluntary Payment Notice"): (i) inform all Non-Defaulting Rates Service Clearing Members that it has insufficient resources and that it is likely to invoke Rule CS5; and (ii) invite each Non-Defaulting Rates Service Clearing Member to make a payment of funds (a "Rates Service Voluntary Payment"), in accordance with Rule 15(h) of the Default Rules, to make up for the relevant shortfall.

Rates Service Voluntary Payments will be made on the following terms:

- (a) no Rates Service Clearing Member shall be obliged to make a Rates Service Voluntary Payment;
- (b) any Rates Service Voluntary Payment will be made by a Rates Service Clearing Member by the close of business on the business day after receipt of the relevant Rates Service Voluntary Payment Notice;
- (c) no Rates Service Voluntary Payment may be withdrawn once made; and
- (d) the Clearing House shall have full discretion as to whether or not to accept a particular Rates Service Voluntary Payment.

Any failure by the Clearing House to deliver a Rates Service Voluntary Payment Notice pursuant to this Rule CS5 will not invalidate any action taken by the Clearing House pursuant to Rule CS5 nor give rise to any liability whatsoever on the part of the Clearing House.

Any Rates Service Voluntary Payments remaining unused at the time of the expiry of the relevant Rates Service Default Period will be accounted for rateably by the Clearing House as if they were amounts paid in respect of the Rates Service Contributions of those Rates Service Clearing Members from which Rates Service Voluntary Payments were accepted.

CS6. Rates Service Closure

Where, following the process for inviting Rates Service Voluntary Payments in accordance with Rule CS5, the Clearing House makes a determination (an "Insufficient Resources Determination") that it is clear that the Clearing House does not have sufficient resources to meet its obligations and liabilities arising in respect of those Rates Service Contracts to which it is party with Non-Defaulting Rates Service Clearing Members, the provisions of this Rule shall have effect.

(a) All outstanding Rates Service Contracts shall be closed out as of the business day following the date of the Insufficient Resources Determination and any further obligations to make any payments under or in respect of such Rates Service Contracts shall cease. The closing prices used shall be prices calculated by the Clearing House in accordance with the methodology used by it to carry out end of day margin runs in respect of the outstanding Rates Service Contracts. Where such data is not available to the Clearing House, the closing price shall be the last price used by the Clearing House to calculate the

- variation margin, <u>Variation Settlement or daily settlement</u> obligation for the position to be closed out.
- On the basis of the close out values established for each outstanding Rates (b) Service Contract, an account shall be taken (as at the time of close out) of what is due in respect of each Rates Service Clearing Member, from that Rates Service Clearing Member to the Clearing House and from the Clearing House to that Member, as well as all other amounts owing under or in respect of such Rates Service Contracts and any other amounts that may be due in respect of the Rates Service (including for these purposes, a proportionate share of any amounts owed generally to or from the Clearing House), and the sums due from the Rates Service Clearing Member shall be set off against the sums due from the Clearing House and only the balance of the account shall be payable. Amounts due in respect of such Rates Service Contracts shall include, but shall not be limited to, returns of cash Collateral provided in respect of variation margin associated therewith and the repayment of any Net Cash Gainer Currency Adjustment to Cash Payments made in the Rates Service Default Period to which the Insufficient Resources Determination relates (and in respect of which Rule CS4(e) shall be specifically disapplied), but shall exclude (i) the repayment of any cash Collateral provided to the Clearing House by a Rates Service Clearing Member in respect of initial margin, (ii) the repayment of any cash Collateral provided to the Clearing House by a Custodial Segregated Client, or (iii) any outstanding Rates Service Contributions.

To the extent that the aggregate of all of the amounts owed to the Clearing House by Rates Service Clearing Members plus all of those other resources applicable to the Rates Service Business under Rules 15(a) to 15(h) of the Default Rules that have not been applied towards an Excess Loss is less than the aggregate of the amounts owed to Rates Service Clearing Members by the Clearing House, each amount owed to Rates Service Clearing Members by the Clearing House shall be reduced *pro rata* the shortfall.

- (c) The Clearing House shall determine any amounts due to each Rates Service Clearing Member in respect of the repayment of cash Collateral provided in respect of initial margin obligations and outstanding Contributions to be repaid. The claim of each such Rates Service Clearing Member in respect to the foregoing shall be limited to a *pro* rata share of the assets available to the Clearing House to satisfy those amounts.
- (d) For each Rates Service Clearing Member, the amount due to it or due from it as determined pursuant to (b) above shall be aggregated with its claim determined pursuant to (c) above and only the net sum shall be payable. Where the result of such calculations is that a Rates Service Clearing Member owes an amount to the Clearing House, that Rates Service Clearing Member shall pay that amount to the Clearing House immediately. Where the result of such calculations is that a Rates Service Clearing Member is owed an amount by the Clearing House, the Clearing House shall pay that amount to the Rates Service Clearing Member immediately, subject to (f) below.