Preamble: The AE Rules of Products and Electronic Services, hereinafter referred to as the RoPES, is the third of four legally-binding documents contained in the Quartet. The first is the AE Rules; the second is The AE Clearinghouse Terms, Conditions, and Procedures; the fourth is the OmniGlossary.

The Actuarials Exchange and The AE Clearinghouse reserve the right to make any necessary changes to any document in the Quartet. Notices of these changes shall be published and distributed to Member Firms for review in a numbered and dated official AE Circular.

The dates of the latest amendments shall be listed at the end of the amended paragraph and shall refer to a numbered and dated official AE Circular. Last Amended AE Circular 005, Dec 22, 2004

CHAPTER 1

DAYS AND HOURS OF THE EXCHANGE AND CLEARINGHOUSE

SECTION 1: **SCOPE OF CHAPTER**

This Chapter 1 of these Rules of Products and Electronic Services is limited in application to the days and hours of trading and clearing, of The Actuarials Exchange and The AE Clearinghouse. Any rules for exchange days and hours that are not specifically covered in this chapter shall be determined by the AE Rules. Any terms, conditions, and procedures for clearing days and hours that are not specifically covered in this chapter shall be determined by The AE Clearinghouse Terms, Conditions, and Procedures.

SECTION 2: **BUSINESS DAYS AT THE EXCHANGE AND CLEARINGHOUSE**

(i) **Business Days**

(a) The Actuarials Exchange and The AE Clearinghouse shall be open for business on weekdays that are not observations of any enumerated American holiday, as listed in (ii)(a) below. Last Amended AE Circular 005, Dec 22, 2004

(b) The Actuarials Exchange shall not be open for order posting, order cancellation, or trading, when The AE Clearinghouse is not open for business.

(c) The AE Clearinghouse shall not be open for clearing when the Fedwire system is not available, except during an emergency as provided in the AE Rules.

(ii) **Enumerated American Holidays**

(a) The Actuarials Exchange and The AE Clearinghouse shall be closed for business on these following American holidays, as observed by the Federal Reserve Banks of the United States, falling on a weekday: New Year’s Day, Dr. Martin Luther King, Jr. Day, Presidents’ Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day and Christmas Day.

(b) If any of these American holidays falls on a Saturday, The Actuarials Exchange and The AE Clearinghouse shall be closed the previous Friday, unless the Fedwire service of the Federal Reserve Bank of the United States is operating, in which case, The Actuarials Exchange and The AE Clearinghouse shall be open.

(c) If any of these American holidays falls on a Sunday, The Actuarials Exchange and The AE Clearinghouse shall be closed the following Monday, unless the Fedwire service of the Federal Reserve Bank of the United States is operating, in which case, The Actuarials Exchange and The AE Clearinghouse shall be open.

SECTION 3: **BUSINESS HOURS AT THE EXCHANGE AND CLEARINGHOUSE**

(i) **Business Hours at the Exchange**

(a) The Actuarials Exchange shall be open for business every business day from 8am to 11pm LDN, with personnel available at the Help Desk to respond to the Authorized Traders and Authorized Support Persons of Member Firms.

(b) The Actuarials Exchange shall be open for the posting of new orders, for the cancellation of already-posted orders, and for the buying and selling of Contracts, from 8am to 10pm LDN, every business day, unless The AE Clearinghouse is closed, in which case The Actuarials Exchange shall be closed.

(c) The Actuarials Exchange shall be open for trading, from 9am to 9pm LDN, every business day, unless The AE Clearinghouse is closed, in which case The Actuarials Exchange shall be closed.

(ii) **Business Hours at the Clearinghouse**

(a) The AE Clearinghouse shall be open for clearinghouse operations and bank payment services every business day from 3am to 6pm NYC, which is usually 8am to 11pm LDN, with personnel available at the Help Desk to respond to the Authorized Support Persons of Member Firms, unless the Fedwire service of the Federal Reserve Bank of the United States is not operating, in which case The AE Clearinghouse shall be closed.

(b) The AE Clearinghouse Payment Bank shall be open to promptly recognize and duly credit all Fedwire receipts to the Clearinghouse Concentration Account at the Payment Bank, from 12:30am to 6pm NYC, which is usually 5:30am to 11pm LDN, unless the Fedwire service of the Federal Reserve Bank of the United States is not operating, in which case The AE Clearinghouse shall be closed.

CHAPTER 2

ORDERED LIST OF CONTRACTS

SECTION 1: **SCOPE OF CHAPTER**

This Chapter 2 of these Rules of Products and Electronic Services is limited in application to establishing a sequence of Contracts by which The Actuarials Exchange or The AE Clearinghouse shall execute procedures on a Contract-by-Contract basis. Any rules for exchange activities with respect to Contracts that are not specifically covered in this chapter shall be determined by the AE Rules. Any terms, conditions, and procedures for clearing activities with respect to Contracts that are not specifically covered in this chapter shall be determined by The AE Clearinghouse Terms, Conditions, and Procedures.

SECTION 2: **THE ORDERED LIST OF CONTRACTS** Last Amended AE Circular 005, Dec 22, 2004

Procedures with respect to Contracts shall be executed in the following order of Instrument Family:

1. Listed Contracts at AE, namely:
   a) Cleared LIBOR FRAs,
      with individual Contracts of Cleared LIBOR FRAs sequenced further according to the Ordered List of Contracts specified in Chapter 5 of the RoPES,

2. Portfolio Contracts at The AE Clearinghouse, from earliest to latest time stamp.

Guidance: *Cleared LIBOR FRAs represent the first Instrument Family to be traded on The Actuarials Exchange, whose contract specifications can be found in Chapter 5 of the RoPES. As more Instrument Families are made available for trading, their order of precedence in the Ordered List of Contracts shall be published in this chapter of the RoPES. The ordered list of Contracts begins with all listed Contracts at AE, and ends with all portfolio Contracts that are not listed Contracts at AE.*

CHAPTER 3

DEFAULT PROTECTION FACILITY

SECTION 1: **SCOPE OF CHAPTER**

This Chapter 3 of these Rules of Products and Electronic Services is limited in application to the structure and utilization of a **Default Protection Facility** provided by a Member Firm to The AE Clearinghouse. Any terms, conditions, and procedures for clearing activities with respect to the Default Protection Facility that are not specifically covered in this chapter shall be determined by The AE Clearinghouse Terms, Conditions, and Procedures.

SECTION 2: **STRUCTURE OF DEFAULT PROTECTION FACILITY**

(i) Every Member Firm shall furnish to The AE Clearinghouse a Default Protection Facility comprised of any combination of:

a) assigned, isolated collaterals, deposited directly at the AE Clearinghouse, comprised of USD cash and/or US Treasuries, and
b) irrevocable letters of credit for USD cash, Last Amended AE Circular 005, Dec 22, 2004

whose total value shall exceed the sum of the Total Account Balances of all Trading Accounts under the domain of that Member Firm, by a factor determined by The AE Clearinghouse, as communicated to Member Firms in a numbered and dated official AE Circular.

(ii) Any assigned, isolated collaterals, comprising any part of a Default Protection Facility, shall be provided in a form and manner that is authorized by The AE Clearinghouse.

(iii) Any irrevocable letters of credit, comprising any part of a Default Protection Facility, shall be arranged and provided in a form and manner that is authorized by The AE Clearinghouse, from an **Arranger** approved by The AE Clearinghouse.

(iv) All of the funds of the Default Protection Facility from each Member Firm shall be held at The AE Clearinghouse in a **Keepsafe Bank Account** held in the name of the Member Firm.

SECTION 3: **UTILIZATION OF DEFAULT PROTECTION FACILITY**

(i) All of the funds of the Default Protection Facility of a Member Firm shall be made available to The AE Clearinghouse upon a Failed Obligation triggered event associated with that Member Firm.

(ii) All of the funds of the Default Protection Facility from a Failed Obligation Member Firm shall be applied to relieve any shortfalls at The AE Clearinghouse resulting from the following:

a) Failure to furnish a margin payment to The AE Clearinghouse;
b) Failure to furnish sufficient margins to maintain open positions at The Actuarials Exchange;
c) Failure to furnish sufficient margins for closed positions at The Actuarials Exchange;
d) Failure to furnish sufficient margins to satisfy obligations by The AE Clearinghouse to Member Firms in Good-Standing whose Trading Accounts are owed realized profits, but have not been paid;
e) Failure to furnish sufficient margins to satisfy obligations by The AE Clearinghouse to Member Firms in Good-Standing whose Trading Accounts are owed unrealized profits, but have not been paid;
f) Failure to furnish sufficient moneys to satisfy AE Clearinghouse obligations to **force-liquidate** the positions of the Failed Obligation Member Firm, without subsidy;

g) Failure to furnish sufficient moneys to satisfy AE Clearinghouse obligations to **force-liquidate** the positions of the Failed Obligation Member Firm, with subsidy;
h) Failure to furnish sufficient moneys to satisfy AE Clearinghouse obligations to **force-settle** the positions of the Failed Obligation Member Firm, without a loss;
i) Any other failure to furnish required collaterals, margins, fees, and fines to The AE Clearinghouse.
Last Amended AE Circular 005, Dec 22, 2004

(iii) None of the funds for the Default Protection Facility shall be utilized by the Member Firm or by The AE Clearinghouse to any other purpose, except as provided herein.

CHAPTER 4

CONCENTRATION RISK

SECTION 1: **CONCENTRATION RISK**

If the **open position exposure** of a Trading Account or Member Firm, in either an individual Contract, or in a set of related Contracts, exceeds an **exposure limit,** as outlined in this Chapter of RoPES, the Authorized Compliance Officer shall perform the following:

- activate a **Concentration Risk trigger;**
- observe a **Concentration Risk triggered event**;
- calculate the new **initial margins** for the single Trading Account or the Member Firm, and issue a **Concentration Risk margin notice**;
- adjust the concentration risk factor affecting heightened **initial margin requirements.**

SECTION 2: **CONCENTRATION RISK TRIGGER**

The AE Clearinghouse, or the Authorized Compliance Officer when specified, shall have the authority to perform the following:

Activate Trigger

1. If the **open position exposure** of a Trading Account or Member Firm, in either an individual Contract, or in a set of related Contracts, exceeds an **exposure limit,** as published in a numbered and dated official AE Circular, the Authorized Compliance Officer shall activate a **Concentration Risk trigger**.

Observe Triggered Event

2. One minute after a Concentration Risk trigger has been activated, the Authorized Compliance Officer shall observe a **Concentration Risk triggered event**.

Calculate New Initial Margin Requirements

3. Following the activation of a Concentration Risk trigger, the Authorized Compliance Officer shall determine if a Trading Account or a Member Firm is responsible for activating the trigger:

   (a) If a Trading Account's exposure in a related set of Contracts activated the trigger, proceed to 4.
   (b) If a Member Firm's net exposure in a related set of Contracts activated the trigger, proceed directly to 7.

Trading Account Concentration Risk

4. If a Trading Account's exposure in a Contract causes a Concentration Risk trigger to be activated, that Trading Account shall be called the **Concentration Risk Trading Account.**

5. The Authorized Compliance Officer shall calculate the new **initial margins** for the Concentration Risk Trading Account, by multiplying the initial margins required for the current number of **open position lots** held by the Concentration Risk Trading Account in that Contract, by a **concentration risk factor** published in a numbered and dated official AE Circular, to create heightened **initial margin requirements**.

6. The Authorized Compliance Officer shall then incorporate the change in initial margins into the Available Balance of the Concentration Risk Trading Account, and determine if the Concentration Risk Trading Account is in deficit:

(a) if yes, the Authorized Compliance Officer shall issue to the Member Firm under whose domain the Concentration Risk Trading Account resides, a time-stamped **Concentration Risk margin notice** with a **Concentration Risk margin call**, and observe an **Insufficient Funds triggered event**.
(b) if no, the Authorized Compliance Officer shall issue to the Member Firm under whose domain the Concentration Risk Trading Account resides a time-stamped Concentration Risk margin notice with a **Good-Standing Notice**, which notifies the Member Firm of the heightened initial margin requirements for the Concentration Risk Trading Account.

Member Firm Concentration Risk

7. If the netted exposures of all Trading Accounts under the domain of a Member Firm in a related set of Contracts causes a Concentration Risk trigger to be activated, that Member Firm shall be called a **Concentration Risk Member Firm**.

8. The Authorized Compliance Officer shall calculate the new initial margins for each and every Trading Account of the Concentration Risk Member Firm, by multiplying the initial margins required for the current number of open position lots held by the Concentration Risk Member Firm in that related set of Contracts, by a factor published in a numbered and dated official AE Circular, to create heightened initial margin requirements.

9. The Authorized Compliance Officer shall incorporate the change in initial margins into the Available Balances of each Trading Account under the domain of the Concentration Risk Member Firm, and then determine if any Trading Account is in deficit:

(a) if yes, the Authorized Compliance Officer shall issue to the Concentration Risk Member Firm a time-stamped Concentration Risk margin notice with a Concentration Risk margin call and observe an **Insufficient Funds triggered event**.
(b) if no, the Authorized Compliance Officer shall issue to the Concentration Risk Member Firm a time-stamped Concentration Risk margin notice with a Good-Standing Notice, which notifies the Concentration Risk Member Firm of the heightened initial margin requirements for every Trading Account under its domain.

Adjust Concentration Risk Factor

10. The Chief Risk Officer, in consultation with the Chief Executive Officer and Chief Compliance Officer of The AE Clearinghouse, shall adjust the concentration risk factor associated with a set of related Contracts, from time to time, by lowering or raising the factor, or by adjusting the association of the factor to a different set of Contracts, and publish these adjustments in a numbered and dated official AE Circular.

CHAPTER 5

CLEARED LIBOR FRAS Last Amended AE Circular 005, Dec 22, 2004

SECTION 1: **SCOPE OF CHAPTER**

This Chapter 5 of these Rules of Products and Electronic Services is limited in application to trading and clearing Cleared LIBOR FRAs, an Instrument Family of The Actuarials Exchange. Any rules for trading Cleared LIBOR FRAs that are not specifically covered in this chapter shall be determined by the AE Rules. Any terms, conditions, and procedures for clearing Cleared LIBOR FRAs that are not specifically covered in this chapter shall be determined by The AE Clearinghouse Terms, Conditions, and Procedures.

SECTION 2: **INSTRUMENT FAMILY, INSTRUMENT, AND CONTRACT**

Cleared LIBOR FRAs shall constitute an Instrument Family; for which each unique and valid combination of **currency** and **maturity** shall constitute an Instrument; and each unique and valid combination of currency, maturity, expiration date, or value date, shall constitute a Contract.

SECTION 3: **WRITTEN DESCRIPTION OF THE CONTRACT**

A Contract in Cleared LIBOR FRAs shall be described as:
"A cleared product whose value is the **final settlement** interest rate for $1,000,000 worth of a given currency, for a specified maturity of term deposit, with an **exact day basis** associated with a value date following the expiration date of the cleared product."

SECTION 4: **TICK SIZE AND QUOTE BASIS**

The **tick size** for a Cleared LIBOR FRA shall be 1/10th of a basis point, whose monetary value shall be determined by the specified maturity of term deposit, and the **exact day basis** of the value date. The **quote basis** shall be the interest rate specified, expressed on a yield basis (not IMM basis), at 1/10th of a basis point. The minimum price basis shall be set at 0.001%. Last Amended AE Circular 005, Dec 22, 2004

SECTION 5: **SCHEDULED EXPIRATION DATE AND SCHEDULED FIXING DATE**

The scheduled expiration date of a Cleared LIBOR FRA shall be the same date as a British Bankers Association fixing date, even if The Actuarials Exchange or The AE Clearinghouse is not open, or the Fedwire service is not available, on such a BBA fixing date.

SECTION 6: **REFERENCED RELATIONSHIP BETWEEN A SCHEDULED EXPIRATION DATE AND AT LEAST ONE VALUE DATE**

The Actuarials Exchange shall provide a calendar and look-up table for associating each unique combination of currency, maturity, and scheduled expiration/fixing date, with at least one valid value date, with all such valid value dates falling on a valid American banking day. **An Authorized Trader shall be solely responsible for ensuring that this look-up table is consistent with the referenced relationship of a scheduled expiration/fixing date, with at least one valid value date, referenced by an OTC derivatives counterparty, or referenced by the BBA.**

SECTION 7: **AVAILABLE TRADING AND NON-MATCHING SESSIONS**

(i) Trading in Cleared LIBOR FRAs shall begin at 9:00am LDN and shall trade continuously until ending at 9:00pm LDN every Actuarials Exchange business day. The Actuarials Exchange shall provide the following trading sessions for Cleared LIBOR FRAs, starting at 9:00am LDN:
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(1) a Regular Session, 1 hour, 59 minutes long, 9:00 am-10:59am LDN every Actuarials Exchange business day.
(2) a Closing Session, 1 minute long, at 10:59am LDN every Actuarials Exchange business day.
(3) a Reset Session, 1 hour long, from 11:00am-12 Noon LDN, every Actuarials Exchange business day, during which a final settlement for any expiring FRAs shall be established,
(4) an Opening Session, 1 minute long, at 12 Noon LDN every Actuarials Exchange business day.
(5) another Regular Session, 8 hours, 59 minutes long, 12:01pm-9:00pm LDN every Actuarials Exchange business day.

(ii) The Actuarials Exchange also shall have short, non-matching sessions that last a few seconds, before the Opening Session, and before the Closing Session, that allow for the simultaneous release of **at-the-opening** or **at-the-closing** market orders for Cleared LIBOR FRAs, that may be immediately filled during the respective Opening or Closing Sessions.

(iii) The Actuarials Exchange also shall have a Pre-Start session from 8:00am-9:00am LDN and a Post-Finish session from 9:00pm to 10:00pm LDN where existing orders for Cleared LIBOR FRAs may be cancelled and new orders may be submitted.

SECTION 8: **TWO DAILY SCHEDULED SETTLEMENTS FOR NON-EXPIRING CLEARED CONTRACTS** Last Amended AE Circular 005, Dec 22, 2004

For **non-expiring Cleared LIBOR FRAs,** there shall be two scheduled marks, one for the "mid-trading-day settlement price," and one for the "end of trading-day settlement price." The "mid-trading-day settlement price" shall be based on the last time-stamped trade taking place before, or exactly at, 11:59:59am LDN. The "end of trading-day price" settlement basis for "liquid" financial instruments shall be based on the last time-stamped trade taking place before or exactly at 8:59:59pm LDN. An unscheduled mark may take place at any time during the trading day, and the last time-stamped trade taking place before such a mark shall be considered the settlement basis for that mark.

SECTION 9: **FINAL SETTLEMENT FOR EXPIRING FRAS**

(i) For **expiring Cleared LIBOR FRAs,** the final settlement shall be established between 11:00am and 11:55am LDN of the scheduled expiration date, and shall be effective at, 11:59:59am LDN.

(ii) For each Contract, if the BBA fixing for that day is available by 11:55am LDN, then that fixing shall be so obtained, from TeleRate Page 3750 or some equivalent source, to the precision of five decimal places to the right of the decimal point, and then rounded to the precision of three decimal places to the right of the decimal point. Such a rounded figure shall then serve as the "final settlement" price for any Contract scheduled to expire that day.

(iii) For each Contract, if the BBA fixing for that day is unavailable by 11:55am LDN, then the last traded price, taking place at a time closest to 10:59:59am LDN without going over that time, shall serve as the "final settlement" price for the expiring cleared Contract.

SECTION 10: **ACCEPTABLE ORDER TYPES**

Acceptable order types shall be: Limit Orders, Market Orders, Block Trades, RFP Responses, and Market Maker Strips, as provided in the AE Rules.

SECTION 11: **CALCULATION OF INITIAL MARGIN**

(i) Calculation of initial margin for each Contract having a unique Instrument combination of currency and maturity shall be established by the Chief Risk Officer.

(ii) For USD 3M Contracts, the initial margin shall be extreme one-day move of any of the front four quarterly tenor instruments traded on related markets, since January 2, 1998, as measured in number of basis points, multiplied by 1.25. Last Amended AE Circular 005, Dec 22, 2004

SECTION 12: **CALCULATION OF VARIATION MARGIN**

Calculation of variation margin for each Trading Account shall be: (1) on the trade date, the difference between the average cost basis of an open position and the settlement basis of the most recent mark in a Contract, (2) on any subsequent date that the position remains open, the difference between the settlement basis of the most recent mark in a Contract and the last preceding settlement basis, (3) upon the closing of that position, the difference between the settlement basis of the most recent mark in a Contract and the average cost basis of closing the position.

SECTION 13: **SPECIAL NOTICE REGARDING MERCHANTABILITY**

(i) **Memorandum with BBA**
The Actuarials Exchange has entered into a Memorandum with the British Bankers' Association, or BBA, which allows the Exchange to use the published BBA LIBOR rates as the basis for settling Cleared LIBOR FRAs, and to refer to BBA LIBOR in connection with creating, marketing, trading, clearing, settling, and promoting Cleared LIBOR FRAs.

(ii) **No BBA Relationship to, or Liability for, Traded and Cleared Contract**
Cleared LIBOR FRAs are not in any way sponsored, endorsed, sold, or promoted by the BBA, and the BBA has no obligation or liability in connection with the trading of such contracts. The BBA LIBOR is compiled and calculated solely by the BBA. However, the BBA shall not be liable (whether in negligence or otherwise) to any person for any error in BBA LIBOR, and the BBA shall not be under any obligation to advise any person of any such error.

(iii) **No Warranty for Merchantability or Fitness**
The BBA makes no warranty, express or implied, either as to the results to be obtained from the use of BBA LIBOR and/or the figure at which BBA LIBOR stands at any particular time on any particular day. The BBA makes no express or implied warranties of merchantability or fitness for a particular purpose for use with respect to Cleared LIBOR FRAs.

SECTION 14: **ORDERED LIST OF CONTRACTS WITHIN CLEARED LIBOR FRAS**

When executing procedures, The Actuarials Exchange and The AE Clearinghouse shall sequence Cleared LIBOR FRAs in the following way, when these Contracts are available:

(a) First, by **CURRENCY**,
1) USD - US Dollar
2) EUR - Euro
3) GBP - British Pound
4) JPY - Japanese Yen
5) CHF - Swiss Franc

(b) Second, within each Currency, by **MATURITY**, from shortest to longest:
    1) 1 Week
    2) 2 Week
    3) 1 Month
    4) 2 Month
    5) 3 Month
    6) 6 Month
    7) 12 Month

    Maturities will always be ranked from shortest to longest, in the event that more maturities are available to trade on the AE System over time.

(c) Third, within each Currency/Maturity, by **EXPIRATION DATE**, from earliest to the latest.

(d) Fourth, within each Currency/Maturity/Expiry Date, by **VALUE DATE**, if more than one Value Date is available for a given Expiration Date, from earliest to the latest.

SECTION 15: PRICE LIMITS

No trading or clearing of any FRA Contract shall take place at a price more than 200 basis points above or below that of the settlement price of the most recent "good" mark, that is, the mark whose funding requirements have been fully satisfied by all Member Firms of The AE Clearinghouse. Last Amended AE Circular 005, Dec 22, 2004

CHAPTER 6

CLEARING OFF-EXCHANGE TRADES

Entire Chapter Amended AE Circular 007, Feb 06, 2005

SECTION 1: **SCOPE OF CHAPTER**

This Chapter 6 of these Rules of Products and Electronic Services is limited in application to submitting, registering, and matching arbitrary collections of Off-Exchange transactions as trades for clearing at The AE Clearinghouse, and further, electing to convert such transactions into listed contracts or portfolio contracts. Any terms, conditions, and procedures for Off-Exchange transactions or conversions that are not specifically covered in this chapter shall be determined by The AE Clearinghouse Terms, Conditions, and Procedures.

SECTION 2: **ELIGIBLE OFF-EXCHANGE TRADES**

(i) An over-the-counter trade that is bilaterally negotiated between any two Member Firms of The AE Clearinghouse, shall be deemed by The AE Clearinghouse to be an **excluded derivatives transaction**, within the meaning of the CFMA, if those two Member Firms were eligible contract participants at the time of inception of such a transaction.

(ii) An excluded derivatives transaction whose product and delivery specification is comprised of any combination of one or more eligible excluded commodities, within the meaning of the CFMA, shall be deemed by The AE Clearinghouse as an **eligible excluded derivatives transaction**.

(iii) Any collection of one or more eligible excluded derivatives transactions, whose component product and delivery specifications are found in the RoPES, may be grouped by the two Member Firms into a single **Off-Exchange order** for clearing.

SECTION 3: **OFF-EXCHANGE ORDER SUBMISSIONS**

(i) During any part of the current business day of The AE Clearinghouse, any two Member Firms shall submit to a trade capture interface one side of an **Off-Exchange order** for a mutually-agreed price, quantity, and product and delivery specification, but with one Member Firm having a Trading Account uniquely identifying itself as the buyer, and the other Member Firm having a Trading Account uniquely identifying itself as the seller.

(ii) The AE Clearinghouse shall check each Trading Account submitting such an eligible Off-Exchange order to ensure that sufficient **initial margins** and **fees** are available to register that new order, and, if so, to immediately subtract those initial margins and fees, from the current Available Balance. Last Amended AE Circular 005, Dec 22, 2004

1. If the Available Balance would remain positive after such pre-reserves would be so subtracted, the order shall be deemed “registered” at The AE Clearinghouse, as a pending order subject to further match consideration, with pre-reserves then subtracted. The “registered” status of the order shall be communicated by The AE Clearinghouse to the Trading Account on a timely basis.

2. If the Available Balance would not remain positive after such pre-reserves would be subtracted, the order shall be deemed “not registered” at The AE Clearinghouse, and also not subject to further match consideration. The “not registered” status of the order shall be communicated by The AE Clearinghouse to the Trading Account on a timely basis.

(iii) The earlier Trading Account submitting such a “registered” order shall receive a unique registration identifier from The AE Clearinghouse, and may communicate this identifier to the later Trading Account, for ease of accessing a trade capture interface with relevant order details.

SECTION 4: **MATCHING OFF-EXCHANGE ORDER SUBMISSIONS**

(i) If the two Trading Accounts have submitted, before the end of the current business day, two Off-Exchange orders for a mutually-agreed price, quantity, and product and delivery specification, with one Trading Account uniquely identifying itself as the buyer, and the other Trading Account uniquely identifying itself as the seller, that are both subsequently deemed "registered" into The AE Clearinghouse, then the two "registered" orders shall be **matched.**

(ii) If the two Trading Accounts have not submitted, before the end of the current business day, two Off-Exchange orders for a mutually-agreed price, quantity, and product and delivery specification, with one Trading Account uniquely identifying itself as the buyer, and the other Trading Account uniquely identifying itself as the seller, that are both deemed "registered" into The AE Clearinghouse, then the two orders shall not be matched, and both orders shall be cancelled, by The AE Clearinghouse.

(iii) The matched or cancelled status of the submitted Off-Exchange orders shall be communicated by The AE Clearinghouse to each Trading Account on a timely basis.

SECTION 5: **CLEARING MATCHED OFF-EXCHANGE ORDER SUBMISSIONS**

(i) After the end of the business day, The AE Clearinghouse shall determine the end-of-day settlement basis for the match, and then compare that settlement basis with the mutually-agreed price of the match, to determine whether any **variation margins** and **fees** are required to clear that match.

(ii) If any variation margins and fees are so required, The AE Clearinghouse shall immediately subtract those variation margins and fees, from the current Available Balance of the applicable Trading Account.

1. If the Available Balance of the applicable Trading Account would remain positive after such variation margins would be so subtracted, the match shall be deemed "cleared" by The AE Clearinghouse, with variation margins then subtracted. The "cleared" status of the match shall be communicated by The AE Clearinghouse to each Trading Account that is a party to the transaction on a timely basis.

2. If the Available Balance of the applicable Trading Account would not remain positive after such variation margins would be so subtracted, the order shall be deemed "not cleared" by The AE Clearinghouse, and also not subject to further clearing consideration. The "not cleared" status of the order shall be communicated by The AE Clearinghouse to each Trading Account that is a party to the non-transaction on a timely basis.

(iii) An eligible Off-Exchange order that is cleared by The AE Clearinghouse shall be **novated,** so that The AE Clearinghouse substitutes itself as, and assume the position of, seller to the matched buyer, and buyer to the matched seller. Such substitution shall be effective in law for all purposes.

(iv) Notwithstanding the clearing and novation of the above eligible Off-Exchange order submission, the two parties shall remain solely responsible for electing to reverse or unwind any original eligible Off-Exchange trade that may still bilaterally exist between them, to remove a redundant open position from their books.

SECTION 6: **CONVERTING AN OFF-EXCHANGE TRADE TO A LISTED CONTRACT**

If a novated Off-Exchange trade has an overall product and delivery specification that is identical to some exact number of lots of exactly one listed Contract at The Actuarials Exchange, the two Trading Accounts may mutually agree to elect to **convert** the cleared Off-Exchange trade into that existing listed Contract, and thereby incorporate the open interest of that Off-Exchange trade into the open interest for that listed **Contract marketspace** at the start of the next exchange business day. The AE Clearinghouse shall require an adjustment in initial margin from both Trading Accounts, and an adjustment in **variation margin** from one Trading Account, before accepting the cleared Off-Exchange trade for conversion. The amount of the variation margin required from such a Trading Account shall be solely determined by The AE Clearinghouse, at the time of the end-of-day mark.

SECTION 7: **DESIGNATING A NON-CONVERTED TRADE AS A PORTFOLIO CONTRACT**

(i) A novated Off-Exchange trade that is not converted to a listed Contract at the Actuarials Exchange shall be designated by The AE Clearinghouse as a unique **portfolio Contract,** whose restricted marketspace of open interest is limited to a single lot of the current buyer with the sole long position, and, on the other side, a single lot of the current seller holding with the sole short position.

(ii) The open interest of a portfolio Contract shall not be combined with the open interest of any other Contract marketspace.

(iii) The initial and variation margin requirements of a portfolio Contract shall be updated by The AE Clearinghouse every business day, and shall not be offset against the initial or variation margin of any other Contract.

(iv) A Trading Account of a Member Firm may close out its single lot in a portfolio Contract before expiry by transferring the lot to the Trading Account of any other Member Firm, after submitting an Off-Exchange order to that effect that is subsequently matched and cleared by The AE Clearinghouse.

CHAPTER 7

OBTAINING INTERIM MARKS IN ILLIQUID MARKETS

Entire Chapter Amended AE Circular 005, Dec 22, 2004

SECTION 1: **SCOPE OF CHAPTER**

This Chapter 7 of these Rules of Products and Electronic Services is limited in application to obtaining marks as interim price settlements for cleared, unexpired Contracts at The AE Clearinghouse. Any terms, conditions, and procedures for marks that are not specifically covered in this chapter shall be determined by The AE Clearinghouse Terms, Conditions, and Procedures.

SECTION 2: **DEFINITION OF A "LIQUID" AND "ILLIQUID" CONTRACT MARKETSPACE**

A "liquid" Contract marketspace shall have at least 1 on-market trade of at least 1 lot executed at The Actuarials Exchange within the last hour before a new scheduled or unscheduled mark is required. All other Contract marketspaces of The AE Clearinghouse shall be deemed "illiquid."

SECTION 3: **TYPES OF INTERIM MARKS OBTAINED**

(i) When a new scheduled or unscheduled mark is required, The AE Clearinghouse shall determine whether a given unexpired Contract marketspace is "liquid" or "illiquid."

- (a) If "liquid," The AE Clearinghouse shall establish the price of the last trade as the interim settlement basis of that Contract marketspace, by obtaining a **mark-to-market** observation.
- (b) If "illiquid," The AE Clearinghouse shall establish the price of the mid-market spread as the interim settlement basis of that Contract marketspace, by obtaining a **mark-by-indication** observation.
- (c) If "illiquid," and a mark-by-indication observation cannot be obtained, The AE Clearinghouse shall establish the price of the mid-market spread as the interim settlement basis of that Contract marketspace, via a **mark-to-model** observation, but only if the RoPES for that Contract expressly allows a model to be so used,
- (d) If "illiquid," and a mark-by-indication or mark-to-model observation cannot be obtained, The AE Clearinghouse shall re-establish the price of the last mark as the interim settlement basis of that Contract marketspace.

(ii) The AE Clearinghouse shall clearly indicate on the **Mark Report** whether the interim settlement basis of a Contract is based on a liquid mark-to-market, illiquid mark-by-indication, illiquid mark-to-model, or illiquid mark-to-market observation.

SECTION 4: **MARK-BY-INDICATION**

The AE Clearinghouse shall obtain a mark-by-indication in the following manner: find all of the illiquid Contract marketspaces for which the Omnibus Trading Account has a leftover open position, sort all such Contracts according to the Ordered List of Contracts in the RoPES, label the highest-ranked sorted Contract as the "selected Contract," and then perform the following steps:

Obtain Bid/Ask Spread from Trading Accounts with Open Positions

1. Discover the overall size of open interest in the "selected Contract,"
2. Discover the long/short position and number of **open position lots** of each Trading Account of each Member Firm in Good-Standing,

3. From each Trading Account having an open position, request a bid/ask spread of market indication that is one tick apart, within one half hour,
4. After one half hour, if and only if The AE Clearinghouse has obtained at least one such bid/ask spread, a mark-by-indication may be determined by The AE Clearinghouse by proceeding to Step 5.

Assign Market Weights To Each Obtained Bid/Ask Spread To Determine a Market Indication

1. Multiply the value of the ask portion of the bid/ask of each Trading Account by the number of open position lots to obtain a “weighted indication price” for that contributing Trading Account.
2. Sum all of the “weighted indication prices” for all contributing Trading Accounts, to obtain a weighted indication price sum.
3. Sum all of the open interest lots of all contributing Trading Accounts, to obtain a contributing open interest sum.
4. Divide the weighted indication price sum by the contributing open interest sum to determine a mid-market price.

CHAPTER 8

SIMPLE AND COMBINATION FINANCIAL INSTRUMENTS

Entire Chapter Amended AE Circular 008, Feb 14, 2005

SECTION 1: **SCOPE OF CHAPTER**

This Chapter 8 of these Rules of Products and Electronic Services is limited in application to specifying simple and combination financial instruments. Any terms, conditions, and procedures for simple or combination financial instruments that are not specifically covered in this chapter shall be determined by The AE Clearinghouse Terms, Conditions, and Procedures.

SECTION 2: **DEFINITION OF A SIMPLE FINANCIAL INSTRUMENT**

(i) A simple financial instrument shall be defined as any financial instrument cleared by The AE Clearinghouse that must settle at expiry to a single controlling mathematical function utilizing one and only one independent reference variable contributing to the overall value of the instrument.

(ii) The independent reference variable of a simple financial instrument shall be based solely on the behavior, price, price indication, value, or value indication of a single eligible excluded commodity, as generated, received, or observed by The AE Clearinghouse.

SECTION 3: **TYPES OF SIMPLE FINANCIAL INSTRUMENT**

(i) A simple financial instrument Contract whose open lots may exceed one long and one short, shall be listed on The Actuarials Exchange, and shall be deemed by The AE Clearinghouse to be a **listed Contract** whose final settlement at expiration shall be determined by a single function for a single variable already specified in the RoPES.

(ii) A simple financial instrument Contract whose open lots may not exceed one long and one short, shall not be listed on The Actuarials Exchange, and shall be deemed by The AE Clearinghouse to be a **portfolio Contract,** final settlement at expiration shall be determined by a single function for a single variable already specified in the RoPES.

SECTION 4: **VALID EXPIRATION DATES FOR A SIMPLE FINANCIAL INSTRUMENT**

(i) A simple financial instrument Contract must have a scheduled expiration date that falls on any present or future calendar date. The AE Clearinghouse shall not normally settle such an expiring Contract until a business day that is the same as, or immediately following that of, the scheduled expiration date.

SECTION 5: **DEFINITION OF A COMBINATION FINANCIAL INSTRUMENT**

(i) A combination financial instrument shall be defined as any financial instrument cleared by The AE Clearinghouse that must settle at expiry to a single controlling mathematical function utilizing two or more independent reference variables contributing to the overall value of the instrument.

(ii) All of the independent reference variables serving as components of a combination financial instrument shall be based solely on the behaviors, prices, price indications, values, or value indications of eligible excluded commodities specified in the RoPES, as generated, received, or observed by The AE Clearinghouse.

SECTION 6: **TYPES OF COMBINATION FINANCIAL INSTRUMENT**

(i) A combination financial instrument Contract whose open lots may exceed one long and one short, shall be listed on The Actuarials Exchange, and shall be deemed by The AE Clearinghouse to be a **listed Contract**, whose multiple components shall already be specified in the RoPES.

(ii) A combination financial instrument Contract whose open lots may not exceed one long and one short, shall not be listed on The Actuarials Exchange, and shall be deemed by The AE Clearinghouse to be a **portfolio Contract,** whose multiple components shall already be specified in the RoPES.

SECTION 7: **VALID EXPIRATION DATES FOR A COMBINATION FINANCIAL INSTRUMENT**

(i) A combination financial instrument Contract must have a scheduled expiration date that falls on any present or future calendar date. The AE Clearinghouse shall not normally settle such an expiring Contract until a business day that is the same as, or immediately following that of, the scheduled expiration date.

CHAPTER 9

DETERMINING INITIAL MARGINS AND INTERMARK PRICE LIMITS FOR SIMPLE AND COMBINATION FINANCIAL INSTRUMENTS

Entire Chapter Amended AE Circular 008, Feb 14, 2005

SECTION 1: **SCOPE OF CHAPTER**

This Chapter 9 of these Rules of Products and Electronic Services is limited in application to determining initial margins and intermark price limits for simple and combination financial instruments. Any terms, conditions, and procedures for marks that are not specifically covered in this chapter shall be determined by The AE Clearinghouse Terms, Conditions, and Procedures.

SECTION 2: **SIMPLE INSTRUMENTS**

(i) Simple instruments for eligible excluded commodities already listed in the RoPES may be novated by The AE Clearinghouse.

(ii) The AE Clearinghouse shall establish initial margins and intermark price limits for Contracts that are simple instruments in the following way:

(a) Determine whether there is historical data of daily observations of changes in a reference variable over the last 7 years. If yes, then obtain the historical distribution of changes in this reference variable. If no, create a computer-generated distribution of changes in this reference variable.
(b) For the distribution of changes, sort the values from lowest to highest in ascending order.
(c) From this sorted distribution, determine Contract values at 5%, 50%, and 95% confidence intervals.
(d) Determine whether the initial margin is for the long or short position in the Contract.
(e) For the long position, obtain the difference between the values of the 5% and 50% confidence intervals, as a maximum expected daily unrealized loss. For the short position, obtain the difference between the values of the 95% and 50% confidence intervals as a maximum expected daily unrealized loss.
(f) For the long position, set the initial margin equal to the amount of the loss of the long position. For the short position, set the initial margin equal to the amount of the loss of the short position.
(g) For the long position, set the amount of money in the default protection facility to be equal to or exceeding 3x the initial margin of the long position. For the short position, set the amount of money in the default protection facility to be equal to or exceeding 3x the initial margin of the short position.
(h) For the long position, sum the initial margin and default protection facility of the long position for this Contract. For the short position, sum the initial margin and default protection facility of the short position.
(i) For the long position, calculate a Contract market move resulting in losses equal to or less than 95% of the long obtained sum as the intermark price limit "down". For the short position, calculate a Contract market move resulting in losses equal to or less than 95% of the short obtained sum as the intermark limit "up."

SECTION 3: **COMBINATION INSTRUMENTS**

(i) Combination instruments whose components are simple instruments of eligible excluded commodities already listed in the RoPES may be novated by The AE Clearinghouse.

(ii) The AE Clearinghouse shall establish initial margins and intermark price limits for Contracts that are combination instruments in the following way:

(a) For each independent reference variable, determine whether there is historical data of daily observations of changes in that reference variable for the last 7 years. If yes, then obtain a historical

distribution of changes for that variable. If no, create a computer-generated distribution of changes for that variable.
(b) Correlate the changes in each pair of independent variables.
(c) Combine all of the correlated variables into an overall distribution, and sort this distribution from the lowest to the highest in ascending order.
(d) From this sorted overall distribution, determine Contract values at 5%, 50%, and 95% confidence intervals.
(e) Determine whether the initial margin is for the long or short position in the Contract.
(f) For the long position, obtain the difference between the values of the 5% and 50% confidence intervals, as a maximum expected daily unrealized loss. For the short position, obtain the difference between the values of the 95% and 50% confidence intervals as a maximum expected daily unrealized loss.
(g) For the long position, set the initial margin equal to the amount of the loss of the long position. For the short position, set the initial margin equal to the amount of the loss of the short position.
(h) For the long position, set the amount of money in the default protection facility to be equal to or exceeding 3x the initial margin of the long position. For the short position, set the amount of money in the default protection facility to be equal to or exceeding 3x the initial margin of the short position.
(i) For the long position, sum the initial margin and default protection facility of the long position for this Contract. For the short position, sum the initial margin and default protection facility of the short position.
(j) For the long position, calculate a Contract market move resulting in losses equal to or less than 95% of the long obtained sum as the intermark price limit “down”. For the short position, calculate a Contract market move resulting in losses equal to or less than 95% of the short obtained sum as the intermark limit “up.”