S	UBMISSION COVER SHEET	
Registered Entity Identifier Code (optional) 13-502 Date: November 6, 2013 IMPORTANT: CHECK BOX IF CONFIDENTIAL TREATMENT IS REQUESTED. Image: Check Box IF Confidential Treatment Is requested.		
ORGANIZATION	Chicago Mercantile Exchange, Inc. ("CME")	
FILING AS A:	DCM SEF DCO SDR ECM/SPDC	
TYPE OF FILING		
• Rules and Rule	Amendments	
Certificat	ion under § 40.6 (a) or § 41.24 (a)	
🗌 "Non-Ma	terial Agricultural Rule Change" under § 40.4 (b)(5)	
Notification under § 40.6 (d)		
Request for Approval under § 40.4 (a) or § 40.5 (a)		
Advance Notice of SIDCO Rule Change under § 40.10 (a)		
Products		
Certificat	ion under § 39.5(b), § 40.2 (a), or § 41.23 (a)	
Swap Class Certification under § 40.2 (d)		
Request for Approval under § 40.3 (a)		
Novel De	rivative Product Notification under § 40.12 (a)	
RULE NUMBERS		
CME Swap Execution Facility Rulebook Chapter 10 (U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW)); CME Rulebook Chapter 8 (Clearing House and Performance Bonds)		
DESCRIPTION		
Notification of Acceptar Clearing	ce U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) for	



November 6, 2013

VIA E-MAIL

Ms. Melissa Jurgens Office of the Secretariat Commodity Futures Trading Commission Three Lafayette Centre 1155 21st Street, N.W. Washington, DC 20581

RE: CFTC Regulation 39.5(b) Notification of Acceptance U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) for Clearing CME Submission No. 13-502

Dear Ms. Jurgens:

The clearing house division of the Chicago Mercantile Exchange Inc. ("CME Clearing"), a registered derivatives clearing organization ("DCO"), hereby notifies the Commission that it is accepting the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) for clearing. CME Clearing is accepting the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) for clearing pursuant to this submission, in accordance with the requirements of Commodity Futures Trading Commission ("CFTC" or "Commission") Regulation 39.5(b).

Eligibility to Clear

Regulation 39.5(b)(3)(i): "A statement that the derivatives clearing organization is eligible to accept the swap, or group, category, type, or class of swaps for clearing and describes the extent to which, if the Commission were to determine that the swap, or group, category, type, or class of swaps is required to be cleared, the derivatives clearing organization will be able to maintain compliance with section 5b(c)(2) of the Act."

Ferrous scrap metal, the commodity underlying the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW), is recovered from automobiles, steel structures, household appliances, railroad tracks, ships, farm equipment and other sources. Ferrous scrap metal is processed by the recycling industry into commodity grade material that is used to produce more than 60% of total raw steel produced in the United States, predominantly at electric arc furnaces. As contemplated by Commission Regulation 39.5(a)(1), the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) is a subset of one or more groups, categories, types, or classes of swaps that CME Clearing already accepts for clearing. CME Clearing currently accepts for clearing physical-commodity swaps that financially-settle to commercially acceptable, publicly accessible and timely disseminated price series administered by major third-party price index providers. These swaps include the following products:¹

CBOT AUD Chicago Soft Red Winter Wheat Swap (CAW) CBOT Dow-Jones UBS Commodity Index Excess Return 2-Month Forward Swap (DG2) CBOT Dow-Jones UBS Commodity Index Excess Return 3-Month Forward Swap (DG3) CBOT Dow-Jones UBS Commodity Index Swap (DGS)

¹ Notably, CME Clearing currently accepts a series of S&P GSCI and Dow Jones-UBS commodity indexbased swaps for clearing. These cleared swaps are based on multiple physical-commodity pricing components including natural gas and base metal pricing components.

CME USD Malaysian Crude Palm Oil Calendar Swap (CPC) CME S&P GSCI Excess Return Crude Oil Swap (GCO) CME S&P GSCI Excess Return Gold Index Swap (GDI) CME S&P GSCI Enhanced Excess Return Swap (RRE) CME S&P GSCI Index Excess Return 2-Month Forward Swap (SE2) CME S&P GSCI Index Excess Return 3-Month Forward Swap (SE3) CME S&P GSCI Index Swap (SES) KCBOT AUD KC Hard Red Winter Wheat Swap (KAW) CBOT Wheat Calendar Swap (WCS) CBOT Corn Calendar Swap (CCS) CBOT Soybean Calendar Swap (SNS) KCBOT Kansas City Wheat Calendar Swap (KWS)

The U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW), as a physical-commodity swap that is financially-settled to a commercially acceptable, publicly accessible and timely disseminated price series administered by a major third-party price index provider, is within a subset of one or more groups, categories, types, or classes of swaps that CME Clearing already accepts for clearing.²

In addition, CME Clearing currently clears a group, category, type, or class of swaps that financially-settle to price series used to settle designated contract market ("DCM") futures products. These "look-alike" swap and DCM futures products include the CBOT Dow-Jones UBS Commodity Index Swap contract (DGS) and the Dow Jones-UBS Commodity Index Futures contract (AW). The U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) included in this submission is a look-alike swap that is financially-settled to an identical price series used to settle an exchange-listed and cleared futures contract, namely the New York Mercantile Exchange, Inc. ("NYMEX") U.S. Midwest #1 Busheling Ferrous Scrap (AMM) Swap (BUW) comes within an additional subset of a group, category, type, or class of swaps that CME Clearing already accepts for clearing.

For the above reasons, and pursuant to Commission Regulation 39.5(b)(3)(i), CME Clearing states that it is eligible to accept the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) for clearing.

Statements and Information (Product Execution and Clearing)

Regulation 39.5(b)(3)(ii) – "A statement that includes, but is not limited to, information that will assist the Commission in making a quantitative and qualitative assessment of the following factors:"

"(A) The existence of significant outstanding notional exposures, trading liquidity, and adequate pricing data"

"(B) The availability of rule framework..."

Regulation 39.5(b)(3)(iii) – "Product specifications, including copies of any standardized legal documentation, generally accepted contract terms, standard practices for managing any life cycle events associated with the swap, and the extent to which the swap is electronically confirmable"

² As discussed further below, the price data for the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) contract is readily available since it references the American Metal Market ("AMM") U.S. Midwest Busheling Ferrous Scrap Index for its settlement values. The AMM has been reporting on the U.S. scrap market for over 100 years and is the U.S. source for benchmark steel prices to industry. The U.S. Midwest Busheling Ferrous Scrap Index is based on transactions, which are reported to AMM by market participants conducting trades on a delivered Midwest mill basis and is not restricted to a panel or selected group of commercial market participants. The AMM Midwest Scrap Index methodology is enclosed as Appendix 1-A (AMM Midwest Scrap Index – Methodology).

Regulation 39.5(b)(3)(v) - "Pricing sources, models, and procedures, demonstrating an ability to obtain sufficient price data to measure credit exposures in a timely and accurate manner, including any agreements with clearing members to provide price data and copies of executed agreements with third-party price vendors, and information about any price reference index used, such as the name of the index, the source that calculates it, the methodology used to calculate the price reference index and how often it is calculated, and when and where it is published publicly."

Statement on Outstanding Derivatives Notional Exposure

To CME Clearing's knowledge, there is no materially active OTC ferrous scrap metal derivatives market. In September of 2012, NYMEX listed a U.S. Midwest #1 Busheling Ferrous Scrap (AMM) Futures contract (BUS) to facilitate the growth of a derivatives market for managing commercial ferrous scrap metal price risks. The U.S. Midwest #1 Busheling Ferrous Scrap (AMM) Futures contract (BUS) has a contract size of 20 gross tons. As of October 11, 2013, the U.S. Midwest #1 Busheling Ferrous Scrap (AMM) Futures contract (BUS) had an open interest level of 381 contracts. At the October 11, 2013 NYMEX price of \$385 per gross ton, the notional value of open interest was approximately \$3 million.

The following cash market data may be relevant to assessing potential outstanding notional exposures of swap transactions. Total value of domestic purchases and exports of ferrous scrap metal was estimated to be \$39.4 billion in 2012.³ The United States exports ferrous scrap to approximately 90 countries worldwide.⁴ In 2012, more than 20 million metric tons of ferrous scrap – valued at more than \$9 billion – was exported to approximately 90 countries, including China, South Korea, Turkey, Taiwan, Canada, and India. This makes the U.S. the biggest ferrous scrap exporter in the world.⁵

Statement on Derivatives Trading Liquidity

While there is some trading in the NYMEX U.S. Midwest #1 Busheling Ferrous (AMM) Futures contract (BUS), the derivatives market in scrap steel is in its early stages and is likely to continue to grow. CME Clearing is not aware of ferrous scrap OTC derivatives and forward transaction market activity.

Trading liquidity data for the NYMEX U.S. Midwest #1 Busheling Ferrous (AMM) Futures contract (BUS) is provided below.

Month	Monthly Volume	Notional Value for Monthly Volume	Average Daily Volume	Notional Value for Average Daily Volume
Sept, 2012	66	\$516,199	3	\$23,464
Oct, 2012	220	\$1,478,048	10	\$67,184
Nov, 2012	175	\$1,364,090	8	\$62,358
Dec, 2012	45	\$350,379	2	\$15,572
Jan, 2013	267	\$2,077,100	13	\$101,132
Feb, 2013	50	\$375,240	3	\$22,514
Mar, 2013	264	\$2,203,133	13	\$108,488

U.S. Midwest #1 Busheling Ferrous (AMM) Futures (BUS)

³ U.S. Geological Survey (USGS), U.S. Department of the Interior, pages 80 to 81, available at http://minerals.usgs.gov/minerals/pubs/mcs/2013/mcs2013.pdf.

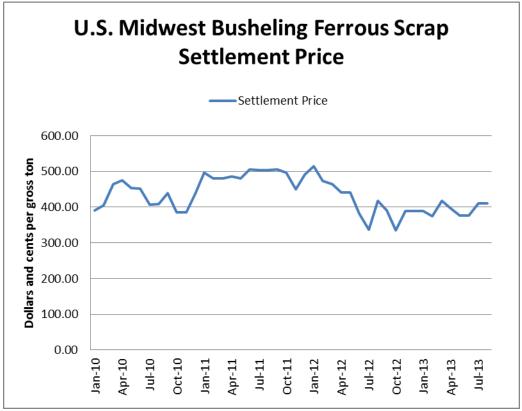
⁴ Id.

Apr, 2013	159	\$1,262,937	7	\$55,601
May, 2013	665	\$5,018,223	30	\$226,386
Jun,2013	35	\$264,159	2	\$15,095
Jul, 2013	125	\$1,026,825	6	\$49,288
Aug, 2013	0	\$0	0	\$0
Sept, 2013	0	0	0	\$0
Total	2,071	\$15,936,333	97	\$747,082

Source: CME Group

Statement on Pricing Data

Pricing data for the NYMEX U.S. Midwest #1 Busheling Ferrous (AMM) Futures contract (BUS) and U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) is readily available. Both contracts reference the U.S. Midwest Busheling Ferrous Scrap Index for settlement values. The U.S. Midwest Busheling Ferrous Scrap Index for settlement values. The U.S. Midwest Busheling Ferrous Scrap Index is administered by the American Metal Market ("AMM"), which has been reporting on the U.S. scrap metal market for over 100 years. Information regarding the U.S. Midwest Busheling Ferrous Scrap Index, including its calculation methodology, is publicly available. The AMM Midwest Scrap Index methodology is enclosed as Appendix 1-A (AMM Midwest Scrap Index – Methodology).



Source: AMM

Statement on Swap Product Rule Framework

The U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) will be listed for trading by the Swap Execution Facility Division of the Chicago Mercantile Exchange ("CME SEF"). In accordance with the listing of the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW), CME SEF Rulebook Chapter 10 will be implemented through a separate submission. That chapter is enclosed as Appendix 1-B.

Swap Product Specifications

As noted above, the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) will be listed for trading by CME SEF. In accordance with this listing, CME SEF Rulebook Chapter 10, which includes the cleared product's specifications, is being adopted in a separate submission and is set forth herein as Appendix 1-B. A summary of the product specifications for the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) are as follows:

Contract Title: U.S. Midwest Busheling Ferrous Scrap (AMM) Swap

Commodity Code: BUW

Contract Size: 20 Gross Tons

Prices and Fluctuations: \$ 0.01 per gross tons

Settlement: The Floating Price for each contract month is equal to the price assessment published on the 10th calendar day of that given calendar month for the U.S. Midwest Busheling Ferrous Scrap by AMM. If the 10th day is a holiday or weekend, the price will settle on the first immediately following business day. Final settlement under the contract shall be by cash settlement. Final settlement, following termination of trading for a contract month, will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract month.

Termination of Clearing: Trading shall terminate on the 10th calendar day of the contract month. If 10th calendar day falls on a holiday or weekend, the price will settle on the first immediately following business day. Business days are based on the U.S. Public Holiday calendar.

Listing Schedule: 24 consecutive calendar months

First Listed Month: December 2013

Rule Chapter: 10

Clearing Hours: CME ClearPort Sunday – Friday 6:00 p.m. – 5:15 p.m. New York Time with a 45-minute break each day beginning at 5:15 p.m.

Pricing Sources, Models and Procedures

The AMM U.S. Midwest Busheling Ferrous Scrap Index methodology aims to use the input of high-quality data. AMM has been reporting on the U.S. scrap market for over 100 years and therefore has significant experience and knowledge in providing benchmark prices to the industry. The index is based on transactions, which are reported to AMM by market participants conducting trades on a delivered Midwest mill basis, and is not restricted to a panel or selected group of market participants. The Midwest Busheling Ferrous Scrap Index also utilizes aggregate transaction data, where available, in order to maximize the tonnage proportion of buyers and sellers in the market represented in the final index. AMM is impartial and has no financial or other interest in the level or direction of the AMM U.S. Midwest Busheling Ferrous Scrap Index.

The licensing agreement between AMM and CME is enclosed as Appendix 2-A and designated for confidential treatment.

Statements and Information (Product Clearing)

Regulation 39.5(b)(3)(ii) - "A statement that includes, but is not limited to, information that will

assist the Commission in making a quantitative and qualitative assessment of the following factors:"

"(B) The availability of rule framework, capacity, operational expertise and resources, and credit support infrastructure to clear the contract on terms that are consistent with the material terms and trading conventions on which the contract is then traded"

"(C) The effect on the mitigation of systemic risk, taking into account the size of the market for such contract and the resources of the derivatives clearing organization available to clear the contracts"

"(D) The effect on competition, including appropriate fees and charges applied to clearing"

"(E) The existence of reasonable legal certainty in the event of the insolvency of the relevant derivatives clearing organization or one or more of its clearing members with regard to the treatment of customer and swap counterparty positions, funds, and property"

Regulation 39.5(b)(3)(iv) – "Participant eligibility standards, if different from the derivatives clearing organization's general participant eligibility standards"

Regulation 39.5(b)(3)(vi) – "Risk management procedures, including measurement and monitoring of credit exposures, initial and variation margin methodology, methodologies for stress testing and back testing, settlement procedures, and default management procedures"

Regulation 39.5(b)(3)(vii) - "Applicable rules, manuals, policies, or procedures"

Statement on Clearing Rule Framework

In general, the clearing rule framework governing the clearing of the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) can be found in Chapter 8 (Clearing House and Performance Bonds) of the CME Rulebook. Chapter 8 of the CME Rulebook is enclosed as Appendix 1-C. Also relevant to the rule framework is the CME Clearing House Manual of Operations, a copy of which is enclosed as Appendix 2-B and designated for confidential treatment.

Statement on Operational Expertise, Resources, and Credit Support Infrastructure

The document entitled CME Clearing Financial Safeguards contains information regarding CME Clearing's capacity, expertise, resources and financial safeguards system. A copy of that document is enclosed as Appendix 1-D.

Statement on the Mitigation of Systemic Risk

As a central counterparty, CME Clearing interposes itself between counterparties to the swaps (and other derivatives products) that it clears, becoming the buyer to every seller and the seller to every buyer. For each swap that it clears, CME Clearing provides all clearing house services, including a mark-to-market function. Depending upon the particular asset class, CME Clearing may standardize contract-critical dates (e.g., start dates, last trade dates, expiry dates) and other contract terms. This may enable customers who hold positions to liquidate or to adjust positions simply by buying back or selling the relevant contracts.

The benefits associated with clearing physical-commodity swaps and the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) are considerable and include:

Centralized clearing – Clearing physical-commodity swaps through CME Clearing allows market participants to free up counterparty credit lines. The mark-to-market process employed by CME Clearing enhances customer risk management;

Operational efficiencies – Centralized clearing of swaps reduces operational burdens in several ways. Standardization and centralized clearing enables consolidation of collateral management and cash flows and eliminates the need for novations or tear-ups; and

Ease of position adjustment – In non-cleared markets, the only means to completely eliminate the risk of a swap is to (i) enter into a tear-up agreement with the swap counterparty, or (ii) enter into a novation (i.e., find another entity willing to assume its side of the swap). In either case, the tearup or the novation must be approved by the bilateral swap counterparty. For most asset classes, central clearing may be used to offset by a contra trade.

As further described in the enclosed CME Clearing Financial Safeguards (Appendix 1-D) and as reflected in the enclosed Clearing House Manual of Operations (Appendix 2-B, designated for confidential treatment), CME Clearing has the necessary resources available to clear the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW). With respect to the margining of the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW), please see document entitled CME SPAN, which is enclosed as Appendix 1-E.

Statement on Competition and Appropriate Fees and Charges

CME Clearing's margin and guaranty fund computations, fees and charges are appropriately set and account for the risk brought to the clearinghouse.

Statement on Legal Certainty and Insolvency

The bankruptcy of a DCO is governed by subchapter IV of Chapter 7 of the U.S. Bankruptcy Code (11 U.S.C. §§ 761-767), and by Part 190 (Bankruptcy) of the Commission's regulations. Also relevant in the event that CME were to enter into bankruptcy proceedings is CME Rule 818 (Close-Out Netting) included in Chapter 8 (Clearing House and Performance Bonds) of the CME Rulebook. CME Rule 818 (Close-Out Netting) is included in CME Rulebook Chapter 8 (enclosed as Appendix 1-C).

The bankruptcy of a clearing member that is a U.S. futures commission merchant ("FCM") would be governed by subchapter IV of Chapter 7 of the U.S. Bankruptcy Code (11 U.S.C. §§ 761-767) and Part 190 (Bankruptcy) of the Commission's regulations. If an FCM is registered as a broker-dealer, certain aspects of its insolvency proceeding may also be governed by the Securities Investor Protection Act. For further details regarding the legal certainty provided under the relevant U.S. insolvency laws, please see CME Clearing Financial Safeguards, enclosed as Appendix 1-D.

Participant Eligibility Standards

Clearing member participation standards are set forth in the following documents: (i) Requirements for Clearing Memberships and (ii) Clearing Membership Handbook. These documents are enclosed in Appendix 1-F.

Risk Management, Rules, Policies and Procedures

Matters related to risk management and applicable rules, manual, policies and procedures are specifically discussed in CME Clearing's Annual Compliance Report (Fiscal Year 2012), which is enclosed in Appendix 2-C and designated for confidential treatment.

Please see discussion above and the following documents:

CME Rulebook Chapter 8 (Appendix 1-C);

CME Clearing House Manual of Operations (Appendix 2-B, designated for confidential treatment);

CME Clearing Financial Safeguards (Appendix 1-D); and

CME SPAN (Appendix 1-E).

Communication to Members Regarding this Submission

Regulation 39.5(b)(3)(viii) – "A description of the manner in which the derivatives clearing organization has provided notice of the submission to its members and a summary of any views on the submission expressed by the members (a copy of the notice to members shall be included with the submission."

CME Clearing has posted this submission (absent confidential materials) on the CME website at <u>http://www.cmegroup.com/market-regulation/rule-filings.html</u>.

As set forth above, CME Clearing hereby notifies the Commission that it is accepting the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) for clearing. CME Clearing is accepting the U.S. Midwest Busheling Ferrous Scrap (AMM) Swap (BUW) for clearing pursuant to this submission, in accordance with the requirements CFTC Regulation 39.5(b).

If you require any additional information regarding this action, please contact me at 212-299-2200 or <u>Christopher.Bowen@cmegroup.com</u>, or John McKinlay at <u>John.McKinlay@cmegroup.com</u> and reference CME Submission No. 502 in any related correspondence.

Sincerely,

/s/ Christopher Bowen Managing Director and Chief Regulatory Counsel

Enclosures:

Appendix 1-A: AMM Midwest Scrap Index – Methodology

Appendix 1-B: CME SEF Rulebook Chapter 10

Appendix 1-C: CME Rulebook Chapter 8 (Clearing House and Performance Bonds)

Appendix 1-D: CME Clearing Financial Safeguards

Appendix 1-E: CME SPAN

Appendix 1-F: Requirements for Clearing Memberships and Clearing Membership Handbook

Appendix 2-A: Licensing agreement between AMM and CME (designated for confidential treatment) Appendix 2-B: CME Clearing House Manual of Operations (designated for confidential treatment) Appendix 2-C: CME Clearing's Annual Compliance Report, Fiscal Year 2012 (designated for confidential treatment)

APPENDIX 1-A

AMM MIDWEST SCRAP INDEX – METHODOLOGY

- AMM Midwest Scrap Index (No. 1 heavy melting scrap)
- AMM Midwest Scrap Index (No. 1 busheling)
- AMM Midwest Scrap Index (Shredded)

American Metal Market

AMM is the leading independent supplier of market intelligence and pricing to the North American metals industries and publisher of the widely-used reference prices for scrap.

AMM's Midwest Scrap Index builds upon the publication's extensive experience in reporting scrap prices in a wide range of grades and locations and utilizes an established and leading index methodology.

AMM Midwest Scrap Index

The Midwest Scrap Index has been developed to provide a fair, transparent and objective representation of the market.

The AMM Index methodology is a tonnageweighted calculation of transactions that have been normalized to our base specification using value-in-use curves as defined by the market.

Our methodology aims to use the input of high-quality data. AMM has been reporting on the U.S. scrap market for more than 100 years and therefore has a unique level of experience and knowledge in providing benchmark prices to the industry.

The Index is based on actual transactions, which are reported to *AMM* by any market participant conducting trades on a delivered Midwest mill basis and is not restricted to a panel or selected group.

The Midwest Scrap Index also utilizes aggregate transaction data, where available, in order to maximize the proportion of the market represented in the final Index.

AMM is impartial and has no financial or other interest in the level or direction of the Index. *AMM* will not pay any market player to participate in the Index.

Midwest Scrap Index Specifications

The details on pages 4 and 5 are the base specification. The Index is quoted in \$/gross ton delivered to the mill and is calculated for three grades: No. 1 heavy melting scrap, No. 1 busheling and shredded.

The number of grades quoted can be increased according to market requirements. The grades are based on ISRI specifications from 2011 and are listed in the table on pages 7 and 8.

Trades in similar grades are normalized back to the base specification to reflect the whole market and to increase liquidity in the calculation.

The trades are normalized using the value-inuse of the different grades as defined by the market itself and are updated on a regular basis as market movements dictate. In addition, where there is variation in other contract terms, such as a difference in pricing terms, these are adjusted back to the base specification.

Index Calculation

The Index consists of two sub-indices, based on data received from sellers and buyers of scrap.

The sub-indices are each based on a tonnage-weighted average of the normalized trade information, and the two indices are combined with equal weighting to ensure that the market is fairly represented across all participants. Only the final Index is published.

Data Quality and Verification

All data points that vary by more than 4 percent from the calculated Index are excluded and the Index recalculated to a single iteration. Outliers can be investigated, and attempts to influence the Index unfairly

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will result in the data provider being warned or excluded.

In some cases, where prices appear out of line or anomalous, participants may be asked to provide evidence of the transaction in the form of a signed contract. Participants will have the right to decline to provide this and *AMM* will have the right to exclude prices that cannot be substantiated.

The number of trades available for use in the Index does of course vary depending on the market conditions prevailing, but *AMM* seeks to utilize as many trades as possible.

Where insufficient transactions have taken place in the market, defined as less than 20 percent of the average monthly market volumes over the past 12 months, *AMM* reserves the right to include assessments, bids and offers from market participants in the Index calculation.

Material of all origin is included in the calculation with no sources specifically excluded. However, the origin may have an influence on the normalization coefficients used, if appropriate to the grade.

Data is submitted in a secure manner by phone and e-mail survey.

In its attempts to collect as much data from the market as possible, *AMM* will use the means that best suit the prevailing market environment.

All correspondence is stored by *AMM*. The data collection and Index calculation process will be made available for audit by a recognized and accepted third-party auditor.

Index Publication

The Index is published on the 10th of each month at 5 p.m. EST from our New York office. All data must be received by 12 p.m. EST. Any data received after 12 p.m. EST on the day of publication will not be included in the Index calculation.

In the event of the 10th of the month falling on a public holiday or weekend, the Index will be published on the following working day. While the Index will typically be published by AMM's New York office, AMM and its parent organization maintain offices in a number of locations and can publish the Index from any of them as circumstances dictate.

AMM reserves the right to change the publication frequency according to market requirements.

Data Input

AMM aims to collect as many transactions from the greatest number of counterparties as possible each month in its attempt to represent the majority of the market. AMM has the reach and network to achieve this.

The more data collected, the larger the proportion of the market that is represented and the more statistically significant the final figure will be.

AMM is constantly looking to expand its contact list in order to represent any changes in participants in the market. All market participants are permitted to contribute and the process is not limited to a closed price-setting panel.

Both buyers and sellers are equally represented in the final Index price in order to avoid bias. However, different numbers of inputs may be entered from each side of the market into each sub-index.

Notes on the Data Submission and Calculation Methodology

These notes are intended as a guide to the *AMM* Midwest Scrap Index and aim to expand the thinking and development processes that go into the calculation of each *AMM* Index. They also aim to answer some of the typical queries about the calculation of the methodology, selection of data, removal of bias and transparency of the process.

How Many Respondents are Included in the Data Collection?

The number of respondents is not limited to a pricing panel or group of price setters, but is open to any market participant who is con-

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ducting business on a delivered Midwest mill basis. AMM collects transactional data from approximately 50 market participants. Naturally, only a proportion will be active in the market in any particular month, but they will all typically be contacted each month to determine whether they have conducted any business.

What Data Does *AMM* Request from Market Participants?

AMM requires that its contacts in the market report data in good faith and with full transparency. Typically that would include establishing a formal relationship and a dedicated contact point to maintain consistency from month to month.

In order to create the most representative Index, *AMM* requests the following aspects of the transaction for inclusion in the calculation:

- Transaction price
- Material type
 (based on ISRI specifications)
- Origin
- Tonnage
- Delivery point
- Delivery period
- Payment terms
- Name of company
- Date of transaction
- Any other relevant data to pricing (e.g. distressed sale.)

Data can be supplied in a number of ways to maximize convenience. This can include by phone or e-mail to the normal *AMM* contact or to editor@amm.com.

Verification of Data

AMM employs a number of mechanisms to ensure that data submitted to the Index is fair and representative of the market. The calculation automatically removes data which is more than 4 percent away from the calculated final Index, and the Index is then recalculated to one iteration. This allows outliers to be discarded, whether they are based on error, erroneous data or any attempt to influence the Index calculation.

AMM reserves the right to demand to see contracts and signed paperwork before inclusion of the data in the calculation. If this is refused, the data, or the data supplier, can be excluded from the data collection process. Furthermore, *AMM* reserves the right to exclude data that it does not feel is fairly presented or is an effort to distort the market.

Security of Data

AMM stores the collected data and calculation process on secure off-site servers that are backed-up on a daily basis. The data is not accessible to parties outside AMM or the group, and internally only to defined individuals within the Index and editorial teams.

If required, the Index calculation process is auditable by a recognized and mutually acceptable third-party auditor according to legal requirements and under non-disclosure agreements.

Internal Compliance

AMM has established extensive training to ensure that the methodologies of data collection, Index calculation, publication and information storage are strictly adhered to. This includes internal auditing, close management oversight and regular updating of standards to reflect any changes in market practice.

Why is the Index Calculation Split into Buyers and Sellers?

The AMM methodology is designed specifically and uniquely to balance out any bias in the market to create the most representative and objective price. The Index is split into the two groups of buyers and sellers to balance a number of factors, including tonnage bias, where more transactions are reported by one side or the other.

In this case, if more tonnage is reported on one side, it will contribute to the accuracy of the sub-index, but it does not over influence the market as it will always be 50 percent of the final Index calculation.

By splitting the calculation into two, influence from potential selective reporting of data is reduced. This is critical in a tonnage-weighted assessment that calculates the Index in a methodological and mathematical manner.

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How Many Trades are Captured in the Index? This depends on the market conditions at the time of calculation. In calculations of the Index, there are typically 30 to 40 data points included, giving a very strong statistical analysis.

How Does the Index Methodology Adjust for Different Levels of Concentration Between the Buyers and Sellers?

The sub-indices are based on a tonnageweighted calculation of actual transactions normalized for grade, payment terms, etc. The final Index is the non-weighted average of the two sub-indices, allowing for equal representation from both sides of the market, and also counters market distortion or selective reporting of data. Only the final Index is published.

The different market concentrations then do not matter, as both sides of the market are treated individually and then combined equally.

What Happens if the Material is Downgraded on Delivery?

The transaction is done on the expected delivery specifications, including grade and payment terms, and the price settled on this basis. If it turns out to be different, then that is an issue between the two parties who entered the contract, and the Index is not revised retroactively.

Spot Pricing vs. Long-Term Contracts

The AMM Midwest Scrap Index includes material that will be delivered within 30 days to the mill. Spot business concluded after the 10th of the month will not be included. Any material that is delivered as part of a long-term contract is excluded from the calculation process.

Payment Terms

The basis of the payment terms is based on typical commercial practice in the Midwest scrap market. Transactions that are conducted on different payment or credit terms will be normalized back to the base specifications, taking into account discounts, current interest rates and standard commercial terms.

Low Liquidity

There may be periods when the number of transactions available for inclusion in the Index calculation will fall, for example, due to poor market conditions. *AMM* has established formal methodologies to address this issue. Where insufficient transactions have taken place in the market, defined as less than 20 percent of the average monthly market volumes over the past 12 months, *AMM* reserves the right to include assessments, bids and offers from market participants in the Index calculation. These are treated in the same way as transactions, but weighted at a minimum tonnage and subject to exclusion under the same rules.

Timing of Publication

The structure of the Midwest scrap market means that the large majority of the business is conducted in the first 10 days of the month. *AMM* publishes the scrap Index on the 10th of each month, unless that falls on a weekend or public holiday, in which case the Index is published on the following working day.

Security of Publication

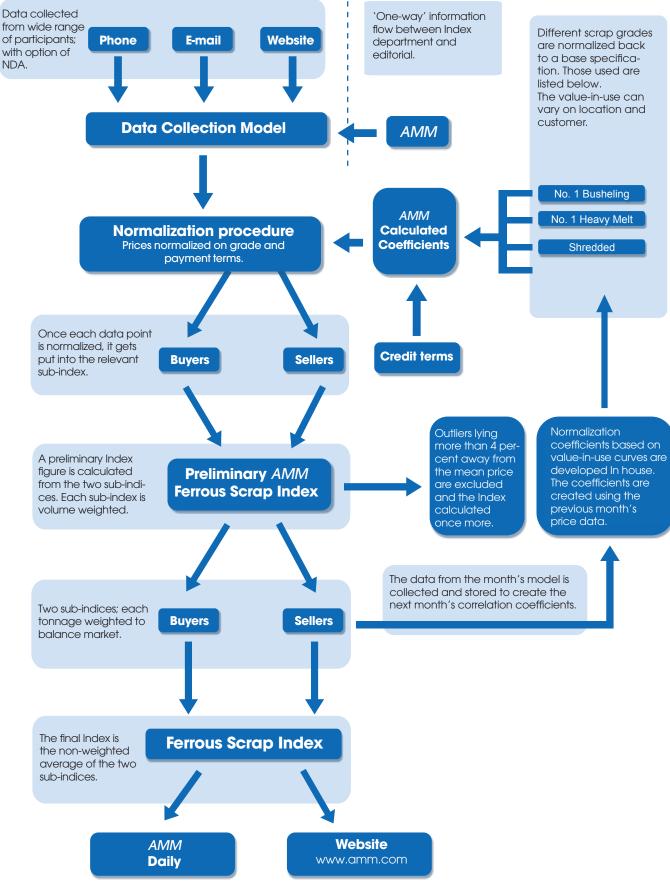
AMM utilizes secure off-site servers for the whole of its operations, calculations and publication. In the event of breakdown or damage to the systems, emergency and disaster planning procedures are in place to ensure continual and timely publication of the Index. These systems can be implemented from any of the offices in New York, Pittsburgh or London.

AMM's Scrap Prices Portfolio - Indices and Assessments

AMM publishes a comprehensive list of scrap market prices including indices and assessments. The assessments are designed to provide a clear and fair representation of the spot price in the various regional markets. The AMM Midwest Scrap Index aims to reflect scrap prices for the entire Midwest region. The Index price differs from the assessment figure due to a difference in the methodologies.

However, we expect both price series to correlate strongly due to the overlapping nature of many of the data points.

American Metal Market





Specification for US Scrap Midwest No. 1 Heavy Melting Scrap Index		
Price Pricing Point Delivery Points Specifications	US\$ per gross ton Delivered Midwest mill Any mill in Illinois, Indiana, Michigan, Wisconsin, Iowa and NW Ohio ISRI Grade 200 No. 1 heavy melting steel. Wrought iron and/or steel scrap 1/4 inch and over in thickness. Individual pieces not over 60 x 24 inches (charging box size) prepared in a manner to insure compact charging.	
Other Grades Normalized	 ISRI Grade 201 No. 1 heavy melting steel 3 feet x 18 inches. Wrought iron and/or steel scrap 1/4 inch and over in thickness. Individual pieces not over 36 x 18 inches (charging box size) prepared in a manner to insure compact charging. ISRI Grade 202 No. 1 heavy melting steel 5 feet x 18 inches. Wrought iron and/or steel scrap 1/4 inch and over in thickness. Individual pieces not over 60 x 18 inches (charging box size) prepared in a manner to insure compact charging. 	
Material Origin	All origins	
Trade Size	Minimum 1,000 gross tons	
Delivery Window	Within 30 days	
Delivery Method	Any permitted according to ISRI specifications 2012	
Payment Terms	Net 30 days post delivery. Other terms normalized	
Publication Date	10 th of each month (or following working day)	
Publication Time	5 p.m. EST	

Specification for US Scrap Midwest No. 1 Busheling Index

Price Pricing Point Delivery Points Specifications	US\$ per gross ton Delivered Midwest mill Any mill in Illinois, Indiana, Michigan, Wisconsin, Iowa and NW Ohio ISRI Grade 207 No. 1 busheling. Ferrous busheling. Compliant to ISRI Specifications 7 No. 1 busheling. Clean steel scrap, not exceeding 12 inches in any dimensions, including new factory busheling (sheet clippings, stampings, etc.). May not include old auto body and fender stock. Free of metal coated, limed, vitreous enamelled, and electrical sheet containing over 0.5-percent silicon.
Material Origin	All origins
Trade Size	Minimum 1,000 gross tons
Delivery Window	Within 30 days
Delivery Method	Any permitted according to ISRI specifications 2012
Payment Terms	Net 30 days post delivery. Other terms normalized
Publication Date	10 th of each month (or following working day)
Publication Time	5 p.m. EST



Specification for US Scrap Midwest Shredded Index		
Price Pricing Point Delivery Points Specifications	US\$ per gross ton Delivered Midwest mill Any mill in Illinois, Indiana, Michigan, Wisconsin, Iowa and NW Ohio ISRI Grade 211 Shredded scrap. Homogeneous iron and steel scrap magnetically separated, originating from automobiles, unprepared No. 1 and No. 2 steel, miscellaneous baling and sheet scrap. Average density 70 pounds per cubic foot.	
Other Grades Normalized	ISRI Grade 210 Shredded scrap. Homogeneous iron and steel scrap, magnetically separated, originating from automobiles, unprepared No. 1 and No. 2 steel, miscellaneous baling and sheet scrap. Average density 50 pounds per cubic foot. ISRI Grade 212 Shredded clippings. Shredded 1000 series carbon steel clippings or sheets. Material should have an average density of 60 pounds per cubic foot.	
Material Origin	All origins	
Trade Size	Minimum 1,000 gross tons	
Delivery Window	Within 30 days	
Delivery Method	Any permitted according to ISRI specifications 2012	
Payment Terms	Net 30 days post delivery. Other terms normalized	
Publication Date	10 th of each month (or following working day)	
Publication Time	5 p.m. EST	



Appendix:

About AMM

American Metal Market (*AMM*), founded in 1882, over its long history has established itself as the unrivaled leader in metals news and pricing in North America.

AMM and sister publication Metal Bulletin are part of the Euromoney Institutional Investor Plc group, a £1-billion (\$1.6-billion) business publisher that is publicly listed on the London Stock Exchange and is majority owned by Daily Mail & General Trust Plc.

With around 7,500 subscribers, *AMM* covers the full array of metals, although its particular strengths are in steel and ferrous scrap.

AMM disseminates its information through a daily electronic newspaper, its website amm.com and a monthly magazine. In all, more than 10,000 stories are published every year and more than 1,000 different prices are assessed regularly across a range of metals, grades and locations.

A Strong History in Pricing

AMM has built a reputation as a trusted source in pricing assessment. Its prices are used as benchmarks in contracts between buyers and sellers in a variety of markets, but perhaps have the strongest traction in ferrous scrap.

Ferrous Scrap

For the past several decades, *AMM* has assessed and published prices for up to 30 different grades of ferrous scrap in 20 different cities. Some of these are export yard or broker buying prices, but the majority are assessments of the prices paid by consumers—steel mills and, for certain grades, steel foundries.

AMM's price assessments are based on the reporting staff's regular interaction with scrap buyers and sellers. The assessments consider actual transactions, although the calculation of the price depends to a great extent on the experience and expertise of *AMM*'s editorial team.

The prices have become widely used by the industry and the assessments in certain cities, most notably Chicago, are recognized as the undoubted benchmarks used for establishing contract prices and surcharges.

The Ferrous Scrap Market

The ferrous scrap market in the United States is quite different from many other commodity markets. The vast majority of business is done on a monthly contract basis, with the bulk of the negotiations typically taking place during the first week of the month and the vast majority of business completed in the first 10 days of the month.

AMM assesses the market throughout the month, but typically updates the prices once or twice and usually completes a final revision by the 10th of the month.

APPENDIX 1-B

CME SEF Rulebook Chapter 10

Chapter 10

US Midwest Busheling Ferrous Scrap (AMM) Swap

10100. SCOPE OF CHAPTER

The provisions of these rules shall apply to all swap contracts bought or sold on CME SEF for cash settlement based on the Floating Price (as defined below). The procedures for trading, clearing and cash settlement of this contract, and any other matters not specifically covered herein shall be governed by the general rules of CME SEF or other rules as referred to therein.

10101. CONTRACT SPECIFICATIONS

The Floating Price for each contract month is equal to the price assessment ("Index") published on the 10th of that given calendar month for the US Midwest Busheling Ferrous Scrap by American Metal Market ("AMM"). If the 10th falls into a holiday or weekend, the price will settle on the immediate following business day.

10102. TRADING SPECIFICATIONS

The number of months open for trading at a given time shall be determined by CME SEF.

10101.A. Trading Schedule

The hours of trading for this contract shall be determined by CME SEF.

10101.B. Trading Unit

The contract quantity shall be 20GT. Each contract shall be valued as the contract quantity multiplied by the settlement price.

10101.C. Price Increments

Prices shall be quoted in U.S. dollars and cents per gross ton. The minimum price fluctuation shall be \$0.01 per gross ton. There shall be no maximum price fluctuation.

10101.D. Position Limits and Position Accountability

The applicable position limits and/or accountability levels are set forth in the Position Limit and Position Accountability Table in the Interpretations & Special Notices Section of Chapter 5.

A person seeking an exemption from position limits for bona fide commercial purposes shall apply

to the Market Regulation Department on forms provided by CME SEF, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

10101.E. Termination of Trading

Trading shall terminate on the 10th calendar day of the contract month. If the 10th calendar day falls into a holiday or weekend, the price will settle on the immediate following business day. Business days are based on the US Public Holiday calendar.

10103. FINAL SETTLEMENT

Final settlement under the contract shall be by cash settlement. Final settlement, following termination of trading for a contract month, will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract month.

10104. CLEARING GUARANTEE

No order or trade in this contract may be entered or executed upon any CME SEF platform unless a NYMEX Clearing Member, as the term is defined under NYMEX Rules, guarantees and assumes complete responsibility for the financial obligations of the participant on whose behalf such order or trade is entered.

10105. DISCLAIMER

NEITHER CHICAGO MERCANTILE EXCHANGE INC. ("CME"), ITS AFFILIATES NOR AMM ("AMERICAN METAL MARKET") GUARANTEES THE ACCURACY NOR COMPLETENESS OF THE INDEX OR ANY OF THE DATA INCLUDED THEREIN. CME, ITS AFFILIATES OR AMM MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AS TO THE RESULTS TO BE OBTAINED BY ANY PERSON OR ENTITY FROM USE OF THE INDEX, TRADING AND/OR CLEARING BASED ON THE INDEX, OR ANY DATA INCLUDED THEREIN IN CONNECTION WITH THE TRADING AND/OR CLEARING OF THE CONTRACT, OR, FOR ANY OTHER USE. CME, ITS AFFILIATES AND AMM MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AND HEREBY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE INDEX OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT SHALL CME, ITS AFFILIATES OR AMM HAVE ANY LIABILITY FOR ANY LOST PROFITS OR INDIRECT, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.



APPENDIX 1-C

CHAPTER 8 CLEARING HOUSE AND PERFORMANCE BONDS

GENERAL

800.	CLEARING HOUSE
801.	MANAGEMENT
802.	PROTECTION OF CLEARING HOUSE
	802.A. Default by Clearing Member or Other Participating Exchanges
	802.B. Satisfaction of Clearing House Obligations
	802.C. Application of Funds to Avoid Clearing House Insolvency
	802.D. Restoration of Funds Following Final Determination of Losses
	802.E. Rights of Exchange for Recovery of Loss
	802.F. Guaranty Fund Contributions to be Restored
	802.G. Default Management Across Account Classes
	802.H. Base Cooling Off Period and Multiple Defaults
803.	LIMITATION OF LIABILITY
804.	SUBSTITUTION
805.	OPEN POSITIONS
806.	OFFSET PROCESS
807.	OPEN LONG POSITIONS DURING DELIVERY MONTH
808.	PROCEDURES FOR TRADE SUBMISSION ON CME CLEARPORT
809.	TRADE DATA PROCESSING SYSTEM
	809.A. Trade Data
	809.B. Matched and Unmatched Trades
	809.C. Trade Register and Clearing Reports
	809.D. Reconciliation of Outtrades
810.	FALSE ENTRIES ON CLEARING MEMORANDA
811.	POSITION CHANGE DATA
812.	FINAL SETTLEMENT PRICE
813.	DAILY SETTLEMENT PRICE
814.	SETTLEMENT VARIATION
815.	[RESERVED]
816.	GUARANTY FUND DEPOSIT
817.	LIQUIDITY FACILITY

818. CLOSE-OUT NETTING





819.	LIEN ON COLLATERAL
820.	PERFORMANCE BONDS
821823.	[RESERVED]
824.	ADDITIONAL PERFORMANCE BOND
825826.	[RESERVED]
827.	SECURITIES LENDING PROGRAM
828829.	[RESERVED]
830.	CROSS-MARGINING
	830.A. Definitions
	830.B. Cross-Margining Programs
	830.C. [RESERVED]
	830.D. Performance Bonds for Cross-Margining Program
	830.E. Close-Out of Cross-Margin Positions

831.-849. [RESERVED]

MISCELLANEOUS

- 850. FEES
- 851. [RESERVED]
- 852. SURCHARGES FOR ERRORS, DELAYS AND OMISSIONS
- 853. TRANSFERS OF TRADES AND CUSTOMER ACCOUNTS
- 854. CONCURRENT LONG AND SHORT POSITIONS
- 855. OFFSETTING DIFFERENT SIZED FUTURES POSITIONS
- 856. NORMALIZATION OF OTC FX SPOT, FORWARD, SWAP AND OPTIONS TRANSACTIONS FOR CLEARING



Chapter 8 Clearing House and Performance Bonds

GENERAL

800. CLEARING HOUSE

The Exchange shall maintain and operate a Clearing House in order to protect market participants and to maintain the integrity of the contracts traded on or processed through the Exchange. Membership in the Clearing House shall be a right and privilege granted by the Board of Directors which may, from time to time, establish such classes of membership in the Clearing House, together with the duties, rights and privileges thereof, as it deems necessary. Whenever these rules create a right in favor of the Clearing House, or impose a liability on the Clearing House, it shall be construed as the right or liability of the Exchange, and shall be enforced by or against the Exchange.

For purposes of these Chapter 8 rules and except as otherwise noted within a particular rule, all references to requirements, conditions or procedures of the Clearing House, shall be deemed to apply to Dubai Mercantile Exchange Limited ("DME") contracts. The Clearing House, in relation to providing clearing services to DME for transactions effected on or subject to the rules of the DME, will provide reports and such other information to the DME as may be required for the business operation and regulatory requirements applicable to the DME.

801. MANAGEMENT

The general direction of the Clearing House shall be under the jurisdiction of the Clearing House Risk Committee. The Chief Executive Officer with the approval of the Board shall appoint a President of the Clearing House, who shall be responsible for the daily operation of the Clearing House and the implementation of the rules applicable to the Clearing House. The President of the Clearing House may also delegate authority for certain aspects of the daily operation of the Clearing House to staff of the Clearing House.

Exchange staff shall adopt, establish, publish and amend from time to time a Clearing House Manual of Operations ("Manual"). This Manual shall contain, among other things, information and directions for preparing trade data, completing prescribed memoranda and meeting other Clearing House requirements. The Manual and amendments thereto shall constitute part of the rules of the Exchange.

802. PROTECTION OF CLEARING HOUSE

802.A. Default by Clearing Member or Other Participating Exchanges

The Clearing House shall establish a guaranty fund (the "Base Guaranty Fund") for products other than CDS Products, IRS Products and any positions commingled with IRS Contracts pursuant to Rule 8G831 (such products, the "Base Guaranty Fund Products" and each product, a "Base Guaranty Fund Product Class"). Each clearing member shall contribute to the Base Guaranty Fund in accordance with the requirements of Rule 816. A clearing member's Base Guaranty Fund contribution may be applied by the Clearing House in accordance with this Rule 802 to mitigate a Loss (as defined below) to the Clearing House attributable to any cleared Base Guaranty Fund Product Class (as defined below) regardless of the Base Guaranty Fund Product Classes a clearing member clears. However, in order to accommodate differences in time frames and processes associated with the liquidation of certain Base Guaranty Fund Product Classes, Losses will be allocated among a set of Base Guaranty Fund tranches established to reflect the relative contributions of different product classes to the total Base Guaranty Fund. Notwithstanding this prioritization of the Clearing House's recourse, ultimately the entire Base Guaranty Fund will be available if necessary to satisfy all losses regardless of Base Guaranty Fund Product Class.

1. Default by Clearing Member

If a clearing member of CME, CBOT, NYMEX, COMEX, or an OTC Clearing Member or a Clearing Participant of the Kansas City Board of Trade Clearing Corporation (which, for the purposes of this rule shall be considered within the definition of the term "clearing member"), (i) fails promptly to discharge any obligation to the Clearing House or (ii) becomes subject to any bankruptcy, reorganization, arrangement, insolvency, moratorium, or liquidation



proceedings, or other similar proceedings under U.S. federal or state bankruptcy laws or other applicable law, the Clearing House may declare such clearing member to be in default. For purposes of this Rule 802, each default by a clearing member will be considered a separate default event, provided that if a clearing member has been declared in default, subsequent failures to pay by such defaulting clearing member shall not be considered separate default events unless and until the original default has been fully resolved and such clearing member has been restored to good standing.

2. Defaulting Clearing Member's Collateral

If a clearing member defaults, its Base Guaranty Fund contribution (pursuant to Rule 816), its performance bonds on deposit with the Clearing House relating to the Base Guaranty Fund Product Classes, the proceeds of the sale of any membership assigned to it for clearing qualification, and any of its other assets held by, pledged to or otherwise available to the Clearing House, shall be applied by the Clearing House to discharge the clearing member's obligation to the Clearing House. The defaulting clearing member shall take no action, including but not limited to, attempting to obtain a court order that would interfere with the ability of the Clearing House to so apply such assets and proceeds.

If the Base Guaranty Fund contribution, performance bond relating to Base Fund Products and other assets of a clearing member available to the Clearing House are insufficient to satisfy all of its obligations to the Clearing House, including all claims against the Clearing House by reason of its substitution for that clearing member pursuant to Rule 804 or Rule 8F05, the Clearing House shall nonetheless pay all such claims, which payments by the Clearing House shall be deemed a loss to it (hereinafter "Loss") and which shall be a liability of the defaulting clearing member to the Clearing House, which the Clearing House may collect from any other assets of such clearing member or by process of law.

For purposes of this Rule, the positions in the cross-margin account of a Participating Clearing Member or its Cross-Margining Affiliate at a Cross-Margining Clearing Organization, and the performance bond thereon, shall be considered assets of the Participating Clearing Member available to the Clearing House to the extent provided in the Cross-Margining Agreement between the Clearing House and such Cross-Margining Clearing Organization. A clearing member in default shall immediately make up any deficiencies in its Base Guaranty Fund contribution resulting from such default and in any event no later than the close of business on the banking day following demand by the Clearing House.

3. Default by Other Participating Exchanges or Partner Clearinghouses

If a Participating Exchange or Partner Clearinghouse fails to promptly discharge any obligation to the Clearing House arising out of its obligations to the Exchange, such Participating Exchange's or Partner Clearinghouse's letters of credit, performance bonds and other assets available to the Clearing House shall be applied by the Clearing House to discharge the obligation, pursuant to the procedures set forth below in Rule 802.A.5 with respect to a defaulting clearing member. If such resources are insufficient to satisfy the Participating Exchange's or Partner Clearinghouse's obligations to the Clearing House, the deficiency shall be considered a Loss that is subject to satisfaction pursuant to Rule 802.B.

4. Allocation of Base Guaranty Fund into Tranches

The Base Guaranty Fund shall be composed of the required Base Guaranty Fund contributions of clearing members pursuant to Rule 816, or any comparable security deposit contributions from a Participating Exchange or Partner Clearinghouse. The Clearing House shall allocate the Base Guaranty Fund into tranches as follows:

i. Base Tranche. Base Guaranty Fund Product Classes that are not associated with an Alternate Tranche as described below shall comprise the Base Product Class. The first 80% of Base Guaranty Fund amounts contributed with respect to the Base Product Class shall be the "Base Tranche".

ii. [Reserved]

iii. Alternate Product Class Tranches. Any other product class approved by the Clearing House Risk Committee to support a product-specific Base Guaranty Fund tranche hereunder shall comprise an Alternate Product Class. The first 80% of Base Guaranty Fund amounts contributed with respect to each such an Alternate Product Class shall be an "Alternate Tranche".



iv. Commingled Tranche. The remaining 20% of Base Guaranty Fund amounts contributed with respect to all of the foregoing Product Classes shall be the "Commingled Tranche".

As set forth below in 802.B, if the collateral of the defaulting clearing member, as described in Rule 802.A.2, Participating Exchange or Partner Clearinghouse is insufficient to satisfy its obligation to the Clearing House, the Tranche associated with a particular Base Guaranty Fund Product Class will be the Tranche first applied to reimburse the Clearing House for Losses attributable to that Base Guaranty Fund Product Class, as determined in accordance with Rule 802.A.5, (i.e., the Base Tranche will first be applied to Losses attributed to the Base Product Class, and the Alternate Tranche will first be applied to Losses attributed to an Alternate Product Class). The Base Guaranty Fund requirements of clearing members for purposes of allocation of such amounts into the Tranches shall be the required amounts in effect for each clearing member at the time of the default.

5. Apportionment Among Base Guaranty Fund Product Classes; Application of Defaulting Clearing Member's Collateral

Upon a default, the Clearing House shall apply the defaulting clearing member's collateral to the deficiency in accordance with the following procedures:

i. <u>Initial Allocation of Assets to Base Guaranty Fund Product Classes</u>. Subject to the provisions of 802.G, as of the cycle in which the default occurs, the Clearing House shall allocate assets of the defaulting clearing member to the different Base Guaranty Fund Product Classes in which the clearing member has open positions as follows: (a) the defaulting clearing member's Base Guaranty Fund requirement associated with each Base Guaranty Fund Product Class shall be attributed to such Class, (b) the defaulting clearing member's required performance bond amounts for each Base Guaranty Fund Product Class as of the prior clearing cycle shall be allocated to such Class, (c) any CME shares (whether common shares or class B shares) or any cash posted in lieu of such shares, and (d) any of the defaulting clearing House shall be divided among the Base Guaranty Fund Product Classes in proportion to the defaulting clearing member's Base Guaranty Fund Product Classes as of the prior clearing member's other assets held by, pledged to or otherwise available to the Clearing House shall be divided among the Base Guaranty Fund Product Classes in proportion to the defaulting clearing member's Base Guaranty Fund Product Classes in proportion to the defaulting clearing member's Base Guaranty Fund Product Classes in proportion to the defaulting clearing member's Base Guaranty Fund Product Classes in proportion to the defaulting clearing member's Base Guaranty Fund Product Classes in proportion to the defaulting clearing member's Base Guaranty Fund Product Classes in proportion to the defaulting clearing member's Base Guaranty Fund Product Classes in proportion to the defaulting clearing member's Base Guaranty Fund requirement.

Management of Obligations for Cycle of Default. As of the cycle in which the default ii occurs, the Clearing House shall aggregate the following assets: any excess Base Guaranty Funds, any excess performance bond from the prior clearing cycle for Base Guaranty Fund Product Classes, any partial payment by the clearing member for the default cycle, and any other available assets of the clearing member that are not specific to a Base Guaranty Fund Product Class. Such unassigned assets shall be allocated first to any net settlement variation payment obligation of the defaulting clearing member to the Clearing House relating to Base Guaranty Fund Product Classes, pro rata across account classes relative to the net settlement variation payment obligation for each account class. If the unassigned funds so allocated are sufficient to satisfy the clearing member's immediate settlement variation payment obligations for Base Guaranty Fund Product Classes, any remaining unassigned funds shall be divided among the Base Guaranty Fund Product Classes, pro rata in proportion to the size of the performance bond requirements for each Base Guaranty Fund Product Class for the clearing cycle immediately prior to the default. If the unassigned funds are not sufficient to satisfy the clearing member's settlement variation payment obligations for Base Guaranty Fund Product Classes for the default cycle, then (i) the Clearing House shall apply the unassigned funds to such obligations, pro rata relative to the size of such obligations on a per-Base Guaranty Fund Product Class basis, and within each Base Guaranty Fund Product Class, pro rata across account classes, and (ii) the remaining settlement variation payment obligations for such clearing cycle shall be satisfied on a per-Base Guaranty Fund Product Class basis only from the assets allocated to the relevant Base Guaranty Fund Product Class pursuant to 802.A.5.i. If the Clearing House is unable to satisfy a settlement variation payment obligation attributable to any Base Guaranty Fund Product Class from such assets, the deficiency shall be a Loss that the Clearing House shall satisfy pursuant to the procedures in Rule 802.B. For the avoidance of doubt, as set forth in 802.G, the Clearing House shall not use performance bond amounts or other collateral in any customer account class of the defaulting clearing member to satisfy a payment obligation to the Clearing House in respect of the defaulting clearing member's proprietary account.

iii. <u>Payment Obligations as Losses are Finalized</u>. During any subsequent clearing cycles in which the Clearing House is managing and/or liquidating open positions in respect of the defaulting clearing member, the Clearing House shall satisfy any settlement variation payment



obligations owed by the defaulting Clearing member to the Clearing House, or other realized losses of or expenses to the Clearing House with respect to the default, on a per-Base Guaranty Fund Product Class basis, only from the assets allocated to the relevant Base Guaranty Fund Product Class pursuant to 802.A.5.i. Any settlement variation gain to the defaulting clearing member in any Base Guaranty Fund Product Class during such subsequent clearing cycles shall be added to collateral allocated to such Product Class pursuant to 802.A.5.i. Any additional assets of the defaulting clearing member obtained by the Clearing House during subsequent clearing cycles (including amounts from CDS Products and IRS Products made available to Base Guaranty Fund Product Classes) shall be divided among the Base Guaranty Fund Product Classes pro rata in proportion to the size of the performance bond requirements for each Base Guaranty Fund Product Class for the clearing cycle immediately prior to the default. The Clearing House shall apply such collateral to such payment obligations for all account classes, giving priority to customer account classes (i.e., customer accounts and proprietary accounts). If the Clearing House is unable to satisfy a settlement variation payment obligation to the Clearing House, or other realized loss or expense to the Clearing House, from the defaulting clearing member's collateral as set forth in this paragraph, the deficiency shall be a Loss that the Clearing House shall satisfy pursuant to the procedures in Rule 802.B. For the avoidance of doubt, as set forth in 802.G, the Clearing House shall not use performance bond amounts or other collateral in any customer account class of the defaulting clearing member to satisfy a payment obligation to the Clearing House in respect of the defaulting clearing member's proprietary account.

Final determination of gain or deficiency for each Product Class. When the Clearing House determines the final net deficiency for a Base Guaranty Fund Product Class, it shall apply any remaining collateral of the defaulting clearing member with respect to such Base Guaranty Fund Product Class to satisfy the deficiency. If the Clearing House achieves a final gain, or if any excess collateral remains following satisfaction of a deficiency, the Clearing House shall allocate such excess funds to the defaulting clearing member's collateral for Base Guaranty Fund Product Classes within the same account class as to which a final gain or deficiency is yet to be determined, pro rata in proportion to the size of the performance bond requirements for such Base Guaranty Fund Product Classes for the clearing cycle immediately prior to the default. For the avoidance of doubt, as set forth in 802.G, the Clearing House shall not use performance bond amounts or other collateral in any customer account class of the defaulting clearing member to satisfy a payment obligation to the Clearing House in respect of the defaulting clearing member's proprietary account. Any gains or excess collateral within a segregated customer account class following final determination of the defaulting clearing member's losses shall remain segregated to the relevant customer account class, where it may be used to satisfy payment obligations arising from such account class in other Product Classes, but shall not be added to the clearing member's collateral generally.

Any remaining unsatisfied obligations of the defaulting clearing member shall become Losses to the Clearing House that shall be satisfied as set forth below.

802.B. Satisfaction of Clearing House Obligations

If the Clearing House is unable, using the defaulting clearing member's collateral as set forth in Rule 802.A, to satisfy all of the clearing member's obligations to the Clearing House then such obligations shall be met and made good promptly by the Clearing House pursuant to this Rule 802.B. Such obligations include, but shall not be limited to, costs associated with the liquidation, transfer and managing of positions, arising out of: 1) its substitution (pursuant to Rule 804 or Rule 8F05) for a defaulting clearing member a defaulting Participating Exchange, or a defaulting Partner Clearinghouse; 2) a shortfall in a cross-margining program; 3) the failure of a depository, exchange or market apart from the Exchange but whose transactions are cleared pursuant to the provisions of Chapters 8B, 8C, 8D, 8E or 8F; or 4) any other cause. All of the foregoing shall be deemed Losses to the Clearing House, which shall be apportioned by the Clearing House to Loss categories associated with the Base Guaranty Fund Product Class producing the Loss. Losses that cannot readily be attributed to a specific Base Guaranty Fund Product Class shall be apportioned by the Clearing House across all Base Guaranty Fund Product Classes in proportion to relative size of the Tranches (excluding the Commingled Tranche). Losses shall be satisfied by the Clearing House in the order of priority hereafter listed. Non-defaulting clearing members shall take no actions, including but not limited to attempting to obtain a court order, that would interfere with the ability of the Clearing House to collect and apply assets and proceeds in accordance with this Rule 802.B.



For purposes of this Rule 802.B, a default by a Participating Exchange or a Partner Clearinghouse shall be managed in the same manner as a default by a clearing member.

- 1. If Losses Are Limited to the Base Product Class
- i. The corporate contribution of CME, which shall equal \$100,000,000 (the "CME Contribution").
- ii. The Base Tranche.
- iii. The Commingled Tranche.
- iv. The Alternate Tranche.

v. The balance of any Losses remaining after the application of the above funds shall be assessed against all clearing members (excluding any insolvent or defaulting clearing members). Each clearing member (excluding any insolvent or defaulting clearing member) shall be subject to an assessment up to an amount that does not exceed (A) a total of 275 per cent of such clearing member's Base Guaranty Fund requirements attributable to all Base Guaranty Fund Product Classes at the time of the default with respect to Losses attributed to a single defaulted clearing member and (B) a total of 550 per cent of such clearing member's Base Guaranty Fund Product Classes at the time of the default with respect to Losses at the time of the defaulted clearing member's Base Guaranty Fund Product Classes at the time of the defaulted clearing member's Base Guaranty Fund Product Classes at the time of the default with respect to Losses attributable to all Base Guaranty Fund Product Classes at the time of the defaulted clearing member's Base Guaranty Fund Product Classes at the time of the default with respect to Losses attributable to all base Guaranty Fund Product Classes at the time of the default with respect to Losses attributed to all defaulted clearing members during a Base Cooling Off Period. Assessed amounts shall be divided among clearing members pro rata in proportion to the size of the Clearing House's assessment authority with respect to each clearing member.

2. [Reserved]

3. If Losses Are Limited to an Alternate Product Class:

- i. The CME Contribution.
- ii. The Alternate Tranche.
- iii. The Commingled Tranche.

iv. The Base Tranche and any other Alternate Tranche, pro rata in accordance with the relative size of such Tranches.

v. The balance of any Losses remaining after the application of the above funds shall be assessed against all clearing members (excluding any insolvent or defaulting clearing member). Each clearing member (excluding any insolvent or defaulting clearing member) shall be subject to an assessment up to an amount that does not exceed (A) a total of 275 per cent of such clearing member's Base Guaranty Fund requirements attributable to all Base Guaranty Fund Product Classes at the time of the default with respect to Losses attributed to a single defaulted clearing member and (B) a total of 550 per cent of such clearing member's Base Guaranty Fund Product Classes at the time of the default with respect to Losses at the time of the defaulted clearing member's base Guaranty Fund Product Classes at the time of all Base Guaranty Fund Product Classes at the time of the default with respect to Losses attributed to all Base Guaranty Fund Product Classes at the time of the defaulted clearing member's Base Guaranty Fund Product Classes at the time of the default with respect to Losses attributed to all defaulted clearing members during a Base Cooling Off Period. Assessed amounts shall be divided among clearing members pro rata in proportion to the size of the Clearing House's assessment authority with respect to each clearing member.

4. If Losses Are Apportioned Among Multiple Product Classes:

Because of differences in the timeframes and processes associated with the liquidation of certain product types, the Clearing House may finalize Loss amounts associated with different Base Guaranty Fund Product Classes at different points in time. Notwithstanding this, the Clearing House will act with all possible speed to satisfy the Losses as they are finalized, in the order of priority and per the schedule set forth below.

i. The CME Contribution shall be applied. The CME Contribution shall be divided by the Clearing House into separate segments in proportion to the size of each Tranche except for the Commingled Tranche. Each segment of the CME Contribution shall be applied first to Losses associated with the applicable Base Guaranty Fund Product Class for such segment,



and only at such time as one or more Losses associated with such Tranche are finalized. Subject to paragraph 802.C if any of the CME Contribution remains after such initial application, such funds shall be reserved to be later applied to Losses associated with other Product Classes as set forth in paragraph 802.B.4.v.

ii. The Base Tranche shall be applied to Losses associated with the Base Product Class and any Alternate Tranche shall be applied to Losses associated with the applicable Alternate Product Class, in each case when one or more Losses associated with such Tranche are finalized. Subject to paragraph 802.C, if the Tranche is not exhausted, any remaining funds shall be held in such Tranche and may later be applied to other Losses as set forth in paragraph 802.B.4.v.

iii. The Commingled Tranche funds shall be applied to remaining Losses associated with any Base Guaranty Fund Product Class immediately as such Losses are finally determined by the Clearing House, in the order that the amounts of such Losses are finalized. Consequently, the application of Commingled Tranche funds to Losses associated with one Base Guaranty Fund Product Class may occur prior to the finalization of Losses associated with other Base Guaranty Fund Product Classes (i.e., prior to the completion of the processes set forth in paragraphs 802.B.4.i and 802.B.4.ii with respect to Losses associated with another Base Guaranty Fund Product Class are to be finalized pursuant to auction processes being conducted concurrently, then any remaining Commingled Tranche funds shall be divided and allocated to such auctions during the auction process, pro rata in proportion to the relative sizes of the mark-to-market losses for such Base Guaranty Fund Product Classes.

iv. Any Losses remaining after the application of the processes set forth above shall be assessed against all clearing members (excluding any insolvent or defaulting clearing members) up to an amount that does not exceed (A) a total of 275 per cent of the aggregate guaranty fund requirements across all clearing members (excluding any insolvent or defaulting clearing members) at the time of the default with respect to the Base Guaranty Fund Product Class with which the Loss is associated with respect to Losses attributed to a single defaulted clearing member and (B) a total of 550 per cent of the aggregate guaranty fund requirements across all clearing members (excluding any insolvent or defaulting clearing members) at the time of the default with respect to the Base Guaranty Fund Product Class with which the Loss is associated and all defaulted clearing members during a Base Cooling Off Period. Such assessments shall occur on a per- Base Guaranty Fund Product Class basis as Losses associated with each Base Guaranty Fund Product Class are finalized by the Clearing House. Consequently, the application of an assessment against clearing members with respect to Losses associated with one Base Guaranty Fund Product Class may occur prior to the finalization of Losses associated with other Base Guaranty Fund Product Classes. Assessed amounts shall be divided among clearing members pro rata in proportion to the size of the Clearing House's assessment authority with respect to each clearing member, without regard to the Base Guaranty Fund Product Classes cleared by such clearing member or the proportion to which such Base Guaranty Fund Product Classes contribute to such clearing member's maximum assessment exposure. (For example, a clearing member that clears only Alternate Tranche products and that is subject to a maximum \$1 billion assessment because of that clearing activity will be subject to assessment of up to \$500 million for a Loss associated with the Base Product Class if 50% of the Clearing House's aggregate assessment powers are generated by Base Guaranty Fund requirements with respect to the Base Product Class.) Any remaining unused assessment authority associated with Base Guaranty Fund Product Classes as to which Losses are fully satisfied shall be reserved and later may be applied to Losses associated with other Product Classes as set forth in paragraph 802.B.4.v below.

v. (a) Collateral of the defaulting clearing member, (b) the CME Contribution, (c) Base Tranche funds or Alternate Tranche funds, and (d) assessment powers shall be applied to remaining Losses as they are finalized with respect to each Base Guaranty Fund Product Class and in such order, provided that if at the time of any such application, Losses associated with another Base Guaranty Fund Product Class remain to be finalized, the Clearing House shall continue to reserve a portion of such remaining funds or assessment powers, pro rata in proportion to the size of the Tranches originally supporting such Base Guaranty Fund Product Classes, until such remaining Losses are finalized. When all Losses have been finalized by the Clearing House, any remaining reserved funds and assessment powers of any kind may be applied to



satisfy such Losses, pro rata relative to the size of the remaining losses for the Base Guaranty Fund Product Classes.

5. Fedwire and Satisfaction of Assessment

All amounts assessed by the Clearing House against a clearing member pursuant to this Rule, during the hours in which the Federal Reserve's wire transfer system (Fedwire) is in operation, shall be paid to the Exchange by such clearing member prior to the close of Fedwire on such day; provided, however, that all amounts assessed within one (1) hour prior to the close of Fedwire shall be paid to the Exchange within one (1) hour after Fedwire next opens.

Any clearing member that does not satisfy an assessment, made pursuant to this paragraph 802.B.5 or paragraphs 802.B.1.v, 802.B.2.v, 802.B.3.v, 802.B.4.iv or 802.B.4.v above, shall be in default. Any Loss that occurs as a result of such default shall itself be assessed by the Clearing House to non-defaulting clearing members pursuant to the applicable paragraph.

If a clearing member (i) has made payment of all amounts assessed against it pursuant to this Rule 802.B in connection with any single default and any related default by any other clearing member with respect to its own assessment, (ii) has replenished any deficiency in its Base Guaranty Fund contribution in accordance with Rule 802.D, and (iii) within five (5) business days after making such payments, has satisfied the other conditions for withdrawal set forth in Rule 913.A, it may provide written notice of its application to withdraw from clearing membership pursuant to Rule 913. Upon receipt of such notice, provided that the foregoing conditions have been satisfied, the withdrawing clearing member shall not be subject to any residual assessment to cover Losses for defaults occurring after the related Base Cooling Off Period. Further, the Base Guaranty Fund contribution that it has restored shall not be used or applied towards meeting any claim or obligation of the Clearing House pursuant to Rule 802.B that arises with respect to defaults occurring after the related Base Cooling Off Period, and the withdrawing clearing member's Base Guaranty Fund contribution shall be released in accordance with Rule 913.

After payment of an assessment pursuant to Rule 802.B, a clearing member shall charge other clearing members for whom it clears contracts or carries positions on its books to recover their proportional share of the assessment. Such other clearing members shall promptly pay the charge.

6. Details of Implementation

While adherence to the provisions of this Rule 802.B shall be mandatory, the detailed implementation of the process of finalizing Losses with respect to a default, including the liquidation, auction or sale of positions or assets of the defaulting clearing member, shall be conducted by the Clearing House in consultation with the Clearing House Risk Committee, with the approval of the Board, and/or such other committee as the Board may designate.

In order to ensure that the process for liquidating open commodity contracts results in competitive pricing, to the extent feasible under market conditions at the time of liquidation, liquidation of open commodity contracts held for a house account or customer account of a defaulting clearing member may occur by one or more of the following methods: (a) book entry that offsets open commodity contracts on the books of the defaulting clearing member; (b) liquidation in the open market; and/or (c) one or more private auctions amongst qualified market participants invited by the Clearing House to submit confidential bids. The Clearing House shall have discretion to select the best bid submitted for any portfolio in an auction, based on the totality of the circumstances.

In the event that identical customer commodity contracts are liquidated in the open market on the same date but cannot be liquidated at the same price, unless the Clearing House determines that it would be inappropriate, a weighted average of the liquidation prices for such contracts shall be used in determining the value of the liquidated commodity contracts for each such customer. In the event that open commodity contracts of multiple customers are liquidated in a bulk auction, the net proceeds of such auction shall be allocated on a pro rata basis amongst the affected customers based upon their applicable performance bond requirements for the clearing cycle immediately prior to the default.



802.C. Application of Funds to Avoid Clearing House Insolvency

Notwithstanding any requirements to reserve funds set forth in Rule 802.A or Rule 802.B, if at any point following a default, the Clearing House will be unable to timely fulfill its obligations following application of the funds described above in the priority described above, such that the Clearing House is in imminent danger of defaulting on its obligations or being declared insolvent, then the Clearing House shall be entitled to apply to such obligation any available funds reserved from the defaulting clearing member's collateral, the CME Contribution or any Tranche (other than the Commingled Tranche, which shall have been exhausted pursuant to paragraph 802.B.4.iii), in the foregoing order of priority, if necessary to avoid a default by the Clearing House or a declaration of its insolvency. Such use of reserved funds may only be made (i) if the Clearing House reasonably concludes that there is a reasonable expectation that (A) the use of such funds will satisfy the immediate obligation and avoid a default or insolvency and (B) that the remaining funds in the overall financial safeguards package (including assessment powers) will be sufficient to satisfy the finalized Losses with respect to all Base Guaranty Fund Product Classes, and (ii) the Clearing House reaches such conclusion in consultation with the Clearing House's primary regulator as to the specific facts, circumstances and estimates of Losses supporting such conclusion. In such case, the Clearing House shall restore the funds so employed to the reserved collateral segments, the CME Contribution segments or Tranches from which they were drawn promptly following receipt by the Clearing House of assessment payments or any other amounts that become available to it in respect of obligations arising out of the defaulted clearing member's default.

802.D. Restoration of Funds Following Final Determination of Losses

If after the default of a clearing member is finally resolved, the Clearing House determines that collateral of the defaulting clearing member, the CME Contribution, Tranche funds other than the Commingled Tranche, or assessment powers were employed in a manner different from what would have occurred had all assets been secured and liquidated immediately and all Losses finalized simultaneously, then the Clearing House shall make appropriate (i) distributions to the non-defaulting firms whose Base Guaranty Funds were applied or who were assessed and/or (ii) rebalancing allocations among Base Guaranty Fund tranches.

802.E. Rights of Exchange for Recovery of Loss

Losses caused by the default of a clearing member, Participating Exchange or Partner Clearinghouse are amounts due to the Clearing House from such clearing member, exchange or clearing house and shall remain legal obligations thereof notwithstanding the Clearing House's recourse to the loss-mutualization provisions of this Rule 802, which amounts the Clearing House shall take commercially reasonable steps to recover (including claims submitted in bankruptcy court). If a Loss for which clearing members or their Base Guaranty Fund contributions have been assessed is subsequently recovered by the Exchange in whole or in part, the net amount of such recovery shall be credited to such clearing members (whether or not they are still clearing members at the time of recovery) in proportion to the amount of the assessment.

802.F. Guaranty Fund Contributions to be Restored

In the event it shall become necessary to apply all or part of the Base Guaranty Fund contributions to meet obligations to the Clearing House pursuant to this Rule 802, clearing members shall restore their contribution to the Base Guaranty Fund to previously required level prior to the close of business on the next banking day.

802.G. Default Management Across Account Classes

The procedures set forth in 802.A and 802.B shall be conducted separately by the Clearing House with respect to open positions and associated performance bond contributions for different account classes. Upon a default, the Clearing House may, in accordance with applicable law, act immediately to attempt to transfer to alternate clearing members part or all customer positions and associated collateral with respect to any customer account class in which there is no default on payment obligations or shortfall in required collateral, and in such cases the Clearing House shall not apply segregated customer collateral to any payment



obligations or Losses arising from a default in any proprietary account or a different customer account class.

1. If a default occurs in a customer futures account, the Clearing House has the right to liquidate and apply toward the default all open positions and customer performance bond deposits in the futures account class of the defaulting clearing member. Accordingly, positions and performance bonds deposited by customers not causing the default are at risk if there is a default in the futures account class of their clearing member. If the Clearing House liquidates positions and/or collateral in the futures account class, any collateral remaining after application to Losses in respect of such account class shall be reserved to the futures account class in order to satisfy the claims of non-defaulting customers in accordance with applicable law.

2. In order to minimize disruptions and loss to its public customers if a clearing member defaults, each clearing member shall cause its cleared swaps customers to establish arrangements to directly make all required performance bond and settlement variation payments directly to the Clearing House and to keep current and on file with the Clearing House any direction to transfer its open positions and collateral to another clearing member.

3. The Clearing House shall treat positions and collateral of the cleared swaps customers of a clearing member, which has been declared to be in default, in accordance with Part 22 of the CFTC's regulations. Immediately after the default of a clearing Member, the Clearing House shall cease netting settlement variation among the cleared swaps customers of the defaulted clearing member.

4. If the Clearing House ceases to net settlement variation margin of the customers of a defaulted clearing member, the Clearing House will calculate the settlement variation margin obligation owed to each cleared swaps customer ("collects"), and also calculate the settlement variation margin obligation owed to the Clearing House by each cleared swaps customer ("pays"). The Clearing House will establish a holding account for settlement variation margin collects owed to each cleared swaps customer or, subject to necessary approvals, pay such settlement variation margin collects directly to each cleared swaps customer. The Clearing House will collect cleared swaps customer settlement variation margin pays from the following sources:

- (i) Directly from the obligated cleared swaps customer in accordance with the arrangements established pursuant to 802.G.2 or by attaching any excess collateral attributable to that customer;
- (ii) By means of liquidating the collateral supporting the cleared swaps customer's position attributed to a cleared swaps customer that fails to make a required settlement variation payment when due. The proceeds of such liquidation shall be used to meet the cleared swaps customer's settlement variation pay obligation to the clearing house. (If the collateral is liquidated, the positions supported by the collateral shall be promptly liquidated.);

Any unmet cleared swaps customer obligation to the Clearing House will be a "Loss," per 802.A.2, and will be cured in accordance with the provisions of 802.B.

5. The Clearing House shall rely on its own books and records to identify the portfolio of rights and obligations arising from the positions of each cleared swaps customer. To the extent the Clearing House's books and records are not available or the Clearing House determines that its books and records are not accurate, the Clearing House shall rely on the information provided by the defaulted clearing member to identify the portfolio of rights and obligations arising from the positions for each of its cleared swaps customers.

6. Upon liquidating the defaulting clearing member's proprietary account, any remaining collateral may be applied by the Clearing House to Losses remaining in the defaulting clearing member's customer account classes, provided that such collateral shall be divided among the



Product Classes as described above. If the defaulting clearing member has more than one customer account class that has been declared to have defaulted, proceeds from the defaulting clearing member's proprietary account for each relevant Product Class shall be divided by the Clearing House pro rata among such customer account classes, based on their applicable performance bond requirements for the clearing cycle immediately prior to the default.

802.H. Base Cooling Off Period and Multiple Defaults

The provisions set forth in Rule 802.A and 802.B shall apply with respect to each default by a clearing member. If more than one clearing member default occurs at a time or in close sequence, including a default that occurs by reason of a clearing member's failure to satisfy an assessment demand, the Clearing House shall manage the defaults separately. Upon any default, non-defaulted clearing members shall be subject to a maximum obligation during the relevant Base Cooling Off Period to contribute to the Base Guaranty Fund and to fund assessments as set forth in Rule 802.B. This maximum shall apply from the date of the original default until the later of (i) the 5th Business Day thereafter and (ii) if another clearing member defaults during the 5 Business Days following the initial or any subsequent default, the 5th Business Day following the last such default (such period, the "Base Cooling Off Period"), regardless of the number of defaults that occur during such Base Cooling Off Period.

The aggregate maximum contribution for the Base Cooling Off Period shall be based upon each clearing member's Base Guaranty Fund requirement and assessment exposure in effect at the commencement of the Base Cooling Off Period. The maximum does not limit clearing members' obligations to restore their Guaranty Fund contributions as set forth in Rule 802.F, except that if the clearing member's required Guaranty Fund contribution would exceed such maximum, the clearing member's Base Guaranty Fund requirement shall be reduced accordingly for the remainder of the Base Cooling Off Period. Following a Base Cooling Off Period, the Clearing House shall notify each clearing member of its Base Guaranty Fund deposit obligation and its assessment exposure.

803. LIMITATION OF LIABILITY

The liability of the Clearing House shall be limited to losses resulting from the substitution of the Clearing House upon contracts between clearing members and to losses in connection with substitution of another Participating Exchange for clearing members (i.e., the Mutual Offset System), and to losses in connection with amounts due and owing from a Partner Clearing House. The Clearing House shall not be liable for any other obligations, including but not limited to, obligations of a non-clearing member, obligations of a clearing member to a non-member, obligations of a clearing member to another member of the Clearing House who is acting for him as broker, or obligations to a customer by a clearing member; nor shall the Clearing House become liable to make deliveries to or accept deliveries from a customer of its clearing members.

804. SUBSTITUTION¹

Except with respect to trades made pursuant to Rules 526, 538 and 853, the Clearing House shall, through the process of novation, be substituted as, and assume the position of, seller to the buyer and buyer to the seller of the relevant number of Exchange or Marketplace contracts upon the successful matching of trade data submitted to the Exchange by the clearing members on the long and short sides of a trade. With respect to contracts that are traded on and matched by another exchange or market, the Clearing House shall be substituted as, and assume the position of, seller to buyer and buyer to seller of the relevant number of such contracts upon matching of trade data submitted to and accepted by the Exchange.

Upon such substitution, each clearing member shall be deemed to have bought the contracts from or sold the contracts to the Clearing House, as the case may be, and the Clearing House shall have all the rights and be subject to all the liabilities of such member with respect to such transaction. Such substitution shall be effective in law for all purposes.

With regard to trades made pursuant to Rules 526, 538 and 853, the Clearing House shall be substituted at the time payment of the first settlement variation and performance bond due for such trades pursuant to Rule 814 is confirmed by the appropriate settlement bank for both

¹ Revised December 2008.



members.

805. OPEN POSITIONS

All contracts for the purchase or sale of any product for future delivery shall remain open and in force, and shall continue to be binding upon the original parties until liquidated by offset as provided in Rule 806 or by delivery or failure to perform as provided in Chapter 7.

806. OFFSET PROCESS

When a member buys and sells the same commodity for the same delivery month or a put or call option with the same strike price and expiration month and such contracts are cleared through the Clearing House, the purchases and sales are not automatically offset one against the other. Transactions can only be offset against one another by complying with Rule 811.

807. OPEN LONG POSITIONS DURING DELIVERY MONTH

At such times and in such manner as shall be prescribed by the Manual, clearing members shall submit a complete and accurate record of dates of all open purchases for use in making deliveries. Clearing members shall be fully responsible for inventories submitted to the Clearing House. Unless otherwise provided in the Manual, beginning on the day following the first day on which longs may be assigned delivery, all purchases and sales, made in one day in the lead month contract by a person holding a long position in that contract, must first be netted out as day trades with only the excess buys considered new longs or the excess sales being offsets of the long position.

This rule shall not apply to trading in options contracts.

808. PROCEDURES FOR TRADE SUBMISSION ON CME CLEARPORT

808.A. Scope of Rule

This Rule governs transactions not competitively executed on the Exchange ("Transactions") that are submitted via CME ClearPort for clearing in connection with a contract that is listed on the Exchange for clearing only or listed for trading and clearing on the Exchange. For purposes of this Rule, the two parties to the Transaction shall be referenced as the "Parties to the Transaction."

808.B. Compliance with Regulatory Exemptions and Exclusions

Each of the Parties to the Transaction shall be responsible for ensuring that, where applicable, the Transaction complies with CFTC regulatory requirements.

808.C. Block Trades or Exchange for Related Position Transactions

The process of submission of a block trade or an exchange for related position Transaction ("EFRP") executed pursuant to Rules 526 or 538, as applicable, shall not be deemed to have been completed unless and until the Parties to the Transaction have successfully concluded the submission of the Transaction to the Clearing House as a block trade or an Exchange of Futures for Physical ("EFP"), an Exchange of Futures for Risk ("EFR") or an Exchange of Options for Options ("EOO"), as applicable, pursuant to the provisions of this Rule and the requirements of Rule 804.

808.D. OTC Derivatives Transactions Submitted for Clearing

CME ClearPort allows for the submission of off-Exchange OTC derivatives Transactions that the Exchange has designated as eligible for clearing only. Such Transactions are subject to the Rules of the Exchange applicable to such cleared-only products.

808.E. Trade Submission Procedures

All Transactions submitted to the Exchange pursuant to this Rule must be submitted in accordance with the procedures established by the Exchange and the Clearing House for this purpose, as amended from time to time. The Parties to the Transaction and any Party authorized under Section F. of this Rule with brokering capability ("Broker" or "Brokers") to submit executed transactions on behalf of Parties to the Transaction to the Exchange shall be responsible, both individually and jointly, for accurately confirming the details of the Transaction to the Exchange. Additionally, Brokers submitting Transactions on behalf of Parties to the Transaction remain responsible for ensuring that such Transactions are accurately and timely submitted in accordance with the requirements of applicable Exchange



Rules and requirements of the Clearing House. Once submitted, such transactions may not be modified except in accordance with Section H. of this Rule. The Exchange has no responsibility with respect to the confirmation of trade terms for the Transactions, and the Clearing Members carrying the account of the Parties to the Transaction shall only be responsible for the confirmation required pursuant to Rule 957.

808.F. CME ClearPort Registration Requirements

Each Clearing Member must register with the Exchange in the manner required for any customer authorized by the Clearing Member to submit transactions to the Exchange pursuant to this Rule, and must also register with the Exchange the applicable account numbers for each such customer. For each such account, the Clearing Member carrying that account must also submit to the Exchange the name of any Broker(s) who has registered with the Exchange for services provided by the Exchange, and who is authorized by the customer to act on its behalf in the submission of executed Transactions to the Exchange. For any such Brokers authorized by the Clearing Member will not constitute an endorsement or ratification of the customer's authorization of the Broker. Moreover, submission of Brokers authorized by the clearing Member will not mean that the Clearing Member is in privity with, has a relationship with and/or is otherwise standing behind any of the customer's authorized by the customer and submitity for any such Brokers selected by the customer and no duty or obligation to supervise the activities of any such Brokers.

808.G. Establishment of Authorized Commodities and Account Risk Limit(s)

With the exception of Credit Default Swap ("CDS") and Interest Rate Swap ("IRS") Transactions, for each account number that has been registered with the Exchange pursuant to Section F. of this Rule, a Clearing Member must also input into the CME Account Manager system an authorization identifying the specific commodities for which a Transaction may be submitted to the Exchange pursuant to this Rule and the account risk limit(s) assigned by the Clearing Member for Transactions for that account. Requirements for CDS and IRS Transactions are set forth in the applicable sections of the Clearing House Manual of Operations for those products.

808.H. Trade Deletion Procedures for Transactions Submitted via CME ClearPort

Following submission of the trade details by Broker (or by Exchange staff as mutually agreed by the Parties to the Transaction), an e-mail will be transmitted to the Parties to the Transaction notifying them that they have been listed as counterparties in a Transaction that has been submitted to the Exchange. Following such submission, a buyer or seller may not unilaterally reject the trade terms previously submitted to the Exchange. However, in order to correct an error resulting from the good faith actions of the Broker or Exchange staff, as applicable, and upon mutual consent of the Parties to the Transaction, Broker or Exchange staff, as applicable, may void the transaction provided, however, that this void response is received by the Exchange within three Business Days of the time of the initial submission of the Transaction to the Exchange. Notwithstanding the provisions of this Section, the Parties to the Transaction and any Broker authorized by the Parties to the Transaction pursuant to Section E. of this Rule may be subject to sanctions pursuant to Rule 512 for the inaccurate, incomplete or untimely submission of the Transactions to the Clearing House.

808.I. Entry of Transactions

For a Transaction submitted to the Exchange pursuant to this rule, such Transaction will first be routed to the Exchange's credit check system. The time of entry of a Transaction into the Exchange's system will be recorded by the system and will be used by the Exchange as the time that a credit check was conducted pursuant to Section J. below.

808.J. Use of Credit Check System

The Exchange will conduct a credit check for each Transaction. The credit check will confirm whether the Clearing Member carrying that account has authorized that account for Transactions submitted pursuant to this Rule in the commodity involved in the Transaction, and confirm whether the entry of the Transaction into clearing would fall within the account risk limit(s) established by the Clearing Member. At all times until both sides (Buy and Sell) of the Transaction have successfully cleared the credit check and the Clearing House has been substituted as the counterparty to the Transaction pursuant to Rule 804, a Transaction submitted to the Exchange pursuant to this rule shall remain as an uncleared Transaction. In



the event that either side of the Transaction is rejected as a result of the credit check test, the Parties to the Transaction and their respective Clearing Members will be informed accordingly.

Thereafter, any determination as to further action with respect to the Transaction will be the sole responsibility of the Parties to the Transaction.

808.K. Trade Submission Deadlines

With the exception of CDS, IRS and FX Spot, Forward and Swaps Transactions, all other Transactions that are submitted, confirmed and accepted for clearing, as further provided by Section L. of this rule, prior to 5:15 p.m. New York time on an Exchange Business Day will be included by the Exchange for clearing for that Business Day. The Exchange reserves the right to modify these business hours without notice at any time. The CME ClearPort Facilitation Desk will generally be available to assist users 24 hours a day on all Exchange Business Days. Trade submission deadlines for CDS, IRS and FX Spot, Forward and Swaps Transactions are set forth in the applicable sections of the Clearing House Manual of Operations for those products.

808.L. Clearance by Both Sides of the Transactions of Credit Check

Upon clearance by both sides of the Transaction of the credit check, the Transaction shall be deemed to have been accepted for clearing and will be routed automatically to the Exchange's clearing system. Notwithstanding the above, a Clearing Member shall also be responsible for accepting and clearing a position for a Transaction entered into the Exchange's clearing system for clearing following any non-operation of the Exchange's credit check functionality for the applicable account carried by the Clearing Member.

809. TRADE DATA PROCESSING SYSTEM

809.A. Trade Data

Every clearing member must submit accurate trade data for the day's business to the Clearing House no later than the time specified by the Clearing House.

809.B. Matched and Unmatched Trades

The Clearing House shall process all trade data submitted by clearing members but shall accept only those trade records (transactions) which are in agreement with the corresponding trade records submitted by the opposite clearing members.

Trade records will be matched, to the extent the opposite trade information is consistent, through the tiered matching process.

Resubmitted trade data will be processed by the Clearing House. Trades with unmatched trade information remaining after the tiered matching process will be rejected and outtrade notices will be issued to clearing members.

Trades unreconciled after the final reconciliation must be submitted on the following business day as "as-of-trades."

809.C. Trade Register and Clearing Reports

From the trade data cleared during each day's reconciliation, the Clearing House will produce a trade register for each clearing member which will itemize by commodity and contract: the opening long and short position, the contracts bought and/or sold during the day, the prices at which executed, and the settlement amounts.

The Clearing House will also produce a recap ledger for each clearing member that will itemize various position and financial information that includes but is not limited to, commodity positions, settlement amounts and performance bond information.

809.D. Reconciliation of Outtrades

It shall be the primary responsibility of the clearing member to see that all trades are cleared prior to the opening of the following day's open outcry market.

Each member, if applicable, and clearing member firm shall designate a person or persons who will be available and responsible for reconciling the member or clearing member firm's outtrades. The person or persons shall be qualified to resolve outtrades as the member or clearing member firm's designated outtrade representative. Failure to have a qualified representative available, with all materials necessary to reconcile outtrades, at the time specified above shall constitute negligence in the determination of responsibility for any outtrades. If one firm cannot locate another firm's broker or representative for clearing



purposes during these time periods, it shall report such fact to the President of the Clearing House. If the President of the Clearing House or his designee cannot find the broker or representative of the firm, fines will be assessed in the amounts of \$1,000, \$2,000 or \$3,000 sequentially, for violations occurring within a 30-day period.

810. FALSE ENTRIES ON CLEARING MEMORANDA

No member shall place any false or inaccurate entries on any clearing memoranda, including, with respect to a Participating Clearing Member, the clearing memoranda of a Cross-Margining Clearing Organization.

811. **POSITION CHANGE DATA**

Position change data must be submitted to the Clearing House each trading day not later than the time specified by the Clearing House. Position change data will be in such form and contain such information as prescribed by the Clearing House. When requested, the identification of accounts will be made available to the Financial and Regulatory Surveillance Department.

812. FINAL SETTLEMENT PRICE

Certain products, as described in the applicable product chapters, have procedures for establishing a final settlement price that are distinct from the procedures for establishing the daily settlement price for the product on the last day of trading. For such products, if a final settlement price is unable to be determined or if the applicable procedures result in a clearly aberrant final settlement price inconsistent with market value and alternative settlement procedures are not otherwise specified in the relevant product chapter, then the Chief Executive Officer, President or Chief Operating Officer, or their delegate, may establish a final settlement price that reflects the true market value at the time of final settlement.

813. DAILY SETTLEMENT PRICE ¹

Daily settlement prices shall be determined each business day for each product pursuant to one or more of the procedures set forth below. The settlement price shall be a price consistent with the minimum tick increment for the product; if the calculated settlement price is not a standard tick increment, the calculated settlement price will be rounded either to the nearest tick or to the tick closer to the previous day's settlement price. The procedure used to determine the settlement price of a product will depend on the product group, level of activity and liquidity during the defined closing time period, and the trading venue(s) used to derive the settlement. To the extent that any members participate in the creation of settlement prices, they agree to assign and transfer to the Exchange any and all right, title and interest in and to the settlement prices, including, but not limited to, all copyright in the settlement prices.

1. Midpoint of the Closing Range: In products that use this procedure, the first trade and all subsequent trades, higher bids and lower offers that are quoted during the established closing time period will be included in the closing range. The midpoint of the high and low quotes in the closing range will be the settlement price. If no trade occurs during the defined closing period, the last quote of the day (trade, higher bid, lower offer) will be the settlement price. In the event there are no valid quotes during the day, the settlement price will be the prior day's settlement price.

2. Volume-Weighted Average Price (VWAP) of the Closing Range: In products that use this procedure, all outright trades that occur during the defined closing time period are utilized to calculate the VWAP for specified contract months and the VWAP will be the settlement price. If the open outcry venue is used to determine the settlement price, the VWAP may be estimated. The calculated or estimated VWAP of relevant spread trades that occur during the closing time period may be used to determine the settlement price of deferred or less actively traded contract months in products that use this procedure.

3. Bid/Ask Midpoint at the Close: In products that use this procedure, the midpoint of the bid/ask at the defined closing time will be the settlement price.

¹ Revised January 1981; March 1981; April 1982; July 1982; September 1989; September 1992; November 1995; November 2000; November 2001, March 200; June 2009; September 2009; December 2009; November 2010' September 2011.



4. Option Settlements: Option settlements are derived from available market information including, but not limited to, outright trades, bids or offers during the close, relevant spread trades, bids or offers during the close, the settlement price of the underlying future and relevant relationships based on option pricing theory using option pricing models employed by the exchange.

5. For all contract months not determined by one of the methods set forth above or pursuant to Section 6 below, relevant spread relationships between contract months will be used to derive the settlement.

6. In the event the Exchange determines that the settlement price derived by one of the methods set forth above is not an accurate representation of the relevant market, the Exchange may determine the settlement price based on other market prices, including settlement prices for similar contracts trading on other exchanges.

7. For all products that are settled with the delivery of, or by reference to, the same underlying instrument but which are offered in alternative contract sizes (mini or micro), a single settlement price will be applicable to all such contracts, with necessary adjustments made to round to the nearest tradable price increment eligible in all such contracts.

8. For contracts cleared through ClearPort Clearing that are not otherwise settled by one of the methods set forth above, staff shall determine settlement prices for such contracts based upon a consideration of relevant market data, including, but not limited to, trading activity in such OTC products, pricing data obtained from OTC market participants, the settlement prices of related products and any other pricing data from sources deemed reliable by Staff. With respect to CDS products, in addition to the foregoing, the Exchange may use a price quality auction in which bids and offers submitted by Members may be "crossed" to effect trades and to establish settlement prices for particular contracts.

9. Notwithstanding the above, if a settlement price in any product, as derived by the normal methodology used for that product, is inconsistent with trades, bids or offers in other months/strikes during the closing range, or other relevant market information, or if there is no relevant market activity, an Exchange official may establish a settlement price that best reflects the true market valuation at the time of the close.

10. For products cleared by the Clearing House on behalf of another entity, the settlement price shall be determined according to the rules of such entity.

11. Notwithstanding the above, in the case of inaccuracy or unavailability of a settlement price, or if a settlement price creates risk management concerns for the Clearing House, the Clearing House reserves the right to calculate settlement variation using an alternate price determined by the Clearing House.

814. SETTLEMENT VARIATION

When a clearing member is long or short any amount of any futures contract at the end of the trading day, as indicated by its clearing memoranda, settlement shall be made with the Clearing House to the settlement price for that day, and such member shall be liable to pay to, or entitled to collect from, the Clearing House any loss or profit, as the case may be, represented by the difference between the price at which the commodity was bought or sold and the settlement price of the commodity at the end of the trading day. After making such settlement with the Clearing House, such member shall be deemed long or short (or long and short) such commodity, as the case may be, at the settlement price of the trading day. Notwithstanding the foregoing, the Clearing House shall not be required to pay any profit to a Participating Clearing Member in the event that such member or its Cross-Margining Affiliate fails to make any required settlement for that trading day with a Cross-Margining Clearing Organization.

If the market conditions or price fluctuations are such that the Clearing House deems it necessary, it may call upon the clearing members which in its opinion are affected to deposit with the Clearing House by such time as specified by the Clearing House the amount of funds that it estimates will be needed to meet such settlements as may be necessary. The Clearing House may pay out funds to those clearing members that in the opinion of the Clearing House will have credit balances as a result of those same market conditions or price fluctuations, except that in no instance may the Clearing House pay out funds to a clearing member, other than at the regular settlement, in excess of the total original performance bond deposits it holds for such clearing member. All deposits and payments made under this Rule shall be



subject to the procedures prescribed by the Clearing House and set forth in the Manual.

Settlement variation, as figured to the market at such times as the Clearing House shall determine, must be paid in cash or any other form of collateral approved by the Clearing House Risk Committee.

815. [RESERVED]

816. GUARANTY FUND DEPOSIT

Each clearing member shall make a Base Guaranty Fund deposit with the Exchange as security for its obligations to the Clearing House. The minimum Base Guaranty Fund deposit of a clearing member, shall equal the greater of (a) an amount specified by the Clearing House Risk Committee or (b) the clearing member's proportionate share of the "Aggregate Guaranty Fund Deposit," which shall be an amount determined by the Clearing House Risk Committee.

Each clearing member's proportionate share of the Aggregate Guaranty Fund Deposit shall consist of:

(i) a specified percentage of the Aggregate Guaranty Fund Deposit multiplied by the clearing member's proportionate share (including the total risk performance bond requirement in respect of positions in its cross-margin accounts and any applicable short option value) of the average aggregate risk performance bond requirement (including the risk performance bond requirement in respect of positions in all cross-margin accounts and any applicable short option value) for the preceding three months; plus

(ii) a specified percentage of the Aggregate Guaranty Fund Deposit multiplied by the clearing member's proportionate share of the total number of contracts executed on the Exchange and any applicable exchange or market during the preceding three months; plus

(iii) a specified percentage of the Aggregate Guaranty Fund Deposit multiplied by the clearing member's proportionate share of foreign currency settlements for the preceding three months.

The percentages in (i) through (iii) above shall be determined and modified by the Clearing House Risk Committee as appropriate. Some contracts may be weighted more heavily than others in order to reflect the greater risk associated with those contracts. The average aggregate risk performance bond requirement, the total number of contracts executed, the gross notional amount of open interest cleared and each clearing member's proportionate share of each will be calculated by the Clearing House, and a report setting forth such information and the clearing member's required Base Guaranty Fund deposit will be given to the clearing member each quarter, and the Clearing House may provide such reports on an interim basis at any time during the guarter as the Clearing House staff shall determine. On a guarterly basis, if such report indicates that the clearing member's current Base Guaranty Fund deposit with the Clearing House is smaller than the amount required, the clearing member shall increase its amount within five business days. If such report indicates that the clearing member's current Base Guaranty Fund deposit with the Exchange is larger than the amount required, the clearing member may withdraw the excess amount. If, prior to the issuance of the guarterly report, the Clearing House determines that an increase in the Base Guaranty Fund deposit is necessary to protect the financial integrity of the Clearing House, the clearing member, upon demand of the Clearing House, shall increase its Base Guaranty Fund deposit amount within five business days.

The minimum Base Guaranty Fund deposit amount of a Clearing Participant at the Kansas City Board of Trade Clearing Corporation that is not a CME Clearing Member shall be set at an amount of \$500,000.

A clearing member's Base Guaranty Fund deposit may be in a form as set forth in the Manual. Such Base Guaranty Fund deposit forms and amounts shall be subject to the terms and conditions as approved by Exchange staff.

817. LIQUIDITY FACILITY

Assets deposited by a clearing member in satisfaction of guaranty fund deposits and performance bond requirements may also be used to directly secure the Exchange's obligations to its lenders under any liquidity facility entered into by the Exchange for the purpose of providing liquidity to the Exchange; provided that assets pledged from (x) Base Guaranty Fund deposits and performance bond associated with Base Guaranty Fund Product Classes shall only be used under this Rule to secure liquidity to satisfy obligations arising from



Base Guaranty Fund Product Classes, (y) IRS Guaranty Fund deposits and performance bond associated with IRS Products shall only be used under this Rule to secure liquidity to satisfy obligations arising from IRS Products, and (z) CDS Guaranty Fund deposits and performance bond associated with CDS Products shall only be used under this Rule to secure liquidity to satisfy obligations arising from CDS Products; provided further that performance bond deposits of a non-defaulting clearing member may only be pledged under this Rule to secure liquidity for amounts assessed against such clearing member. By delivering assets to the Exchange in satisfaction of guaranty fund deposit and performance bond requirements, each clearing member is hereby deemed: (i) to agree that its assets may be used by the Exchange to directly secure the Exchange's obligations to the Exchange's liquidity lenders and that its assets may become subject to a lien in favor of the Exchange's liquidity lenders or otherwise guarantee the Exchange's obligations and; (ii) to authorize the Exchange, and appoint the Exchange (such appointment being coupled with an interest) as such clearing member's attorney-in-fact, to enter into agreements on its behalf in connection with its assets serving as security for the Exchange's obligations to the Exchange's liquidity lenders: and (iii) to acknowledge that the obligations of the Exchange to its liquidity lenders may be greater, and extend for periods of time longer, than the obligations, if any, of such clearing member to the Exchange. The Exchange, as each clearing member's attorney-in-fact, will have authority to enter into agreements on behalf of each clearing member and in each clearing member's name for the purpose of causing the clearing member's assets to directly secure the Exchange's obligations to the Exchange's liquidity lenders. Any agreement entered into by the Exchange on behalf of clearing members pursuant to this Rule 817 shall bind each clearing member and will contain provisions, including representations, warranties and covenants, required by lenders under any liquidity facility. If there is a default under any such liquidity facility, the assets of the clearing members pledged to secure such liquidity facility may be foreclosed upon by the Exchange's liquidity lenders and applied against the obligations of the Exchange under the related liquidity facility. The clearing members shall take no action, including but not limited to attempting to obtain a court order, that would interfere with the ability of such liquidity lenders to receive the benefit of their contractual remedies in connection with any such foreclosure or that would controvert or assert the invalidity of any provision of these rules. Each clearing member agrees to sign any document or agreement requested by the Exchange to further document the power of attorney set forth and established by these rules.

818. CLOSE-OUT NETTING

818.A. Bankruptcy of the Exchange

If at any time the Exchange: (i) institutes or has instituted against it a proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency law or other similar law affecting creditors' rights, or a petition is presented for its winding up or liquidation, and, in the case of any such proceeding or petition presented against it, such proceeding or petition results in a judgment of insolvency or bankruptcy or the entry of an order for relief or the making of an order for the Exchange's winding-up or liquidation, or (ii) approves resolutions authorizing any proceeding or petition described in clause (i) above (collectively, a "Bankruptcy Event"), all open positions in the Clearing House shall be closed promptly.

818.B. Default of the Exchange

If at any time the Exchange fails to comply with an undisputed obligation to pay money or deliver property to a Clearing Member that is due and owing in connection with a transaction on the Exchange or cleared by the Exchange, for a period of five Business Days from the date that the Exchange receives notice from the Clearing Member of the past due obligation, the Clearing Member's open proprietary and customer (including, for this rule, CFTC Regulation Section 30.7 secured and Cleared Swaps Customers) positions at the Clearing House shall, at the election of that Clearing Member, be closed promptly.

818.C. Netting and Offset

At such time as a Clearing Member's positions are closed, the obligations of the Clearing House to a Clearing Member in respect of all of its proprietary positions, accounts, collateral and deposits to the guaranty fund shall be netted, in accordance with the Bankruptcy Code, the Commodity Exchange Act and the regulations adopted thereunder in each case, against the obligations of that Clearing Member in respect of its proprietary positions, accounts, collateral, its obligations as guarantor of the performance of its customers and its then matured



obligations to the guaranty fund to the Clearing House and to the Exchange. For clarity all of the property in a Clearing Member's proprietary account or accounts on deposit with the Clearing House, shall be deemed to be subject to a single master netting agreement with the result that any excess which is on deposit with respect to any product category shall be applied to reduce any deficiency of the Clearing Member in any other product category. All obligations of the Clearing House to a Clearing Member in respect of its customer positions, accounts, and collateral shall be separately netted against the positions, accounts and collateral of its customers without regard to product category in accordance with the requirements of the Bankruptcy Code, the Commodity Exchange Act and the Regulations adopted thereunder in each case. At the time a Bankruptcy Event takes place, the authority of the Clearing House, pursuant to Rule 802, to make new assessments and/or require a clearing member to cure a deficiency in its guaranty fund deposit, arising after the Bankruptcy Event, shall terminate. All positions open immediately prior to the close-out shall be valued in accordance with the procedures of Paragraph D of this Rule.

818.D. Valuation

As promptly as reasonably practicable, but in any event within thirty days of the: (i) Bankruptcy Event, or (ii) if a Clearing Member elects to have its open positions closed in a default as described in Paragraph B of this Rule, the date of the election, the Exchange shall, in a manner that is consistent with the requirements of the Commodity Exchange Act and the regulations adopted thereunder (including, without limitation) Part 190 of the Regulations, fix a U.S. dollar amount (the "Close-out Value") to be paid to or received from the Exchange by each Clearing Member, after taking into account all applicable netting and offsetting pursuant to paragraph C of this Rule.

The Exchange shall value open positions subject to close-out by using the market prices for the relevant market (including without limitation, any over the counter markets) at the moment that the positions were closed-out, assuming the relevant markets were operating normally at such moment. If the relevant markets were not operating normally at such moment, the Exchange shall exercise its discretion, acting in good faith and in a commercially reasonable manner, in adopting methods of valuation to produce reasonably accurate substitutes for the values that would have been obtained from the relevant market if it had been operating normally at the moment that the positions were closed-out.

In determining a Close-out Value, the Exchange may consider any information that it deems relevant. Amounts stated in a currency other than U.S. Dollars shall be converted to U.S. Dollars at the current rate of exchange, as determined by the Exchange. If a Clearing Member has a negative Close-out Value it shall promptly pay that amount to the Exchange.

818.E. Interpretation in Relation to FDICIA

The Exchange intends that certain provisions of this Section be interpreted in relation to certain terms (identified by quotation marks) that are defined in the Federal Deposit Insurance Exchange Improvement Act of 1991 ("FDICIA"), as amended, as follows:

(1) The Exchange is a "clearing organization."

(2) An obligation of a Clearing Member to make a payment to the Exchange, or of the Exchange to make a payment to a Clearing Member, subject to a netting agreement, is a "covered clearing obligation" and a "covered contractual payment obligation."

(3) An entitlement of a Clearing Member to receive a payment from the Exchange, or of the Exchange to receive a payment from a Clearing Member, subject to a netting contract, is a "covered contractual payment entitlement."

(4) The Exchange is a "member," and each Clearing Member is a "member."

(5) The amount by which the covered contractual payment entitlements of a Clearing Member or the Exchange exceed the covered contractual payment obligations of such Clearing Member or the Exchange after netting under a netting contract is its "net entitlement."



(6) The amount by which the covered contractual payment obligations of a Clearing Member or the Exchange exceed the covered contractual payment entitlements of such Clearing Member or the Exchange after netting under a netting contract is its "net obligation."

The By-Laws and Rules of the Exchange, including this Section, are a "netting contract."

819. LIEN ON COLLATERAL

Each Clearing Member hereby grants to the Clearing House a first priority and unencumbered lien against any property and collateral deposited with the Clearing House by the Clearing Member. Clearing Members shall execute any documents required by CME to create and enforce such lien.

820. PERFORMANCE BONDS

Performance bond requirements will be as determined by Exchange staff from time to time.

Subject to the terms and conditions as approved by Exchange staff, the Clearing House will accept as performance bond, cash, equity securities, shares of mutual funds, United States Treasury and agency Securities, Letters of Credit, units in CME's Interest Earning Facility Program, shares in CME's Interest Earning Facility 2 Program, permitted investments allowable under CFTC Regulation 1.25, "readily marketable securities" as defined by Securities and Exchange Commission Rules, as applicable, and "London Good Delivery" gold, as defined by the London Bullion Market Association (as used in this Rule 820, such assets and any proceeds thereof are collectively referred to as "Assets"), all of which must be and remain unencumbered. The Clearing House may include other forms of collateral within the definition of "Assets" upon the approval of the Clearing House Risk Committee and notice to clearing members.

All performance bond collateral, as herein described, shall be placed to the credit of the member paying the same for its customers' trades or its own (so-called "house") trades as designated by the clearing member. The Clearing House shall value performance bond collateral as it deems appropriate. The clearing member shall transfer the performance bond collateral to the Exchange or to an approved depository for safekeeping in an Exchange account and the Exchange shall retain control over such performance bond collateral. Neither the Exchange nor the Clearing House shall have any obligation or responsibility to preserve, protect, collect or realize upon, and under no circumstances shall the Exchange or Clearing House be liable for, any loss or diminution in value or depreciation in the performance bond collateral maintained pursuant to this rule. A clearing member who maintains performance bond collateral for its benefit pursuant to this rule shall hold the Exchange and Clearing House harmless from all liability, losses and damages which may result from or arise with respect to the care and sale of such performance bond collateral. All initial and additional performance bonds shall be retained by the Clearing House in whole or in part, as Exchange staff may deem necessary, until the trades for which such performance bond collateral has been deposited, have been offset, cash settled, delivered or otherwise closed out as determined by Exchange staff.

Each clearing member shall reimburse the Clearing House for all fees, expenses, charges and costs assessed by a depository against the Exchange with respect to all performance bond collateral maintained in its account, and shall make deposits as may be required by the Clearing House by reason of any depreciation in the market value of such performance bond collateral. If a clearing member defaults to the Clearing House with respect to performance bonds, the performance bond collateral maintained in its account pursuant to this rule shall be taken over by the Clearing House and sold without notice and the proceeds of the performance bond requirements for the clearing members' customers' accounts, and the proceeds of performance bond collateral deposited for the house trades shall be applied against the requirements for the clearing member's own (so-called "house") account.

821.-823. [RESERVED]

824. ADDITIONAL PERFORMANCE BOND

Whenever, in the opinion of the Clearing House Risk Committee, the President of the Clearing



House or, in his absence, his delegate, unstable conditions relating to one or more products exist, they may from time to time, call for additional performance bond collateral from clearing members. Such additional performance bond calls may be as much as or more than the original performance bond collateral. The performance bond collateral thus called for may be for one or more contract(s) from one or more clearing member(s) and on long positions, short positions or both.

In the event market conditions and price fluctuations at any time shall cause the Clearing House Risk Committee or the President of the Clearing House or, in his absence, his delegate, to conclude that additional performance bond collateral is required to maintain an orderly market or to preserve fiscal integrity the Clearing House Risk Committee or the President of the Clearing House or his delegate may call for additional performance bond collateral to be deposited with the Clearing House during the next banking hour after demand therefor, or at such times as may be specified. Such additional performance bond collateral may be called from the longs or the shorts or from both.

When the Clearing House Risk Committee or the President of the Clearing House or, in his absence, his delegate, shall be of the opinion that any clearing member is carrying commitments or incurring risk in its proprietary, customer and/or cross-margin accounts, that are larger than is justified by the financial condition of that clearing member, then the Clearing House Risk Committee, the President of the Clearing House or, in his absence, his delegate, may require additional performance bond collateral of such clearing member which shall be deposited with the Clearing House during the next banking hour after demand therefor, or at such time as may be specified, or a portion of the open positions of said clearing member may be required to be transferred to the books of another clearing member.

825.-826. [RESERVED]

827. SECURITIES LENDING PROGRAM

United States Treasury Bills, Treasury Notes, Treasury Bonds, Treasury Bond Principal Strips, Agency Securities, and other financial instruments approved by Exchange staff, (collectively, "Securities") that are deposited with the Clearing House by clearing members in satisfaction of Guaranty Fund requirements or as performance bond for their own (i.e., "house") trades may be loaned out by the Exchange pursuant to the Securities Lending Program. Clearing members depositing Securities with the Exchange in satisfaction of guaranty fund requirements or as performance bond for house trades that are loaned out pursuant to the Securities Lending Program are deemed to agree that the lending of Securities under arrangements having safeguards consistent with generally accepted market practices will constitute reasonable care of the Securities in the possession of the Exchange or its securities lending custodian.

828.-829. [RESERVED]

830. CROSS-MARGINING

830.A. Definitions

- 1. Cross-Margining Affiliate: An affiliate of a Participating Clearing Member with which such clearing member is cross-margining its positions at the Clearing House and a Cross-Margining Clearing Organization.
- 2. Participating Clearing Member: A clearing member that is cross-margining its positions at the Clearing House with its own or a Cross-Margining Affiliate's positions at a Cross-Margining Clearing Organization.
- 3. Cross-Margining Clearing Organization: A clearing organization that has entered into a Cross-Margining Agreement with the Exchange.
- 4. Joint Cross-Margining Program: A cross-margining program in which the Exchange and one or more Cross-Margining Clearing Organizations each hold a joint security interest in positions, margin and other property of Participating Clearing Members and, if applicable, their Cross-Margining Affiliates.
- 5. Guaranteed Cross-Margining Program: A cross-margining program in which a guaranty is provided by and between the Exchange and one or more Cross-Margining Clearing Organizations and each entity holds an individual security interest in positions, margin and



other property of Participating Clearing Members and, if applicable, their Cross-Margining Affiliate.

830.B. Cross–Margining Programs

- The Exchange may establish cross-margining programs as approved by the Clearing 1. House Risk Committee and the Board. A clearing member may become a Participating Clearing Member to participate in a Joint Cross-Margining Program by establishing with the Clearing House one or more cross-margin accounts for cross-margining positions with either its own positions or those of a cross-margining affiliate at a Cross-Margining Clearing Organization. In order to establish a cross-margin account, a clearing member shall enter into the agreements required by the Exchange, including a Cross-Margined Account Agreement and Security Agreement with the Exchange, the Cross-Margining Clearing Organization, and, if applicable, the member's Cross-Margining Affiliate. That Agreement shall provide, among other things, that the Exchange and the Cross-Margining Clearing Organization shall jointly have a first lien on and security interest in all positions held in the cross-margin account, all related performance bond, and all proceeds of the foregoing, as security for the obligations of the clearing member and, if applicable, its Cross-Margining Affiliate, to the Exchange and the Cross-Margining Clearing Organization. Failure to comply with the terms of such Agreements may constitute an act detrimental to the interest or welfare of the Exchange.
- 2. A clearing member may become a Participating Clearing Member in a Guaranteed Cross-Margining Program by entering into a Cross-Margining Participant Agreement with the Exchange, the Cross-Margining Clearing Organization, and, if applicable, the clearing member's Cross-Margining Affiliate. That Agreement shall provide, among other things, that a Participating Clearing Member shall immediately be obligated to reimburse the Exchange ("Reimbursement Obligation") in the event the Participating Clearing Member or its Cross-Margining Affiliate defaults in the payment of any obligation to a Cross-Margining Clearing Organization and the Exchange is required to make a guaranty payment to such Cross-Margining Clearing Organization. In addition, the Agreement shall provide that the Exchange shall have a first lien and security interest in all positions held, all related performance bond, and all proceeds of the foregoing, as security for the obligations of the clearing member and, if applicable, its Cross-Margining Affiliate, to the Exchange. Failure to comply with the terms of such Agreement may constitute an act detrimental to the interest or welfare of the Exchange.

The provisions of this Rule 830 and the corresponding sections of the Clearing House Manual shall apply to all CME–cleared positions held pursuant to a cross–margining program and shall supersede all other provisions of the Rules to the extent inconsistent therewith. In addition, the Exchange shall determine what positions will be eligible for cross-margining.

830.C. [Reserved]

830.D. Performance Bonds for Cross–Margining Program

Performance bond requirements for a Joint and Guaranteed Cross–Margining Program shall be determined as set forth in the Cross-Margining Agreement, and that Agreement shall also govern what forms of performance bond will be permitted and how such performance bond will be held.

830.E. Close–Out of Cross–Margin Positions

A Participating Clearing Member may be suspended if it or its Cross-Margining Affiliate, if any, is in default in payment of any obligation, including a Reimbursement Obligation, with respect to a Joint or Guaranteed Cross–Margining Program.

The cross-margin account of a clearing member participating in a Joint Cross-Margining Program may be liquidated by the Clearing House at the request of a Cross-Margining Clearing Organization whether or not the Exchange suspends, or is permitted under the Rules to suspend, such clearing member. Upon the suspension of a Participating Clearing Member, or upon receiving notice from a Cross-Margining Clearing Organization of its suspension of a Participating Clearing Member or its Cross-Margining Affiliate, the Clearing House shall have the right to liquidate the positions in the cross-margin account, convert to cash the performance bond therefor, and dispose of the proceeds thereof, all in accordance with the terms of the Cross-Margining Agreement.

The positions of a clearing member participating in a Guaranteed Cross-Margining Program



may be liquidated by the Clearing House in the event that the Participating Clearing Member or its Cross-Margining Affiliate defaults in the payment of any obligation to the Clearing House or a Cross-Margining Clearing Organization. Upon the suspension of a Participating Clearing Member, or upon receiving notice from a Cross-Margining Clearing Organization of its suspension of a Participating Clearing Member or its Cross-Margining Affiliate, the Clearing House may liquidate: the positions of the Participating Clearing Member; all related performance bond; and all proceeds of the foregoing. The Exchange may then apply all such liquidated proceeds to satisfy the Participating Clearing Member's obligations to the Exchange, all in accordance with the terms of the Cross-Margining Agreement.

831.-849. [RESERVED]

MISCELLANEOUS

850. FEES

A. Exchange Fees

Exchange fees, including clearing fees, Globex system fees, brokerage and/or any transaction surcharges, shall be assessed against a clearing member for each side of a transaction traded on, cleared by or processed through the Exchange and/or the Dubai Mercantile Exchange Limited ("DME") as the Board, Exchange staff or DME, as appropriate, may from time to time prescribe.

B. Clearing Fees

Member rates will apply in the following situations based on the membership division held (note: "membership division" is deemed to also include transactions in lower divisions.) Transactions executed in a higher division than the membership division held will receive non-member rates.

- 1. Transactions executed on the trading floor for an account owned by a member if executed in accordance with Exchange policy for member rates. Transactions executed on Globex for an account owned by a member will be based on the combined memberships of both the operator and account owner, in accordance with Exchange policy for member rates.
- 2. Transactions for accounts owned by persons holding memberships through CME Rule 106.C. or D. if executed in accordance with Exchange policy for member rates. The owner of the membership does not receive members' rates.
- 3. Transactions for the proprietary accounts of a clearing member and its subsidiaries, which are wholly owned, directly or indirectly. (See Non-Member Rates i. below.)
- 4. Transactions for accounts owned by general partners of the clearing member whether or not they are members.
- 5. Transactions for an account owned by a corporation or partnership which is wholly-owned by a member or members and which transactions are solely for their benefit if executed in accordance with Exchange policy for member rates and as noted in Member Rates 1. above.
- 6. Transactions for the proprietary accounts of firms holding membership pursuant to Rule 106.H., 106.N. or 106.R. subject to approval by Exchange staff. If an employee of such firm holds the membership either the member or the firm may receive member rates, but not both.
- 7. Transactions for the proprietary accounts owned by each related party in a chain of related parties which, holds a membership pursuant to Rule 106.I. subject to approval by Exchange staff. A "related-party" shall be defined to include a clearing member or a firm that either: owns, directly or indirectly, 100% of a clearing member or has 100% ownership, direct or indirect, in common with a firm that owns, directly or indirectly, 100% of a clearing member.
- 8. Transactions for the proprietary accounts owned by each related hedge fund in a "family of funds" which holds membership pursuant to Rule 106S. subject to approval by Exchange staff.
- 9. Transactions for joint accounts owned by a member/parent, member/spouse or member/child or a member/Rule 106.H. firm or a member/related party which would



receive member rates.

10. Transactions executed on the trading floor for an account jointly owned by members will be based on the combined memberships of all account owners, in accordance with Exchange policy for member rates. Transactions executed on Globex for an account jointly owned by members will be based on the combined memberships of both the operator and account owners, in accordance with Exchange policy for member rates. The type of membership held (equity, lessee, clearing member, Rule 106.H., 106.I., 106.N., 106.R. or 106.S.) will determine the rate received. For on-floor trading activity, trading discretion over an account constitutes a "de facto" joint account for clearing fee purposes between the executing member. For off-floor trading activity, an account is presumed to be jointly owned (for clearing fee purposes) where an individual or entity has direct or indirect risk of loss with respect to a specific trading account or group of trading accounts.

"Lowest Common Denominator" (LCD) Rule" - To determine the rates charged for a joint account, the LCD rule is used. Rates are determined by the type of membership held by all of the owners and applying the rates corresponding to the lowest level of membership (highest rate).

Non-Member Rates will apply in the following circumstances:

- i. Transactions for accounts owned by persons not holding Exchange memberships. (This includes transactions for officers and employees of clearing member firms, who may be considered "house" accounts of the firm, but who are not members.)
- ii. Transactions for the account jointly owned by a member and one or more non-members, except as noted in member rate categories 4. or 9. above.
- iii. Transactions for an omnibus account, whether or not the account is held in the name of a member, unless there is clear evidence that all transactions in the omnibus are eligible for member rates.
- iv. Transactions for accounts owned by a corporation or partnership which is not 100% owned by a member or members and which does not fall into member rate categories 4., 5. or 9. above.

851. [RESERVED]

852. SURCHARGES FOR ERRORS, DELAYS AND OMISSIONS

Exchange staff may establish, and from time to time revise, schedules of surcharges to be imposed upon clearing members for errors, delays and omissions with respect to trade data and certain other information required to be provided to the Clearing House. These surcharges are to be collected by the Clearing House and are in addition to any disciplinary sanctions that may be imposed by Market Regulation, the BCC or CHRC for the violation of Exchange rules.

853. TRANSFERS OF TRADES AND CUSTOMER ACCOUNTS

853.A. Transfers of Trades

1. Subject to the limitations of Rule 854, existing trades may be transferred either on the books of a clearing member or from one clearing member to another clearing member provided:

- i. The transfer merely constitutes a change from one account to another account provided the underlying beneficial ownership in said accounts remains the same; or
- ii. An error has been made in the clearing of a trade and the error is discovered and the transfer is completed within three Business Days after the trade date.

2. Subject to the limitations of Rule 854, Exchange staff may, upon request by the clearing member(s), approve a transfer of existing trades either on the books of the same clearing member, or from the books of one clearing member to the books of another clearing member if the transfer is in connection with, or as a result of, a merger, asset purchase, consolidation or similar non-recurring transaction between two or more entities where one or more entities become the successor in interest to one or more other entities.



3. Exchange staff may, with the consent of the clearing member(s) involved, permit the transfer of existing trades if, in staff's opinion, the situation so requires and such transfer is in the best interests of the Exchange.

4. Provided that the transfer is permitted pursuant to Sections 1, 2 or 3 above, transactions in all physically delivered futures contracts except for FX futures contracts must be recorded and carried on the books of the receiving firm at the original trade dates; all other transactions may be recorded and carried at either the original trade date or the transfer date. Futures transactions may be transferred using either the original trade price or the most recent settlement price; options transactions may be transferred using either the original trade price or a trade price of zero.

5. All transfers shall be reported to the Clearing House in a form acceptable to the Exchange for the type of transactions involved. The proper indicator must be included in the transfer such that the transactions, including the transaction(s) to reverse an error, clear as transfers. The clearing members involved shall maintain a full and complete record of all transactions together with all pertinent memoranda.

853.B. Transfers of Customer Accounts

1. Subject to the limitations of Rule 853.A, after receipt of a signed instruction from a Clearing Member (the "Carrying Clearing Member") to transfer all or a portion of a customer account to another Clearing Member (the "Receiving Clearing Member"), and provided that such instruction contains the customer's name and account number (and, if the transfer is not of the entire account, a description of which portion is to be transferred), and provided that the Receiving Clearing Member agrees to accept the account, the Exchange shall promptly transfer the account (or the relevant portion thereof), without requiring any close-out or rebooking of positions in connection with the transfer, provided that:

i. The transferred positions will satisfy Exchange performance bond requirements at the Receiving Clearing Member; and

ii. Any remaining positions in the customer account at the Carrying Clearing Member will satisfy Exchange performance bond requirements.

854. CONCURRENT LONG AND SHORT POSITIONS

Set forth below are the procedures that must be followed for concurrent long and short positions and hold-open accounts.

- A. Concurrent long and short positions in the same commodity and month may be held by a clearing member at the direction of a customer or on behalf of an omnibus account; however it shall be the duty of the clearing member to ascertain whether such positions are intended for offset or to be held open prior to final transmission of position data to the Clearing House.
- B. Concurrent long and short positions in physically delivered contracts that are held by the same owner during the delivery month and two business days prior to the delivery month must be offset by transactions executed in the market, by allowable privately negotiated transactions, or fulfilled through the normal delivery process, provided however that trades may be transferred for offset if the trade date of the position being transferred is the same as the transfer date. Such positions may not be offset via netting, transfer, or position adjustment except to correct a bona fide clerical or operational error on the day the error is identified and provided that the quantity of the offset does not represent more than one percent of the reported open interest in the affected futures contract month.¹
- C. Clearing members which, pursuant to this rule, carry concurrent long and short positions, must report to the Exchange both sides as open positions. When either side or both sides are reduced in accordance with Section B. of this rule, the open positions as reported to the Exchange must be reduced accordingly.
- D. The Exchange takes no position regarding the internal bookkeeping procedures of its clearing members which, for the convenience of a customer, may "hold open" a position only on their books. However, the clearing member must accurately report to the

¹ Revised October 2008.

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Exchange and the Clearing House, as appropriate, large trader positions, long positions eligible for delivery and open interest.

855. OFFSETTING DIFFERENT SIZED FUTURES POSITIONS¹

With the consent of the account controller, a clearing member may offset and liquidate long E– Mini or E-Micro futures positions against short regular futures positions, or short E–Mini or E-Micro futures positions against long regular futures positions, held in the same account in the following ratios of E–Mini or E-Micro to regular futures contracts:

E–Mini S&P 500 to regular S&P 500:	5:1
E–Mini Nasdaq 100 Index to regular Nasdaq 100 Index:	5:1
E-Mini S&P Midcap 400 to regular S&P Midcap 400:	5:1
E–Mini Currency to regular Currency:	2:1
E-Mini S&P CNX Nifty Index Futures to E-micro S&P CNX Nifty Index Futures:	5:1
E-Mini Nikkei 225 (Yen) to regular Nikkei 225 (Yen):	5:1
E-Micro GBP/USD, EUR/USD, AUD/USD, CAD/USD, JPY/USD, CHF/USD, USD/RMB	
or CNY, USD/Offshore RMB or CNH to regular Currency	10:1
E-Micro INR/USD to regular INR/USD	5.1

The clearing member shall notify the Clearing House of offsetting positions by submitting reports to the Clearing House in such form and manner as the Clearing House shall specify. The positions shall be offset at the previous day's settlement price.

The positions being offset shall be transferred to a CME holding account. Long and short positions in the same contract and contract month held in the holding account shall be netted, thus reducing the number of open positions in such contract.

856. NORMALIZATION OF OTC FX SPOT, FORWARD, SWAP AND OPTIONS TRANSACTIONS FOR CLEARING²

For over-the-counter (OTC) foreign exchange (FX) transactions submitted for clearing and any non-standard specification of the transaction as defined by the price format shall be normalized by CME Group Clearing to standard or normal specifications by the following "normalization process."

Instrument: Currency 1/Currency 2 (CCY1/CCY2)

Generically, for spot and forward OTC FX transactions...

Standard or Normal: Buy (B)/Sell (S) CCY1 notional amount at CCY2 per CCY1 rate.

Non-standard or Non-normal: B/S CCY2 notional amount at CCY2 per CCY1 rate.

To normalize:

- 1. Convert B to S, or S to B
- Convert CCY2 notional to CCY1: CCY2 amount divided by CCY2 per CCY1 rate to obtain CCY1 amount.

For example, for Instrument: EUR/USD ... Standard: EUR/USD- Quote USD per EUR; notional amount in EUR Trade comes in as SELL €15 million at 1.350000 USD per EUR →BUY \$20,250,000 (€15 million x 1.350000 USD/EUR)

Non-standard: EUR/USD- Notional amount in USD, but quote still in USD per EUR. Trade comes in as buy \$20 million at 1.350000 USD per EUR →SELL €14,814,814.81 (\$20 million / 1.350000 USD/EUR).

To normalize the non-standard EUR/USD transaction, CME Clearing shall:

¹ Revised September 2008; March 2009; September 2010; December 2010; January 2013.

² Adopted April 2011.



- 3. Convert Buy to Sell, or Sell to Buy
- 4. Convert USD notional to EUR: USD amount divided by USD per EUR rate.
- Example: The trade "BUY \$20 million at 1.350000 ⇔SELL €14,814,814.81 (\$20/1.350000) at 1.350000 USD per EUR" shall be normalized and held in CME Clearing as:

The trade "SELL €14,814,814,81 (\$20/1.350000) at 1.350000 USD per EUR⇒ BUY \$20 million at 1.350000."

For swap OTC FX transactions, ...

Standard or Normal: Leg 1 B/S CCY1 notional amount at CCY2t per CCY1 rate.

Leg 2 S/B CCY1 notional amount at CCY2_{t+n} per CCY1 rate.

Non-standard or Non-normal:

Leg 1 B/S CCY2 notional amount at CCY2 t per CCY1 rate.

Leg 2 S/B CCY2 notional amount at CCY2_{t+n} per CCY1 rate.

To normalize:

- 1. Convert B to S, or S to B
- Convert CCY2 notional to CCY1: CCY2 amount divided by CCY2 per CCY1 rate to obtain CCY1 amount.

For example, for instrument: EUR/USD...

Standard: Leg 1 EUR/USD- Quote USD per EUR; notional amount in EUR Leg 2 EUR/USD- Quote USD per EUR; notional amount in EUR

Trade comes in as "Leg 1 BUY €20 million at 1.305000 ⇔SELL \$26,100,000 (\$20 million x 1.305000) at 1.305000 USD per EUR; Leg 2 SELL €20 million at 1.315000 USD per EUR (1.3050 + 0.0100 swap points)"

Non-Standard: Leg 1 EUR/USD- Notional amount in USD, but quote still in USD per EUR. Leg 2 EUR/USD- Notional amount in USD, but quote still in USD per EUR.

Trade comes in as "Leg 1 SELL \$26.1 million at 1.305000 ⇔BUY €20 million (\$26.1 million / 1.305000) at 1.305000 USD per EUR; Leg 2 BUY \$26.3 million at 1.315000 USD per EUR (1.3050 + 0.0100 swap points)."

To normalize the non-standard EUR/USD transaction, CME Clearing shall:

- 3. Convert Buy to Sell, or Sell to Buy
- 4. Convert USD notional to EUR: USD amount divided by USD per EUR rate.
- Example: The trade "Leg 1 SELL \$26.1 million at 1.305000 ⇒BUY €20 million (\$26.1 million / 1.305000) at 1.305000 USD per EUR; Leg 2 BUY \$26.3 million at 1.315000 USD per EUR (1.3050 + 0.0100 swap points)" shall be normalized and held in CME Clearing as:

The trade "Leg 1 BUY €20 million at 1.305000 ⇔SELL \$26,100,000 (\$20 million x 1.305000) at 1.305000 USD per EUR; Leg 2 SELL €20 million at 1.315000 USD per EUR (1.3050 + 0.0100 swap points)"

For option OTC FX transactions, ...



Standard or Normal:	B/S CCY1/CCY2 CALL (PUT) at STRIKE PRICE in units of CCY2 per CCY1 for a notional amount of CCY1 for a premium in CCY2 (CCY1 amount x premium price in CCY2 per CCY1, that is, CCY2 pips) or % of CCY1 (CCY1 premium / CCY1 notional amount).
Non-standard or Non-normal:	B/S CCY1/CCY2 CALL (PUT) at STRIKE PRICE in units of CCY2 per CCY1 for a notional amount of CCY2 for a premium in CCY1 (CCY2 amount / premium price in CCY2 per CCY1, that is, CCY1 pips) or % of CCY2 (CCY2 premium / CCY2 notional amount).
To normalize:	

1. Retain B/S direction

- 2. Convert CCY2 Put to CCY1 Call, CCY2 Call to CCY1 Put
- 3. Convert CCY2 notional to CCY1: CCY2 amount divided by Strike Price expressed in CCY2 per CCY1.
- 4. Process original premium amount and currency.
- 5. Take premium amount and divide by CCY1 notional to express price in CCY1 terms for reference purposes.

For example, for Instrument: EUR/USD ...

Standard: EUR/USD- Quote USD per EUR; notional amount in EUR, premium in either % of EUR notional (EUR premium) or USD pips (USD premium)

Trade comes in as BUY EUR/USD PUT at 1.350000 USD per EUR for a notional amount of €20 million with premium of \$100,000 (€20 million x option price of 0.0050 USD per EUR, that is, USD pips) or 1.0% of €20 million (€200,000 premium / €20 million) → SELL EUR/USD PUT at 1.350000 USD per EUR for a notional amount of €20 million with premium of \$100,000 (€20 million x option price of 0.0050 USD per EUR, that is, USD pips) or 1.0% of €20 million (€20,000 premium / €20 million).

Non-standard: EUR/USD- Notional amount in USD, but quote still in USD per EUR, premium in either % of USD notional (USD premium) or EUR pips (EUR premium).

Trade comes in as BUY EUR/USD PUT at 1.350000 USD per EUR for a notional amount of \$20 million with premium of €170,100 (\$20 million x option price of 0.008505 EUR per USD, that is, EUR pips) or 1.0% of \$20 million (\$200,000 premium / \$20 million) \rightarrow SELL EUR/USD PUT at 1.350000 USD per EUR for a notional amount of \$20 million with premium of €170,100 (\$20 million x option price of 0.008505 USD per EUR, that is, EUR pips) or 1.0% of \$20 million (\$200,000 premium / \$20 million).

To normalize the non-standard EUR/USD transaction, CME Clearing shall:

- 6. Retain B/S direction
- 7. Convert USD Put to EUR Call, USD Call to EUR Put
- 8. Convert USD notional to EUR: USD amount divided by Strike Price expressed in USD per EUR.
- 9. Process original premium amount and currency.
- 10. Take premium amount and divide by EUR notional to express price in EUR terms for reference purposes.
- Example: Trade comes in as BUY EUR/USD PUT at 1.350000 USD per EUR for a notional amount of \$20 million with premium of €170,100 (\$20 million x option price of 0.008505 EUR per USD, that is, EUR pips) or 1.0% of \$20 million (\$200,000



premium / \$20 million) \rightarrow SELL EUR/USD PUT at 1.350000 USD per EUR for a notional amount of \$20 million with premium of €170,100 (\$20 million x option price of 0.008505 USD per EUR, that is, EUR pips) or 1.0% of \$20 million (\$200,000 premium / \$20 million) shall be normalized and held in CME Clearing as:

BUY EUR/USD CALL at 1.350000 USD per EUR for a notional amount of €14,814,814.81 (\$20 million/1.350000 USD per EUR) with a premium of €170,100 (\$20 million x option price of 0.008505 EUR per USD, that is, EUR pips) or 1.148% of €14,814,814.81 (€170,100 / €14,814,814.81).

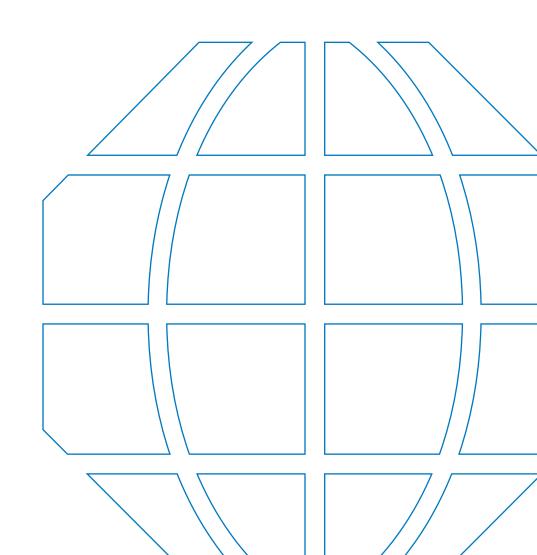
(End Chapter 8)

APPENDIX 1-D

CME Clearing Financial Safeguards



CME Clearing Financial Safeguards



CME Group Inc. is the parent company of Chicago Mercantile Exchange Inc. (CME). CME Clearing, a division of CME, is one of the world's leading central counterparty clearing services. CME Clearing provides clearing and settlement services for exchange-traded contracts and cleared over-the-counter (OTC) derivatives transactions. CME Clearing applies robust risk management standards and applicable CFTC customer protection standards for all products it clears.

CME Clearing brings buyers and sellers together through numerous venues including the CME Globex electronic trading platform, open outcry trading facilities in Chicago and New York, cleared privately negotiated transactions, and an array of clearing services offered through CME ClearPort. CME Clearing serves as the counterparty to every trade, becoming the buyer to each seller and the seller to each buyer, limiting credit risk and therefore mitigating risk of default.

CME Clearing's integrated clearing function is designed to ensure the safety and soundness of our markets, serving the risk management needs of customers around the globe by offering clearing services for a wide range of global benchmark products. CME Clearing continues to structure its services, safeguards, and registration status to best serve the evolving markets to which it provides clearing services. This includes business transacted on CBOT, CME, COMEX, NYMEX, Green Exchange (GEX) and Dubai Mercantile Exchange (DME), as well as OTC transactions cleared through CME ClearPort.

CME Clearing is vitally aware of its role in global markets and is confident that our operational standards paired with our financial safeguards provide an effective set of risk management tools and capabilities that result in industry leading risk management capabilities.

This brochure is intended to provide an overview of CME Clearing's financial safeguard system. For additional details and applicable rules, please reference the CME, CBOT, and NYMEX rulebooks published on CME Group's website (www.cmegroup.com).

FINANCIAL SAFEGUARDS OVERVIEW

Risk management and financial surveillance are principal functions of CME Clearing's financial safeguards system. The safeguards are designed to provide the highest level of security and the early detection of unsound financial practices. The safeguards aim to protect and mitigate the consequences to clearing members and their customers from a participant default.¹ CME Clearing's financial safeguards system is continually evaluated and updated to reflect the most advanced risk management and financial surveillance techniques. The financial safeguards system is administered by the Risk Management Department with collaboration from management from the Audit, Banking and Collateral Services, Legal and Market Regulation departments.

For products other than cleared OTC interest rate swaps (IRS) and cleared OTC credit default swaps (CDS), CME Clearing is overseen on major risk management policy issues, financial safeguards, and financial surveillance and membership issues by the Clearing House Risk Committee (CHRC).²

2 CME Rule 403 (Clearing House Risk Committee).

For general matters related to cleared OTC IRS products, including risk management policies and practices, CME Clearing has established an IRS Risk Committee.³ For general matters relating to cleared OTC CDS products, including risk management policies and practices, CME Clearing has established a CDS Risk Committee.⁴ Each of these committees is chaired by one or more members of the CME Group Board of Directors with broader participation largely comprised of market participants, who typically comprise a majority representation, and independent representatives.

Clearing members may apply for clearing privileges for all or a subset of cleared products. Membership requirements may vary by product class, but generally include maintaining adequate financial resources, contributing to each applicable guaranty fund, satisfying risk-based capital requirements, and demonstrating adequate knowledge and experience in the desired products including the appropriate risk management policies and procedures. CME Clearing is registered with the U.S. Commodity Futures Trading Commission (CFTC) as a derivatives clearing organization (DCO). CME Clearing provides clearing services to a variety of CFTC-registered designated contract markets (DCMs), including CME, CBOT, NYMEX, COMEX, DME, and GEX. CME Clearing also accepts trades through CME Clearport, a flexible clearing service that allows market participants to transact trades on OTC terms and submit them for clearing, either clearing products as OTC swaps or as futures (through an exchange-of-futures-for-swaps, or EFS, transaction), pursuant to applicable rules. CME Clearing provides clearing services to the OTC markets through uniquely designed services for the IRS and CDS markets. In order to underpin its role as the central counterparty to market participants utilizing products in these various markets, CME Clearing has three independent guaranty funds and financial safeguards waterfalls (as further explained below): one for IRS, one for CDS, and one for futures and cleared OTC products other than IRS or CDS (the Base guaranty fund).

As provided in Rule 802.A.1, a clearing member is in default when it "fails to promptly discharge any obligation to" CME Clearing.

³ CME Rule 8G27 (IRS Risk Committee).

⁴ CME Rule 8H27 (CDS Risk Committee).

FINANCIAL INTEGRITY OF CME CLEARING

CME Clearing serves as the counterparty to every cleared transaction, becoming the buyer to each seller and the seller to each buyer, and limiting credit risk by guaranteeing financial performance of both parties. Each clearing member assumes performance and financial responsibility for all transactions it clears, including transactions cleared on behalf of its customers and on behalf of the clearing member and its affiliates.

CME Clearing utilizes a variety of risk management metrics to evaluate clearing members' ability to withstand changing market dynamics. Each clearing member is accountable to CME Clearing as the guarantor for payment and performance bond obligations arising from the accounts it clears. CME Clearing relies on the prudent oversight and evaluation of individual customers by each clearing member, and evaluates clearing members for the adequacy of their customer credit- and risk-monitoring.

CME Clearing is committed to providing clearing firms with fundamental risk management tools to promote and protect the financial integrity of the market including the interest of clearing members, their customers, and CME Clearing.



PRE-EXECUTION RISK CONTROLS

CME Globex

CME Globex is the world's leading electronic trading platform, providing access to a broad array of futures and options products. CME Globex offers high-speed execution, vast capabilities, direct market assess, fairness, transparency, anonymity and global distribution. CME Globex is accessible nearly 24 hours a day throughout the trading week.

Risk management services on CME Globex include Globex Credit Controls, Drop Copy service, and Cancel on Disconnect functionality designed to protect CME Globex customers and clearing firms.

Globex Credit Controls

CME Globex Credit Controls provides pre-execution risk controls that enable administrators to set credit limits through the CME Globex Credit Controls (GC2) tool. Risk administrators are able to define trading limits and select real-time actions if those limits are exceeded, including e-mail notification, order blocking and order cancellation.

Drop Copy

Drop Copy service allows market participants to receive real-time copies of CME Globex execution reports and reject messages as they are sent over iLink sessions. Features include the ability to monitor orders and activity, as well as aggregate execution and reject messages.

Cancel on Disconnect

Upon an involuntarily dropped CME Globex to iLink user connection, Cancel on Disconnect (COD) functionality cancels all resting session/day futures and options orders for that user to protect market participants from position changes without the ability to monitor activity.

CME ClearPort

CME ClearPort is a comprehensive set of flexible clearing services for global OTC markets backed by CME Clearing. CME ClearPort offers an array of clearing services that depend on the nature of the product traded, allowing users to submit bilaterally negotiated trades for clearing. It has the capacity to report transactions in multiple asset classes and provides significant mitigation of counterparty risk and neutral valuations across asset classes.

CME ClearPort offers enterprise-wide credit limits, primarily used by clearing member administrators to allow for prudent risk management. Clearing members control the creation of accounts, permission tradable products, set position limits, and establish overall performance bond limits.

FINANCIAL SAFEGUARDS SYSTEM

CME Clearing has established a financial safeguard system to provide optimal risk management protections. CME Clearing provides clearing services for a variety of products and has developed independent financial safeguards to best serve the unique attributes of the market infrastructure serving particular products. Each clearing member is required to participate in each applicable financial safeguards system package for the products it is eligible to clear.

CME Clearing employs a variety of tools and methods to manage risk including, markto-market functionality, performance bond requirements, and account identification as standard risk management practices across all asset classes, and additional procedures specific to more dynamic markets.

CME Clearing firms are subject to stringent capital, operational, and risk management standards as a condition of clearing membership. These clearing firm standards are augmented by CME Clearing risk management and financial surveillance techniques that are designed to:

- Estimate potential market exposures
- Prevent the accumulation of losses
- Ensure appropriate integrity and capability of clearing members

- Ensure that sufficient resources are available to cover future obligations
- Result in the prompt detection of financial and operational weaknesses
- Allow for swift and appropriate action to rectify any financial problems and protect market participants

Mark-to-Market

CME Clearing promotes financial stability throughout the financial system by monitoring and removing accumulated debt obligations among market participants. At each settlement cycle, CME Clearing determines the change in market value of all open positions from the prior settlement cycle and communicates to respective clearing members for settlement. Debt obligations from option contracts are immediately removed when the option buyer pays the premium (cost of the option) at the time of purchase and subsequently as positions are marked-to-market.

CME Clearing's basic standard is to mark open positions to market at least twice a day, require payments from clearing firms whose positions have lost value, and make payments to clearing firms whose positions have gained value. For select cleared-only markets, positions are marked-to-market daily, with the capability to mark-to-market more frequently as conditions warrant.

CME Clearing establishes minimum performance bond requirements for exchange-traded and OTC products including CDS and IRS. During each settlement cycle, CME Clearing captures and collects performance bond for any new positions and determines the change in value of existing positions. Cash settlement occurs for the mark-to-market on open futures positions and the option premium associated with new option positions, known as settlement variation. Settlement variation for open option positions can be satisfied with collateral as part of performance bond requirements. These processes remove accumulated debt obligations from the system while ensuring that CME Clearing holds sufficient collateral to protect against potential losses that may accumulate prior to the next settlement cycle.

Settlement variation payments through CME Clearing averaged \$3.2 billion per day for the twelve months ending December 30, 2011 and reached a record of \$18.5 billion on October 13, 2008.

Performace Bond Requirements

Performance bond (also referred to as margin) requirements are good-faith deposits to guarantee financial performance on open positions. CME Clearing establishes minimum initial and maintenance performance bond levels for all cleared products. CME Clearing requires that clearing members post maintenance performance bond levels, which represent the minimum amount of protection against potential losses of a position or portfolio. Any deficit in a clearing member's performance bond requirement results in a direct debit to the clearing member's account at a designated settlement bank.

CME Clearing requires that clearing members obtain initial performance bond levels from a customer when an account is new or when the account's equity falls below minimum maintenance requirements set by CME Clearing, allowing customers to absorb some losses before issuance of another performance bond call. When performance bonds on deposit at the customer level fall below the maintenance requirement, the account is re-margined at the required (higher) initial performance bond level resulting in a direct debit to the clearing members account at its settlement bank. Clearing members may impose more stringent performance bond requirements on their customers than the minimums established by CME Clearing.

Performance bond requirements vary by product, and are based on, and adjusted for, historical and implied price volatilities, market composition, current and anticipated market conditions, and other relevant information. In setting performance bond requirements, CME Clearing monitors historical price and implied volatility movements covering short-, intermediate-, and long-term data as well as liquidity, concentration, seasonality and other factors.

For futures and options on futures, performance bond levels are established to cover at least 99 percent of expected price changes for a given product within a given historical period, providing further quantitative and qualitative considerations based on market risk. Actual performance bond requirements may exceed this level for some products. Performance bond requirements for options reflect movements in the underlying futures price, volatility, time to expiration and other risk factors, and adjust automatically each day to reflect the unique and changing risk characteristics of each option series.

To compute performance bond requirements for exchange-traded futures, CME Clearing

utilizes Standard Portfolio Analysis of Risk (CME SPAN), a system developed and implemented by CME Clearing. CME SPAN bases performance bond requirements on the overall risk of the portfolios, using parameters determined by CME Clearing, providing transparency and the ability to replicate margin computations by end users. CME SPAN simulates the effects of changing market conditions and uses tailored options pricing models to determine a portfolio's overall risk. It treats all products uniformly while recognizing the unique features of options. In standard options pricing models, three factors most strongly affect options values: underlying price, volatility (variability of the underlying price), and time to expiration. As these factors change, positions may gain or lose value. CME SPAN constructs scenarios of price and volatility changes to simulate what the entire portfolio might reasonably lose over a specified time horizon. The resulting CME SPAN performance bond requirement covers this potential loss. Additionally, options purchased must be paid for in full and, therefore, the value is added to account equity. Conversely, the value of options sold is added to the overall performance bond requirement for the account. CME Clearing mandates stringent minimum performance bonds for short option positions.

CME SPAN is the industry's standard performance bond system licensed by CME Clearing to exchanges and clearing organizations around the world. CME Clearing requires "gross" performance bonds for customer segregated and customer sequestered positions in CME, CBOT ⁵, COMEX and NYMEX products. The clearing member must deposit performance bonds for each open position (long or short) held at each clearing cycle, with appropriate allowances for risk offsets. CME Clearing allows for "net" performance bonds for non-segregated or proprietary positions.

For cleared OTC IRS and cleared OTC CDS, performance bond levels are established to cover at least 99 percent of expected price changes for a given product within a given historical period, providing further quantitative and qualitative considerations based on market risk. CME Clearing applies a multi-factor risk model to compute margin requirements for CDS. The multi-factor risk model captures the impact of overall macro-economic price risks and event risk at the sector, single name, liquidity, and basis levels. The methodology provides 99 percent coverage over a five-day period. CME Clearing applies a historical value-at-risk model to compute margin requirements for IRS. The model achieves 99 percent coverage over a five-day period by scaling observed historical returns by exponentially-weighted moving average volatilities.

For both cleared OTC IRS and cleared OTC CDS, CME Clearing continually monitors volatility, performs backtesting, and reviews margin coverage to ensure appropriate coverage is maintained both at a position and portfolio level, with the ability to demand additional collateral when required to maintain desired coverage. CME Clearing allows for "net" performance bonds for clearing members' proprietary positions in these products. CME Clearing calculates performance bond requirements for each customer, collecting gross performance bond for the aggregate customer sequestered account.

Concentration Performance Bond

CME Clearing also maintains a concentration performance bond program, which allows CME Clearing to charge additional performance bond requirements when a clearing member's potential market exposures become large relative to the financial resources available to support those exposures.

Guaranty Funds

CME Clearing's rules are designed to maximize the liquidity and safety of the pool of guaranty funds. Guaranty fund contributions to the Base guaranty fund are sized to cover a default to CME Clearing by the largest net debtor,⁶ and are computed as the greater of \$500,000 or the results of a formula under which 95 percent of the total requirement is based on the clearing member's proportionate contribution to aggregate risk performance bond requirements over the prior three months and the remaining 5 percent is based on the clearing member's contribution to risk-weighted transaction activity over the prior three months.

⁵ Clearing firms are optionally allowed to post net margin for CBOT customer positions, if they also agree to forego utilization of long option value in CME Clearing's calculation of clearing level performance bond requirement. This optional CBOT performance bond calculation profile is due to be phased out by November 2012.

⁶ Clearing members that clear OTC products in the Base guaranty fund must maintain a minimum guaranty fund deposit of \$2.5 million.

The CDS Guaranty Fund is sized to cover defaults by the two largest net debtors. Individual Clearing Member contributions are computed as the greater of \$50 million or the Clearing Member's proportional share of the fund based on (a) a 30-day trailing average of their Potential Residual Loss (95%) and (b) a 30-day trailing average of their Gross Notional (5%).

The IRS Guaranty Fund is sized to cover defaults by the two largest net debtors. Individual Clearing Member contributions are computed as the greater of \$50 million or the Clearing Member's proportional share of the fund based on (a) a 30-day trailing average of their Potential Residual Loss, which is the tail risk the Clearing Member brings to the Clearing House (90%) and (b) a 30-day trailing average of their Gross Notional (10%).

CME Clearing recomputes guaranty fund requirements on an ongoing basis and requires clearing members to deposit any additional required funds at the beginning of each quarter for the Base guaranty fund and at the beginning of each month for both the IRS and CDS guaranty funds, or more frequently as conditions warrant. As of December 30, 2011, the aggregate contribution requirements across all three guaranty funds totaled \$4.5 billion. As more fully discussed below, assessment powers augment funds on deposit in the guaranty fund.

Acceptable Collateral

CME Clearing determines the acceptability of various collateral types, in accordance with applicable CFTC regulations, and determines appropriate haircuts as well as requirement type eligibility (core, reserve, concentration or guaranty fund). Active clearing members may meet performance bond requirements using a wide variety of collateral, which may include:

- Cash, including USD and select foreign currencies
- U.S. Treasuries, including TBILL, TBOND, TNOTE, TSTRIP, TLGP
- U.S. Agencies, including select discount notes and bills, select coupon bearing instruments, select mortgage backed securities
- Select Foreign Sovereign Debt
- Letters of credit
- Physical gold

- Stocks, including select stock from S&P 500 Index
- Specialized collateral programs including:
 - Money market mutual fund program
 - Tri-party collateral management program for pledging alternative collateral
 - Cash with interest on trust ledger of participating banks

Securities are revalued on a daily basis, at minimum, and are subject to prudent haircuts. Foreign cash is subject to haircuts in selected circumstances. Various forms of collateral are also subject to concentration and diversification limits. CME Clearing offers a choice of several different collateral management programs, providing efficient and cost-effective solutions for clearing members' collateral management needs. Acceptable collateral may vary by account class and account type, please refer to the following link for further details <u>http://www.cmegroup.com/</u> <u>clearing/financial-and-collateral-management/ index.html</u>.

Customer Protection

Customers face credit risk in doing business through any particular futures commission merchant (FCM), so each customer's selection process for a suitable FCM is important. While the laws, rules and regulations applicable to segregation of customer positions and collateral for products traded in regulated markets are designed to protect customers from the consequences of an FCM's failure, they may not provide complete protection if the FCM's default to CME Clearing results from a shortfall in customer segregated (or sequestered) funds (e.g., if the FCM's default is caused by another customer failing to meet its financial obligations to the FCM). Protection against a customer-caused default rests primarily with the management of the clearing member and its internal risk management controls. Generally, a clearing organization's role in the customer protection process is to monitor risk management requirements to provide oversight, require all customers to post adequate performance bonds, administer financial surveillance programs designed to monitor the financial viability of FCM clearing members, and, when necessary, impose specific remedies in an effort to avert the consequences of financial deterioration of a clearing member.

Segregation and Sequestration of Customer Positions and Collateral

CFTC regulations require customer positions and collateral to be segregated or kept separate from the positions and collateral of the FCM clearing member. The requirements apply directly to the activity and accounting by the clearing member and are further detailed in CME rules. CME Clearing has adopted rules for customer OTC derivatives accounts (known as customer sequestered accounts) that parallel CFTC regulations for customer segregated accounts. These rules are supported by CFTC Part 190 Bankruptcy regulations and are designed to protect customers in the event of insolvency or financial instability of their FCM clearing member. CME Clearing's Audit Department routinely inspects clearing member records to monitor compliance with segregation and sequestration requirements. The integrity of segregation and sequestration relies on the accuracy and timeliness of the information provided to CME Clearing by FCM clearing members. Violations by a clearing member of segregation or sequestration requirements are considered serious infractions and can result in imposition of significant regulatory penalties.

Capital Requirements for Clearing Members

CME Clearing members that are subject to CFTC regulation are required to maintain Adjusted Net Capital (ANC) at prescribed levels. All active clearing members are required to maintain the greatest of:

- \$5,000,000;⁷
- CFTC minimum regulatory capital requirements (see below); or
- SEC minimum regulatory capital requirements

⁷ Or such other minimum as may be established for particular products.

CME Clearing and the CFTC have adopted a risk-based capital requirement as the regulatory minimum capital requirement. This requirement is computed as 8 percent of domestic and foreign domiciled customer and 8 percent of non-customer (excluding proprietary) risk maintenance performance bond requirements for all domestic and foreign futures and options on futures contracts,⁸ excluding the risk margin associated with naked long option positions and any cleared OTC contracts.

Either in conjunction with or separately from being a clearing member for futures and options on futures listed by CME, CBOT, NYMEX and/or COMEX, a firm may have become an OTC clearing member, an IRS clearing member or a CDS clearing member. OTC, IRS and CDS clearing members are subject to the requirements established within the relevant rule set.

As set forth below, minimum capital requirements for a clearing member that

clears OTC derivatives depend upon the categories of OTC products the firm is entitled to clear:

- \$50,000,000 if the clearing member will clear only commodity (i.e. agricultural, metal, and energy) and /or foreign exchange OTC products;
- \$50,000,000 if the clearing member will clear the above products and CDS or IRS;
- For bank clearing members, capital is defined as Tier 1 Capital, as defined in accordance with regulations applicable to the bank clearing member; and
- For additional information on OTC clearing capital requirements, please refer to CME Rule 8F04 for OTC derivatives, CME Rule 8H04 for CDS and CME Rule 8G04 for IRS.

The Clearing House Risk Committee, the IRS Risk Committee, CDS Risk Committee or the Clearing House may prescribe additional capital requirements or grant exemptions.

ANC is computed based on the following formula:

Current Assets

- Adjusted Liabilities
- Capital Charges

Adjusted Net Capital

Current Assets: Cash and other assets that are reasonably expected to be realized as cash, or sold, during the next twelve months. However, certain assets such as prepaid expenses, deferred charges, and unsecured receivables from customers, non-customers, subsidiaries and affiliates, which would be classified as current under generally accepted accounting principles, are deemed non-current. Exchange memberships are also reflected as non-current assets.

Adjusted Liabilities: The clearing member's total liabilities less the liabilities which have been subordinated to the claims of general creditors.

Capital Charges: Regulatory capital charges primarily encompass percentage deductions ("haircuts") on the following:

Speculative proprietary futures and options positions

Proprietary inventories, fixed price commitments and forward contracts

Undermargined customer, noncustomer and omnibus accounts

Marketable securities

⁸ Any risk maintenance performance bond requirements for cleared OTC products must also be included in the calculation.

Capital requirements are monitored by CME Clearing's Audit Department. Capital requirements vary to reflect the risk of each clearing member's positions as well as CME Clearing's assessment of each clearing member's internal controls, risk management policies and back office operations. Clearing members which are members of all of CME Group Exchanges (CME, CBOT, NYMEX and COMEX) must assign to CME Clearing two CME memberships, two IMM memberships, two IOM memberships, one GEM membership, two full CBOT memberships, two full NYMEX memberships and one full COMEX membership. To obtain clearing privileges for a single CME Group Exchange, a firm must meet the membership requirements of that particular Exchange. To obtain clearing privileges for two CME Group Exchanges, firms need to meet the membership requirements of those particular Exchanges.

Clearing members that are only entitled to clear OTC derivatives products are subject to capital and membership requirements based on the particular products cleared.

Finally, CME, CBOT and NYMEX/COMEX rules generally require owners of five percent or more of the equity securities of a clearing member to guarantee obligations arising out of house (non-customer and proprietary) 12 accounts of the clearing member to the extent of their ownership interest. Owners of 50 percent or more must guarantee 100 percent of the clearing member's house obligations. This parent guarantee provides a high level of assurance that obligations arising out of trades made and positions held by owners or affiliates of clearing members are promptly discharged. Additionally, per the terms of Rule 901G, CME staff may require a guaranty in situations where clearing firms are subject to common ownership.

Financial Surveillance

Recognizing the need to monitor the financial condition of clearing members, CME Clearing's Audit Department, in conjunction with other self-regulatory organizations, operates a sophisticated financial surveillance program. The program has several important aspects, as outlined below:

<u>Reporting.</u> Clearing members must calculate segregation and sequestered requirements and ensure compliance with capital requirements on a daily basis. In addition, firms must submit to the Audit Department full financial statements monthly, provide certified financial statements once a year, and submit more frequent reports (daily or weekly) as directed. OTC Clearing Members regulated by another regulatory authority must submit to CME annual audited financial statements as well as all unaudited financial statements provided to its primary regulator within five days after such statements are provided to its regulator.

<u>Notification</u>. Clearing members are required to report any failure to meet segregation, sequestered, foreign futures or foreign options secured amount, or minimum capital requirements. Clearing members also must notify CME Clearing prior to any significant business transaction, any significant change in operations, or significant declines in net capital.

<u>Inspection</u>. Generally, each clearing member is subject to a financial/operational review every year. The reviews are tailored to focus on the specific risks of the clearing member. All such inspections are performed on an impromptu basis.

<u>Information Sharing</u>. CME Clearing participates in formal agreements with other domestic and foreign regulatory authorities, as well as clearing and self-regulatory organizations. As part of these agreements, CME Clearing regularly exchanges financial and operational information about joint clearing members with other participating markets. Recognizing that the financial marketplace spans the globe, CME Clearing was instrumental in developing

the International Information Sharing Memorandum of Understanding, which established a framework for participating exchanges and clearing organizations worldwide to share information relevant to managing global market emergencies. CME Clearing also seeks broader cooperation between clearing organizations through such industry forums as the Unified Clearing Group, CCP 12, the Joint Audit Committee, the Intermarket Financial Surveillance Group and the DCO Risk Committee.

Intra-Day Monitoring

CME Clearing monitors intra-day price movements and trading activity throughout the trading session. To assess the impact of these price changes on clearing members, intra-day mark-to-market calculations are performed on clearing member and customer positions and reviewed by CME Clearing throughout the day and overnight. The risk management team may contact exchanges or clearing organizations to follow up on clearing firm activity at their respective organizations. On a daily basis, CME Clearing conducts stress testing of clearing member portfolios and individual customer accounts of their large customers. Numerous stress scenarios have been modeled to reflect a diverse set of possible market events. Stress results

are evaluated against performance bond on deposit and clearing member adjusted net capital. Results of stress tests may lead CME Clearing to request that a clearing member provide additional information about its customer accounts, such as whether offsetting positions for CME-cleared products exist in other markets. In some cases, stress test results may cause CME Clearing to increase a clearing member's performance bond requirement, capital requirements, or require a clearing member to reduce or transfer positions.

Market Regulation

Through CME Group's Market Regulation Department, CME Clearing's risk management team has access to specific account position information for clearing members' large individual customer accounts. Such position information, which is maintained on a highly confidential basis, allows the identification of concentrated positions as they arise and the aggregation of positions that may be owned by common principals through several different clearing members. Knowledge of concentrated or high-risk positions, coupled with information routinely gathered on the cash and/or related derivative markets, enables CME Clearing to respond rapidly to market situations that might adversely affect the

financial integrity of CME Clearing or the financial stability of a clearing member.

Clearing Member Risk Reviews

CME Clearing periodically visits clearing member firms to evaluate various financial metrics such as liquidity, capital adequacy, asset quality, and earnings/profitability, and to review policies for new and existing account monitoring, risk management procedures for customer and proprietary exposures, and monitoring for liquidity risk and operational risk management. Results of each review are summarized for CME Clearing management. If a review indicates a potential weakness or area of concern, the risk management team will submit recommendations to CME Clearing management and the CHRC for approval. Recommendations may include, among other things, issuing a formal request to the clearing member to address the matter within a specified period to alleviate the need for more severe action to be taken.

Cross-Margining

CME Clearing has administered a range of cross-margining programs for more than twenty years. In recognition of the linkages among the markets for exchange-traded equity derivative products, as well as the need to promote efficient clearing procedures and to focus on the true inter-market risk exposure of clearing members, CME Clearing, in conjunction with the Options Clearing Corporation (OCC), offers a crossmargining program with respect to market professionals and proprietary accounts. Combining the positions of joint or affiliated clearing members in certain broad-based equity index futures and options into a single portfolio, and utilizing the sophisticated risk-based margining systems of each clearing organization, results in a single performance bond requirement across both markets. The clearing organizations jointly hold a first lien on and security interest in the positions in cross-margined accounts. All performance bond deposits associated with these accounts are jointly held. The cross-margining program significantly enhances both the efficiency and financial integrity of the clearing system by

allowing gains accruing to futures or options positions to be immediately available to meet the requirements for funds from losing positions.

If a clearing organization were to suspend a cross-margining member, the positions in the cross-margin accounts would be liquidated and all performance bond collateral would be converted to cash and applied toward each clearing organization's costs of liquidating the cross-margin accounts. CME Clearing and the OCC each would be entitled to half of any surplus to apply toward other obligations of the clearing member; if one clearing organization did not need its entire share of the surplus, the excess would be made available to the other clearing organization.

CME Clearing also maintains a cross-margin agreement with the Fixed Income Clearing Corporation (FICC). The program provides cross-margining of selected interest rate products and fixed income products. The design of the FICC program differs from the above-mentioned OCC program in that performance bond collateral is held separately at each respective clearing organization. If CME Clearing or FICC were to suspend a cross-margining participant, the crossmargined positions would be liquidated and performance bond collateral would be converted to cash at each respective clearing organization. If the liquidation of crossmargined positions and performance bond resulted in a cross-margin loss, there would be a cross-margin guarantee payment from one clearing organization to the other to share the loss.

Additionally, CME Clearing and Singapore Exchange Limited (SGX) have a mutual offset agreement. CME Clearing can maintain collateral in the form of U.S. Treasury securities or irrevocable letters of credit. Regardless of the collateral, CME Clearing guarantees all cleared transactions submitted through SGX. In the event of a default, CME Clearing would initiate procedures designed to satisfy these financial obligations, such as the use of performance bond and guaranty fund contributions of the defaulting clearing member.

DEFAULT BY A CLEARING MEMBER

CME Clearing's financial safeguards system includes default procedures for both exchange-traded and cleared OTC markets. The risk management and financial surveillance techniques of CME Clearing are designed to minimize the possibility that a clearing member will default on its obligations to CME Clearing. CME Clearing, by rule and by operational practice, has prepared contingencies to expeditiously deal with the unlikely event of a clearing member default. A clearing member may be declared to be in default when it fails to promptly discharge any obligation to CME Clearing,9 including but not limited to failure to satisfy its financial obligations to CME Clearing. In the event of a default by a clearing member, depending upon the products cleared by the particular clearing member firm, CME Clearing may utilize one of three different guaranty funds and financial safeguards waterfalls: one for IRS, one for CDS, and one for futures and OTC cleared products other than IRS and CDS (the Base guaranty fund).

CME Clearing performs various default management exercises throughout the year. For CDS and IRS, default management drills are conducted twice yearly, with oversight provided by default management committees. The procedures detailed below outline CME Clearing's general procedures in the event of a clearing member default. More detailed procedures may be applied to respond to the unique attributes of defaults involving specific asset classes, such as IRS and CDS. ¹⁰

House Account Default

If a clearing member were unable to meet its financial obligations to CME Clearing resulting in a failure to make a payment within its house (sometimes referred to as proprietary or non-customer) account, CME Clearing may act immediately to:

- Transfer segregated and sequestered customer positions and collateral to another clearing member;
- Take control of, or liquidate, positions in the clearing member's house account;
- Apply the clearing member's guaranty fund and house performance bond deposits to satisfy the clearing member's obligations to CME Clearing with regard to its house account;
- Utilize all other assets of the clearing member that are available to CME Clearing (e.g., Exchange memberships); and/or
- Invoke any applicable parent guarantee.

Customer segregated and sequestered assets (positions and/or collateral) on deposit with or in the control of CME Clearing may not be used or impaired by CME Clearing in the case of a clearing member default to CME Clearing resulting from house account activity.

Customer Segregated or Sequestered Account Default

If a clearing member were unable to meet its financial obligations resulting in a failure to make payment within its customer segregated or customer sequestered account, CME Clearing may act immediately to:

- Transfer non-involved customer segregated or customer sequestered positions and collateral to another clearing member.
- Take control of, or liquidate, involved customer segregated or customer sequestered positions and house positions.
- Apply the clearing member's guaranty fund and house performance bond deposits to the failed obligation to CME Clearing.
- Utilize all other assets of the clearing member that are available to CME Clearing (e.g. Exchange memberships).

⁹ CME Rule 802.A.1 (Default by Clearing Member).

¹⁰ See CME Rules 8H802 AND 8G802 (Protection of Clearing House).

DEFAULT BY A CLEARING MEMBER, continued

Although CME Clearing separates customer segregated and customer sequestered performance bond deposits and positions from the clearing member's proprietary performance bond deposits and positions, the customer performance bond deposits and positions for each clearing member are held in aggregate, without identifying specific ownership at the customer level. If a default to CME Clearing occurred in the clearing member's customer segregated or customer sequestered accounts, CME Clearing has the right to apply toward the default all performance bond deposits and positions within the respective account at CME Clearing. Accordingly, positions and performance bonds deposited by customers not causing the default are potentially at risk if there is a default to CME Clearing in the respective customer account of their clearing member and may be liquidated.

Unsatisfied Obligation

Should there be any remaining unsatisfied obligations to CME Clearing following the above procedures, CME Clearing would apply CME designated funds, guaranty fund contributions of non-defaulting clearing members, and funds collected through an assessment against such clearing members. For the financial safeguard package that includes the Base guaranty fund, CME- designated contributed capital is \$100 million. For each of the IRS and CDS financial safeguard packages, CME-designated contributed capital is \$100 million.

Following the application of CME-designated funds, CME Clearing would apply the guaranty funds of the non-defaulting clearing members, limited to the contributions to the financial safeguards package associated with the default.

If necessary to cure the default to CME Clearing, CME Clearing would then invoke its right to assess non-defaulting clearing members. For the financial safeguards package that includes the Base guaranty fund, assessment powers cannot exceed 2.75 times the aggregate Base guaranty fund requirement across all clearing members for a single default. For multiple defaults in a five-day period, assessment powers are capped at 5.5 times the aggregate guaranty fund. For both the IRS and CDS financial safeguard packages, assessment powers are sized to match the third and fourth largest theoretical net debtors.¹¹ Should the applicable financial safeguard package be exhausted, beyond maximum assessment powers, the terms of Rule 818 Close-Out Netting would apply.

Liquidity Facility

CME Clearing maintains a fully secured, committed line of credit with a consortium of domestic and international banks that may be used in certain situations. Under the terms of the credit agreement, CME Clearing may use the proceeds of the advances to provide temporary liquidity in the unlikely event of a clearing member default, in the event of a liquidity constraint or default by a depository institution (custodian of the collateral), or if there is a temporary problem with the domestic payments system that would delay payments of settlement variation between CME Clearing and clearing members. The line of credit thus provides CME Clearing with additional capacity to pay settlement variation to all clearing members even if a clearing member may have failed to meet its financial obligations to CME Clearing. As of December 30, 2011, the size of the facility was \$3 billion, expandable to \$5 billion.

U.S. Insolvency Law Protections

In the case of a bankruptcy of an FCM clearing member, the U.S. Bankruptcy Code, the CFTC Part 190 Bankruptcy Rules and other laws contain a number of provisions that provide protections to a clearing member's public customers. These provisions include

¹¹ Rule 8H802 and 8G802 (Protection of Clearing House).

DEFAULT BY A CLEARING MEMBER, continued

special priority rules for distribution of property to customers and certain exceptions to the Bankruptcy Code's automatic stay and voidability provisions. Set forth below is a general overview of these provisions.

In the event of a clearing member bankruptcy, the Bankruptcy Code provides a number of protections to CME Clearing, regardless of whether the bankrupt clearing member holds public customer accounts or only clears proprietary trades. For example, a trustee may not void pre-bankruptcy payments of original performance bond or settlement variation made to CME Clearing (except in the event of a fraudulent transfer). In addition, the filing of a bankruptcy petition will not stay a set-off by CME Clearing of claims for original performance bond or settlement variation payments owed by a clearing member against cash, securities or other property of a clearing member held by CME Clearing. These provisions establish a priority for CME Clearing with respect to performance bond deposits, which protect all clearing members. Further, the Bankruptcy Code provides that neither a clearing member's bankruptcy nor any order of a bankruptcy court can prevent CME Clearing from exercising any contractual right it has to liquidate a commodity contract.

The Bankruptcy Code and the CFTC Part 190 Bankruptcy Rules provide a five-day grace period during which time customer accounts may be transferred from a defaulting clearing member to non-defaulting clearing members, either pursuant to arrangements made by the customer or as part of a "bulk transfer" of accounts coordinated with CME Clearing and the CFTC. With respect to distribution of customer property remaining at the defaulting clearing member, the CFTC Part 190 Bankruptcy Rules classify a clearing member's customers as either "public" or "non-public." Non-public customers include certain account holders that are affiliated with or related to the clearing member such as the clearing member officers, directors, general partners or ten percent or greater owners. All other customers are considered "public," and their property on deposit with the clearing member is subject to CFTC segregation requirements.

The Bankruptcy Code and CFTC Part 190 Rules afford claims of public customers the highest priority, subject only to the payment of claims relating to the administration of customer property. For purposes of claims in an FCM bankruptcy, customers of the FCM are divided into the following account classes: U.S. futures accounts (governed by Section 4d of the Commodity Exchange Act and related CFTC Regulations), foreign futures accounts (governed by CFTC Regulation 30.7), cleared swaps accounts, leverage accounts and delivery accounts. Each account class is a separate pool of funds for claims. The claims of customers whose funds are held in defined account classes will have priority over proprietary claims and the claims of general creditors in an FCM bankruptcy to funds in that pool. All property segregated on behalf of, or otherwise traceable to, a particular account class is allocated to that class and distributed to customers in that class on a pro-rata basis.

For banks and foreign entities that are direct clearing members, the applicability of these and other insolvency-related provisions will depend on the circumstances of each situation.

An insolvency of a domestic bank would be controlled by the Federal Deposit Insurance Corporation (FDIC) or a receiver appointed by the Comptroller of the Currency (Comptroller) depending on the type of banking services provided by the clearing

DEFAULT BY A CLEARING MEMBER, continued

member bank. If the clearing member is a retail depository bank, and therefore insured by the FDIC, its insolvency would be administered under the Federal Deposit Insurance Act (FDIA) with the FDIC as receiver. A non-depository bank would not be subject to the FDIA, and its insolvency would be controlled by the Comptroller as the licensing agency. Such insolvency is governed by the National Banking Act.

CME Clearing's outside counsel has indicated that based on the FDIA and the Federal Deposit Insurance Corporation Act of 1991 (FDICIA) there is strong legal support for contractual netting among a clearing organization such as CME Clearing and its members, including U.S. banks. FIDICIA generally provides that the covered contractual payment obligations and the covered contract payment entitlements of a member of a clearing organization to and from all other members of a clearing organization shall be netted. In addition, the FDIA has provisions that are similar to the Bankruptcy Code in permitting broad cross-product netting and allowing prompt liquidation of contracts with an insolvent bank.

Foreign banks will fall within one of three relevant categories. If the foreign bank has assets but no subsidiaries or branches in the U.S., it would be subject to the U.S. Bankruptcy Code. Second, a foreign bank could establish a subsidiary bank in the U.S., either as a retail depository bank subject to FDIC regulations or as a non-depository bank that must be licensed by the Comptroller. The subsidiary's insolvency would be processed in the same manner as a U.S. bank. Finally, the foreign bank could set up branches rather than a bank subsidiary in the U.S. Such branches would not be permitted to accept retail deposits, and therefore the Comptroller, which would license the branches, would be the federal regulator rather than the FDIC. A receiver appointed by the Comptroller would administer the insolvency process in the U.S.

CME CLEARING FINANCIAL SAFEGUARDS SYSTEM RESOURCES

Under no circumstances will customer segregated or sequestered performance bond deposits held by CME Clearing for one FCM clearing member be used to cover either a house or customer default of another clearing member. Customers doing business through a clearing member not involved in a default are insulated from losses incurred by the failure of another clearing member.

At December 30, 2011, CME Clearing maintained aggregate performance bonds of approximately \$90 billion.¹² The following highlights additional available resources of CME Clearing at December 30, 2011 in the event that the resources of the defaulting firm are exhausted.

Base Financial Safeguards Package

CME Contributed Capital	\$100,000,000
Guaranty Fund Contributions	\$2,968,000,000
Assessment Powers	\$8,161,000,000
Aggregate base financial safeguards ¹³	\$11,229,000,000

IRS Financial Safeguards Package¹⁴

CME Designated Working Capital	\$100,000,000
Guaranty Fund Contributions	\$948,000,000
Minimum Total Assets Available for Default	\$1,048,000,000

CDS Financial Safeguards Package¹⁵

CME Designated Working Capital	\$100,000,000
Guaranty Fund Contributions	\$629,000,000
Minimum Total Assets Available for Default	\$729,000,000

13 Exchange memberships assigned to CME Clearing are available in the event of the respective clearing member default.

- 14 IRS Financial Safeguards additionally include assessment powers as detailed in Rule 8G802 (Protection of Clearing House).
- 15 CDS Financial Safeguards additionally include assessment powers as detailed in Rule 8H802 (Protection of Clearing House).

¹² Aggregate performance bonds stated represent the value after any applicable CME Clearing performance bond haircuts.

DISASTER RECOVERY AND BUSINESS CONTINUITY

The Business Continuity Management (BCM) program is committed to ensuring CME Group can respond to an incident while ensuring the safety of our people, guarantee the survivability of core trading and clearing functions and meeting our fiduciary responsibility to our stakeholders.

Key components of the program include:

- Identifying a program framework that aligns with U.S. and International standards.
- Multiple-redundant systems components, maintained at separate, geographicallydispersed facilities.
- Multiple-redundant network connectivity between clearing firms and CME Clearing, into those separate, geographicallydispersed facilities.

- Real-time mirroring of data storage between separate facilities.
- Physical dispersion of operations oriented staff.
- Multiple electricity feeds as well as back-up generator capability.
- Redundant voice telecommunications lines with automatic switching to backup facilities.
- Routinely-tested scenarios include both the completion of the daily clearing cycle and the resumption of normal clearing processing.

CME CLEARING EUROPE

CME Clearing Europe, CME Group's European Clearing House, is approved as a Recognised Clearing House by the UK Financial Services Authority. CME Clearing Europe was launched in May 2011 initially offering clearing for a wide range of OTC products. CME Clearing Europe is a separate legal entity which is wholly owned by CME Group; although CME Clearing Europe benefits from CME Clearing's system infrastructure and proven risk management expertise, it has its own experienced staff based in London and its own governance structure including a Board of Directors and Risk Committee. It also has its own membership criteria for firms wishing to clear business through the European entity and maintains its own financial safeguards to protect against the default of a Clearing Member.

The following highlights the available resources of CME Clearing Europe at December 30, 2011 in the event that the resources of the defaulting firm are exhausted.

Financial Safeguards Package:

CME Clearing Europe Guarantee Fund Contribution	\$20,000,000
Clearing Member Guaranty Fund Contributions	\$40,000,000
Assessment Powers	\$110,000,000

For more information on CME Clearing Europe visit <u>cmeclearingeurope.com</u>.

Financial Safeguards

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All matters pertaining to rules and specifications herein are made subject to and are superseded by official CME Group rules.

Current CME Group rules should be consulted in all cases concerning contract specifications.

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APPENDIX 1-E

CME SPAN



CME CLEARING

CME SPAN®

The Standard Portfolio Analysis of Risk



Introduction

CME Clearing is the world's largest derivatives clearing organization, clearing approximately 90% of all futures and options on futures traded in the United States. An operating division of CME, CME Clearing is the central counterparty and guarantor for two of the largest and most diverse financial exchanges in the world, handling over 1.5 billion futures, options on futures and OTC transactions worth more than \$788 trillion in notional value in a single year.

Our clearing function ensures the safety and soundness of the markets we clear and helps differentiate us from our competitors. We serve the risk management needs of customers around the globe by offering clearing services for the widest range of benchmark financial products. In addition to clearing for CME, Chicago Board of Trade (CBOT), and One Chicago, CME Clearing also provides clearing services for OTC transactions through CME Auction MarketsTM, and CME Clearing360TM.

With CME*Clearing being substituted as the counterparty to every trade matched or submitted in the clearing process – the risk of default is greatly reduced. The financial integrity of CME Clearing is a foremost consideration of CME's Board of Directors, Clearing House Risk Committee, and management. CME is vitally aware of its role in international financial markets and believes that its financial safeguard system, designed for the benefit and protection of both clearing members and their customers, is second to none.

1

What is SPAN[®]?

The **Standard Portfolio Analysis of Risk™ (SPAN)** system is a highly sophisticated methodology that calculates performance bond requirements by analyzing the "what-ifs" of virtually any market scenario. Developed and implemented in 1988 by Chicago Mercantile Exchange (CME), SPAN was the first system ever to calculate performance bond requirements exclusively on the basis of overall portfolio risk at both clearing and customer levels.

In the years since its inception, SPAN has become the industry standard for portfolio risk assessment. It is the official performance bond (margin) mechanism of 47 registered exchanges, clearing organizations, service bureaus and regulatory agencies throughout the world. SPAN software is utilized by a wide range of end-users, including futures commission merchants (FCMs), investment banks, hedge funds, research organizations, risk managers, brokerage firms and individual investors worldwide. Although originally designed for use with derivatives, its extra-ordinary capabilities have led to its extensive use in assessing risk for many different types of financial instruments.

Now in its fourth generation of functionality, SPAN has evolved into a "family" of three software products designed to meet the needs of a wide range of customers.

PC-SPAN® - a single-user desktop application that offers margin calculation across multiple exchanges.

SPAN Risk Manager™ – a single-user desktop program that includes risk analytics in addition to margin calculation.

SPAN Risk Manager Clearing – an institutional-level program used by exchanges, clearing organizations, service bureaus and regulatory agencies that employs all the functionalities of PC-SPAN and SPAN Risk Manager, and also offers real-time margining, risk array calculations and production of SPAN risk parameter files.

Why is SPAN the global standard?

SPAN is the global standard in risk assessment software because it:

- » Is flexible and powerful
- » Offers cost-efficient and easy-to-implement solutions
- » Calculates performance bond requirements at multiple levels: clearing members, members/brokers, omnibus and individual accounts
- » Offers true market transparency, including access to free daily SPAN files and detailed documentation
- » Provides unparalleled customer support

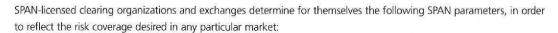
How does SPAN work?

SPAN evaluates overall portfolio risk by calculating the worst probable loss that a portfolio might reasonably incur over a specified time period. SPAN achieves this number by comparing hypothetical gains and losses that a portfolio would sustain under different market conditions.

SPAN typically provides a "Risk Array" analysis of 16 possible scenarios for a specific portfolio under various conditions. SPAN methodology, however, allows users to request any number of scenarios to meet their particular needs:

- » Each scenario consists of a "what-if" situation in which SPAN assesses the effects of variations in price, volatility and time to expiration.
- » Each calculation represents a gain or loss based on the possible gains or losses due to changes in an instrument's price by X and volatility by Y.

Risk Array Graph



- » Price Scan Range: A set range of potential price changes
- » Volatility Scan Range: A set range of potential implied volatility changes
- » Intracommodity Spread Charge: An amount that accounts for risk (basis risk) of calendar spreads or different expirations of the same product, which are not perfectly correlated
- » Short Option Minimum: Minimum margin requirement for short option positions Spot Charge: A charge that covers the increased risk of positions in deliverable instruments near expiration
- » Intercommodity Spread Credit: Margin credit for offsetting positions between correlated products

SPAN combines financial instruments within the same underlying for analysis, and refers to this grouping as the Combined Commodity group. For example, futures, options on futures and options on equities on the same stock could all be grouped under a single Combined Commodity.

To calculate a performance bond requirement, for each Combined Commodity in a portfolio, SPAN will:

- » Sum the Scan Risk charges, any Intracommodity Spread and Spot Charges
- » Apply the offsets for all Intercommodity Spread Credits within the portfolio
- » Compare the above sum with any existing Short Option Minimum requirement
- » Assess the greater of the two compared as the risk of the Combined Commodity

The Total Margin Requirement for a portfolio is the sum of the risk of all Combined Commodities less all credit for risk offsets between the different Combined Commodities.

Here's an example of a portfolio with CME Euro FX Futures and Options positions:

- » Euro FX Futures: 1 Long June04
- » Euro FX Options on Futures: 1 Short June/June04 Call 1.150 Strike
- » Euro FX June Futures Settlement = 1.1960
- » Euro FX Futures Price Scan Range = \$2400 = 192 points
- » Euro FX Volatility Scan Range = 1%

Contract	Net
CME EC Future 200406	1
CME EC 200406 Call at 1.150 on CME EC Future 200406	-1

#	One Long June 04 EuroFX	One Short June on June 04 1.150 Call Euro FX Option	Portfolio	Scenario Description					
1 \$0		- \$130		Price unchanged; Volatility up the Scan Range					
2	\$0	\$155	\$155	Price unchanged; Volatility down the Scan Range					
3	\$800	- \$785	\$15	Price up 1/3 the Price Scan Range; Volatility up the Scan Range					
4	\$800	- \$531	\$269	Price up 1/3 the Price Scan Range; Volatility down the Scan Range					
5	- \$800	\$500	- \$300	Price down 1/3 the Price Scan Range; Volatility up the Scan Range					
6	- \$ 800	\$815	\$15	Price down 1/3 the Price Scan Range; Volatility down the Scan Range					
7	\$1600	- \$1463	\$137	Price up 2/3 the Price Scan Range; Volatility up the Scan Range					
8	\$1600	- \$1240	\$360	Price up 2/3 the Price Scan Range; Volatility down the Scan Range					
9	- \$ 1600	\$1102	- \$498	Price down 2/3 the Price Scan Range; Volatility up the Scan Range					
10	- \$1600	\$1446	-\$154	Price down 2/3 the Price Scan Range; Volatility down the Scan Range					
11	\$2400	- \$2160	\$240	Price up 3/3 the Price Scan Range; Volatility up the Scan Range					
12	\$2400	- \$1967	\$433	Price up 3/3 the Price Scan Range; Volatility down the Scan Range					
13	- \$2400	\$1674	- \$726	Price down 3/3 the the Price Scan Range; Volatility up the Scan Range					
14	- \$2400	\$2043	- \$357	Price down 3/3 the Price Scan Range; Volatility down the Scan Range					
15	\$2304	- \$2112	\$192	Price up extreme (3 times the Price Scan Range) - Cover 32% of loss					
16	- \$2304	\$1466	-\$838	Price down extreme (3 times the Price Scan Range) - Cover 32% of loss					

In the sample portfolio above, in scenario 8, the gain on one long June 04 EC futures position offsets the loss of one short EC June/June 04 1.150 call option position, incurring a gain of \$360.

In scenario 16, the portfolio would incur a loss of \$838 over the next trading day, which is 32% of the resulting loss if the price of the underlying future decreases by three times the price scan range.

After SPAN has scanned the different scenarios of underlying market price and volatility changes, it selects the largest loss among these observations. This "largest reasonable loss" is the Scan Risk charge. In this example, the largest loss across all 16 scenarios is a result of Scenario 16, a loss of \$838.

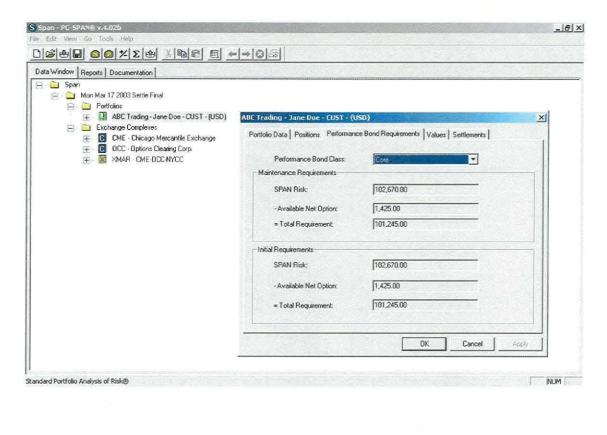
About the SPAN software family:

A number of common features are integrated into the SPAN software family. All SPAN software products:

- » Are Windows-based and have the familiar look and feel of today's most widely used desktop software products
- » Feature free access to daily SPAN arrays from a variety of exchanges and clearing organizations around the world
- » Feature extensive, detailed and well-documented reports on Portfolio and Risk parameters
- » Include an XML-based reporting module which provides for simple data import and export to Access or Excel
- » Are supported by the CME Clearing House's Risk Management experts via a dedicated SPAN hotline and email address
- » Run in batch or GUI interactive mode and can be automated with simple scripting language
- » Support multiple currencies and the widest possible variety of instruments including stocks, bonds, OTC derivatives, cash, futures, and options

PC-SPAN = Margin Calculation

PC-SPAN is single-user desktop software that enables a user to enter positions manually or by using scripting language to automate the position entry process. With a click of the mouse, the SPAN requirement is known. As thousands of users can attest, PC-SPAN allows for an extremely quick, inexpensive and simple way to calculate margin requirements across multiple exchanges.



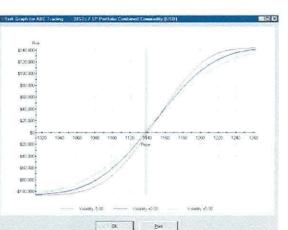
SPAN Risk Manager = Margin Calculation + Risk Analytics

The new Span Risk Manager is a single-user, desktop software that integrates risk management features with the latest processing technology to deliver an extremely flexible, intuitive system for full portfolio risk management. Span Risk Manager's powerful features and intuitive design allow for true portfolio analytics through multi-variant stress testing and option exposures.

Specifically, SPAN Risk Manager:

- » Enables users to gauge the effects, on a total portfolio or an individual option, of
 - » Changes in price
 - » Implied volatility
 - » Time to expiration
 - » Dividend yields
 - » Interest rates
- » Calculates hypothetical P&L's, option prices, and Greeks
- » Calculates implied, average call/put and series volatilities
- » Allows for stress testing of multiple products
- » Allows user to define, compare, save and reload "What If" Scenarios for stress testing
- » Enables the user to shift volatility skews
- » Provides simultaneous analyses on several different trading instruments
- » Supports the following option pricing models:
 - » Black-Scholes
 - » Merton
 - » Adesi-Whaley
 - » Cox-Ross-Rubenstein

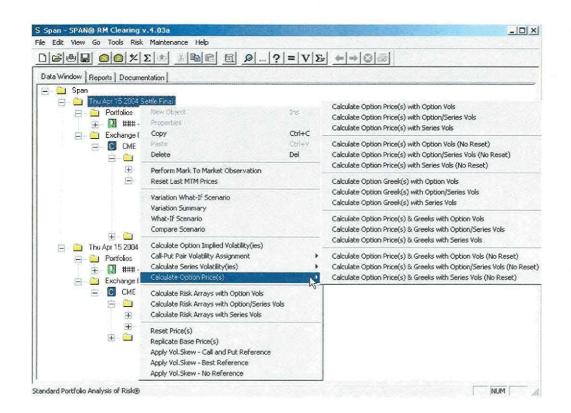
Combined Commod	Product	Product. (None)								
Option Pricing Mod	let Default			Display pric	te for	CME SP Future 200306				
Main Variable:	Price	-	1230	Secondary	Secondary Variable:		Volatility 👻			
Step Size:	10			Step Size:			5			
Step Size specified as: C % of value (C absolute value				Step Size a	Step Size specified as: C % of value (C absolute value Number of Steps: 1					
Number of Steps: 3			Number of							
Maint Anit Margin	952,200.0	0 / 1.1	90,250.00	Multicommo	dity Analysis	Position Details Risk Graph				
Price	826.70	836.70	846.70	856.70	866.70	876.70	886.70			
Underlying	Undedying 10.0000 10.0000		10.0000	10.0000	10.0000	10.0000	10.0000			
Opt.Delta	-43.7216	-47.5099	-51.2757	-54.9862	-58.6114	-62.1243	-65.5018			
Net Delta	Delta -33.7216		-41.2757	-44.9862	-48.6114	-52 1243	-55.5016			
Gamma	-0.3788	-0.3783	-0.3743	-0.3673	0.3573	-0.3449	-0.3303			
Vega	-152.4844	-155.9636	-158.0549	-158.7521	-158.0853	-156.1176	-152.9410			
		26.1954	26.1954 26.5466		26.6637 26.5517		25.6877			
theta	Rho -72.3322 -79.237 Risk 295.250.00 206.250.0		-86.1845	-93.1107	-99.9570	-106.6683 -243,000.00	-113.1946			
			107,750.00	0.00	-117,000.00					
Rho	295,250.00	200,200.00					-188,750.00			
Rho	295,250.00 485,000.00	401,000.00	305,250.00	198,250.00	80,000.00	49,250.00	~188,700.00			
Rho Rick			305,250.00 107,750.00	198,250.00 0.00	-117,000.00		-188,750.00			



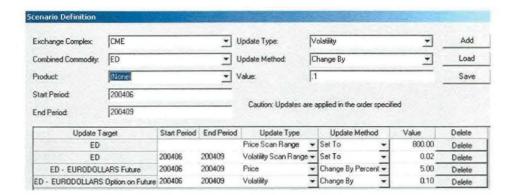
SPAN Risk Manager Clearing = Margin Calculation + Risk Analytics + Real Time Capabilities + Risk Array Calculations + Production of SPAN Risk Parameter Files

At the top of the SPAN software hierarchy is SPAN Risk Manager Clearing. This program employs all of the functionalities of PC-SPAN and SPAN Risk Manager plus several additional features which are applicable to entities such as exchanges, clearing organizations, and service bureaus. These powerful features include:

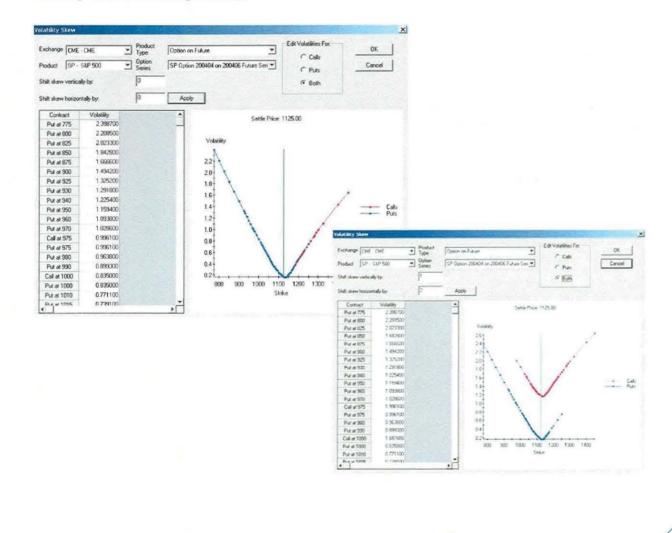
- » "What-If" Margining Allows an organization to view and compare hypothetical margins under multi-variant "What If" scenarios
- » Real-Time Component Interface Allows for real-time SPAN margining and pre or post execution credit controls
- » Automated Production and Publication of SPAN Risk Array files Takes the work out of creating a publishing a daily SPAN Risk Array file to the world
- » Complex Implied Volatility Averaging



"What -if" margining



Volatility Skew and Shifting Function



Option Analyzer

Option Parameters C Call Und Price/Value: Strike Price/Value: Time To Expiration: Interest Rate: Dividend Yield:	© Put 1.19600 1.060 34.245 0 0	₩ Edit Pi / [149,500.0 / [132,500.0	rices (00 F 10 V	Calculations – VM: Price/Value: /olatility: Pricing Model: ixercise Style:	125000 0.00005 0.12 Merton American	/ [6.25	Delta: Gamma: Vega: Theta: Rho: Calculate V	0.000041 [(0.000005) [(0.000005)	
Unvidend Field.	15			L		suer ulleeks	Calculate v	organiy	
Underlying Price	1.08836	1.10630	1.12424	1.14	218	1.16012	1.17806	1.19600	
Option Price	0.00812	0.00430	0.0	3209	0.00094	0.00038	0.00014	0.00005	
Option Value	1,015.00	537.50	26	1.25	117.50	47.50	17.50	6 25	
Delta	-0.2687	-0.1624	-0.0	0890	0.0442	-0.0200	-0.0082	-0.0031	
Gamma	6.8241	4.9995	3.3	2251	1.8431	0.9385	0.4281	0.1759	
Vega	0.0013	0.0010		1007	0.0004	0.0002	0.0001	0.0000	
Theta	-0.0002	-0.0001	-0.0	0001	0.0000	0.0000	0.0000	0.0000	+
Main Variable:	Underlying Pric	• •						10000	
Step Size:	1.5			ega					
Step Size specified a	G T C A	the second and	0.0015		1ª	1			
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Calculate Array	Export Data			0.9	1.0	1.1 1.2	1.3 1.4	1.5	
Display Graph For:	Vega	-				Underlying P	'lice		
	Delta	-							
-	Gamma					-	100		-
	Theta Bho	_ Edit	Positions	Graph	0	ж			

Minimum system requirements for SPAN software products:

- » Windows 95, Windows 98, Windows NT version 4, Windows 2000, Windows ME, Windows XP
- » Version 5 of Microsoft's Internet Explorer web browser ("IE5") or higher
- » 20MB (twenty megabytes) of disk space. As a practical matter, at least 50 megabytes of free space on a hard drive is required to install and use PC-SPAN version 4 and IE 5
- » 64 megabytes of RAM (SPAN will run faster, however, with more RAM)

Purchasing, licensing and further information on SPAN software products

For more information on SPAN methodology and software, or to purchase PC-SPAN or SPAN Risk Manager, please go to: www.cme.com. Go to Clearing Services, and follow the links to SPAN.

For information on licensing the SPAN methodology or SPAN Risk Manager Clearing software, please contact the CME SPAN Hotline of the CME Clearing House Risk Department at (312) 648-3888 or e-mail span@cme.com.



IDEAS THAT CHANGE THE WORLD

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APPENDIX 1-F

Requirements for Clearing Memberships and Clearing Membership Handbook



Summary of Requirements for CME, CBOT, NYMEX and COMEX Clearing Membership And OTC Derivatives Clearing Membership September 2013

CME Clearing ("Clearing House") is the clearing house division of Chicago Mercantile Exchange Inc. ("CME") which is wholly owned by CME Group Inc. ("CME Group"). CME Group is the ultimate parent of: (1) CME; (2) Board of Trade of the City of Chicago ("CBOT"); (3) New York Mercantile Exchange, Inc. ("NYMEX"); and (4) Commodity Exchange, Inc. ("COMEX") (hereafter referred to as "Exchange(s)").

A firm may become a clearing member of one or more Exchanges and have privileges to clear exchange-traded futures and/or options on futures ("futures/options") on that Exchange. Depending upon the clearing membership privileges held, these clearing members may be eligible to clear OTC derivatives products (i.e. cleared swaps and forwards) if additional requirements, including additional capital and risk management requirements, are met. For example, CME clearing members are eligible to clear FX OTC products, Credit Default Swaps ("CDS") and Interest Rate Swaps ("IRS"), CBOT clearing members are eligible to clear energy OTC products and COMEX clearing members are eligible to clear metal forwards. A CBOT-only, NYMEX-only or COMEX-only clearing member is not eligible to clear CDS or IRS.

A firm may also become an Over-The-Counter ("OTC") Derivatives Clearing Member if it desires to only clear OTC derivative products and not clear any Exchange-traded futures/options activity. For firms choosing this alternative, please see the Over-The-Counter Derivatives Clearing Membership Handbook. It can be found on CME Group's Website at: http://www.cmegroup.com/company/membership/files/CME-OTC-Clearing-Membership-Handbook.pdf

Clearing members that will clear exchange-traded futures/options and/or OTC derivatives for customers must be registered with the United States Commodity Futures Trading Commission ("CFTC") as a Futures Commission Merchant ("FCM"). FCMs are subject to CFTC rules and regulated pertaining to regulatory capital, monthly financial reporting, required notifications and customer protection. More detailed information concerning FCM registration can be found on the CFTC's web site at <u>www.cftc.gov</u>.

The general requirements of clearing membership are stated in Chapter 9 of each Exchange's rulebook. The additional requirements for clearing OTC derivative products are stated in Chapter 8F of CME's Rulebook, for IRS are stated in Chapter 8G of CME's Rulebook and for CDS are stated in Chapter 8H of CME's Rulebook. Also, the Clearing House may impose additional requirements upon the clearing member that may be specific to the products cleared by the clearing member. Below is a summary of the major requirements. For a more detailed account of clearing membership requirements, please review the Clearing Membership Handbook. It can be found on CME Group's web site at: http://www.cmegroup.com/company/membership/files/clearmemberhandbook.pdf

<u>Clearing membership in the Exchanges or for OTC derivatives is a privilege granted by the appropriate Clearing House Risk Committee and may be withdrawn at any time.</u>



General Requirements

- 1. A clearing member must be a corporation (including a C Corporation, Subchapter S Corporation or Limited Liability Company), partnership (including a Limited Partnership or General Partnership) or cooperative association.
- A clearing member shall be qualified to do business in the State of Illinois or the State of New York or have an agency agreement in place with an entity already qualified in the State of Illinois or the State of New York. Such agency agreement must be in an Exchange approved format.
- 3. A clearing member must have an authorized representative (i.e., officer, principal or partner), satisfactory to the Clearing House Risk Committee, to represent the clearing member before the Exchanges and their committees.
- 4. A clearing member shall be engaged in or demonstrate immediate capacity to engage in the conduct of the business of a clearing member.
- 5. A clearing member shall ensure that any and all necessary approvals have been received from regulatory authorities, including, but not limited to, the United States Federal Reserve and other foreign banking regulators, to allow the firm to conduct the business of a Clearing Member, if applicable.
- 6. A clearing member shall demonstrate such fiscal and moral integrity as would justify the Clearing House's assumption of the risks inherent in clearing its trades.
- 7. A clearing member shall agree to abide by all Exchange rules upon which it has membership privileges and to cooperate in their enforcement.
- 8. A clearing member shall agree to guarantee and assume complete responsibility for: (a) all trades executed or directed to be executed by floor brokers and traders qualified by it; and (b) all orders that floor brokers qualified by it negligently execute or fail to execute. In addition, a clearing member shall agree to guarantee and assume responsibility for all trading activity routed through any electronic trading system, if applicable, to the Clearing House for clearing of such transactions and which are guaranteed to the Clearing House by the clearing member via any connection, terminal, link, telecommunications hub or handheld unit provided by a clearing member to a third party, as well as any applicable electronic trading systems and terminals that the clearing member provides to a third party, including an eligible customer, to enter orders.
- 9. A clearing member shall comply with all credit control policies developed by the Exchange for customer and proprietary transactions. Such credit control policies may include, but not be limited to, registration of credit control administrators with the Exchange, definition of credit control limits, and maintenance of written procedures verifying compliance with Exchange credit control requirements. Any "GC2" credit control functionality required by the Exchange shall be in addition to a clearing member's initial risk monitoring and credit control procedures.
- 10. A clearing member must be in "good standing" under each applicable regulatory regime which it is subject to and must maintain this status while it is a clearing member.



Refer to Exchange Rule 901. (General Requirements and Obligations)

Clearing Members in Non-U.S. Jurisdictions

Clearing members that are incorporated/domiciled in non-U.S. jurisdictions must be subject to a legal and insolvency regime acceptable to the Clearing House. Clearing members from non-U.S. jurisdictions must use the Clearing House's approved settlement banks for performance bond deposits and variation margin.

Choice of Law

The rules of the Exchange shall be governed by and construed in accordance with the laws of the State of Illinois in the United States. Any action, claim, dispute or litigation of any kind between the clearing member and the Exchanges shall be adjudicated in a federal or state court in Chicago, Illinois. Clearing members must consent to the jurisdiction of such court and to service of process by any means authorized by Illinois or U.S. federal law, and waive the right to transfer the venue of such litigation. Refer to Rule 905. In addition, the rule provides that clearing members irrevocably waive any grounds of sovereign immunity in any legal action with the Exchanges.

Additional General Requirements for OTC

- 1. The clearing member shall agree to guarantee and assume responsibility for all OTC derivatives trading activity executed via outside means and submitted for clearing to the Clearing House by any customer, broker or affiliate authorized by the clearing member.
- 2. A clearing member that will clear IRS and CDS must have appropriate risk management capabilities, operational infrastructure and experience to support their CDS or IRS clearing activity, as prescribed by the Clearing House.

Refer to CME Rule 8F04 (OTC Clearing Member Obligations and Qualifications), CME Rule 8G04 (IRS Clearing Member Obligations and Qualifications) and CME Rule 8H04 (CDS Clearing Member Obligations and Qualifications) for additional information.

Membership Requirements

To become a CME clearing member, the firm must purchase and/or acquire by assignment seven CME memberships (i.e. 2 CME division, 2 IMM division, 2 IOM division and 1 GEM division). One CME, IMM, IOM and the GEM must be owned by the clearing member or parent company or individual owner with an acceptable proprietary interest of at least \$500,000 in the clearing member (i.e. "firm owned"). The other CME, IMM and IOM memberships may be independently assigned.



To become a CBOT clearing member, the firm must purchase and/or acquire by assignment two Full/B-1 CBOT memberships, if the firm is registered with the CFTC as an FCM, or one Full/B-1 CBOT membership, if the firm is not registered as an FCM. If the firm is required to have two Full CBOT memberships, one Full membership must be owned by the clearing member or a person, including a parent company, with an acceptable proprietary interest of at least \$500,000 in the clearing member. The other may be independently assigned. If only one CBOT Full membership is required to be assigned for clearing membership, then that one membership must be owned by the clearing member or a person, including a parent company, with an acceptable proprietary interest of at least \$500,000 in the clearing member or a person, including a parent company, with an acceptable proprietary interest of at least \$500,000 in the clearing member or a person, including a parent company, with an acceptable proprietary interest of at least \$500,000 in the clearing member or a person, including a parent company, with an acceptable proprietary interest of at least \$500,000 in the clearing member.

To become a NYMEX clearing member, the firm must purchase and/or acquire by assignment two NYMEX memberships. One membership must be owned by the clearing member or parent company or individual owner with an acceptable interest of at least \$500,000 in the clearing member. The other membership may be independently assigned.

To become a COMEX clearing member, the firm must purchase and/or acquire by assignment two COMEX memberships. One membership must be owned by the clearing member or parent company or individual owner with an acceptable proprietary interest of at least \$500,000 in the clearing member. The other may be independently assigned.

To become an OTC Derivatives clearing member, the firm must deposit a \$5,000,000 membership deposit with the Clearing House in lieu of purchasing and/or assigning Exchange memberships. The membership deposit will not be required if the OTC Derivative Clearing Member is also a CME, CBOT, NYMEX or COMEX clearing member.

Approved clearing member firms of CME, CBOT and/or NYMEX which also maintain CME Group Inc. shares in accordance with Exchange Rule 106.J. Equity Member Firm requirements are entitled to receive equity member rates on their proprietary trading. CME and CBOT clearing members who do not maintain CME Group Inc. shares are entitled to Rule 106.H. Trading Member Firm rates and NYMEX clearing member firms who do not maintain CME Group Inc. shares are entitled to Non-Member rates on their proprietary trading activity. Approved COMEX clearing member receive equity member rates on their proprietary trading in accordance with Exchange Rule 106.J. Member Firms.

Guaranty Fund Requirements

All clearing members must deposit with the clearing house a guaranty fund deposit for their obligations to the Clearing House.

The minimum guarantee fund deposit for a clearing member which will clear:

- Exchange-traded futures and options is \$500,000 or its proportionate share of the Aggregate Guaranty Fund Deposit;
- Exchange-traded futures and options and OTC products (excluding CDS and IRS) is \$2,500,000 or its proportionate share of the Aggregate Guaranty Fund Deposit;
- CDS is the greater of \$50,000,000 or the clearing member's proportionate share of the two largest CDS Clearing Member's losses as outlined in CME Rule 8H07; and
- IRS is the greater of \$50,000,000 or the clearing member's proportionate share of the two largest IRS Clearing Member's losses as outlined in CME Rule 8G07.



The minimum guaranty fund deposit of an OTC Clearing Member which clears IRS products and has an affiliated clearing member which also clears IRS products is \$25,000,000 for each affiliated IRS clearing member. In these instances, one affiliated IRS Clearing Member provides primary clearing services for customers as a FCM (with any proprietary business of such FCM only incidental to providing such clearing service for customers) and the other affiliated clearing member only provides IRS clearing services through its proprietary account for itself and/or its affiliates.

The guaranty fund requirements of the Clearing House are stated in Exchange Rule 816 (Guaranty Fund Deposit) for Exchange-traded futures and options and OTC derivatives (excluding IRS and CDS) in CME Rule 8F07 (Guaranty Fund Deposit); for IRS products in CME Rule 8G07 (IRS Financial Safeguards and Guaranty Fund Deposit); and for CDS products in CME Rule 8H07. (CDS Financial Safeguards and Guaranty Fund Deposit).

Default management procedures for exchange-traded futures and options and OTC products, excluding IRS and CDS, may be found in Exchange Rule 802: Protection of Clearing House.

The Clearing House has established separate guaranty funds for IRS and CDS which are separate and distinct from the guaranty fund for each and all other products. The IRS default management procedures may be found in CME Rule 8G.802 (Protection of Clearing House) at http://www.cmegroup.com/rulebook/CME/I/8G/802.html and CDS default management procedures may be found in CME Rule 8H.802 (Protection of Clearing House) at http://www.cmegroup.com/rulebook/CME/I/8G/802.html and CDS default management http://www.cmegroup.com/rulebook/CME/I/8G/802.html and CDS default management http://www.cmegroup.com/rulebook/CME/I/8G/802.html and CDS default management http://www.cmegroup.com/rulebook/CME/I/8H/802.html and CDS default management http://www.cmegroup.com/rulebook/CME/I/8H/802.html and CDS default management http://www.cmegroup.com/rulebook/CME/I/8H/802.html.

Guaranty fund minimums may be increased from time to time, depending on the mix of OTC asset classes for which the Clearing House provides clearing services.

The Clearing House Risk Committee, the IRS Risk Committee, CDS Risk Committee or the Clearing House may prescribe additional financial, including guaranty fund deposit, requirements or grant exemptions.

Capital Requirements

Capital requirements for clearing members which are not Banks are specific to its exchange membership privileges and, if applicable, any OTC products that it will clear. For non-Bank clearing members, capital is defined as Adjusted Net Capital as computed in accordance with CFTC Regulation 1.17. For Bank clearing members, capital is defined as Tier I Capital, as defined in accordance with regulations applicable to the bank clearing member. The following are the applicable capital requirements:

For a CME Clearing Member, the exchange capital requirement is the greater of the CFTC or SEC capital requirement or:

For a non-Bank clearing member:

- \$5,000,000 if it will clear only exchange-traded futures/options; or,
- \$50,000,000 if a clearing member will clear any OTC derivative product, including, but not limited to, FX OTC, CDS or IRS; or,
- 20% of aggregate performance bond requirement for all customer and house accounts containing CME-cleared CDS and IRS positions.



For a Bank clearing member:

- \$5,000,000,000 if it will clear exchange-traded futures/options; or,
- \$50,000,000 if it will clear only OTC derivative products, including, but not limited to, FX OTC, CDS or IRS; or
- 20% of aggregate performance bond requirement for all proprietary and affiliate accounts containing CME-cleared CDS and IRS positions.

For a CBOT Clearing Member, the exchange capital requirement is the greater of the CFTC or SEC capital requirement or:

For a non-Bank clearing member:

- \$5,000,000 if it will clear exchange-traded futures/options or agricultural OTC derivative products; or,
- \$50,000,000 if it will clear any OTC derivative products excluding agricultural OTC derviatives.

For a Bank clearing member:

- \$5,000,000,000 if it will clear exchange-traded futures/options; or,
- \$50,000,000 if it will clear only OTC derivative products, including, but not limited to, agricultural OTC derivative products.

For a NYMEX Clearing Member, the exchange capital requirement is the greater of the CFTC or SEC capital requirement or:

For a non-Bank clearing member:

- \$5,000,000 if it will clear only exchange-traded futures/options; or,
- \$20,000,000 if it will clear exchange-traded futures/options and it will guarantee NYMEX Floor Members pursuant to the program referenced in NYMEX Rule 992; or,
- \$50,000,000 if it will clear any OTC derivative products, including, but not limited to energy OTC derivative products.

For a Bank clearing member:

- \$5,000,000,000 if it will clear exchange-traded futures/options; or,
- \$50,000,000 if it will clear only OTC derivative products, including, but not limited to energy OTC derivative products.

For a COMEX Clearing Member, the exchange capital requirement is the greater of the CFTC or SEC capital requirement or:

For a non-Bank clearing member:

- \$5,000,000 if it will clear only exchange-traded futures/options; or,
- \$50,000,000 if it will clear any OTC derivative products, including, but not limited to metal OTC derivative products.

For a Bank clearing member:

- \$5,000,000,000 if it will clear exchange-traded futures/options; or
- \$50,000,000 if it will clear only OTC derivative products, including, but not limited to, metal OTC derivative products.



For additional information on capital requirements, refer to Rule 970 for Exchange-traded futures/options, CME Rule 8F04 for OTC derivatives, CME Rule 8H04 for CDS and CME Rule 8G04 for IRS.

The Clearing House Risk Committee, the IRS Risk Committee, CDS Risk Committee or the Clearing House may prescribe additional capital requirements or grant exemptions.

Hedge Funds

Hedge funds approved for clearing membership are subject to various additional requirements which include, but are not limited to:

- If a hedge fund is the CME, CBOT, NYMEX or COMEX Clearing Member, the hedge fund is subject to additional requirements, including (i) maintaining separate clearing accounts for each fund whose activity it will clear, (ii) additional reporting of risk exposures and liquidity resources from the funds, and (iii) maintaining assets under management of \$1 billion.
- If the investment manager of a hedge fund is the CME, CBOT, NYMEX or COMEX Clearing Member, its exchange minimum capital requirement for exchange-traded futures/options is \$50,000,000 (instead of \$5,000,000 per the above).

Settlement and Performance Bond Banks

All clearing members must maintain bank and securities safekeeping accounts at one or more Clearing House banks for purposes of posting cash and securities to meet mark-to-market variation, performance bond (i.e. margin) and guaranty fund requirements.

Currently, the approved settlement, performance bond and guaranty fund banks are:

- Bank of America, N.A.
- Bank of China Ltd., NY Branch
- BMO Harris, N.A.
- Brown Brothers Harriman & Co.
- Citibank, N.A.
- Fifth Third Bank
- Lakeside Bank
- J.P. Morgan Chase Bank, NA
- The Bank of New York Mellon

See also http://www.cmegroup.com/clearing/financial-and-collateral-management/settlement-banks.html for a complete listing.

Periodic Financial Reporting Requirements

Clearing members which are not Banks are subject to monthly financial statement reporting requirements. Clearing members must submit to CME Group's Financial and Regulatory Surveillance ("FRS") Department monthly CFTC Form 1-FRs or SEC FOCUS reports (if a U.S.



registered broker dealer) through the WinJammer[™] system, a CME Group electronic financial statement filing system. Such monthly reporting includes the submission of an unaudited monthly report as of the clearing member's fiscal year-end.

In addition, clearing members must submit an annual certified financial statement to CME Group's FRS Department within 90 days of its fiscal year-end (60 days if the clearing member is a US broker-dealer).

Clearing members which are not Banks must comply with the requirements set forth in CFTC Regulations 1.10, 1.12, 1.17 and 1.18 unless an exemption is granted by the Clearing House.

Clearing members which are Banks are required to file any and all financial reports which are filed with its primary banking regulator. However, such financial reports must be filed on, at least, a quarterly basis, including as of the bank clearing member's fiscal year-end if such reports are also required by its primary banking regulator, and are due five days after such statements are filed with its primary banking regulator. These financial reports must demonstrate compliance with the Exchange minimum capital requirements.

In addition, clearing members which are Banks must submit an annual certified financial statement to CME Group's FRS Department. The annual certified financial statement is due five days after such statements are filed with its primary banking regulator.

All clearing members, including clearing members which are not registered as an FCM, shall make available to the CFTC, upon the CFTC's request, copies of financial reports required to be submitted to the FRS Department. The financial reporting requirements of clearing members are stated in Exchange Rule 970.

Notification Requirements

A clearing member must provide written notice to the FRS Department whenever the clearing member:

- Fails to maintain minimum capital;
- Fails to maintain early warning capital;
- Fails to maintain current books and records;
- Determines the existence of a material inadequacy as specified in CFTC Regulations;
- Fails to comply with additional accounting, reporting, financial and/or operational requirements as prescribed by the Exchange or Clearing House;
- Changes its fiscal year; or
- Changes its public accountant.

In addition, Exchange Rule 972 requires a clearing member to provide written notice to the FRS Department of any substantial reduction in its capital as compared to the most recently filed financial report.

These requirements are in addition to any notifications required by CFTC regulations.



Clearing members are also subject to additional notification requirements which include, but are not limited to:

 Significant Business Transaction or Change in Operations. All clearing members are required to provide notice to the applicable Exchange prior to any significant business transaction. The purpose of such notification is to enable the Clearing House to better identify and monitor risks presented by significant business transactions. The notification requirements are contained in Exchange Rule 901.H (General Requirements and Obligations).

Such transactions may be subject to review and approval by the Clearing House Risk Committee or the Clearing House.

- 2. Firm Contact Listings. Maintaining up-to-date personnel contact information is critical in order to continue communications with our clearing members during normal, as well as crisis, situations. Therefore, clearing members are required to immediately notify the applicable Exchange of all changes to its key personnel and update its personnel contact information via the CME portal when changes occur. Further, on a semi-annual basis, firm personnel are required to review its personnel listing and signoff that all information is current and accurate. Refer to Rule 983.B.
- 3. Ownership Changes. All clearing members must submit and maintain with the FRS Department a current list of every person or entity that is directly or indirectly through intermediaries, the beneficial owner of 5% or more of any class of equity security of the clearing member.

Other Clearing Membership Requirements (General)

- Anti-Money Laundering and Economic Sanctions Compliance. All clearing members are required to have a written compliance program approved by its senior management which is reasonably designed to achieve and monitor the clearing member's compliance with all applicable requirements of the Bank Secrecy Act, the International Emergency Economic Powers Act, the Trading with the Enemy Act, Executive Orders and the regulations issued by the U.S. Department of Treasury. Refer to Rule 981 (Anti-Money Laundering and Economic Sanctions Compliance).
- Risk Management. All clearing members must have written risk management policies and procedures in place to ensure they are able to perform certain basic risk and operational functions at all times.

A clearing member that will clear OTC products must have sufficient risk management and operational procedures in place for its OTC activity. These risk management and operational procedures include procedures for settlement and default management.

Refer to Rule 982 (Risk Management) and CME Rule 8F010 (Risk Management).

 Disaster Recovery and Business Continuity. All clearing members must have written disaster recovery and business continuity policies and procedures in place to ensure they are able to perform certain basic operational functions in the event of a significant internal



or external interruption to their operations. Refer to Exchange Rule 983 (Disaster Recovery and Business Continuity).

- 4. Required Records and Reports. The books and records of a clearing member shall be made promptly available for inspection upon request by the Exchange. Refer to Rule 980 (Required Records and Reports), CME Rule 8F0004.9 (OTC Clearing Member Obligations and Qualifications) and CME Rule 8H04.7 (CDS Clearing Member Obligations and Qualifications).
- 5. Parent Guarantee. Unless an exemption is granted, all clearing members conducting non customer and/or proprietary activity as defined by CFTC Regulation 1.3(y), must submit to the exchange a written guarantee, on a form provided by the Exchange as follows:

A parent guarantee must be obtained from each person or entity owning 5% or more of the equity securities of the clearing member. Clearing members which maintain capital of at least \$300,000,000 are granted an exemption from the parent guarantee requirements by the Exchange due to their capital level. The parent guarantee is unlimited for house obligations and does not include assessments.

6. Cross Guarantee. Unless an exemption is granted, all clearing members must submit to the Exchange a written cross guarantee, on a form provided by the Exchange, from each clearing member where the clearing member shares ownership of 10% or more with any other clearing member. By executing the cross guarantee, each clearing member guarantees the obligations of the other clearing member to the Clearing House. This rule is applicable if any CME, CBOT, NYMEX, COMEX or OTC Derivatives Clearing Member has common ownership of 10% or more. Refer to Rule 901.G (General Requirements and Obligations).

Note: If a cross guarantee affiliation exists, absent an exemption, only one entity may trade in a given OTC clearing class within the house origin (i.e., only one entity may clear IRS activity and only one entity may clear CDS activity).

7. Examinations. Each clearing member will be subject to on-site examinations and on-going oversight by the Clearing House Risk Committee. Required documents must be submitted in a timely manner and in the requested format.

Other Clearing Membership Requirements

 Customer Activity: If the clearing member will clear Exchange-traded futures/options, foreign futures/options for U.S. customers or OTC derivative products for customer accounts, it must be properly registered or authorized for such activity by its primary regulator and it must be registered as an FCM with the CFTC and NFA. FCMs are subject to CFTC rules and regulations including rules and regulations pertaining to regulatory capital, financial reporting and customer protection.

Exchange-traded futures/options for the account of a customer will be held in a Customer Segregated Account. Foreign futures and/or foreign options traded by U.S. customers must be held in a Customer Secured 30.7 Account. OTC derivatives



submitted to clearing for the account of a customer will be assigned and held in a Customer Cleared Swap Account unless the CFTC has issued an order permitting particular OTC derivatives products to be included in customer segregated accounts. Refer to CME Rule 8F03 (Classification of Positions) and CME Rule 8H03 (Classification of Positions).

Clearing Members are required to:

- Maintain sufficient funds in segregated, secured and cleared swap accounts;
- Compute, record and report daily Segregation, Secured and Cleared Swap Amounts Statements;
- Compute, record and report bi-monthly, investments of segregated, secured 30.7 and cleared swap customer funds;
- Obtain satisfactory segregation, secured and cleared swap acknowledgement letters;
- Allow and provide for access to account information, in a form and manner prescribed by FRS Department, for each FCM clearing member's customer segregated, secured 30.7 and cleared swap customer account;
- Provide immediate written notice to CME Group's FRS Department of a failure to maintain sufficient funds in segregation, secured or cleared swap accounts;
- Provide notice of pre-approval by CEO, CFO or authorized representative of disbursement not made for the benefit of customers from segregated, secured 30.7 or cleared swap customer account which exceeds 25% of the previous day's excess funds in the respective origin.

Refer to CFTC Regulations 1.20 through 1.32 regarding customer segregated protection requirements, CFTC Regulation 30.1 through 30.12 regarding customer secured protection requirements, CFTC Regulation Part 22 regarding cleared swap protection requirements and CME Rules 8F120 through 8F132 regarding cleared OTC derivatives customer protection requirements.

2. All clearing members must ensure that its customers meet any eligibility requirements established for trading certain OTC derivatives products.

All OTC derivative transactions must be identified with an account number which identifies the originator of the transaction and indicate whether the transaction was executed as a proprietary or customer transaction. In addition, a clearing member must register all "ultimate" or end customers. Refer to CME Rule 8F09. (Customer Registration)

Disclaimer

This summary is designed to provide a brief overview of the requirements for CME, CBOT, NYMEX and COMEX Clearing Membership and OTC Derivatives Clearing Membership. The information contained in this summary has been compiled by CME Group for general purposes only. All matters pertaining to rules and specifications herein are made subject to and are superseded by official Exchange rules. Current rules should always be consulted.



Clearing Membership

Handbook

Table of Contents

- 1. Introduction
- 2. General Requirements
- 3. Membership and Share Requirements
- 4. Capital and Financial Requirements
- 5. Cleared OTC Derivatives
- 6. Financial Reporting, Notification and Other Requirements
- 7. Parent Guarantees
- 8. Cross-Guarantee, Guarantee of Obligations and Guaranty Fund Guarantee
- 9. Letters of Credit
- 10. Clearing Fees, GPS[™], BPS[™] and CME[®] Globex[®] and Trading Floor Customer Service
- 11. Contact Listing and Resource Guide

Exhibits

- A. Agency Agreement
- B. Clearing Member-Membership Assignment Agreement and Clearing Member-Class A Shares Assignment Agreement
- C. Indemnification Acknowledging Ownership or Assignment of Membership
- D. Settlement and Customer Account Listing and Debit Authorization Form
- E. Parent Guarantee Agreement Full Guarantee
- F. Parent Guarantee Agreement Partial Guarantee
- G. Certificate With Respect to Corporate Resolution
- H. Cross-Guarantee Agreement

Table of Contents

- I. Guarantee of Obligations to CME
- J. Guaranty Fund Deposit Guarantee of Obligations
- K. Fee Policy Bulletin #09-01: Clearing and Globex Fees for Member Firm Accounts
- L. Clearing Member Firm Trading Attestation CME Clearing Member Firm Sample
- M. Authorization Agreement for Pre-Authorized Payments
- N. GPS[™] Clearing Member Agreement and Participation Form
- O. Online System Access Request Form and CME Firm MQM Definition Request Form
- P. BPS[™] System Clearing Member Participation Form
- Q. BPS[™] System Floor Broker Agreement (CME and CBOT Brokers)
- R. BPS[™] System Floor Broker Agreement (NYMEX and COMEX Brokers) Form
- S. Designated Spokesperson Forms
- T. Tax Forms: W-9 and W-8BEN

<u>Summary</u>

This handbook is designed to familiarize firms with the requirements for clearing membership and to assist them in becoming clearing members.

The use of the term "clearing member" in the handbook includes all clearing members of CME, CBOT, NYMEX and COMEX. Thus, unless specifically stated otherwise, wherein a rule and/or requirement states clearing member, such rule and/or requirement applies to clearing members of all four exchanges.

The handbook supplements and clarifies the rules for clearing members as adopted in CME, CBOT and NYMEX Rulebooks. This handbook is compiled for the convenience of the user and is furnished without responsibility for any errors or omissions contained therein. In the event of a conflict between this Handbook and the applicable Exchange's rules, the Exchange's rules shall control.

CME Clearing ("Clearing House") is the clearing house division of Chicago Mercantile Exchange Inc. ("CME"), a Delaware corporation, which is wholly owned by CME Group Inc. ("CME Group"), a publicly traded Delaware corporation. CME Group was formed by the merger of Chicago Mercantile Exchange Holdings Inc. and CBOT Holdings, Inc. in 2007, and subsequently merged with NYMEX Holdings, Inc. in 2008. CME Group is the ultimate parent of: (1) CME; (2) Board of Trade of the City of Chicago, Inc. ("CBOT"); (3) New York Mercantile Exchange, Inc. ("NYMEX"); and (4) Commodity Exchange, Inc. ("COMEX").

Exchange-traded futures and options are listed by CME Group Designated Contract Markets ("DCM") and cleared by the Clearing House, CME Group's Derivatives Clearing Organization ("DCO"). In addition, CME Group's DCO provides clearing services for over-the-counter ("OTC") derivatives. While this manual generally applies to clearing members which will clear exchange-traded futures and options, a summary of the requirements for clearing members which will also clear OTC derivative products is located in Chapter 5. In addition, if a clearing member will only clear OTC derivatives, it should consider an OTC Derivatives Clearing Membership. More detailed information may be found in the OTC Derivatives Clearing Membership Handbook and Summary of Membership Requirements. Both are located on CME Group's Web site at: http://www.cmegroup.com/company/membership/membership-resources.html.

Clearing membership in CME, CBOT, NYMEX and/or COMEX (hereafter referred to individually as "Exchange" and collectively as "Exchanges") is a privilege granted by the Clearing House Risk Committee of CME. Clearing members assume full financial and performance responsibility for all transactions executed through them and cleared by the Clearing House. They are responsible and accountable for every position they carry, whether it is for the account of a member, non-member customer or their own account.

A clearing member is an elected member in the Clearing House. The Clearing House is a division of CME through which all trades are confirmed, matched and settled on a daily basis until either offset or delivered and through which all financial settlement is made. In every matched transaction executed through the Clearing House's facilities, the Clearing House is substituted as the buyer to the seller and the seller to the buyer, with a clearing member assuming the opposite side of each transaction.

The Clearing House conducts business only with its clearing members, not with their customers or individual members of the Exchanges. As the contra-side to every position, the Clearing House is held accountable to clearing members for performance on all open positions. The Clearing House, by monitoring and overseeing its clearing members, guarantees performance on each contract to protect both buyers and sellers from financial loss.

Each of the Exchanges offers separate and distinct clearing membership options as follows:

CME

- Clearing Member
- Clearing Member Hedge Fund
- Clearing Member Bank

CBOT

- Clearing FCM
- Clearing Corporate Member May not be an FCM or Hedge Fund
- Clearing Member Hedge Fund
- Clearing Member Bank

NYMEX

- Clearing Member
- Clearing Member Hedge Fund
- Clearing Member Bank

COMEX

- Clearing Member
- Clearing Member Hedge Fund
- Clearing Member Bank

Clearing members are not required to clear or carry positions directly with the Clearing House. A firm may be approved as a clearing member and not actively clear its positions with the Clearing House. These clearing members who do not actively clear have all the rights and responsibilities as all other (active) clearing members; however, they do not clear or carry positions directly with the Clearing House or qualify traders on the Exchanges' trading floors.

Clearing Membership Application Process

Clearing member applicants who wish to clear their Exchange trading activity with the Clearing House must complete the following:

Non-Bank Applicants:

Application for Clearing Membership – Corporate Information which can be found on CME Group's Web site at:

http://www.cmegroup.com/company/membership/files/CMCorpMemberInfo.pdf.

In addition, each Exchange maintains a separate Agreement for Clearing Membership which must also be completed as follows:

CME: Application for Clearing Membership – Agreement for CME Clearing Membership which can be found on CME Group's Web site at: http://www.cmegroup.com/company/membership/files/CMECMAgreementWriteable.pdf.

CBOT: Application for Clearing Membership – Agreement for CBOT Clearing Membership which can be found on CME Group's Web site at: http://www.cmegroup.com/company/membership/files/CBOTCMAgreementWriteable.pdf.

NYMEX: Application for Clearing Membership – Agreement for NYMEX Clearing Membership which can be found on CME Group's Web site at: http://www.cmegroup.com/company/membership/files/NYMEXCMAgreementWriteable.pdf.

COMEX: Application for Clearing Membership – Agreement for COMEX Clearing Membership which can be found on CME Group's Web site at: http://www.cmegroup.com/company/membership/files/COMEXCMAgreementWriteable.pdf.

Hedge Fund Applicants:

All hedge fund clearing member applicants must complete the Application for Clearing Membership – Hedge Fund Information. This can be found on CME's Web site at: http://www.cmegroup.com/company/membership/files/CMCorpMemberInfoHedgeFund.pdf

In addition, each Exchange maintains a separate Hedge Fund Agreement for Clearing Membership which must also be completed as follows:

CME: Application for Clearing Membership, Agreement for CME Hedge Fund Clearing Membership can be found on CME Group's Web site at: <u>http://www.cmegroup.com/company/membership/files/CMECMAgreementHedgeFund.pdf</u>

CBOT: Application for Clearing Membership, Agreement for CBOT Hedge Fund Clearing Membership can be found on CME Group's Web site at: http://www.cmegroup.com/company/membership/files/CBOTCMAgreementHedgeFund.pdf

NYMEX: Application for Clearing Membership, Agreement for NYMEX Hedge Fund Clearing Membership can be found on CME Group's Web site at: http://www.cmegroup.com/company/membership/files/NYMEXCMAgreementHedgeFund.pdf

COMEX: Application for Clearing Membership, Agreement for COMEX Hedge Fund Clearing Membership can be found on CME Group's Web site at: http://www.cmegroup.com/company/membership/files/COMEXCMAgreementHedgeFund.pdf

The application must be submitted with the organizational chart, constitutional documents, prospectus, offering documents, investment management agreements, investment advisor agreements, partnership or limited liability company operating agreements, and any other relevant agreements for each fund requesting approval under CBOT Rule 106.S. or CME Rule 106.S. in addition to the clearing member. Hedge fund applicants which are structured as "master-feeders" are required to submit all required documentation for the master fund as well as all feeder funds (U.S. and non-U.S.) with the application.

Bank Applicants:

All bank clearing member applicants must complete the Application for Clearing Membership – Bank Corporate Information which can be found on CME Group's Web site at: <u>http://www.cmegroup.com/company/membership/files/CMCorpMemberInfoBank.pdf</u>

In addition, each Exchange maintains a separate Clearing Membership Bank Agreement for Membership as follows:

CME: Application for Clearing Membership, Agreement for CME Clearing Membership - Banks which can be found on CME Group's Web site at: http://www.cmegroup.com/company/membership/files/CMECMAgreementBank.pdf

CBOT: Application for Clearing Membership, Agreement for CBOT Clearing Membership – Banks which can be found on CME Group's web site at: http://www.cmegroup.com/company/membership/files/CBOTCMAgreementBank.pdf

NYMEX: Application for Clearing Membership, Agreement for NYMEX Clearing Membership – Banks which can be found on CME Group's web site at: http://www.cmegroup.com/company/membership/files/NYMEXCMAgreementBank.pdf

COMEX: Application for Clearing Membership, Agreement for COMEX Clearing Membership – Banks which can be found on CME Group's web site at: <u>http://www.cmegroup.com/company/membership/files/COMEXCMAgreementBank.pdf</u>

Exchanges' Rule 911 (Screening Procedures) requires the Exchange membership community be notified (i.e. the "20-day posting period") of all applicants for clearing membership for a 20-day period. Clearing membership applicants are posted to the membership on the Monday following receipt of a completed clearing membership application. During this 20-day period, an investigation of the applicant's qualifications for membership is conducted.

Once all requirements of membership have been met, or exemptions granted, the clearing applicant is presented to the Clearing House Risk Committee for approval. If approved and all applicable requirements have been met, the approval of the clearing member may become effective.

To be effective as a clearing member, all conditions and requirements of membership must be satisfied and the 20-day posting period must have expired.

OTC Derivatives Clearing Membership

OTC Derivative Clearing Members are eligible to clear OTC derivative products only and must meet all requirements for the clearing of a particular OTC derivative contract (i.e. operational, capital and risk management requirements). An OTC Derivatives Clearing Member is a member of the Clearing House and it is afforded full rights and privileges to clear for its own account, and on behalf of customers if it is properly registered as an FCM, transactions in OTC derivative products. OTC Derivatives Clearing Members are not entitled to clear products other than OTC derivative products.

For additional information on OTC Derivatives Clearing Membership, please refer to Chapter 5 of this Handbook and to the Over-The-Counter Derivative Clearing Membership Handbook. This can be found on CME Group's Website at:

http://www.cmegroup.com/company/membership/files/CME-OTC-Clearing-Membership-Handbook.pdf

Clearing Membership General Requirements

Exchanges' Rule 901. (General Requirements and Obligations) states the requirements which must be satisfied to become a clearing member of the Exchange. Significant clearing membership requirements are outlined in other sections of this handbook. The general requirements for clearing membership are outlined below.

- A clearing member must be a corporation (including a C Corporation, Subchapter S Corporation or Limited Liability Company), partnership (including a Limited Partnership or General Partnership) or cooperative association. The articles of incorporation, operating agreement, or partnership agreement (and all sub-agreements) shall be submitted with a clearing applicant's application.
- A clearing member shall agree to (a) abide by all Exchange Rules and to cooperate in their enforcement; (b) be responsible even after it has withdrawn as a clearing member, for any violations of Exchange Rules committed by it while it was a clearing member; and (c) continue to meet all requirements applicable to clearing members, including all financial requirements.
- 3. A clearing member shall have an authorized representative satisfactory to the Clearing House Risk Committee who shall represent the clearing member before the Exchanges and its committees.
- 4. A clearing member shall be qualified to do business in the State of Illinois or the State of New York or have an agency agreement in place with an entity already qualified in the State of Illinois or the State of New York. Such agency agreement must be in an Exchange approved format. Refer to Exhibit A.

This requirement provides a place for service of process and other communications in connection with the business of the clearing member.

- 5. A clearing member shall be engaged in or demonstrate immediate capacity to engage in the conduct of the business of a clearing member. A clearing member applicant is responsible to ensure that any and all necessary approvals have been received from regulatory authorities, including, but not limited to, the Federal Reserve, to allow the firm to conduct the business of a clearing member.
- 6. A clearing member shall demonstrate such fiscal and moral integrity as would justify the Clearing House's assumption of the risks inherent in clearing its trades.
- 7. A clearing member shall guarantee and assume complete financial responsibility for all trading activity routed through a Globex portal, or routed through any other electronic trading system to CME via any connection, terminal, link, telecommunications hub or handheld unit as well as any other applicable electronic trading systems and terminals that the clearing member provides to a third party to enter orders.
- 8. It shall be responsible for the acts of Globex terminal operators accessing the Globex system through its connections, including direct connections.

Clearing Membership General Requirements

- 9. A clearing member shall agree to guarantee and assume complete responsibility for trades executed on Marketplaces for which the Exchange provides clearing services.
- 10. A clearing member shall comply with all credit control policies developed by the Exchange for customer and proprietary transactions. Such credit control policies may include, but not be limited to, registration of credit control administrators with the Exchange, definition of credit control limits, and maintenance of written procedures verifying compliance with Exchange credit control requirements. Any "GC2" credit control functionality required by the Exchange shall be in addition to a clearing member's initial risk monitoring and credit control procedures. Refer to Rule 949 (Credit Controls).

Exchanges' Rule 905. (Choice of Law) states the Rules of the Exchanges shall be governed by and construed in accordance with the laws of the State of Illinois. Any action, claim, dispute or litigation of any kind between the Clearing Member and the Exchanges shall be adjudicated in a federal or state court in Chicago, Illinois. Clearing Members consent to the jurisdiction of such court and to service of process by any means authorized by Illinois or U.S. federal law, and waive the right to transfer the venue of such litigation. In addition, the rule provides that clearing members irrevocably waive any grounds of sovereign immunity in any legal action with the Exchanges.

Clearing membership in the Exchanges' Clearing House is granted by the Clearing House Risk Committee and may be withdrawn for cause at any time.

Clearing Members in Non-U.S. Jurisdictions

Clearing members that are incorporated/domiciled in non-U.S. jurisdictions must be subject to a legal and insolvency regime acceptable to the Clearing House. Clearing members from non-U.S. jurisdictions must use approved Clearing House's settlement banks for performance bond deposits and variation margin. (See <u>http://www.cmegroup.com/clearing/financial-and-collateral-management/settlement-banks.html</u> for a complete listing.)

Hedge Fund Clearing Members

Clearing Members which are hedge funds are subject to additional clearing membership requirements including:

- Establishing separate clearing accounts for each fund whose activity is being cleared by the Hedge Fund Clearing Member.
- Minimum assets under management of \$1 Billion for the investment manager.
- Additional reporting of risk exposures and liquidity resources of the Hedge Fund Clearing Member and all affiliated funds for which it clears.

Clearing Membership General Requirements

In addition, if the Hedge Fund Clearing Member will clear activity for related funds, it must be registered as an FCM unless the related funds qualify as noncustomer or proprietary accounts as defined in CFTC Regulation 1.3(y).

Clearing Members who are Facilities Managed

A clearing member may determine that it is not cost-effective to establish a back office operation. Clearing members may enter into "facilities management" agreements with other clearing members to reduce their costs associated with doing business on the Exchanges. Under such an agreement, the clearing member <u>clears</u> its trades with the Clearing House; however, another clearing member (facilitator) performs trade processing and/or manages the bookkeeping (service bureau) functions.

Typically, facilities management agreements are entered into between two clearing members for the purpose of doing some or all of the clearing member's back office/clearing operations. For example, if a clearing member's trade processing is conducted through another firm's back office, the clearing member defrays the cost of setting up a back office and hiring personnel to perform trade processing. The terms of the arrangement are private. However, the Exchange will always look to the clearing member clearing the trades (i.e., not the firm processing the trades) in the event there is a late submission or other problems associated with the clearing member's trade processing. A clearing member may not contract out its responsibility to guarantee its trades or follow correct processing procedures.

If a clearing member enters into a facilities management agreement, it must always have a senior officer, director, or partner of the clearing member available to represent the clearing member before the Exchanges and their committees.

Clearing Members and Give Up System Agreements

Likewise, a clearing member may determine that it is not cost-effective to establish its own floor presence. The Give-Up Payment System (GPS) may be used by a clearing member that does not want to establish a floor operation. Essentially, one clearing member agrees to be responsible for the execution of another clearing member's trades on the floor and the resulting positions are then entered into GPS for transfer, acceptance, and clearing by the clearing member.

Demutualization, Reorganization, Mergers and Acquisitions

On November 13, 2000, CME became the first U.S. financial exchange to demutualize by converting its memberships into Class A shares representing equity rights and Class B shares representing equity rights and trading privileges in Chicago Mercantile Exchange Inc.

On December 3, 2001, Chicago Mercantile Exchange Inc. became a wholly owned subsidiary of Chicago Mercantile Exchange Holdings Inc. ("CME Holdings") and the Class A and Class B shares of CME were converted to Class A and Class B shares of CME Holdings and CME division, IMM division, IOM division and GEM division memberships in CME. Memberships represent the trading privileges for products traded on CME.

On July 12, 2007, Chicago Mercantile Exchange Holdings Inc. and CBOT Holdings, Inc. officially merged to form CME Group Inc. ("CME Group"), the world's largest and most diverse exchange. As a result, CME Group became parent to Chicago Mercantile Exchange Inc. and Board of Trade of the City of Chicago, Inc. Class A and B shares in CME Holdings became Class A and B shares in CME Group. Class B memberships in CBOT are divided into Series B-1 (Full) membership, Series B-2 (Associate) membership, Series B-3 (GIM) membership, Series B-4 (IDEM) membership and Series B-5 (COM) membership.

On August 22, 2008, CME Group acquired NYMEX Holdings, Inc. which is parent to New York Mercantile Exchange, Inc. New York Mercantile Exchange, Inc. in turn owns Commodity Exchange, Inc.

The Class A shares in CME Group represent equity and voting rights. The Class B shares represent equity and voting rights and, in addition, certain voting rights concerning "Core Rights" and the election of Directors as detailed in regulatory filings with the Securities and Exchange Commission ("SEC"). Coupled with each Class B share is a CME, IMM, IOM or GEM division membership representing trading rights for products in a division of CME. Class B shares are not coupled with memberships on CBOT, NYMEX or COMEX.

Class B shares in CME Group cannot be sold or transferred separately from the sale of the associated membership in CME. Further, no membership in CME may be sold unless the purchaser also acquires the associated Class B share. References to any CME, IMM, IOM or GEM "membership(s)" in this Handbook includes the associated Class B share.

While the owner of a membership need not be a clearing, corporate or individual member, in order to obtain member benefits, the holder of the membership must satisfy the membership and eligibility requirements and become an approved clearing, corporate or individual member.

An auction market is maintained by the Shareholder Relations and Membership Services Department for memberships. Current bid, offer and last sale price information of memberships is posted on CME Group's Web site at:

http://www.cmegroup.com/company/membership/membership-pricing.html.

Historical pricing of memberships is posted on CME Group's Web site at: http://www.cmegroup.com/company/membership/historical-pricing/cme-historical-membership-pricing.html.

Class A shares in CME Group are publicly traded on the NASDAQ (Symbol: CME). Recent company announcements by CME Group are available on CME Group's Web site at www.cmegroup.com. Securities and Exchange Commission filings, including CME Group's prospectuses, are available at www.cmegroup.com, <u>www.freeedgar.com</u> and <u>www.gov.sec</u>.

Assignment Requirements

Pursuant to Rule 902 (Clearing Membership Assignment Requirements), all assigned memberships, including firm owned and independent assignments, are pledged to the Clearing House as security for a clearing member's obligations. Assigned memberships may be sold by the Clearing House in the event of insolvency of a clearing member. The proceeds of such sale will be used to fulfill the obligations of the clearing member.

CME Rule 902.A. (Assignment Requirement) requires all clearing members to have at least two CME memberships, at least two IMM memberships, at least two IOM memberships and at least one GEM membership assigned to the clearing member.

A higher division membership may be substituted for a lower division membership to satisfy the assignment requirements. That is, one CME membership may be substituted for any other membership; an IMM membership may be substituted for an IOM membership or a GEM membership; and an IOM membership may be substituted for a GEM membership.

At least one CME, one IMM, one IOM and one GEM membership required for clearing membership privileges must be owned by the clearing member or a person, including parent company, with an acceptable proprietary interest in the clearing member. An acceptable proprietary interest is defined as at least a \$500,000 interest in the clearing member and includes the person's interest in the ownership equity of the clearing member plus the person's subordinated debt to the clearing member. Voting rights are not considered when determining an owner's proprietary interest. If the memberships to be assigned are jointly owned, all owners must have an acceptable proprietary interest in the clearing member. The remaining memberships necessary for clearing membership may be independently assigned.

A CBOT Clearing FCM must have at least two Full memberships assigned to the Clearing House while all other CBOT Clearing Corporate Members must have at least one Full membership assigned to the Clearing House. Pursuant to CBOT Rule 902, at least one Full membership required for clearing membership pursuant to this Rule must be owned by the clearing member or a person, including a parent company, with an acceptable proprietary interest in such clearing member. An acceptable proprietary interest is defined as at least a \$500,000 interest in the clearing member and includes the person's interest in the ownership equity of the clearing member plus the person's subordinated debt to the clearing member. Voting rights are not considered when determining an owner's proprietary interest. If the membership or shares to be assigned are jointly owned, all owners must have an acceptable proprietary interest in the clearing

member. If two Full memberships are required for clearing membership, one of those memberships may be independently assigned.

NYMEX clearing members must have two NYMEX memberships assigned to the Clearing House. NYMEX Rule 902 requires 50% of assigned memberships required for NYMEX clearing membership must be owned by the clearing member or by a person, including parent company, with an acceptable proprietary interest in the clearing member. The remaining membership may be independently assigned by any person. An acceptable proprietary interest is defined as at least a \$500,000 interest in the clearing member and includes the person's interest in the ownership equity of the clearing member plus the person's subordinated debt to the clearing member. Voting rights are not considered when determining an owner's proprietary interest. If the memberships to be assigned are jointly owned, all owners must have an acceptable proprietary interest in the clearing member. The remaining membership necessary for clearing membership may be independently assigned.

COMEX clearing members must have two COMEX memberships assigned to the Clearing House. 50% of assigned memberships required for COMEX clearing membership must be owned by the clearing member or by a person, including parent company, with an acceptable proprietary interest in the clearing member. The remaining membership may be independently assigned by any person. An acceptable proprietary interest is defined as at least a \$500,000 interest in the clearing member and includes the person's interest in the ownership equity of the clearing member plus the person's subordinated debt to the clearing member. Voting rights are not considered when determining an owner's proprietary interest. If the membership to be assigned is jointly owned, all owners must have an acceptable proprietary interest in the clearing membership necessary for clearing membership may be independently assigned.

Assignment of Memberships

Memberships may only, at any time, be assigned to a single clearing member. Owners and members may assign memberships to an applicant for clearing membership. At the time of and during assignment, the memberships must be unencumbered and may not be subject to any Exchanges' Rule 110 (Claims Against Membership, Application of Proceeds) claims. An Authorization to Sell or to Transfer or Sell - Rule 106.A.-B. Security Transaction cannot be on file for a membership which is assigned for clearing membership privileges.

A member on an assigned membership need not be qualified by the clearing member for whom the membership is assigned. Such member on an assigned membership may be qualified by any clearing member except a clearing member that is not actively clearing. To qualify traders, a clearing member must have established systems in place for trade submission, risk management, clearing and settlement/banking with the Clearing House. A qualifying clearing member should know if a member it qualifies for trading privileges has assigned their membership to another clearing member. Likewise, a clearing member should know who the qualifying clearing member is for members on memberships assigned for its clearing membership privileges.

Assigned memberships may be transferred in accordance with Exchanges' Rule 106.C. (Family Transfers) and Exchanges' Rule 106.F. (Clearing Member). Note: For an Exchange Rule 106.F.

transfer of an individually owned membership, the owner transferring the membership must have an acceptable proprietary interest of \$500,000 or more in the clearing member. The \$500,000 proprietary interest requirement does not apply to firm owned memberships.

Assigned memberships may not be leased out under Exchanges' Rule 106.D. (Futures Industry Transfers). However, excess memberships owned by the clearing member which are <u>not</u> assigned may be leased out under the respective Exchange Rule 106.D.

An individual member may assign his membership without trading restrictions on his own individual trading activity.

Memberships must be assigned on Exchange-prescribed forms. Refer to Exhibit B. Upon submitting an assignment form to the Shareholder Relations and Membership Services Department, the newly assigned membership shall be posted to the Exchange membership for ten days. After all Exchange Rule 110 (Claims Against Membership, Application of Proceeds) claims have been resolved to the satisfaction of the Exchange, the membership shall be assigned to the clearing member.

A clearing member may substitute other memberships for assigned memberships provided that the clearing member continues, at all times, to meet the assignment requirements of the Exchanges.

If a membership assignment is not necessary for the clearing member to meet its assignment requirements (e.g., the clearing member maintains more than the required number of memberships necessary under Exchange rules), a request to withdrawal such assignment is effective upon receipt.

Further, if an owner of memberships wishes to withdraw his assigned memberships over the objection of the clearing member to which they are pledged, the owner must request permission to do so from the Shareholder Relations and Membership Services Department. The request must be in writing with a copy delivered to the clearing member to which the memberships are assigned. The Shareholder Relations and Membership Services Department may grant such requests under conditions that do not jeopardize the financial integrity of the Clearing House.

In the event a clearing member has a valid claim against a member that it qualifies, and the member's membership is assigned to another clearing member, the clearing member utilizing the membership for assignment shall have 10 business days to substitute another membership to fulfill the assignment requirements of Exchange Rule 902. Such substitution shall be required to protect the financial integrity of the Clearing House.

Note: In order for a member to utilize a previously assigned membership (i.e., use the membership to trade at a new qualifying clearing member) which is currently subject to a 60-day posting period for a withdrawing clearing member, his new qualifying clearing member must execute an Indemnification of Transfer agreement. Such acknowledgment provides that the claims of the new qualifying clearing member to the membership are subordinate to the claims that may be placed against the previously assigned membership or the previously assigned clearing member. Refer to Exhibit C.

Shares and Fees

With regards to trades made for the benefit of the Clearing Member itself (i.e. "proprietary trades"), CME and CBOT Clearing Members receive fees in conjunction with CME Rule 106.H. Trading Member Firm and CBOT Rule 106.H. Trading Member Firm respectively. NYMEX Clearing Members receive non-member fees. COMEX Clearing Members receive COMEX Rule 106.J. Member Firm fees. Clearing Members with shares are those clearing members that also maintain CME Group Class A Shares in accordance with CME Rule 106.J. Equity Member Firm, CBOT Rule 106.J. Equity Member Firm and/or NYMEX Rule 106.J. Member Firm requirements.

Rule 106.I. Affiliate Member Firms

CME Rule 106.I. Affiliate Member Firm

A membership under CME Rule 106.I. allows all non-member firms that either own, directly or indirectly, 100% of a clearing member with shares or that have 100% ownership, direct or indirect, in common with a firm that owns, directly or indirectly, 100% of a clearing member with shares, to receive member clearing fees and performance bond rates on the proprietary trading of such firms within the division of membership held.

Under this rule, a CME, IMM or IOM membership may be owned by the clearing member with shares or any firm that either owns, directly or indirectly, 100% of the clearing member with shares or that has 100% ownership, direct or indirect, in common with a firm that owns, directly or indirectly, 100% of the clearing member with shares ("related parties"). The membership required for CME Rule 106.I. maybe owned by the clearing member with shares or any of its affiliates and is in addition to the memberships assigned for the clearing member with shares clearing membership privileges. A membership held under CME Rule 106.I. cannot be assigned for clearing membership privileges.

If the CME Rule 106.I. member elects to have an individual placed on its CME, IMM or IOM membership, the individual must be an employee or officer of the clearing member with shares or any of its 100% related parties and must be approved for individual membership by the Shareholder Relations and Membership Services Department.

The proprietary positions of the clearing member with shares and its 100% related parties receiving equity member clearing fees must be carried separately from other accounts on the books of a clearing member. Organizational charts must be maintained demonstrating ownership of all related parties receiving equity member clearing fees.

The clearing member with shares or its affiliate must complete an Application for Corporate Membership CME Rule 106.I. Affiliate Member Firm Agreement for Membership and submit it to CME Group's FRS Department for approval as a CME Rule 106.I. firm. The application is located on CME Group's Web site at:

http://www.cmegroup.com/company/membership/files/Rule106IAffiliateMemberApp.pdf.

CBOT Rule 106.I. Affiliate Member Firm – Equity

A membership under CBOT Rule 106.I. allows an entity that is not a pool or a hedge fund, but is owned by the clearing member or any firm that either owns, directly or indirectly, 100% of the clearing member or that has 100% ownership, direct or indirect, in common with a firm that owns, directly or indirectly, 100% of the clearing member ("related parties") to receive member clearing fees and performance bond rates on the proprietary trading of such firms within the division of membership held.

Under this rule, either one CBOT Full + 20,000 Class A shares or one Associate Membership + 8,750 Class A shares may be owned by the clearing member, a related party, or an employee or principal of the clearing member or affiliated applicant. The memberships and shares required for CBOT Rule 106.I. is per affiliate and is in addition to the memberships assigned for the clearing member's clearing membership privileges. The memberships and shares held under CBOT Rule 106.I. Affiliate Member Firm – Equity cannot also be assigned for clearing membership privileges.

If the CBOT Rule 106.I. member elects to have an individual placed on its Full or Associate Membership, the individual must be an employee or officer of the clearing member or its affiliated applicant and must be approved for individual membership by the Shareholder Relations and Membership Services Department.

The proprietary positions of the clearing member and its Exchange approved CBOT Rule 106.I. Affiliate Member Firm – Equity receiving equity member clearing fees must be carried separately from other accounts on the books of a clearing member. Organizational charts must be maintained demonstrating ownership of all related parties.

The affiliate must complete the following two forms found on CME Group's Web site:

Application for Corporate Membership – Corporate Information: <u>http://www.cmegroup.com/company/membership/files/CorporateMemberInformation.pdf</u>. and

CBOT Rule 106.I. Affiliate (Trading and Equity) Member Firm – Agreement for Membership: <u>http://www.cmegroup.com/company/membership/files/CBOTRule106IAffiliateMemberApp.pdf</u>.

Completed forms must be submitted to CME Group's FRS Department for approval as a CBOT Rule 106.I. firm.

<u>CBOT Rule 106.I. Affiliate Member Firm – Trading</u>

A membership under CBOT Rule 106.I. allows an entity that is not a pool or a hedge fund, but is owned by the clearing member or any firm that either owns, directly or indirectly, 100% of the clearing member or that has 100% ownership, direct or indirect, in common with a firm that owns, directly or indirectly, 100% of the clearing member ("related parties") to receiving trading

member clearing fees and performance bond rates on the proprietary trading of such firms within the division of membership held.

Under this rule, either: one CBOT Full, one CBOT Associate Membership, one CBOT IDEM or one CBOT COM may be owned or leased by the clearing member or any related party or an employee or principal of the clearing member or affiliated applicant. The membership required for CBOT Rule 106.I. is per affiliate and is in addition to the memberships assigned for the clearing member's clearing membership privileges. The memberships held under CBOT Rule 106.I. Affiliate Member Firm – Trading cannot also be registered for clearing membership privileges.

If the CBOT Rule 106.I. member elects to have an individual placed on its Full, Associate, IDEM or COM Membership, the individual must be an employee or officer of the clearing member or its affiliated applicant and must be approved for individual membership by the Shareholder Relations and Membership Services Department.

The proprietary positions of the CBOT Rule 106.I. Affiliate Member Firm – Trading receive trading member clearing fees and must be carried separately from other accounts on the books of a clearing member. Organizational charts must be maintained demonstrating ownership of all related parties.

The affiliate must complete the following two forms found on CME Group's Web site:

Application for Corporate Membership – Corporate Information: <u>http://www.cmegroup.com/company/membership/files/CorporateMemberInformation.pdf</u>. and CBOT Rule 106.I. Affiliate (Trading and Equity) Member Firm – Agreement for Membership:

http://www.cmegroup.com/company/membership/files/CBOTRule106IAffiliateMemberApp.pdf.

Completed forms must be submitted to CME Group's FRS Department for approval as a CBOT Rule 106.I. firm.

CBOT Rule 106.I. Affiliate Member Firm - Umbrella

A membership under CBOT Rule 106.I. Affiliate Member Firm – Umbrella allows all firms that either own, directly or indirectly, 100% of the clearing member with shares or that has 100% ownership, direct or indirect, in common with a firm that owns, directly or indirectly, 100% of the clearing member with shares ("related parties") to receive clearing member fees and performance bond rates on the proprietary trading of such firms. Under this rule, four Series B-1 (Full) memberships, two Series B-2 (Associate) memberships and 20,000 CME Group shares or five Series B-1 (Full) memberships and 20,000 CME Group shares (Agricultural only) may be owned by the clearing member with shares or a related party. A CBOT clearing member with shares for the CBOT membership umbrella may qualify an unlimited number of affiliates but the qualified affiliates must be registered with the Exchange. The memberships and CME Group shares required to qualify for the CBOT membership umbrella include the memberships required for the CBOT clearing member, including any independent assignments.

Each affiliate must complete the following form found on CME Group's Web site:

CBOT Rule 106.I. Affiliate Umbrella Member Firm - Qualified Affiliate Agreement for Membership:

http://www.cmegroup.com/company/membership/files/CBOTRule106IAffiliateUmbrellaApp.pdf.

Completed forms must be submitted to CME Group's FRS Department for approval as a CBOT Rule 106.I. Qualified Affiliate.

CME Rule 106.S. Family of Funds Member Firm

CME clearing members with shares that are hedge funds are generally not owned in the traditional sense by a parent company and, as such, related funds do not meet the ownership requirement of Rule 106.I. (Affiliate Member Firm). CME Rule 106.S. (Family of Funds Member Firm) allows a family of funds that is managed by a fund management company to receive equity member clearing fee rates without the need for each fund in the family to become a CME Member.

One fund in the family of funds or the fund management company must become a CME Clearing Member with shares. If the fund management company becomes the CME Clearing Member with shares, it must designate one fund in the family of funds to receive the equity member clearing fee rates. Under CME Rule 106.S., up to five additional funds within the family of funds are eligible for equity member clearing fee rates for each additional membership purchased. The five additional funds in a family may receive equity member clearing fee rates on the proprietary trading of the funds within the division of membership owned under Rule 106.S. The CME Clearing Member with shares will, of course, receive equity member clearing fee rates on all CME products.

To be eligible for CME Rule 106.S. membership, the following criteria must be met:

- Each fund in the family of funds must be approved by the Exchange;
- The accounts must be held by a clearing member(s) in the name of the approved fund;
- Any fund or the fund management company may hold the 106.S. membership; and,
- The fund management company must agree to submit to Exchange regulatory iurisdiction.

Only true funds in the family, not managed accounts, qualify for preferential clearing fee rates under CME Rule 106.S.

Under CME Rule 106.S., a CME, IMM or IOM membership may be owned by the clearing member with shares, any fund in the family or the fund management company. Regardless of who owns the membership, the fund management company is designated as the CME Rule The membership required for CME Rule 106.S. is in addition to the 106.S. member. memberships assigned for the CME Clearing Member with share's membership privileges. A membership held under CME Rule 106.S. cannot be assigned for clearing or corporate membership privileges. Class A shares are not required for CME Rule 106.S. membership.

If the CME Rule 106.S. member elects to have an individual placed on its CME, IMM or IOM membership, the individual must be an employee or officer of the CME Clearing Member with shares, the fund management company or a fund that is part of the family of funds. In addition, the member must be approved for individual membership by the Shareholder Relations and Membership Services Department.

The proprietary positions of CME Clearing Member with shares and each of the approved funds within the family that receive equity member clearing fee rates must be carried separately on the books of a clearing member. Organizational charts must be maintained demonstrating ownership/organization of all entities, including feeder/master funds, the investment manager and other management companies.

The fund management company must complete a CME Application for Corporate Membership – CME Rule 106.S. Family of Funds Member Firm Hedge Fund Agreement for Membership and submit it to CME's FRS Department for approval of the Rule 106.S. funds. The application is located on CME's Web site at:

http://www.cmegroup.com/company/membership/files/Rule106SFamilyofFundsApp.pdf

Capital Requirements

Clearing members are responsible for monitoring their capital and to ensure continued compliance with the Exchanges' capital requirements. Capital requirements for clearing members which are not Banks are specific to its exchange membership privileges and, if applicable, any OTC products that it will clear. For non-Bank clearing members, capital is defined as Adjusted Net Capital as computed in accordance with CFTC Regulation 1.17. For Bank clearing members, capital is defined as Tier I Capital, as defined in accordance with regulations applicable to the Bank clearing member.

For a CME Clearing Member, the exchange capital requirement is the greater of the CFTC or SEC capital requirement or:

For a non-Bank clearing member:

- \$5,000,000 if it will clear only exchange-traded futures/options; or,
- \$50,000,000 if a clearing member will clear any OTC derivative product, including, but not limited to, FX OTC, CDS or IRS; or,
- 20% of aggregate performance bond requirement for all customer and house accounts containing CME-cleared CDS and IRS positions.

For a Bank clearing member:

- \$5,000,000,000 if it will clear exchange-traded futures/options; or,
- \$50,000,000 if it will clear only OTC derivative products, including, but not limited to, FX OTC, CDS or IRS; or
- 20% of aggregate performance bond requirement for all proprietary and affiliate accounts containing CME-cleared CDS and IRS positions.

For a CBOT Clearing Member, the exchange capital requirement is the greater of the CFTC or SEC capital requirement or:

For a non-Bank clearing member:

- \$5,000,000 if it will clear exchange-traded futures/options or agricultural OTC derivative products; or,
- \$50,000,000 if it will clear any OTC derivative products excluding agricultural OTC derivatives.

For a Bank clearing member:

- \$5,000,000,000 if it will clear exchange-traded futures/options; or,
- \$50,000,000 if it will clear only OTC derivative products, including, but not limited to, agricultural OTC derivative products.

For a NYMEX Clearing Member, the exchange capital requirement is the greater of the CFTC or SEC capital requirement or:

For a non-Bank clearing member:

- \$5,000,000 if it will clear only exchange-traded futures/options; or,
- \$20,000,000 if it will clear exchange-traded futures/options and it will guarantee NYMEX Floor Members pursuant to the program referenced in NYMEX Rule 992; or,
- \$50,000,000 if it will clear any OTC derivative products, including, but not limited to energy OTC derivative products.

For a Bank clearing member:

- \$5,000,000,000 if it will clear exchange-traded futures/options; or,
- \$50,000,000 if it will clear only OTC derivative products, including, but not limited to energy OTC derivative products.

For a COMEX Clearing Member, the exchange capital requirement is the greater of the CFTC or SEC capital requirement or:

For a non-Bank clearing member:

- \$5,000,000 if it will clear only exchange-traded futures/options; or,
- \$50,000,000 if it will clear any OTC derivative products, including, but not limited to metal OTC derivative products.

For a Bank clearing member:

- \$5,000,000,000 if it will clear exchange-traded futures/options; or
- \$50,000,000 if it will clear only OTC derivative products, including, but not limited to, metal OTC derivative products.

For ClearPort products cleared as futures, they would be considered in the exchange-traded futures/options line above. For reference, the following product link may be helpful: http://www.cmegroup.com/clearport/#sortKey=7&sortOrder=ascending&SortType=text

&FilterOn=//lcpcProductTO&PageStart=1&vertindex=0

Refer to Chapter 5 – Cleared OTC Derivatives for additional information for clearing members trading OTC derivatives.

The Clearing House Risk Committee(s) may prescribe additional financial and capital requirements and grant exemptions.

CFTC's Minimum Regulatory Capital Requirement

The CFTC's regulatory minimum capital requirement is computed as 8% of domestic and foreign domiciled customer plus 8% of noncustomer (excluding proprietary) risk maintenance performance bond requirements for all domestic, foreign futures and options on futures contracts and cleared swaps (see Chapter 5) excluding the risk margin associated with naked long option positions.

The Exchanges impose a risk-based capital requirement, identical to the CFTC's regulatory minimum capital requirement, on all clearing members, including non-FCMs.

The CFTC's minimum regulatory capital requirement includes all customer and noncustomer commodity accounts posing risk to the clearing member; that is, all domestic and foreign domiciled accounts and their positions. Further, the risks of positions being carried by a firm are best quantified by Exchange determined risk performance bond requirements. For Exchange traded futures/options and various OTC products, risk maintenance performance bond requirements are generated (for all domestic futures exchanges and numerous futures exchanges worldwide) from the Standard Portfolio Analysis of Risk® performance bond system (SPAN®). The SPAN performance bond system is a risk-based, portfolio performance bond system used to compute minimum performance bond requirements for all futures and options positions. For CME CDS, a multi-factor margin model is used. This model takes into account the macroeconomic risk factors of systemic risk, curve risk and spread convergence/divergence risk. In addition, it also accounts for sector risk, idiosyncratic risk and liquidity risk. Additional information on the multi-factor margin model can be located on CME Group's Web site at: http://www.cmegroup.com/trading/cds/overview-of-cleared-otc-cds-buyside-solution.html For CME IRS and FX OTC products, the Historical Value at Risk ("HVaR") methodology is applied. In HVaR, past events are used for determining possible scenarios in the future. Additional **HVaR** methodology Group's information on the can be located on CME Web site at: http://www.cmegroup.com/trading/interest-rates/files/OTC-IRS.pdf

The CFTC's regulatory minimum capital requirement is based <u>solely on the risk component of the</u> <u>performance bond system requirement</u>. The risk component is the assessment for changes in the underlying portfolio's price and volatility. The equity component (the marked-to-the-market value of options) of the SPAN performance bond system requirement is included in performance bond equity and is not part of the capital requirement computation.

The risk maintenance performance bond on <u>naked</u> long option positions may be excluded from the risk maintenance performance bond requirement as the risk component on naked long option positions is an assessment of the liquidation risk and a haircut on the value of the options. Naked long option positions are defined as long options in an account which are not used to reduce the risk of other futures and/or options positions.

It is important to recognize that proprietary accounts of a clearing member are not part of this risk based capital calculation as proprietary charges based upon risk maintenance performance bond requirements are already included in the firm's computation of adjusted net capital.

Computation of Adjusted Net Capital

Clearing members which are not Banks are responsible for computing adjusted net capital in accordance with CFTC Regulation 1.17. As a reminder:

- There are restrictions on the amount of house (noncustomer and proprietary) cash balances which may be held with affiliates and treated as current/allowable assets. Clearing applicants are encouraged to contact the Financial and Regulatory Surveillance ("FRS") Department or their designated self-regulatory organization ("DSRO") for guidance on the classification of house cash deposits with affiliates.
- There is a capital charge on open futures and options positions held in proprietary accounts. Refer to CFTC Regulation 1.17(c)(5)(x) or SEC Rule 15c3-1b(a)(3)(xiv).
- There is a 2% capital charge on the market value of firm-owned investments in money market mutual funds. This haircut is applicable to funds invested in CME's Interest Earning Facility 2 Program ("IEF2[®]"). Refer to SEC Rule 15c3-1(c)(2)(vi)(D)(1).

Computation of Adjusted Net Capital - Subordinated Loan Agreements

The rules and requirements governing subordinated loan agreements are contained in Exchange Rule 970.A.5. (Financial Requirements) and CFTC Regulation 1.17(h). In general, a satisfactory subordinated loan agreement may be considered good for capital purposes provided such loan effectively subordinates any right of the lender to receive payment to the claims of all present and future general creditors. The CFTC Regulations contain very specific requirements for subordinated loan agreements and must be complied with completely.

To qualify as capital, subordinated loan agreements must be approved by a firm's DSRO. If the subordinated debt is needed to meet CME, CBOT, NYMEX or COMEX capital requirements, this approval must be received before an applicant is presented to the Clearing House Risk Committee. For clearing member applicants for whom CME, CBOT, NYMEX or COMEX will be the DSRO, subordinated loan agreements must be submitted to the FRS Department for approval. Such submission shall be at least ten days prior to the loan's effective date and may be included in the clearing membership application packet. For non-CME Group DSRO clearing member applicants, subordinated loan agreements should be submitted to their DSRO for approval.

Sample formats of Subordinated Debt Agreements can be located on CME Group's Web site at http://www.cmegroup.com/clearing/audit/audit-department-forms.html.

Guaranty Fund Requirements

The guaranty fund requirements of the Clearing House are stated in Rule 816. (Guaranty Fund). Clearing members must deposit with the Clearing House a guaranty fund deposit for their obligations to the Clearing House. A clearing member's guaranty fund shall equal the greater of the minimum requirement or the clearing member's proportionate share of the "Aggregate"

Guaranty Fund" or an amount specified by the Clearing House Risk Committee. The Aggregate Guaranty Fund Deposit is an amount determined by the Clearing House Risk Committee and is set at a percentage of the average aggregated performance bond requirements of the Exchanges for the preceding three months.

The minimum guaranty fund deposit is \$500,000 for all clearing members which will clear exchange-traded futures and options and \$2,500,000 if clearing ClearPort or OTC products (not including IRS or CDS). The guaranty fund deposit amount for new clearing members is the minimum requirement. During the clearing membership approval process, the minimum guaranty fund deposit must be wired to the Clearing House prior to the Clearing House Risk Committee meeting where the clearing member applicant will be presented.

Only U.S. Dollars and U.S. treasury and agency securities may be deposited by a clearing member applicant during the application approval process. Interest is not paid on U.S. Dollar deposits. If U.S. treasury or agency securities are deposited, the market value of such securities, less any applicable haircut, must be at least equal to the minimum requirement. For example, U.S. T-Bills with a par value of \$505,000, market value of \$502,000 and no haircut may be used to meet the \$500,000 guaranty fund requirement.

In addition to U.S. Dollars, U.S. treasury and agency securities, once approved for clearing membership, a clearing member may also invest in CME's Interest Earning Facility ("IEF") 2 investments in money market mutual funds, to meet their guaranty fund requirement. Funds in IEF2 are subject to a 3% Clearing House haircut. Under the IEF2 program, only the funds of the settlement banks are allowable for guaranty fund purposes. Other IEF programs allow clearing members to earn interest on their performance bond/margin deposits. Additional information on IEF programs may be found on CME Group's Web site at:

http://www.cmegroup.com/clearing/financial-and-collateral-management/collateral-management-programs.html.

For further information on IEF2 or other IEF programs, contact Mike Auriemma, Risk Management, Clearing House at (312) 634-8399 or michael.auriemma@cmegroup.com.

A clearing member's guaranty fund amount is based on the risk that a clearing member represents to the Clearing House as measured by its performance bond requirements and trading Currently, a clearing member's guaranty fund amount consists of (i) a specified volume. percentage of the Aggregate Guaranty Fund multiplied by the clearing member's proportionate share (including the total risk performance bond requirement in respect of positions in its crossmargin accounts) of the average aggregate risk performance bond requirement (including the risk performance bond requirement in respect of positions in all cross-margin accounts and any applicable short option value) for the preceding three months; plus (ii) a specified percentage of the Aggregate Guaranty Fund multiplied by the clearing member's proportionate share of the total number of contracts executed during the preceding three months; plus (iii) a specified percentage of the Aggregated Guaranty Fund Deposit multiplied by the clearing member's proportionate share of foreign currency settlements for the preceding three months. Such percentages may be modified by the Clearing House Risk Committee as it deems appropriate. Further, in determining a clearing member's guaranty fund volume component, a different weighting may be applied to a particular contract(s) if such contract(s) is deemed to represent a disproportionate amount of exposure to the Clearing House. The guaranty fund deposit is recalculated on a guarterly basis (more frequently if deemed necessary) by the Clearing House.

The guaranty fund deposit should be wired into the account of the Clearing House. The Clearing House should be informed prior to any funds or securities being wired to the Clearing House.

Clearing members that clear OTC derivatives (CDS and IRS) are subject to separate guaranty fund requirements. Refer to Chapter 5 – Cleared OTC Derivatives.

Settlement Banks

All active clearing members must maintain a settlement account at one or more of the approved settlement banks. Clearing members shall establish separate accounts for customer and house (noncustomer and proprietary) activity.

Currently, the approved settlement, performance bond and guaranty fund banks are:

- Bank of America, N.A.
- Bank of China Ltd., NY Branch
- BMO Harris, N.A.
- Brown Brothers Harriman & Co.
- Citibank, N.A.
- Fifth Third Bank
- Lakeside Bank
- J.P. Morgan Chase Bank, NA
- The Bank of New York Mellon

See also http://www.cmegroup.com/clearing/financial-and-collateral-management/settlement-banks.html for a complete listing.

The Clearing House must have information on all settlement and custody accounts established by clearing members to clear trades. Further, the Clearing House requires debit authorization over clearing members' settlement accounts. As such, clearing members must execute and submit to the Clearing House a Settlement and Customer Account Listing and Debit Authorization form. See Exhibit D.

Performance Bond Requirements

The Clearing House determines prudent minimum performance bond levels for all futures and options contracts based on historical price changes, volatilities, current and anticipated market conditions and other factors deemed pertinent. The Clearing House collects performance bonds from its clearing members to guarantee the obligations associated with futures and options contracts which are carried by clearing members.

For margining of CME, CBOT, NYMEX and COMEX positions of clearing members, the Exchanges require that gross positions be used to calculate performance bond requirements for the customer origin; however, firms are allowed to submit spread eligible positions through the Position Change Information ("PCS") system, which are netted. Net positions are used to calculate performance bond requirements for the house origin.

A list of acceptable forms of collateral to meet performance bond requirements is available on CME Group's website at:

http://www.cmegroup.com/clearing/financial-and-collateral-management/

Concentration Margin

The Clearing House also applies a concentration margining program, which allows the Clearing House to assess additional performance bond requirements when a clearing firm's potential market exposure becomes large relative to the financial resources available to support those exposures. Concentration margin is calculated by the Clearing House based on a formula which includes stress testing of equity and interest rate positions and the clearing member's excess adjusted net capital. Collateral which is acceptable for reserve performance bond requirements may also be used to meet concentration margin requirements.

Customer Accounts at the Clearing House

Clearing members must maintain separate accounts for customer segregated, cleared swap and house (noncustomer and proprietary) funds at the Clearing House. Exchange Rule 973 (Customer Accounts with the Clearing House) requires the Clearing House to hold all customer funds deposited with the Clearing House in accordance with the Commodity Exchange Act and CFTC Regulation 1.20 in an account identified as Customer Segregated. Exchange Rule 973 also requires all customer funds deposited with the Clearing House on behalf of Cleared OTC Derivatives Customers shall be held in accordance with Exchange Rules 8F100 through 8F136 in an account identified as a Cleared OTC Derivatives Sequestered Account. As the Clearing House has adopted such a rule, CFTC Reg. 1.26(a) provides that a segregation or cleared swap acknowledgement letter need not be obtained for customer deposits held by the Clearing House.

Financial Responsibilities in the Event of a Default

In the event a clearing member fails to promptly discharge any obligation to the Clearing House, its guaranty fund deposit, its available performance bond on deposit with the Clearing House, any of its other assets available to the Clearing House, and the proceeds of the sale of any memberships assigned to it for clearing qualification shall be applied by CME's Clearing House to discharge the obligation.

If the defaulting clearing member's commodity futures or options (for clearing members trading OTC derivatives, see Chapter 5) obligation to the Clearing House remains unsatisfied, the obligation will be met by the application of funds according to the following priority:

- (1) Surplus funds of the Exchange in excess of funds necessary for normal operations.
- (2) Guaranty Fund deposits of all clearing members in proportion to the total guaranty fund requirement of each clearing member
- (3) Proceeds from any default insurance maintained by the Clearing House to the extent that such proceeds are available in a timely manner to be applied towards the default.
- (4) Assessment against all clearing members (excluding any insolvent or defaulting clearing members) up to an amount that does not exceed:

(a) 275% of such clearing members' guaranty fund requirement when losses are attributable to a single defaulting clearing member; and,

(b) 550% of such clearing members' guaranty fund requirement attributed to losses of all defaulting clearing members during a cooling off period.

Note: The above are generalizations of specified formulas and procedures. The detail of the allocation of guaranty fund contributions in the event of a clearing member default should be read in its entirety in Exchange Rule 802.B. Satisfaction of Clearing House Obligations.

In connection with IRS Clearing Members, the Clearing House has established a separate guaranty fund for IRS contracts. (Refer to Chapter 5 and CME Rule 8G802)

To minimize the possibility of clearing member defaults and to provide our customers and the market with the finest protection, CME Group has adopted and rigorously enforces an integrated package of financial surveillance and risk management procedures. These are described in CME Group's <u>Financial Safeguards</u>, which may be found on CME Group's Web site at: <u>http://www.cmegroup.com/clearing/files/financialsafeguards.pdf</u>.

CME, CBOT, NYMEX and COMEX Clearing Members and OTC Clearing Members are eligible to clear OTC derivative products (i.e. cleared swaps and forwards) with CME's Clearing House if all requirements for the clearance of particular OTC derivative contracts are met.

If a Clearing Member will clear OTC derivatives products through the Clearing House for its customers, the firm must be registered with the CFTC as an FCM. FCMs are subject to CFTC rules and regulations including regulatory capital, financial reporting and customer protection.

A clearing member who clears customer business acts as agent for undisclosed principals (i.e. the customers) vis-a-vis the Clearing House and guarantees their customers' performance to the Clearing House. A clearing member is deemed to be the principal to the OTC contract when it clears trades for its own proprietary account and is deemed a guarantor and agent to the OTC contract when it clears trades for its affiliates or customers. The clearing member-customer agency relationship facilitates customer cleared swaps segregation protection, bankruptcy portability of customer positions and collateral, operational efficiency, and favorable capital treatment for the clearing member. This relationship is fundamental to the operation of the Clearing House and is embedded throughout the rules of Exchanges, the Commodity Exchange Act and the regulations of the CFTC.

General Requirements

In addition to the General Requirements of clearing membership contained in Chapter 2 – General Requirements, the following requirements apply to a clearing member which will clear OTC derivatives.

- 1. A Clearing Member that will clear FX OTC, Credit Default Swaps ("CDS") or Interest Rate Swaps ("IRS") must have appropriate risk management capabilities, operational infrastructure and experience to support this activity, as prescribed by the Clearing House.
- 2. A Clearing Member shall agree to guarantee and assume responsibility for all trading activity routed through a Globex portal, or routed through any electronic trading system, if applicable, to the Clearing House for clearing of such OTC derivative transactions and which are guaranteed to the Clearing House by the clearing member via any connection, terminal, link, telecommunications hub or handheld unit provided by a clearing member to a third party as well as any applicable electronic trading systems and terminals that the clearing member provides to a third party, including an eligible customer, to enter orders.
- 3. The Clearing Member shall agree to guarantee and assume responsibility for all OTC derivatives trading activity executed via outside means and submitted for clearing to and accepted for clearing by the Clearing House by any customer, broker or affiliate authorized by the Clearing Member.

Capital Requirements

Capital requirements for clearing members which are not Banks are specific to its exchange membership privileges and, if applicable, any OTC products that it will clear. For non-Bank clearing members, capital is defined as Adjusted Net Capital as computed in accordance with CFTC Regulation 1.17. For Bank clearing members, capital is defined as Tier 1 Capital, as defined in accordance with regulations applicable to the bank clearing member. The following are the applicable capital requirements:

For a CME Clearing Member, the exchange capital requirement is the greater of the CFTC or SEC capital requirement or:

For a non-Bank clearing member:

- \$5,000,000 if it will clear only exchange-traded futures/options; or,
- \$50,000,000 if a clearing member will clear any OTC derivative product, including, but not limited to, FX OTC, CDS or IRS; or,
- 20% of aggregate performance bond requirement for all customer and house accounts containing CME-cleared CDS and IRS positions.

For a Bank clearing member:

- \$5,000,000,000 if it will clear exchange-traded futures/options; or,
- \$50,000,000 if it will clear only OTC derivative products, including, but not limited to, FX OTC, CDS or IRS; or
- 20% of aggregate performance bond requirement for all proprietary and affiliate accounts containing CME-cleared CDS and IRS positions.

For a CBOT Clearing Member, the exchange capital requirement is the greater of the CFTC or SEC capital requirement or:

For a non-Bank clearing member:

- \$5,000,000 if it will clear exchange-traded futures/options and agricultural OTC derivatives products; or,
- \$50,000,000 if it will clear any OTC derivative products, excluding agricultural OTC derivative products.

For a Bank clearing member:

- \$5,000,000,000 if it will clear exchange-traded futures/options; or,
- \$50,000,000 if it will clear only OTC derivative products, including, but not limited to, agricultural OTC derivative products.

For a NYMEX Clearing Member, the exchange capital requirement is the greater of the CFTC or SEC capital requirement or:

For a non-Bank clearing member:

- \$5,000,000 if it will clear only exchange-traded futures/options; or,
- \$20,000,000 if it will clear exchange-traded futures/options and it will guarantee NYMEX Floor Members pursuant to the program referenced in NYMEX Rule 992; or,
- \$50,000,000 if it will clear any OTC derivative products, including, but not limited to energy OTC derivative products.

For a Bank clearing member:

- \$5,000,000,000 if it will clear exchange-traded futures/options; or,
- \$50,000,000 if it will clear only OTC derivative products, including, but not limited to energy OTC derivative products.

For a COMEX Clearing Member, the exchange capital requirement is the greater of the CFTC or SEC capital requirement or:

For a non-Bank clearing member:

- \$5,000,000 if it will clear only exchange-traded futures/options; or,
- \$50,000,000 if it will clear any OTC derivative products, including, but not limited to energy OTC derivative products.

For a Bank clearing member:

- \$5,000,000,000 if it will clear exchange-traded futures/options; or,
- \$50,000,000 if it will clear only OTC derivative products, including, but not limited to, metal OTC derivative products.

For additional information on capital requirements, refer to Rule 970 for Exchange-traded futures/options, CME Rule 8F04 for OTC derivatives, CME Rule 8H04 for CDS and CME Rule 8G04 for IRS.

The Clearing House Risk Committee, the IRS Risk Committee, CDS Risk Committee or the Clearing House may prescribe additional capital requirements and grant exemptions.

In addition:

- If a hedge fund is the CME, CBOT, NYMEX or COMEX clearing member, the investment manager must maintain assets under management of \$1 billion for exchange-traded futures/options and OTC.
- If the investment manager of a hedge fund is the CME, CBOT, NYMEX or COMEX clearing member, its exchange minimum capital requirement for exchange-traded futures/options is \$50,000,000 (instead of \$5,000,000 per the above).

Guaranty Fund and Membership Requirements

All clearing members must deposit with the Clearing House a guaranty fund deposit for their obligations to CME. Guaranty fund requirements are dependent upon the products cleared. Separate guaranty fund pools are maintained for Exchange-traded products and OTC derivatives excluding CDS and IRS (i.e. the "base" guaranty fund), CDS and IRS. The minimum base guarantee fund deposit for a clearing member which will clear OTC derivative products, excluding CDS and IRS, is \$2,500,000.

A clearing member's base guaranty fund requirement shall equal the greater of the minimum base guaranty fund requirement or the clearing member's proportionate share of the "Aggregate Guaranty Fund Deposit". The Aggregate Guaranty Fund Deposit is an amount determined quarterly by the Clearing House Risk Committee and is set at a percentage of the (a) average aggregated risk performance bond requirements; plus (b) total number of contracts executed on CME, CBOT, NYMEX, COMEX and any other applicable Exchange or market (including OTC derivative products but excluding CDS and IRS); plus (c) foreign currency settlements. The performance bond, volume and settlements for the preceding three months are used to determine the quarterly Aggregate Guaranty Fund Deposit.

The guaranty fund requirements of the Clearing House are stated in Rule 816. (Guaranty Fund Deposit) and for OTC derivatives in Rule 8F07. (Guaranty Fund Deposit).

If the clearing member will clear CDS products, the minimum requirement to the CDS guaranty fund is the greater of \$50,000,000 or the CDS clearing member's proportionate share of the theoretical two largest losses as described in CME Rule 8H07.1.(i)(a) (i.e. the "funded portion" of the CDS financial safeguards package).

If the Clearing Member will clear IRS products, the minimum requirement to the IRS guaranty fund is the greater of \$50,000,000 or the IRS clearing member's proportionate share of the theoretical two largest losses as described in CME Rule 8G07.1.(i) (i.e. the "funded portion" of the IRS financial safeguards package). Refer to Rule 8G07. for information regarding the IRS guaranty fund.

The minimum guaranty fund deposit of an OTC Clearing Member which clears IRS products and has an affiliated clearing member which also clears IRS products is \$25,000,000 for each affiliated IRS clearing member. In these instances, one affiliated IRS Clearing Member provides primary clearing services for customers as a FCM (with any proprietary business of such FCM only incidental to providing such clearing service for customers) and the other affiliated clearing member only provides IRS clearing services through its proprietary account for itself and/or its affiliates.

Guaranty fund minimums may be increased from time to time, depending on the mix of OTC asset classes for which the Clearing House provides clearing services.

An OTC Clearing Member that is not also a CME, CBOT, NYMEX or COMEX clearing member shall maintain a membership-equivalent deposit with CME of at least \$5 million in cash or

collateral to assure performance of all obligations arising out of OTC derivatives submitted by it to the Clearing House.

The Clearing House Risk Committee, the CDS Risk Committee, IRS Risk Committees or the Clearing House may prescribe additional financial, including guaranty fund deposit, requirements.

Clearing of Customer Activity

If the clearing member will clear customer accounts, it must be properly registered or authorized for such activity by its primary regulator and it must be registered as an FCM with the CFTC and NFA. FCMs are subject to CFTC rules and regulations including rules and regulations pertaining to regulatory capital, financial reporting and customer protection. Information on FCM registration can be obtained from the National Futures Association (www.nfa.futures.org or 312.781.1300). CFTC rules and regulations can be found on their Web Site at www.cftc.gov.

OTC derivatives submitted to clearing for the account of a customer will be assigned and held in a Cleared Swap customer account unless the CFTC has issued an order permitting particular OTC derivatives products to be commingled in customer segregated accounts. Refer to Rule 8F03. (Classification of Positions). Refer to CFTC Rules 1.20 through 1.32 regarding customer segregated protection and CFTC Part 22 rules regarding cleared swap customer protection.

A clearing member must comply with the requirements of Rule 971 (Segregation, Secured and Cleared Swaps Customer Account Requirements). These requirements include:

- Maintaining at all times sufficient funds in segregated, secured 30.7 or cleared swap customer accounts;
- Computing, recording and reporting the Segregation, Secured 30.7 and Cleared Swap Amounts Statements;
- Obtaining satisfactory segregation, secured 30.7 and cleared swap acknowledgement letters; and
- Preparing and reporting daily Segregation, Secured 30.7 and Cleared Swap Amounts Statements.

In addition, clearing members must provide immediate written notice to CME Group's FRS Department of a failure to maintain sufficient funds in segregation, secured 30.7 or cleared swap accounts. Refer to Rule 971. (Segregation, Secured and Cleared Swaps Customer Account Requirements).

All clearing members must ensure that its customers meet any eligibility requirements established for trading certain OTC derivatives products. For example, customers who will trade credit default or interest rate swaps must meet the qualifications for Eligible Contract Participant as defined in CFTC regulations.

All OTC derivative transactions must be identified with an account number which identifies the originator of the transaction and indicate whether the transaction was executed as a proprietary or customer transaction. In addition, an OTC Clearing Member must register all "ultimate" or end customers. Refer to Rule 8F09. (Customer Registration)

All OTC clearing members are subject to risk management and monitoring practices by CME related to transactions submitted to the Clearing House. OTC Clearing Members shall promptly provide all information requested by Clearing House staff, including, without limitation, information respecting risk, settlement, liquidity, and operational issues. OT Clearing Members shall make information and documents regarding their risk management policies, procedures and practices available to the CFTC upon the CFTC's request. Refer to Rule 8F10. (Risk Management).

Financial Reporting Requirements

Designated Self-Regulatory Organization (DSRO)

All clearing members will be assigned a DSRO. A clearing member's DSRO is its lead regulator for the futures industry.

DSRO assignments are decided by the Joint Audit Committee which is composed of representatives of all domestic futures exchanges and National Futures Association. For the most part, a DSRO is determined based upon where a clearing member was first elected to membership and where the bulk of the clearing member's business (trading activity) is conducted.

In general, clearing member applicants who are applying to CME for their first U.S. commodity exchange membership will have CME as their DSRO, while clearing members holding other U.S. commodity exchange memberships at the time of application will continue with their current DSRO.

Financial Statement Filings – Daily

All FCM clearing members must submit, on a daily basis, daily segregated, secured 30.7 and cleared swap customer statements ("Daily Seg 1-FR" for FCMs and "Daily Seg FOCUS II" for dually registered FCM-Broker/Dealers), as applicable, through WinJammer[™] by 12:00 noon on the following business day. These statements must be signed off by the firm's Chief Executive Officer, Chief Financial Officer or their designated representatives as allowed.

Financial Statement Filings – Bi-Monthly

All FCM clearing members must submit a report of investments as of the 15th and last business day of the month through WinJammer by the close of business on the following business day. The report will detail the dollar amount of funds held by depository and by permitted investment as outlined in CFTC Regulation 1.25(a). The investment reports must be submitted by segregated, secured 30.7 and cleared swap customer origin.

Financial Statement Filings - Monthly

All non-Bank clearing members must submit monthly Form 1-FRs (all non-Broker/Dealers) or FOCUS Reports (dually registered FCM-Broker/Dealers), including Exchange Supplemental Information, through the WinJammer system within seventeen (17) business days of month-end. Such monthly reporting includes the submission of an unaudited monthly report as of fiscal year-end.

The Exchange Supplemental Information required in the financial filing includes:

- Capital to be withdrawn within 6 months;
- Subordinated Debt maturing within 6 months;
- Subordinated Debt due to mature within 6 months that you plan to renew; and

Additional capital requirement for excess margin on Reverse Repurchase Agreement.*
 * Information is only applicable to broker/dealers

This additional information is required in order for the FRS Department to monitor a clearing member's capital level and decreases which are known and will occur within the next six months.

All monthly financial statements must be submitted through the WinJammer system, an electronic filing system. In order to file the statements using the WinJammer system, authorized financial statement submitters are granted access to WinJammer. In order to gain access and obtain approval for submitter. visit the WinJammer а vou may web site at: http://wjammer.com/newWeb/home.asp#. The information can be located under Getting Started. Should you encounter difficulty, please e-mail wjammer@cmegroup.com or call 312-930-3230.

Bank clearing members are required to file any and all financial reports which are filed with its primary regulator. However, such financial reports must be file on, at least, a quarterly basis, including as of the Bank clearing member's fiscal year-end, and are due five days after such statements are filed with its primary banking regulator. These financial reports must demonstrate compliance with the Exchange minimum capital requirements.

Financial Statement Filings – Annually

All non-Bank clearing members are required to submit certified financial statements to the FRS Department. Broker/dealer clearing members are required to submit certified financial statements within sixty (60) days of their fiscal year-end. Clearing members who are not registered as broker/dealers are required to submit certified financial statements within ninety (90) days of their fiscal year-end. The requirements of certified financial reports of broker/dealers are specified in SEC Rule 17a-5 and the requirements of certified financial reports of FCMs are specified in CFTC Regulations 1.10 and 1.16.

Bank clearing members must submit an annual certified financial statement to CME Group's FRS Department. The annual certified financial statement is due five days after such statements are filed with its primary banking regulator.

Financial Statement Filings - More Frequent Financial Reporting

Clearing Members may be placed on more frequent reporting for "just cause" at the discretion of the Exchanges, including the Clearing House Risk Committee. Generally, more frequent reporting would result from on-going financial difficulties or significant problems discovered during a review of the clearing member. Examples of more frequent reporting include the submission of daily or weekly capital computations.

Notification Requirements

Financial Notifications

- 1. All (DSRO and Non-DSRO) clearing members must provide written notice to the FRS Department whenever the clearing member:
 - Fails to maintain minimum capital requirements;
 - Fails to maintain early warning capital requirements;
 - Fails to maintain current books and records;
 - Determines the existence of a material inadequacy as specified in CFTC Regulation 1.16(d)(2);
 - Changes its fiscal year;
 - Changes its public accountant; or
 - Fails to comply with Exchange prescribed additional accounting, reporting, financial, and/or operational requirements.

Refer to Rule 970.A.3. and Rule 970.D. (Financial Requirements).

2. All (DSRO and Non-DSRO) clearing members must provide written notice to the FRS Department if the clearing member fails to maintain sufficient funds in segregation, secured 30.7 or cleared swap customer accounts.

Refer to Rule 971.C. (Segregation, Secured and Cleared Swaps Customer Account Requirements).

3. All (DSRO and Non-DSRO) clearing member FCMs must provide written notice or preapproval (by CEO, CFO or authorized representative) to the FRS Department for all disbursements not made for the benefit of a customer from a segregated, secured 30.7 or cleared swap customer account which exceed 25% of the FCM clearing member's excess segregated, secured 30.7 or cleared swap customer origin, as applicable, of the most recent calculation.

Refer to Rule 971.D. (Segregation, Secured and Cleared Swaps Customer Account Requirements)

4. All (DSRO and Non-DSRO) non-Bank clearing members must provide written notice to the FRS Department of any reductions in net capital as reported on the Form 1-FR, or tentative net capital as reported on the FOCUS Report for broker/dealers, of 20% or more from the most recent filing of such report within two business days of the event or series of events causing the reduction.

All (DSRO and Non-DSRO) non-Bank clearing members must provide written notice to the FRS Department at least two business days in advance of any planned reductions to equity capital if it would cause a reduction in excess net capital of 30% or more.

Bank clearing members must provide notice if any event or series of events, including any withdrawal, advance, loan or loss would cause, on a net basis, a reduction in Tier I

capital as reported on the most recent filing of a financial report, of 20% or more. Notice must be provided within five business days of the event or series of events causing the.

Refer to Rule 972. (Reductions in Capital).

5. Clearing members for which the CME, CBOT, NYMEX or COMEX is its DSRO must provide written notice to the FRS Department if a performance bond call in any account (customer, noncustomer, or omnibus) exceeds the clearing member's adjusted net capital or if a performance bond call exceeding the clearing member's excess net capital remains unanswered by the close of business the day following the issuance of the call.

Refer to CFTC Regulations 1.12(f)(3) and 1.12(f)(4).

Other Notifications

1. Significant Business Transaction or Change in Operations. All clearing members are required to provide notice to the Exchanges prior to any significant business transaction. The purpose of such notification is to enable the Exchanges to better identify and monitor risks presented by significant business transactions. The notification requirements are contained in Rule 901.H. (General Requirements and Obligations) and are as follows:

All clearing members must notify the FRS Department prior to any significant business transaction or significant change in operations including:

- the merger, combination, or consolidation between the clearing member and another person or entity;
- the assumption or guarantee by the clearing member of all or substantially all of the liabilities of another in connection with a direct or indirect acquisition of all or substantially all of that person's or entity's assets;
- the sale of a significant part of the clearing member's business and/or assets to another person or entity;
- a change in the direct or indirect beneficial ownership of 20% or more of the clearing member;
- any change in the clearing member's system provider used to process trades; and
- an increase in the number of members qualified by the clearing member.

Such transactions may be subject to review and approval by the Clearing House Risk Committee or Exchange staff.

In addition, a clearing member that qualifies members must provide fifteen (15) days notice to the Exchanges of any proposal to terminate such business or any material part of such business.

2. *Ownership Changes.* All clearing members must submit and maintain with the FRS Department a current list of every person or entity that is directly, or indirectly through

intermediaries, the beneficial owner of 5% or more of any class of equity security of the clearing member.

The FRS Department requires notification as soon as any changes in ownership structure occur. Such changes should be accompanied by updated parent guarantee agreements as necessary in accordance with Rule 901.L. (General Requirements and Obligations).

3. *Firm Contact Listings.* Maintaining up-to-date personnel contact information is critical in order to continue communications with our clearing members during normal, as well as crisis, situations. Therefore, clearing members are required to immediately notify the Exchanges of all changes to its key personnel. Further, on a semi-annual basis, the FRS Department requests an update from all clearing members as to its key personnel.

Other Requirements

Anti-Money Laundering and Economic Sanctions Compliance

All clearing members are required to have a written compliance program approved by its senior management which is reasonably designed to achieve and monitor the clearing member's compliance with all applicable requirements of the Bank Secrecy Act, the International Emergency Economic Powers Act, the Trading with the Enemy Act, Executive Orders and the regulations issue by the U.S. Department of Treasury.

Refer to Rule 981 (Anti-Money Laundering and Economic Sanctions Compliance).

Risk Management

All clearing member must have written risk management policies and procedures in place to ensure they are able to perform certain basic risk and operational functions at all time.

Refer to Rule 982 (Risk Management)

Disaster Recovery and Business Continuity

All clearing members must have written disaster recovery and business continuity policies and procedures in place to ensure they are able to perform certain basic operational functions in the event of a significant internal or external interruption to their operations. Depending on the firm's size and its business and product mix, clearing members must have procedures in place to allow them to continue to operate during periods of stress or to transfer accounts to another fully operational clearing members must perform periodic testing of disaster recovery and business continuity plans, have duplication of critical systems at back up sites and periodically back-up critical information.

Refer to Rule 983 (Disaster Recovery and Business Continuity).

Clearing Membership Parent Guarantees

The parent guarantee requirements of the Exchanges are stated in Rule 901.L. (General Requirements and Obligations). Unless an exemption is granted, all clearing members must submit to the Exchanges a written guarantee, on a form provided by the Exchange, from each person or entity owning 5% or more of the equity securities of the clearing member.

A parent guarantee shall guarantee all obligations of the clearing member to the Clearing House arising out of noncustomer and proprietary accounts cleared by the clearing member. These accounts are classified and carried in the house origin of the clearing member and are defined in CFTC Regulation 1.3(y).

Such noncustomer and proprietary obligations covered under the parent guarantee include performance bond and settlement for noncustomer and proprietary positions held and cleared, noncustomer and proprietary trades executed by traders qualified by the clearing member until accepted for clearing by another clearing firm, and noncustomer and proprietary trades executed and processed through the Give Up System ("GUS") by the clearing member until accepted for clearing firm.

A parent guarantee shall not apply to any obligations of the clearing member to pay an assessment to the Clearing House pursuant to Rule 802.B. (Protection of Clearing House - Satisfaction of Clearing House Obligations). Note: Rule 802.B. sets forth a clearing member's financial responsibilities in the event of a default of another clearing member.

Ownership Information and Structure

All clearing members must submit and maintain with the FRS Department a current list of every person or entity that directly or indirectly through intermediaries, is the beneficial owner of 5% or more of any class of equity security of the clearing member. If such person or entity owns the clearing member indirectly through intermediaries, all intermediaries must be listed, including, if a corporation, all shareholders who own 5% or more of any class of equity security, or, if a partnership, all general and any limited or special partners who have contributed 5% or more of the partnership's capital. If the intermediary's shareholders or partners are not individuals, the clearing member must include the chain of ownership of 5% shareholders, general partners and 5% limited or special partners until individuals are listed.

For purposes of parent guarantee requirements, the term "equity security" shall include any stock, partnership interest or similar security; or any security convertible, with or without consideration, into such a security, or carrying any warrant or right to subscribe to or purchase such a security; or any such warrant or right; or any other security which the FRS Department shall deem to be of similar nature and consider necessary or appropriate to treat as an equity security.

Clearing Membership Parent Guarantees

Application of Parent Guarantee Requirements

A clearing member's ultimate parent should provide a parent guarantee unless an intermediate company providing a guarantee has capital greater than or equal to \$300,000,000. Note: If the parent company is a regulated entity, capital shall be defined as adjusted net capital. If the parent company is a non-regulated entity, capital shall be defined as assets less liabilities plus acceptable subordinated debt.

All parent guarantees must be submitted on Exchange-approved forms.

Full Parent Guarantee

An individual or an entity is required to execute a full guarantee if the individual or entity owns, directly or indirectly, 50% or more of the clearing member. Refer to Exhibit E.

If the parent guarantee is not executed on behalf of an individual, such guarantee shall be signed by an authorized officer for a corporation, an authorized member or manager for a limited liability company, a general partner of a partnership or the trustee (not the beneficiary) of a trust. In addition, the guarantor must submit a Board of Director's resolution or similar written documentation stating the guarantor's decision to guarantee the clearing member's obligations to the Exchange under Rule 901.L. (General Requirements and Obligations) and granting such officer, member, manager or partner authority to sign the guarantee. Refer to Exhibit G

Partial Parent Guarantee

A partial guarantee is required for individuals or entities owning, directly or indirectly, 5% or more but less than 50% of the clearing member. The individual or entity need only provide a guarantee to the extent of their ownership. Refer to Exhibit F.

If the partial parent guarantee is not executed on behalf of an individual, such guarantee shall be signed by an authorized officer for a corporation, an authorized member or manager for a limited liability company, a general partner of a partnership or the trustee (not the beneficiary) of a trust. In addition, the guarantor must submit a Board of Director's resolution or similar written documentation stating the guarantor's decision to guarantee the clearing member's obligations to the Exchange under Rule 901.L. (General Requirements and Obligations) and granting such officer, member, manager or partner authority to sign the guarantee. Refer to Exhibit G.

Clearing Membership Parent Guarantees

Parent Guarantee Exemptions

A clearing member may request an exemption from the parent guarantee requirements due to one of the following:

- The clearing member maintains \$300,000,000 or more in adjusted net capital.
- The clearing member does not clear, execute and give-up, or qualify individual traders who execute non-customer or proprietary trades for Exchange contracts.
- The clearing member has minimal activity in their house origin.
- For clearing members clearing only exchange traded futures and options on futures, the clearing member maintains \$30,000,000 or more in adjusted net capital and posts an additional deposit of funds equal to 1.25 times the minimum house performance bond requirement. (Note: This additional deposit of funds to the Clearing House is not considered performance bond and will therefore not affect a firm's minimum capital requirement.)

A clearing member is determined to have minimal activity in the house origin if the average house performance bond requirement is less than 1% of the firm's excess adjusted net capital up to a maximum house performance bond requirement of \$500,000. The average house performance bond requirement is recalculated and reviewed quarterly by the Clearing House. In addition, clearing members receiving this exemption are monitored to ensure that all execution-only business or other significant volume is not part of their house activity. If a clearing member exceeds these thresholds, it is allowed 2 weeks to either scale down the activity, move the positions to another clearing firm or provide the appropriate guarantee(s).

The exemption request must be in writing and submitted to the FRS Department. The request will be reviewed during the approval process.

Clearing Membership Cross-Guarantee, Guarantee of Obligations and Guaranty Fund Guarantee

Cross-Guarantee Agreement

Rule 901.G. (General Requirements and Obligations) states that if any person directly or indirectly controls, owns 10% or more of, or has the right to 10% or more of the profits of two or more clearing members, then each clearing member shall guarantee the obligations of the other clearing members to the Exchanges. If a cross guarantee affiliation exists, absent an exemption, only one entity may trade in a given OTC clearing class within the house origin (i.e., only one entity may clear IRS activity and one entity may clear CDS activity).

Each clearing member shall execute a written guarantee to the Exchanges on an approved form. Refer to Exhibit H.

The cross-guarantee shall be signed by an authorized officer for a corporation, an authorized member or manager for a limited liability company, or a general partner of a partnership. In addition, each clearing member shall submit a Board of Director's resolution or similar written documentation stating the clearing member's decision to execute such Cross-Guarantee Agreement and granting such officer, member, manager or partner authority to sign the guarantee.

A cross-guarantee shall guarantee all obligations of the clearing member to the Clearing House arising out of customer, noncustomer and proprietary accounts cleared by the clearing member.

Such customer, noncustomer and proprietary obligations covered under the cross-guarantee include performance bond and settlement for customer, noncustomer and proprietary positions held and cleared; customer, noncustomer and proprietary trades executed by traders qualified by the clearing member until accepted for clearing by another clearing firm; and, customer noncustomer and proprietary trades executed and processed through the Give Up System ("GUS") by the clearing member until accepted for clearing by another clearing firm.

A cross-guarantee shall also apply to any obligations of the clearing member to pay an assessment to the Clearing House pursuant to Rule 802.B. (Protection of Clearing House - Satisfaction of Clearing House Obligations). Note: Rule 802.B. sets forth a clearing member's financial responsibilities in the event of a default of another clearing member.

The FRS Department may grant exemptions from the cross-guarantee requirements.

Note: For cross-guarantees pertaining to clearing members transacting IRS or CDS products, please refer to Chapter 5.

Guarantee of Obligations to the Clearing House

A guarantee of obligations to the Clearing House must be obtained whenever:

1. A clearing member reorganizes into a different legal entity, such as a corporation reorganizing to a limited liability company; or

Clearing Membership Cross-Guarantee, Guarantee of Obligations and Guaranty Fund Guarantee

2. A clearing member is replaced by a different company within the same corporate structure and the new clearing member wishes to utilize the membership assignments of the withdrawing clearing member during the 60-day posting period.

A guarantee of obligations to the Clearing House must be executed on an Exchange-approved form. The guarantee of obligations is between the new clearing member and the existing clearing member. It must be accepted and signed by both parties. Refer to Exhibit I.

The guarantee of obligations shall be signed by an authorized officer for a corporation, an authorized member or manager for a limited liability company, or a general partner of a partnership. In addition, the clearing member shall submit a Board of Director's resolution or similar written documentation stating the clearing member's decision to reorganize or replace an affiliated company (as applicable) and granting such officer, member, manager or partner authority to sign the guarantee.

Within the guarantee, the new clearing member unconditionally guarantees and assumes all obligations of the current clearing member to the Clearing House. Examples of such obligations include, but are not limited to, out-trades, open complaints, clearing fee liabilities arising from past transactions, delivery obligations, valid Exchange claims, and outstanding bid guarantees.

In addition, the new clearing member assumes responsibility for all agreements entered into by the existing clearing member with the Exchanges. Examples of such agreements include, but are not limited to, membership assignments, trader qualification agreements, authorized signatures, transfers pursuant to Rules 106.D. and 106.F., trading authorizations and consents to qualified members and lessees to have accounts at clearing members other than their qualifying clearing member.

There is no time restriction on the guarantee.

Guaranty Fund Guarantee of Obligations

Under limited conditions, such as a clearing membership replacement or merger with an affiliated company, the new or surviving clearing member may assume the existing guaranty fund deposit of the withdrawing clearing member during the 60-day posting period of the withdrawing clearing member. This eliminates the affiliates having to maintain two guaranty fund deposits with the Clearing House during the 60-day posting period.

By executing the Guaranty Fund Guarantee of Obligations, the new or surviving clearing member agrees to pay all valid claims filed pursuant to Rules 110 and 913 against the withdrawing clearing member. The guarantee is limited to the amount of guaranty fund assumed by the new or surviving clearing member. The guarantee remains in effect until all claims have been resolved.

To utilize a Guaranty Fund Guarantee of Obligations, a written request must be directed to FRS Department staff. FRS Department staff will consider how the replacement or reorganization is structured and the relationship of the parties. If approved, a Guaranty Fund Guarantee of Obligations must be executed on an Exchange approved form. Refer to Exhibit J. The Guaranty

Clearing Membership Cross-Guarantee, Guarantee of Obligations and Guaranty Fund Guarantee

Fund Guarantee of Obligations must be signed by an authorized officer for a corporation, an authorized member or manager for a limited liability company, or a general partner of a partnership.

Clearing Membership Letters of Credit

The Clearing House allows the use of letters of credit in meeting performance bond requirements on positions at the clearing house level. The Clearing House accepts letters of credit in accordance with Rule 820. (Performance Bonds).

Clearing members may accept letters of credit from their customers for performance bond in accordance with Rule 930.C. (Account Holder Performance Bond Requirements: Acceptable Performance Bond Deposits).

All letters of credit must be irrevocable and drawable in the continental United States.

Clearing House Letters of Credit

Letters of credit deposited with the Clearing House must be in Clearing House approved formats from a Clearing House approved bank. Refer to <u>CME Clearing House Manual of Operations</u> for approved formats and approved banks or CME Group's Web site at: <u>http://www.cmegroup.com/clearing/financial-and-collateral-management/collateral-types-accepted.html</u>.

In addition, the Clearing House accepts pass-through letters of credit for margining of CME, CBOT, NYMEX and COMEX positions; that is, letters of credit deposited by a clearing member's customers/noncustomers and passed-through to the Clearing House. Both the clearing member and the Clearing House are beneficiaries of such pass-through letters of credit.

A clearing member (a bank or other organization) is not allowed to post with the Clearing House a letter of credit issued by itself or any of its affiliates.

A clearing member may meet a maximum of 40% of its core performance bond requirements with letters of credit. For a complete list of acceptable collateral and product class restrictions, refer to CME Group's website at: <u>http://www.cmegroup.com/clearing/financial-and-collateral-management</u>.

Clearing Firm Letters of Credit

Letters of credit accepted by clearing firms from their customers/noncustomers to meet performance bond requirements on CME, CBOT, NYMEX and COMEX positions must be in Exchange-approved formats. For approved formats refer to CME Group's Web site at: http://www.cmegroup.com/clearing/financial-and-collateral-management/collateral-types-accepted.html.

A clearing member may not accept a letter of credit from a customer/noncustomer which is issued by the customer/noncustomer, an affiliate of the customer/noncustomer, the clearing member, or an affiliate of the clearing member.

Clearing Fees

Clearing, Exchange and Globex[®] fees are assessed per side (the buy and the sell side) on all Exchanges futures and options contracts according to the published schedules then in effect. Clearing members are invoiced on a monthly basis for all fees. The fee schedules of CME, CBOT, NYMEX and COMEX are located on CME Group's Web site at: http://www.cmegroup.com/company/clearing-fees/index.html.

Proprietary trading activity of clearing members with shares and related Rule 106.I. members must conform to CME Group member fee policies. Refer to Exhibit K. A Proprietary Trading Attestation indicating if proprietary trading activity is conducted by the clearing member with shares applicant and, if so, that it conforms to CME Group fee policies, must be executed and submitted with the clearing membership application. Refer to Exhibit L. A Proprietary Trading Attestation is included in the Application for Clearing.

The Exchange Fee System (EFS) provides the clearing member with online transactional viewing and an adjustment facility for clearing fees. Clearing firms have the ability to reallocate current month trades, exercises, assignments, and deliveries by account on a daily basis and resubmit the transactions through the Exchange Fee Systems. Clearing firms are able to make intra-month and inter-month adjustments that will automatically be reprocessed. Only inter-month transactions appear separately on the clearing firm's month-end statement. A clearing firm may make adjustments to its calculated fees up to two months after the fee month ends.

Clearing members are required to complete, sign and submit an Authorization Agreement for Pre-Authorized Payments for clearing and non-clearing charges (i.e. telecom, floor space fees, etc.) to Sherry Labanco, Accounting, at (312) 338-2642 or at <u>Sherry.Labanco@cmegroup.com</u> and *Accounts Receivable. (A voided check will also need to be submitted.) Refer to Exhibit M (One form for futures and options and one form for OTC). The agreement must be signed by an authorized senior officer of the clearing member.

For more information on clearing fees or Exchange Fee Systems, contact EFSAdmin@cmegroup.com or the Fee Hotline at (312) 648-5470 or the FRS Department at (312) 930-3230.

Give-Up Payment System ("GPS")

The Give-Up Payment System ("GPS") is a billing system for give-up business that automatically transfers funds on a monthly basis between executing and carrying firms using the Harris Bank ACH System. Use of GPS at the Clearing House is <u>mandatory for those entities conducting give-up business</u>.

Clearing members who will clear CME, CBOT, NYMEX or COMEX products are required to complete, sign and submit a Clearing Member Agreement and Participation Form (including a voided check), along with an IRS W-9 Form (or W-8BEN for non-U.S. entities), to the Clearing House before executing trades. Refer to Exhibit N.

In addition, an Online System Access Request Form and CME Firm Definition Request Form must be completed, signed, and submitted to the Customer Support Desk. The Online System Access Request Form must be completed for each individual that will maintain the system at the clearing member. Refer to Exhibit O. These forms allow the users the ability to set rates, change accounts, and add new agreements online as well as transmit and receive data. The completed forms should be faxed to the CME Group Clearing Services at (312) 207-2525 or ccs@cmegroup.com.

For further information concerning GPS, please contact: CME Group Clearing Services at (312) 207-2525 or ccs@cmegroup.com.

Brokerage Payment System ("BPS")

CME Group's Brokerage Payment System ("BPS") is a web based application that facilitates brokerage payments to filling brokers by member firms by automatically debiting the member firms' bank accounts and crediting the brokers' bank accounts. This system eliminates the costly labor-intensive task of preparing and distributing checks to brokers each month, and assures timely brokerage payments. Use of BPS at CME, CBOT, NYMEX and COMEX is mandatory if the firm has floor brokers/traders.

Clearing members who will clear CME, CBOT, NYMEX or COMEX products are required to complete, sign and submit a Brokerage Payment System Clearing Member Participation Form (including voided check), along with an IRS W-9 Form (or W-8BEN for non-U.S. entities), to the Clearing House. Refer to Exhibit P. The agreement and applicable IRS Form must be signed by an authorized senior officer of the clearing member.

Finally, to utilize BPS, all brokers that fill orders for a clearing member must have a Brokerage Payment System Broker Agreement for NYMEX and COMEX brokers (including a voided check) or a Brokerage Payment System Floor Broker Agreement for CME and CBOT brokers, along with an IRS W-9 Form (or W-8BEN for non-U.S. entities), on file with the Shareholder Relations and Membership Services Department. Refer to Exhibit Q for CME and CBOT brokers and Exhibit R for NYMEX and COMEX brokers.

If the clearing member firm conducts 100% of its trading through Globex-API, this form is not required (i.e., this includes if the firm is solely an OTC Clearing Member applicant). However, if the clearing member conducts trading through ClearPort and its brokers have elected to be compensated through BPS, this form is required. For further information concerning BPS, please contact:

- Farris Oweimrin, Manager, Clearing House/Risk Management
 Phone: (312) 648-4780
 e-mail: Farris.Oweimrin@cmegroup.com
- Jule Mondschein, Supervisor, Shareholder Relations & Membership Services, Phone: (312) 435-3485 e-mail: <u>Julie.Mondschein@cmegroup.com</u>

Other Shareholder Relations and Membership Services Department Forms

Clearing members who will clear CME, CBOT, NYMEX or COMEX products are required to execute a Certificate with Respect to Corporate Resolutions (Refer to Exhibit G), a Designated Spokesperson Acknowledgement (Refer to Exhibit S) and IRS W-9 Form (in addition to the IRS W-9 Form executed in conjunction with the GPS and BPS agreements).

The Certificate with Respect to Corporate Resolutions designates an individual who is authorized to execute documents on behalf of the clearing member for membership purchases, sales, transfers, and assignments as well as other documents that may be required by the Shareholder Relations and Membership Services Department.

The Designated Spokesperson Acknowledgement designates an individual at the clearing member who the Shareholder Relations and Membership Services Department may contact if it has questions pertaining to the clearing member's memberships, shares or qualified traders.

An original IRS W-9 Form is required from all clearing members with shares by ComputerShare, the transfer agent for all CME Group Class A shares.

CME Globex[®]

In 1992, CME launched CME Globex[®] ("Globex"), an innovative electronic trading platform for after-hours trading of CME products. Today, Globex offers customers around the world the capability to trade CME, CBOT, NYMEX and COMEX key foreign exchange, equity, interest rate, metal, energy and commodity products 23 hours a day, five days a week. Globex provides fast, flexible, and reliable access to market information, order entry and order management.

Clearing members have direct access to Globex for entry of their own orders and customer orders. In addition, clearing members may authorize Globex access for customers to directly enter their orders. For customers for whom the clearing member has authorized access, the clearing member must:

- Guarantee and assume full responsibility for all activity through the terminal;
- Assist the Exchange in any investigation into potential violations of Exchange rules or the Commodity Exchange Act ("CEA"); and
- Suspend or terminate the customer's Globex access if the Exchange determines that the actions of the customer threaten the integrity or liquidity of any contract or violate any rules of the Exchange or the CEA, or if a customer fails to cooperate in an investigation.

Access to Globex is available through Exchange provided trading software as well as software designed by brokerage firms and independent software vendors (ISVs). Globex Trader[®] is CME Group's proprietary front-end application for trading on Globex and provides order execution and market data capabilities for Globex markets only. It has the capability to connect to Globex using either the Internet or a direct data connection.

FCMs, Introducing Brokers and ISVs also offer customers trading applications that are enabled for trading Globex products and provide connectivity through a number of different means, including the Internet, through the vendor's private network or data center, or via direct connections from the customer to the Exchange.

On the Exchange trading floor, traders can access Globex products through the GALAX-C[™] electronic handheld trading system provided by CME Group. In addition, third-party handheld solutions are available from a number of vendors for trading applicable CME, CBOT, NYMEX and COMEX products on the Exchange trading floor.

Additional information on accessing Globex is available on the Web site at http://www.cmegroup.com/globex/introduction/.

For further information on Globex, please contact Globex Control Center (312) 456-2391 or in Europe at 44-20-7623-4708 or e-mail at gcc@cmegroup.com.

Clearing Membership Contact Listing and Resource Guide

Contact Listing

Kim Taylor	President Clearing House	(312) 930-3156	Kim.Taylor@cmegroup.com
Tim Doar	Managing Director, Chief Risk Officer	(312) 930-3162	Tim.Doar@cmegroup.com
Anne Bagan	Managing Director, FRS Dept	(312) 930-3140	Anne.Bagan@cmegroup.com
Audit Department			
Debbie Kokal	Executive Director, FRS Dept	(312) 930-3235	Debbie.Kokal@cmegroup.com
Cathy Downs	Senior Director, FRS Dept	(312) 648-3802	Cathleen.Downs@cmegroup.com
Laurie Egan	Director, FRS Dept	(312) 338-2405	Laurie.Egan@cmegroup.com
Kristen Klein	Director, FRS Dept	(312) 930-3236	Kristen.Klein@cmegroup.com
Clearing House			
Dale Michaels	Managing Director, Risk Mgmt	(312) 930-3062	Dale.Michaels@cmegroup.com
Steve Staszak	Executive Director, Operations	(312) 930-3189	Steve.Staszak@cmegroup.com
Michael Kobida	Executive Director, Collateral Services	(312) 454-8961	Michael.Kobida@cmegroup.com
Shareholder Relation	ons and Membership Services		
Bob Krewer	Director	(312) 435-3473	Robert.Krewer@cmegroup.com
Beth Hausoul	Manager	(312) 930-3484	Elizabeth.Hausoul@cmegroup.com
Bridget Sullivan	Manager, New York Memberships	(212) 299-2375	Bridget.Sullivan@cmegroup.com
Jule Mondschein	Supervisor	(312) 435-3485	Jule.Mondschein@cmegroup.com
Joyce Blau	Supervisor, Chicago Memberships	(312) 435-3460	Joyce.Blau@cmegroup.com

Clearing Membership Contact Listing and Resource Guide

Resource Guide

Rule Books and Exchange Manuals

- CFTC Regulations www.access.gpo.gov/nara/cfr/waisidx_03/17cfrv1_03.html
- CME Clearing House Manual of Operations
- CME, CBOT, NYMEX and COMEX Rule Books <u>http://www.cmegroup.com/market-regulation/rulebook/</u>
- NFA Rule Book www.nfa.futures.org

Commodity Manuals

- CME Cross-Margins Guide
- CFTC 1-FR Instruction Manual
- CFTC Financial & Segregation Interpretations 1-14
- CFTC Advisories and Interpretative Letters
- Joint Audit Committee (JAC) Foreign Futures and Options Guide <u>www.wjammer.com/jac/</u>
- Joint Audit Committee (JAC) Margins Handbook

http://wjammer.com/jac/ www.cftc.gov/tm/tmfinseg.htm#finseginterps www.cftc.gov/opa/opaletters.htm de www.wjammer.com/jac/ www.wjammer.com/jac/

Publications

CME Group

- CME Group Inc.'s Annual Report
 <u>http://investor.cmegroup.com/investor-relations/financials.cfm</u>
- The Financial Safeguard System CME Clearing
 <u>http://www.cmegroup.com/clearing/cme-clearing-overview/safeguards.html</u>

Membership

- Benefits of Clearing Membership http://www.cmegroup.com/company/membership/files/BenefitsSummary.pdf
- CME, CBOT, NYMEX and COMEX Clearing Fee Schedules http://www.cmegroup.com/company/clearing-fees/index.html
- Clearing Membership Handbook
 <u>http://www.cmegroup.com/company/membership/files/clearmemberhandbook.pdf</u>

Clearing Membership Contact Listing and Resource Guide

Regulatory

- Audit Information Bulletins (AIBs)
- **CME Clearing House Advisories** http://www.cmegroup.com/tools-information/subscriptions/advisory-subscribe.html www.wjammer.com/jac/
- **JAC Regulatory Updates**
- WinJammer[™] Quick Start Guide

www.wjammer.com

Forms and Formats

Membership

- **Clearing Membership Application** http://www.cmegroup.com/company/membership/files/CMCorpMemberInfo.pdf + http://www.cmegroup.com/company/membership/files/CMECMAgreementWriteable.pdf
- Clearing Member Class A Share Assignment Application • http://www.cmegroup.com/company/membership/files/ClassASharesAssignmentApplication.pdf
- Clearing Member Membership and Class B Share Assignment Application http://www.cmegroup.com/company/membership/files/ClassBShareAssignmentApplication.pdf
- **Corporate and Fund Membership Applications** • http://www.cmegroup.com/company/membership/membership-resources.html
- Individual Membership Application (Short Form and Long Form) • http://www.cmegroup.com/company/membership/membership-resources.html
- Parent Guarantee Forms http://www.cmegroup.com/clearing/audit/audit-department-forms.html
- Shareholder Relations and Membership Services Various Forms http://www.cmegroup.com/company/membership/membership-resources.html

Regulatory

Subordinated Loan Agreements - Sample Formats http://www.cmegroup.com/clearing/audit/audit-department-forms.html

Other CME Group Information

Membership Prices http://www.cmegroup.com/company/membership/membership-pricing.html

Any questions and/or requests for materials can be directed to the Audit Department at (312) 930-3230.

Exhibit A

CME Group

AGENCY AGREEMENT

WHEREAS, ______ ("Member") with offices located at

is a clearing member of Chicago Mercantile Exchange Inc. ("CME"), Chicago Board of Trade, Inc. ("CBOT"), New York Mercantile Exchange, Inc. ("NYMEX"), and/or Commodity Exchange, Inc. ("COMEX"), (collectively, "Exchanges"), as applicable, and such other exchange as may become a member of CME Group Inc. ("CME Group");

WHEREAS, the Member hereby appoints _____

("Agent") as its agent for service of process and other communications in connection with the above-referenced business; and

WHEREAS, the **Agent** accepts such appointment to act as agent for service of process and other communications;

NOW THEREFORE, the parties agree as follows:

- 1. <u>Services</u>. The **Member** appoints the **Agent** as its agent for service of process and other communications in connection with its activities related to clearing membership. The **Agent** shall accept service of process and other communications on behalf of the **Member** and shall transmit such communications to the **Member**. Such communications shall be transmitted to the address set forth above or by electronic or telephonic means.
- 2. <u>Termination of Agreement</u>. This Agency Agreement ("Agreement") may be terminated by agreement of the parties provided that the **Member** first provides to the Exchanges an Agreement appointing an agent for service of process that is acceptable to the Exchange(s).
- <u>No Assignment</u>. This Agreement shall not be assigned by either party without the written consent of Exchange staff.
- 4. <u>Applicable Law</u>. This Agreement shall be governed by and construed in accordance with the laws of the State of ______ (Illinois or New York), United States of America.
- 5. <u>Choice of Forum and Consent to Jurisdiction</u>. Each party consents to the personal jurisdiction of the courts (check one):
 - of Illinois and the United States District Court for the Northern District of Illinois over any action at law, suit in equity, or judicial proceeding under or which may otherwise arise out of the **Member** activities as a clearing member or this Agreement and agrees not to contest venue for any such proceeding in Cook County, State of Illinois. The **Member** agrees that any action at law, suit in equity, or judicial proceeding under or which may otherwise arise out of the **Member**'s activities as a

May 2012

clearing member or this Agreement shall be instituted by the **Member** only in the Courts of the State of Illinois or the United States District Court for the Northern District of Illinois.

- New York and the United States District Court for the Southern District of New York over any action at law, suit in equity, or judicial proceeding under or which may otherwise arise out of the **Member**'s activities as a clearing member or this Agreement and agrees not to contest venue for any such proceeding in Kings County, State of New York. The **Member** agrees that any action at law, suit in equity, or judicial proceeding under or which may otherwise arise out of the **Member**'s activities as a clearing member or this Agreement shall be instituted by the **Member** only in the Courts of the State of New York or the United States District Court for the Southern District of New York
- Severability. If any provision of this Agreement is held by any Court of competent jurisdiction to be invalid, illegal or unenforceable for any reason, the remaining provisions of this Agreement shall not be affected and this Agreement shall be construed and enforced as if this Agreement did not contain the provision which is held to be invalid, illegal, or unenforceable.
- 7. <u>Heirs, Successors, and Assigns</u>. This Agreement shall be binding on and shall inure to the benefit of the heirs, executors, administrators, successors, and assigns of the parties. Nothing in this paragraph shall be construed as a consent by either party to any assignment of this Agreement except as provided in Paragraph 3 of this Agreement.
- 8. <u>Notices</u>. Except as provided in Paragraph 1, all notices or communications required by or given under this Agreement shall be deemed given as of the date of receipt or, if earlier, as of the date five days after such notices or communications are deposited in the United States mail, airmail postage prepaid, or in the mails of any other country, airmail postage prepaid, or delivered to any generally recognized international air carrier.

All notices to the Agent shall be addressed as follows:

All notices to the **Member** shall be addressed to the address set forth at the beginning of this Agreement.

Executed on	, 20, at		
(City)	(State, Province, etc.)	(Country)	
(Signature)			
(Printed Name)			
(Title)			
Approved and acce	epted by the Agent on	, 20,	
(City)	(State, Province, etc.)		(Country)
AGENT			
By: (Signature)			
(Printed Name)			
(Title)			

Exhibit B

CME Group

CLEARING MEMBER MEMBERSHIP ASSIGNMENT AGREEMENT

Assignor-Membership Owner_____

Assignee-Clearing Member

Assigned Membership(s)((Division and Number)_____

Assigned Class B Share in CME Group Inc. (for CME Assignments only)

Does Assignor-Owner have an acceptable proprietary interest in Assignee?

Outline Details

The Assignor hereby agrees to assign the Assigned Membership and coupled Class B share in CME Group Inc. for CME, IMM, IOM or GEM Memberships ("Membership(s)") to the Assignee pursuant to Exchange Rule 902. The Assignor and Assignee hereby acknowledge they have read and understand all provisions within Exchange Rule 902.

Upon default of Assignee in meeting its obligations to CME Group Inc. or its subsidiaries or upon the Clearing House Risk Committee's determination that the Assignee's financial position jeopardizes the financial integrity of the Exchange, CME Group Inc. may direct the sale of any or all of the Assignee's Membership(s). The proceeds from the sale of the Membership(s) shall be used to satisfy Rule 110 obligations and any obligations resulting from the Assignee's default as provided in Exchange rules including, but not limited to, Exchange Rule 913.

Assignee and Assignor consent to the exclusive jurisdiction of any federal or state court in Chicago, Illinois with respect to any action between Assignee, Assignor and/or CME Group Inc. or its subsidiaries arising from this Assignment Agreement and hereby waive any right to transfer the venue of such litigation. Assignee and Assignor agree that this Agreement shall be governed by and construed in all respects by the laws of the State of Illinois, without giving effect to principles of conflict of law.

Assignor-Owner	Assignee-Clearing Member
Name (Printed)	Name (Printed)
Title	Title
Dated:	Dated:

CME Group

CLEARING MEMBER CLASS A SHARES ASSIGNMENT AGREEMENT

Assignor-Owner

Assignee-Clearing Member

Assigned Class A Shares in CME Group Inc.

Does Assignor-Owner have an acceptable proprietary interest in Assignee?

Outline Details

The Assignor hereby agrees to assign the Assigned Class A Shares to the Assignee pursuant to Rule 902. The Assignor and Assignee hereby acknowledge they have read and understand all provisions within Exchange Rule 902.

Upon default of Assignee in meeting its obligations to CME Group Inc. or its subsidiaries or upon the Clearing House Risk Committee's determination that the Assignee's financial position jeopardizes the financial integrity of the Exchange, CME Group Inc. may direct the sale of any or all of the Assignee's Assigned Class A Shares. The proceeds from the sale of the Assigned Class A Shares shall be used to satisfy Rule 110 obligations and any obligations resulting from the Assignee's default as provided in Exchange rules including, but not limited to, Rule 913.

Assignee and Assignor consent to the exclusive jurisdiction of any federal or state court in Chicago, Illinois with respect to any action between Assignee, Assignor and/or CME Group Inc. or its subsidiaries arising from this Assignment Agreement and hereby waive any right to transfer the venue of such litigation. Assignee and Assignor agree that this Agreement shall be governed by and construed in all respects by the laws of the State of Illinois, without giving effect to principles of conflict of law.

Assignor-Owner	Assignee-Clearing Member
Name (Printed)	Name (Printed)
Title	Title
Dated:	Dated:

Exhibit C

.



Acknowledgment of Rule 110 and Indemnification of Transfer

	hereby agrees
(Clearing	Member)
that the transfer of the (divisi	membership interest registered in the name of on)
	to
(transferor)	(transferee)

pursuant to Rule 105 ("Application for Membership") and Rule 106 ("Transfers, Security Transactions, and Authorizations to Transfer or Sell") does not extinguish any Rule 110 ("Claims Against Member, Application of Proceeds") claims that have been or may be filed against the membership interest being transferred.

Furthermore, in addition to any claims which may arise from being the qualifying

clearing member of the transferor,

(clearing member)

agrees to pay all such valid Rule 110 claims up to the value of this membership interest on the date of this transfer and to indemnify and hold harmless the Exchange from any claims, demands, actions, liabilities or losses, including costs and attorney fees, arising or resulting from or incurred as a result of the waiver of the posting period for this membership transfer.

Authorized Representative of Clearing Member (please print)

Signature

Date

Exhibit D



USD SETTLEMENT AND CUSTODY ACCOUNT LISTING AND DEBIT AUTHORIZATION

Date _____

Please indicate Firm's Settlement Bank Account Number(s):

SETTLEMENT BANK	CUSTOMER SEGREGATED ACCOUNT	NON- SEGREGATED ACCOUNT	CUSTOMER SEQUESTERED ACCOUNT	GUARANTY FUND DEPOSIT
Bank of America				
Bank of New York Mellon				
Brown Brothers Harriman & Co.				• • • •
BMO Harris Bank, NA				
JP Morgan Chase				
Fifth Third Bank				

CME is authorized to unilaterally debit any of the accounts listed above in accordance with CME rules, policies and procedures and in amounts solely determined by CME.

Delivery Instructions for Firms to Deliver Treasuries and Agencies to CME:

CUSTODY BANK FOR AGENCIES AND TREASURIES	CUSTOMER SEGREGATED ACCOUNT	HOUSE NON- SEGREGATED ACCOUNT	CUSTOMER SEQUESTERED ACCOUNT	SECURITY DEPOSIT
Bank of New York Mellon	CEC	СХН	CSC	N/A
Brown Brothers Harriman & Co.	2498269	2498251	2490159	N/A
BMO Harris Bank, NA	1012009264	1012009256	1013015158	N/A
BMO Harris Bank, NA (CDS)	N/A	N/A	N/A	1013012278
BMO Harris Bank, NA (IRS)	N/A	N/A	N/A	1013012267
JP Morgan Chase	G13438	G13439	G12316	G13466
Fifth Third Bank	23230059341520	23230059341538	N/A	N/A

(Qualifying Clearing Member)

(Signature)

(Printed Name)

(Title)



IRS FOREIGN CURRENCY SETTLEMENT AND CUSTODY ACCOUNT LISTING AND DEBIT AUTHORIZATION

Date _____

CURRENCY	rm's Settlement Bank Acco SETTLEMENT BANK (CIRCLE ONE)	NON-SEGREGATED ACCOUNT	CUSTOMER CLEARED SWAPS ACCOUNT (COTC)
AUD	Brown Brothers Harriman & Co. BMO Harris Bank, NA JP Morgan Chase		
GBP	Brown Brothers Harriman & Co. BMO Harris Bank, NA JP Morgan Chase		
CAD	Brown Brothers Harriman & Co. BMO Harris Bank, NA JP Morgan Chase		
EUR	Brown Brothers Harriman & Co. BMO Harris Bank, NA JP Morgan Chase		
JPY	Brown Brothers Harriman & Co. BMO Harris Bank, NA JP Morgan Chase		
CHF	Brown Brothers Harriman & Co. BMO Harris Bank, NA JP Morgan Chase		

CME is authorized to unilaterally debit any of the accounts listed above in accordance with CME rules, policies and procedures and in amounts solely determined by CME

(Qualifying Clearing Member)

(Signature)

(Printed Name)

Exhibit E



A CME/Chicago Board of Trade/NYMEX Company

FULL GUARANTEE

GUARANTEE AGREEMENT

In consideration of Chicago Mercantile Exchange Inc. ("CME"), Chicago Board of Trade, Inc. ("CBOT"), New York Mercantile Exchange, Inc. ("NYMEX"), and Commodity Exchange, Inc. ("COMEX") (collectively, "Exchanges"), as applicable, accepting/retaining (Clearing Member) as a clearing member, (Guarantor), which is an owner or part owner of Clearing

Member, hereby guarantees to Exchanges the due and punctual performance of all obligations to Exchanges arising out of accounts cleared by Clearing Member that are:

- 1. non-customer accounts, including proprietary accounts as defined by Commodity Futures Trading Commission (CFTC) Regulation 1.3(y); and
- accounts carried by another futures commission merchant if such accounts would be considered non-customer accounts, including proprietary accounts as defined by CFTC Regulation 1.3(y), of Clearing Member, if carried directly by Clearing Member.

Notwithstanding anything herein to the contrary, this guarantee shall not apply to any obligations of Clearing Member to pay an assessment to CME pursuant to Rule 802.B., nor shall it apply to any obligations arising out of non-customer accounts if such obligations arose solely because Exchanges took margin from such non-customer accounts and applied it to a default of a customer account.

Guarantor unconditionally guarantees and promises payment of all indebtedness which Clearing Member may now or in the future owe with respect to obligations covered by this guarantee including, but not limited to, the posting and payment of margins and premiums pursuant to Exchange Rules. Exchanges will attempt to notify Guarantor by telephone of any default by Clearing Member in the performance of an obligation covered by this guarantee, and will thereafter confirm such notice in writing, but the liability of Guarantor to Exchanges pursuant to this agreement shall become due and payable immediately upon any such default by Clearing Member.

Guarantor's liability may be enforced without notice to Guarantor and without first proceeding against Clearing Member or resorting to any collateral, security or other guarantors or obligors, if any, or pursuing any other remedy. Any collateral, security or obligations of any other guarantors or obligors, if any, may be sold, released, surrendered, exchanged, settled, compromised, waived, subordinated or modified, in each case without consideration and on any terms or conditions, without notice to or further assent from Guarantor. Guarantor's liability is several and independent of any other guarantees in effect with respect to any part of the above obligations and may be enforced regardless of the existence of any other guarantees.

Notwithstanding any other provision in this agreement, this guarantee shall continue in effect or shall be reinstated if at any time payment or other performance, or any part thereof, by Clearing Member to Exchanges with respect to any of the above obligations is rescinded, or must otherwise be repaid by Exchanges as a result of bankruptcy or reorganization of Clearing Member.

November 2008

No payment or other performance by Guarantor shall entitle Guarantor, by subrogation or otherwise, to any right against Clearing Member, including any payment by Clearing Member or out of property of Clearing Member, except after the full performance, payment and discharge of all of the above obligations. All remedies, rights, powers and privileges granted to Exchanges pursuant to this agreement are cumulative and not alternative. The exercise of any or all such rights by Exchanges shall not reduce, limit, impair, discharge, terminate or otherwise affect the liability of Guarantor. No failure or delay by Exchanges in exercising any remedy, right, power or privilege pursuant to this agreement shall operate as a waiver, and any such remedy, right, power, or privilege may be exercised by Exchanges at any time. No partial exercise of any such rights shall preclude further exercise or the exercise of any other remedy, right, power or privilege.

No modification of this guarantee or waiver shall be valid unless in writing and signed by Exchanges and then only to the extent specifically set forth in such writing. No notice or demand by Exchanges upon Guarantor or any other guarantor of the above obligations shall preclude Exchanges from taking further action without notice or demand.

This guarantee shall remain in full force until Exchanges receives and accepts written notification of termination. Such acceptance of termination shall not be unreasonably withheld. Guarantor acknowledges that this guarantee applies to all obligations covered by this guarantee arising prior to Exchanges' acceptance of such termination.

This guarantee shall bind the heirs, personal representatives, successors and assigns of Guarantor and shall inure to the benefit of Exchanges, its successors and assigns. Guarantor hereby waives notice of any such assignment by Exchanges.

This guarantee shall be governed by, and construed in accordance with, the laws of the State of Illinois. Any action or litigation of any kind initiated by Guarantor, Clearing Member or Exchanges in connection with this guarantee shall be adjudicated in the appropriate courts located in Chicago, Illinois. Guarantor, Clearing Member and Exchanges hereby consent to the jurisdiction of such courts and to service of process by any means authorized by Illinois or federal law, and hereby waive the right to transfer the venue of any such litigation.

Name of Guarantor:

Date: _____

Signed:		

Printed Name:	
---------------	--

If Guarantor is a Firm:

By: _____

Title:

Exhibit F

1



A CME/Chicago Board of Trade/NYMEX Company

PARTIAL GUARANTEE

GUARANTEE AGREEMENT

In consideration of Chicago Mercantile Exchange Inc. ("CME"), Chicago Board of Trade, Inc. ("CBOT'), New York Mercantile Exchange, Inc. ("NYMEX"), and Commodity Exchange, Inc. ('COMEX') (collectively, "Exchanges"), as applicable, accepting/retaining (Clearing Member) as a clearing member, (Guarantor), which is an owner or part owner of Clearing

Member, hereby guarantees to Exchanges the due and punctual performance of all obligations to Exchanges arising out of accounts cleared by Clearing Member that are:

- 1. non-customer accounts, including proprietary accounts as defined by Commodity Futures Trading Commission (CFTC) Regulation 1.3(y); and
- accounts carried by another futures commission merchant if such accounts would be considered non-customer accounts, including proprietary accounts as defined by CFTC Regulation 1.3(y), of Clearing Member, if carried directly by Clearing Member.

Guarantor's liability under this agreement is limited to _____ percent of the above obligations.

Notwithstanding anything herein to the contrary, this guarantee shall not apply to any obligations of Clearing Member to pay an assessment to CME pursuant to Rule 802.B., nor shall it apply to any obligations arising out of non-customer accounts if such obligations arose solely because Exchanges took margin from such non-customer accounts and applied it to a default of a customer account.

Guarantor unconditionally guarantees and promises payment of all indebtedness which Clearing Member may now or in the future owe with respect to obligations covered by this guarantee including, but not limited to, the posting and payment of margins and premiums pursuant to Exchange Rules. Exchanges will attempt to notify Guarantor by telephone of any default by Clearing Member in the performance of an obligation covered by this guarantee, and will thereafter confirm such notice in writing, but the liability of Guarantor to Exchanges pursuant to this agreement shall become due and payable immediately upon any such default by Clearing Member.

Guarantor's liability may be enforced without notice to Guarantor and without first proceeding against Clearing Member or resorting to any collateral, security or other guarantors or obligors, if any, or pursuing any other remedy. Any collateral, security or obligations of any other guarantors or obligors, if any, may be sold, released, surrendered, exchanged, settled, compromised, waived, subordinated or modified, in each case without consideration and on any terms or conditions, without notice to or further assent from Guarantor. Guarantor's liability is several and independent of any other guarantees in effect with respect to any part of the above obligations and may be enforced regardless of the existence of any other guarantees.

Notwithstanding any other provision in this agreement, this guarantee shall continue in effect or shall be reinstated if at any time payment or other performance, or any part thereof, by

Clearing Member to Exchanges with respect to any of the above obligations is rescinded, or must otherwise be repaid by Exchanges as a result of bankruptcy or reorganization of Clearing Member.

No payment or other performance by Guarantor shall entitle Guarantor, by subrogation or otherwise, to any right against Clearing Member, including any payment by Clearing Member or out of property of Clearing Member, except after the full performance, payment and discharge of all of the above obligations. All remedies, rights, powers and privileges granted to Exchanges pursuant to this agreement are cumulative and not alternative. The exercise of any or all such rights by Exchanges shall not reduce, limit, impair, discharge, terminate or otherwise affect the liability of Guarantor. No failure or delay by Exchanges in exercising any remedy, right, power or privilege pursuant to this agreement shall operate as a waiver, and any such remedy, right, power, or privilege may be exercised by Exchanges at any time. No partial exercise of any such rights shall preclude further exercise or the exercise of any other remedy, right, power or privilege.

No modification of this guarantee or waiver shall be valid unless in writing and signed by Exchanges and then only to the extent specifically set forth in such writing. No notice or demand by Exchanges upon Guarantor or any other guarantor of the above obligations shall preclude Exchanges from taking further action without notice or demand.

This guarantee shall remain in full force until Exchanges receives and accepts written notification of termination. Such acceptance of termination shall not be unreasonably withheld. Guarantor acknowledges that this guarantee applies to all obligations covered by this guarantee arising prior to Exchanges' acceptance of such termination.

This guarantee shall bind the heirs, personal representatives, successors and assigns of Guarantor and shall inure to the benefit of Exchanges, its successors and assigns. Guarantor hereby waives notice of any such assignment by Exchanges.

This guarantee shall be governed by, and construed in accordance with, the laws of the State of Illinois. Any action or litigation of any kind initiated by Guarantor, Clearing Member or Exchanges in connection with this guarantee shall be adjudicated in the appropriate courts located in Chicago, Illinois. Guarantor, Clearing Member and Exchanges hereby consent to the jurisdiction of such courts and to service of process by any means authorized by Illinois or federal law, and hereby waive the right to transfer the venue of any such litigation.

Name of Guarantor:

Date: _____

Signed: _			

Printed Name:_____

If Guarantor is a Firm:

Title:

Exhibit G



CERTIFICATE WITH RESPECT TO CORPORATE RESOULTIONS

The undersigned,		а,
	(Name of Certifying Officer or Manager N	a, Member of Clearing Member) (Title)
of _	(Full Legal Name of Clearing Member)	a Corporation/Limited Liability Company
	ele one) organized and existing under the la s hereby certify:	aws of the State of,
1.	That in his/her above capacity as	, he/she has access to (Title)
	the corporate records/operating agreen	nent of; (Full Legal Name of Clearing Member)
2.	That at meeting of the Board of Director	rs/Members of, (Full Legal Name of Clearing Member)
	at which at quorum of the Board/Manag	on, (State)(Date) ging Members was/were present and acting, the following and unanimously adopted, and that such resolution is still

That on the date hereof, the officer(s)/member(s) listed below is (are) duly elected and gualified to 3. act in the office appearing next to his/her name and that the signature appearing next to his/her name is that of such officer(s)/member(s).

Name, Office and Signature of Officers/Members Authorized to act on behalf of Membership Matters:

Name (please print)	Title	Signature

Please attach a continuation sheet if necessary.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of ____this _____ day of _____,

(Name of Certifying Officer or Managing Member of Clearing Member)

20____.

Name of Certifying Officer or Managing Member of Clearing Member

Print Name

Title

http://www.cmegroup.com/company/membership/files/AuthorizedSignorForm.pdf

Exhibit H



A CME/Chicago Board of Trade/NYMEX Company

CROSS-GUARANTEE AGREEMENT

and ______ (each hereinafter referred to individually as a "Guaranteeing Member" and collectively as "Guaranteeing Members"), which share common ownership, control or profits as set forth in the Exchanges' Rule 901.G., each Guaranteeing Member hereby:

- 1. Unconditionally guarantees and promises payment of any and all indebtedness or other obligations which the other Guaranteeing Member may now or hereafter owe to the Exchanges. The Exchanges will attempt to notify the Guaranteeing Member by telephone of any default by the other Guaranteeing Member and will thereafter confirm such notice in writing; however, the liability of the Guaranteeing Member to the Exchanges for such default pursuant to this Cross-Guarantee Agreement shall become due and payable immediately upon such default;
- 2. Agrees that such Guaranteeing Member's liability hereunder may be enforced without notice to it and without first proceeding against the defaulting Guaranteeing Member or resorting to any collateral, security or other guarantors or obligors, if any, or pursuing any other remedy. Any collateral, security or obligations of any other guarantors or obligors, if any, may be sold, released, surrendered, exchanged, settled, compromised, waived, subordinated or modified, in each case without consideration and on any terms and conditions, without notice to or further assent from either Guaranteeing Member. Each Guaranteeing Member's liability is several and independent of any other guarantees in effect with respect to any part of the above obligations and may be enforced regardless of the existence of any other guarantees;
- 3. Agrees that notwithstanding any other provision in this Cross-Guarantee Agreement, this guarantee shall continue in effect or shall be reinstated if any time, payment or other performance, or any part thereof, by either Guaranteeing Member to the Exchanges with respect to any of the above obligations is rescinded, or must otherwise be repaid by the Exchanges as result of bankruptcy or reorganization of either Guaranteeing Member;
- 4. Agrees that no payment or other performance by either Guaranteeing Member shall entitle it, by subrogation or otherwise, to any right against the defaulting Guaranteeing Member, including any payment by the defaulting Guaranteeing Member or out of property of the defaulting Guaranteeing Member, except after the full performance, payment and discharge of all of the above obligations. All

remedies, rights, powers and privileges granted to the Exchanges pursuant to this Cross-Guarantee Agreement are cumulative and not alternative. The exercise of any or all such rights by the Exchanges shall not reduce, limit, impair, discharge, terminate or otherwise affect the liability of either Guaranteeing Member. No failure or delay by the Exchanges in exercising any remedy, right, power or privilege pursuant to this Cross Guarantee Agreement shall operate as waiver thereof and any such remedy, right, power or privilege may be exercised by the Exchanges at any time. No partial exercise of any such rights shall preclude further exercise or the exercise of any other remedy, right, power or privilege by the Exchanges;

- 5. Agrees that no modification of this Cross-Guarantee Agreement or waiver of any portion hereof shall be valid unless in writing and signed by the Exchanges and then only to the extent specifically set forth in such writing. No notice or demand by the Exchanges upon either Guaranteeing Member or any other guarantor of the above obligations shall preclude the Exchanges from taking further action without notice or demand;
- Agrees that this Cross-Guarantee Agreement is binding upon its respective heirs, personal representatives, successors and assigns, and shall inure to the benefit of and be enforceable by the Exchanges and its transferees, successors and assigns. Each Guaranteeing Member hereby waives notice of any such assignment by the Exchanges;
- Agrees that this Cross-Guarantee Agreement and all rights, obligations and liabilities arising hereunder shall be governed by the laws of the State of Illinois in all respects, including but not limited to matters of construction, validity and performance;
- 8. Agrees that any action or litigation of any kind whatsoever initiated by the Guaranteeing Members or the Exchanges in connection with this Cross-Guarantee Agreement, shall be adjudicated in a court of competent jurisdiction located in Chicago, Illinois. The Guaranteeing Members and the Exchanges hereby consent to the jurisdiction of such courts and to service of process by any means authorized by Illinois or Federal law and hereby waive the right to transfer the venue of any such litigation or action; and
- 9. Agrees that if (1) one of the Guaranteeing Members ceases to be a clearing member of the Exchanges or (2) the Guaranteeing Members provide the Exchanges with written notice that they no longer share common ownership, control or profits as set forth in Rule 901.G., this Cross-Guarantee Agreement shall remain in effect until the Clearing House Risk Committee of the CME Clearing House determines that any and all indebtedness and other obligations owing to the Exchanges from each Guaranteeing Member have been satisfied in full.

(Guaranteeing Member)

By:

(Signature of General Partner or Authorized Officer)

By:

⁽Guaranteeing Member)

⁽Signature of General Partner or Authorized Officer)

(Printed Name / Title)

(Date)

(Printed Name / Title)

(Date)

December 2008

Exhibit I

CME Group

	e of Obligations to Iercantile Exchange Inc.	Please Check the Appropriate Box: [] Reorganization [] Replacement	
-		_ will be replacing as a (Current Clearing Member)	
(New clearing me	mber of	("Exchange") effective (Date)	
		agrees to unconditionally guarantee and assume all obligations	
of	v Clearing Member)	vith Chicago Mercantile Exchange Inc	
(Cur	rrent Clearing Member)	vith Chicago Mercantile Exchange Inc.	
This include	es, but is not limited to, the follow	ving:	
1.	Unresolved trades (outtrad	es),	
2.	Unresolved complaints,	000,900,800 	
3.	Clearing fee liabilities arisir	ng from past transactions,	
4.	Delivery obligations,		
5.	Valid claims in accordance	with Rule 110 and 913, and	
6.	Any other outstanding oblig	ation with Chicago Mercantile Exchange Inc.	
	also agrees th	nat it will assume responsibility for all agreements entered into	
(New Cle	earing Member)		
by	with	n Chicago Mercantile Exchange Inc. This includes, but is not	
limited to, th	ne following:		
1.	Assignment of membership	os and/or shares	
2.	Qualification agreement		
3.	Authorized signatures		
4.	Parent guarantees pursuar	nt to Rule 901 L	
5.	Employee transfers pursua		
6.		ired by Chicago Mercantile Exchange Inc. Rules	
Furthermore	9,	agrees to indemnify and hold harmless Chicago Mercantile	
liabilities or waiver, if an	losses, including costs and atto ny, of the posting period for the	officers and employees from any claims, demands, actions, rney fees, arising or resulting from or incurred as a result of the clearing member change indicated above and for the shares nember change indicated above.	
Signed and	executed by a duly authorized r	epresentative of:	
(Current Cleari	ing Member)	(New Clearing Member)	
By:		Bv.	
(Signature of C	General Partner or Authorized Officer)	By: (Signature of General Partner or Authorized Officer)	
	nennes mennennen het sin stateste en maner i kan som met sokt stateste Dataste till den att stateste Stateste s		

(Printed Name / Title)

(Printed Name / Title)

(Date)

(Date)

Exhibit J

CME Group

Guaranty Fund Guarantee of Obligations to Chicago Mercantile Exchange Inc.

In conjunction with the withdrawal of	, a
· · · · · · · · · · · · · · · · · · ·	(Current Clearing Member)
Clearing Member of	("Exchange"), and the approval of
	as a Clearing Member of the Exchange,
(New Clearing Member)	
	agrees to the following:
(New Clearing Member)	
	agrees to pay any valid claims filed
(New Clearing Member)	
pursuant to Rules 110 and 913 in cor	njunction with the withdrawal of
as	a Clearing Member of the Exchange. Such
(Current Clearing Member)	
guarantee is limited to the amount of	's security (Current Clearing Member)
	(Current Clearing Member)
deposit with CME in the amount of \$_	uaranty Fund Requirement at Withdrawal Date)
(Gu	Jaranty Fund Requirement at Withdrawal Date)
agreement is effective on(With	, the date of
(vvit	's withdrawal and will remain in effect until
(Current Clearing Member)	's withdrawal and will remain in effect until
the disposition of all claims filed purs	uant to Rules 110 and 913
This agreement is binding upon	New Clearing Member) and its successors.
() ()	New Clearing Member)
Signed and executed by a duly authorized	representative of
	(New Clearing Member)
(Guaranteeing Clearing Member)	-
By: (Signature of General Partner or Authorized Officer)	
(Signature of General Partner or Authorized Officer)	
(Printed Name / Title)	
-	
(Date)	

Exhibit K



Memorandum

FEE POLICY BULLETIN

TO: Chief Financial Officers Chief Compliance Officers Corporate Members New Firm Approval Contacts Firm EFS Contacts #09-01

- FROM: Audit Department, Clearing House Division
- DATE: June 16, 2009
- SUBJECT: Clearing and Globex® Fees for Member Firm Accounts

CME Group Inc. ("CME Group") sets the fee policies for its four subsidiary exchanges - Chicago Mercantile Exchange Inc. ("CME"), Chicago Board of Trade, Inc. ("CBOT"), New York Mercantile Exchange, Inc. ("NYMEX") and Commodity Exchange, Inc. ("COMEX").

In December 2008, CME Group issued Fee Policy Bulletin ("FPB") #08-02 concerning Clearing and Globex Fees. In response to market participant feedback and concerns, CME Group is issuing this FPB to enunciate CME, CBOT, NYMEX and COMEX member fee eligibility policies and to update and clarify them as needed. These policies, where different from those in effect today, are effective July 1, 2009. This FPB supersedes all previous bulletins discussing fee policy issues for member firm accounts.

The trading activity of member firms must adhere to our policies in order to be granted member fees – equity member or preferential fees as applicable. CME Group has established member firm trading policies to ensure that the trading activity conducted for the member firm account is for the sole benefit of the member firm itself and not the trading activity of individual customers/traders conducted in the name of the firm; i.e. to prevent arcade type trading under the guise of member firm trading and the "selling" of member firm rates. To that end, the financial benefit and risk of the trading activity must be solely of the member firm. Further the member firm may only profit/benefit from the member firm trading activity through the performance of the trade and not from any other source such as a commission or charge for trade execution.

The trading environment and the customer base has evolved and expanded over the years. We have seen a tremendous growth in both clearing and corporate membership for trading groups. These trading groups have their own unique capitalization, ownership structures, trader compensation and trading styles.

This FPB presents both Requirements (Absolutes) and Best Practices for defining when member firm trading activity will be granted member fees. In recognition of the varying trading operations, Best Practices were established to allow member firms to utilize certain business practices (most not allowed in the past) which are generally prohibited. In order to do so, the member firm must clearly demonstrate to CME Group their application of these non-compliant practices is not inconsistent with CME Group's goal of providing member fees for trading activity for the account and sole benefit of the member firm.

1. <u>REQUIREMENTS</u>

1.1 Member Firm Trading Account

In order to obtain member clearing fees, CME Group rules require that the member firm trading account of CME, CBOT, NYMEX and COMEX clearing members¹, CME and CBOT Rule 106.H. trading members, CBOT Rule 106.J. equity members, NYMEX and COMEX Rule 106.J. members², CME and CBOT Rule 106.I. affiliated members, CME and CBOT Rule 106.R. electronic corporate members and CME and CBOT Rule 106.S. family of funds members must be 100% owned by the firm.³

- For CME clearing members the CME trading activity conducted for the account of 100% owned subsidiaries is entitled to equity member clearing fees.
- For CBOT clearing members the CBOT trading activity of 100% owned subsidiaries is <u>not</u> entitled to member clearing fees unless the subsidiary itself qualifies as an Affiliate Member Firm/Affiliate Umbrella Member Firm under CBOT Rule 106.I. That is, CBOT clearing membership fee benefits do not flow down to 100% owned subsidiaries.
- For NYMEX and COMEX clearing members the NYMEX and COMEX trading activity of 100% owned subsidiaries is <u>not</u> entitled to member clearing fees. That is, NYMEX and COMEX clearing membership fee benefits do not flow down to 100% owned subsidiaries. Furthermore, affiliates and subsidiaries of NYMEX and COMEX clearing members must become member firms themselves in order to receive membership benefits.
- For CME and CBOT Rule 106.H./I./S. and CBOT Rule 106.J./R. corporate members to receive member fees, all member firm trading must be conducted within the division of membership held. Member firm trading activity of such corporate members outside the division of membership held will receive non-member customer fees.

¹ For clarity, clearing member includes CME corporate equity member (formerly known as inactive clearing member).

² For clarity, NYMEX and COMEX Rule 106.J. members were previously known as NYMEX and COMEX non-clearing members.

³ For purposes of this FPB, clearing members referenced without a preceding CME, CBOT, NYMEX or COMEX designation, include CME, CBOT, NYMEX and COMEX clearing members.

- For CME Rule 106.R. corporate members to receive member fees, all member firm trading must be conducted in accordance with the Questions & Answers Guide for Electronic Corporate Members under CME Rule 106.R. which may be found on CME's Web site at http://www.cmegroup.com/company/membership/files/ECMQA.pdf.
- Affiliates and subsidiaries of CME and CBOT Rule 106.H./R. and CBOT Rule 106.J. corporate members are <u>not</u> entitled to the membership benefits of the corporate member.
- Affiliates and subsidiaries of NYMEX and COMEX Rule 106.J. members are <u>not</u> entitled to the membership benefits of the member. Note: A COMEX Option Only Rule 106.J. member is only entitled to member clearing fees on COMEX option contracts.

A member firm trading account is evidenced through:

- The financial benefit and risk shall be solely of the member firm only firm capital is at risk of loss.
- No non-owner traders may make any contributions, loans (including subordinated loans) or payments to the member firm or member firm trading account nor have any capital at risk except for holdbacks as permitted in connection with their trading of the member firm account.
- All contributions by owners of the member firm are subject to risk of loss from any and all trading and business activities of the firm.
- All profits and losses of the member firm account are written off to the income of the member firm and are taxed to the member firm in accordance with IRS regulations.

These accounts must be registered in CME's Exchange Fee System ("EFS") and CBOT's and NYMEX's Combined Fee System ("CFS")⁴ as member firm accounts of the clearing, CME and CBOT Rule 106.H./I./R./S. or CBOT, NYMEX and COMEX Rule 106.J. member as appropriate.

1.1.1 Joint Accounts with Individual Equity/Lessee⁵ Members

A clearing, CME and CBOT Rule 106.H./I./R./S. or CBOT, NYMEX and COMEX Rule 106.J. member may have a joint account with an equity or lessee member and receive preferential fees on contracts under the lowest division of membership held. These accounts must be registered in the Fee System under the joint account owner with the lowest division of membership held. Further the account title field in the Fee System must identify all owners of the joint account.

⁴ For purposes of this FPB, the term "Fee System" will include CME's fee system referred to as EFS and the combined fee system of CBOT and NYMEX referred to as CFS.

⁵ For clarity, lessee includes delegate; CBOT previously defined individuals leasing a membership (lessees) as delegates.

1.2 Member Firm Traders⁶ for Globex Activity

The member firm trading activity must be conducted by traders including operators/administrators of Automated Trading Systems ("ATS") that are:

- Bona-fide IRS Form W-2 ('W-2") employees (or equivalent W-2 of a foreign jurisdiction) of the member firm; or
- Independent contractors and other self-employed individuals of the member firm whose total compensation (that is, all compensation) is reported on an IRS Form 1099-MISC ("1099-MISC") (or equivalent document of a foreign jurisdiction); or
- Independent contractors and other self-employed individuals of clearing, CME and CBOT Rule 106.I. and CBOT, NYMEX and COMEX Rule 106.J. members who maintain at least \$250,000 in holdbacks whose total compensation (that is, all compensation) is reported on a 1099-MISC (or equivalent document of a foreign jurisdiction) and/or on a IRS Form 1099-B ("1099-B"); or
- Owners who maintain at least \$250,000 in bona-fide capital and holdbacks for clearing, CME and CBOT Rule 106.I. and CBOT, NYMEX and COMEX Rule 106.J. members⁷; or
- Bona-fide owners of the firm for CME and CBOT Rule 106.H./R. members; or
- Individual equity members⁸ of CME, CBOT, NYMEX and COMEX trading within their respective exchange and division of membership except for CME Rule 106.R. members. Traders of CME Rule 106.R. members may not own, hold, or have owned or held a membership in any of CME's divisions within the past two years; or
- CME, CBOT, NYMEX and COMEX Rule 106.F. Clearing Member Transfer and CME and CBOT Rule 106.I. Related Party Transfer members; or

⁶ For CBOT clearing members and CBOT Rule 106.I./J. members, the memberships status of the individual entering the trade will impact the level of member fee charged. Please refer to the current CBOT Clearing Fee Schedule at <u>http://www.cmegroup.com/company/clearing-fees/index.html</u>.

⁷ The acceptable bona-fide capital level for owners has been reduced from \$500,000 to \$250,000 effective July 1, 2009. In addition holdbacks will be considered along with any capital investment in maintaining the \$250,000 level. Prior to January 1, 2009, the acceptable bona-fide capital level for owners of CBOT clearing members and CBOT Rule 106.I./J. members was \$200,000. All owners of such CBOT member firms with a bona-fide interest of at least \$200,000 as of December 31, 2008 were grandfathered in at the \$200,000 level. Note that the grandfathering is specific to the individual owners and the particular CBOT member firm and cannot be transferred.

⁸ For clarity, individual members participating in the Clerk for Member Program may not utilize their clerks to enter orders for member firm trading. That is, the Clerk for Member Program does not apply to member firm trading; it is only applicable to the trading of individual members. Such clerks themselves must be qualified traders for member firm trading.

 Registered Commodity Trading Advisors ("CTAs"), exempt CTAs under CFTC Regulations 4.14(a)(4), 4.14(a)(5), 4.14(a)(8)(i)(D) or 4.14(a)(10), and Investment Managers authorized by the Financial Services Authority ("FSA").

All member firm traders must be assigned unique trader IDs, those IDs and the associated member firm trader must be appropriately registered in the Fee System, and all Globex trades (orders) must be identified with the registered ID of the trader executing the trade.

- Clearing, CME and CBOT Rule 106.I./S., CBOT Rule 106.H./J./R. and NYMEX and COMEX Rule 106.J. member firm traders must be further defined as "W-2 Employee", "Commodity Trading Advisor", "Independent Contractor 1099-MISC", "Rule 106.F. Trader", "Owner w/ Acceptable Interest", or for clearing, CME and CBOT Rule 106.I. and CBOT, NYMEX and COMEX Rule 106.J. members as "Trader w/ Acceptable Holdback", or for CBOT clearing and CBOT Rule 106.I./J. as "Member" as applicable.
- Clearing, CME and CBOT Rule 106.I./S., CBOT Rule 106.H./J./R. and NYMEX and COMEX Rule 106.J. member firm traders which are compensated through a W-2 or 1099-MISC for their trading profitability must be registered in EFS as "W-2 Employee" or "Independent Contractor 1099-MISC", as appropriate, even if they are an owner of the firm with less than an acceptable proprietary interest.
- For operators/administrators of an ATS and for the ID under which an ATS submits orders, the "ATS" box on the Fee System registration screen must be checked.

1.2.1 Bona-fide Employees

Bona-fide employees of the member firm are evidenced through:

- Issuance of an W-2, or foreign equivalent, for <u>all</u> compensation (i.e. salary and bonus) to the trader by the member firm;
- Inclusion in the firm's payroll tax records; and
- The trader has no income until the firm pays the trader.

1.2.2 Independent Contractors

1099-MISC independent contractors/self-employed individuals of a member firm may receive member fees when trading a member firm's account.

Except as provided in the following paragraph, the member firm trading activity of independent contractors and other self-employed individuals whose compensation is reported on an IRS Form 1099 which is <u>not</u> a 1099-MISC (e.g. 1099-B) or equivalent document of a foreign jurisdiction will be assessed fees based on the lowest division of membership held by both the firm and the independent contractor/self-employed individual.⁹

⁹ Traders receiving compensation reported on a 1099-B are regarded as "holders" of the positions and, as such, the account would not qualify as a member firm account.

For clearing, CME and CBOT Rule 106.I. and CBOT, NYMEX and COMEX Rule 106.J. members, independent contractors and other self-employed individuals who maintain a holdback of at least \$250,000 may receive their compensation in any manner including a 1099-MISC, 1099-B, or K-1 (if they are an owner as well) for <u>their</u> (not of a team/division) trading activity of the member firm account. Holdbacks are defined to be a trader's share of profits which have not been distributed to the trader and which are held back in an account of the firm. Holdbacks are <u>not</u> a contribution to the firm in the form of a capital contribution, loan, security deposit or other payment. Holdbacks may not exceed the trader's share of net profit/loss in the previous 24 month period. In addition, holdbacks may not be held by the firm for greater than 2 years without being converted to equity capital; that is the trader would need to become an equity owner of the firm for their interest held back greater than 2 years.

If the 1099-B independent contractor/self-employed individual is not an equity, lessee or Rule 106.F. member or does not maintain a holdback of at least \$250,000 as permitted with the member firm and is trading a member firm account, non-member customer fees will apply on trades executed by the individual. These accounts should not be registered in the Fee System as member firm accounts and are not eligible for firm-based incentives or discounts.

1.2.3 Bona-fide Owners

Individual owners are considered to have an acceptable proprietary interest in the member firm as follows:

- Clearing, CME and CBOT Rule 106.I. and CBOT, NYMEX and COMEX Rule 106.J. members \$250,000 in bona-fide capital.
- CME and CBOT Rule 106.H./R. members no specific dollar level; only bona-fide capital interest.

For individual owners, the bona-fide capital interest must be in the form of an equity investment; it cannot take the form of a loan including a subordinated loan. In addition, for clearing, CME and CBOT Rule 106.I. and CBOT, NYMEX and COMEX Rule 106.J. members an individual owner's capital interest as well as any holdbacks may be added together for purposes of meeting the \$250,000 proprietary interest.

Individual owners of member firms who maintain an acceptable proprietary interest in the firm may receive member fees on <u>their</u> trading activity of the member firm's account. Further, individual owners with acceptable proprietary interests who share in the profit split of a team of traders must share in the profits/losses of the overall firm (e.g. customer business and other proprietary trading activities) in order to be considered a bona-fide owner. If such individual owners do not share in the overall firm profits/losses, their share of the profit split from the team of traders must be reported on a W-2 or 1099 MISC in order to receive member fees on the trading activity of the trader team.

Individual owners of member firms who do not maintain an acceptable proprietary interest in the firm are not entitled to receive member fees on their trading activity of the member firm's account unless their trading profitability is reported to them on a W-2 or 1099-MISC or they are on one of the clearing member firm's Rule 106.F. memberships.

Individual owners of member firms with less than an acceptable proprietary interest who trade the member firm account and whose trading profitability is reported on a form other than a W-2

or 1099 MISC (e.g. an IRS Form K-1) are assessed fees based on the lowest division of membership held by the owner and the firm. If such owners are not equity, lessee or Rule 106.F members themselves, non-member customer fees will apply and these accounts should not be registered in the Fee System and are not eligible for firm-based incentives or discounts.

An investing LLC is prohibited from trading and/or having a specific interest in a member firm account eligible for equity member rates unless (1) the investing LLC maintains an investment of an acceptable proprietary interest of bona-fide capital in the member firm for each owner (that is owner, member and/or equity participation member) of the investing LLC and (2) the trading is conducted by and only by individual owners of the investing LLC.¹⁰

1.2.4 Individual Equity/Lessee Members

A member firm account traded by an equity/lessee member who is not a W-2 employee, 1099-MISC independent contractor/self-employed individual, 1099-B independent contractor/selfemployed individual of a clearing, CME and CBOT Rule 106.I. or CBOT, NYMEX and COMEX Rule 106.J. member who maintains at least \$250,000 in holdbacks, or Rule 106.F. member is assessed fees based on the lowest membership status of the firm and the equity/lessee member. These accounts must be registered in the Fee System under the party with the lowest division of membership held. Further the account title field in the Fee System must identify the member firm as the account owner.

1.2.5 Rule 106.F. Clearing Member Transfers

Traders on a clearing member's Rule 106.F. membership may receive their compensation in any manner including a W-2, 1099-MISC, 1099-B, or K-1 for <u>their</u> (not of a team/division) trading activity of the clearing member firm account. All other requirements for member firm trading must be met.

1.3 Member Firm Traders for Open Outcry Activity

1.3.1. CME Open Outcry

The member firm trading of a CME clearing member or CME Rule 106.H./I./S. member is entitled to member clearing fees when an individual owning and holding a membership or the firm's CME Rule 106.F. or CME Rule 106.H./I./S. member executes it on the floor of the exchange in open outcry.

The member firm trading of a CME clearing member or CME Rule 106.H./I./S. member conducted with discretion by a CME Rule 106.D. lessee member on the floor of the Exchange in open outcry will be charged fees based on the lowest membership status of the firm and the CME Rule 106.D. lessee member regardless if the lessee member is a firm W-2 employee or 1099-MISC independent contractor/self-employed individual. The CME Rule 106.D. lessee

¹⁰ There are no restrictions on passive investing LLCs of members firms. Passive investing LLCs do not trade or have a specific interest in a trading account(s) and their return is based on the overall firm's profitability.

member must be registered as an account controller for the clearing or CME Rule 106.H./I./S. member firm account in the Fee System.

1.3.2. CBOT Open Outcry

The member firm trading of a CBOT clearing member or CBOT Rule 106.H./I./J./S. member is entitled to member clearing fees when an equity member or lessee or the firm's CBOT Rule 106.F. or CBOT Rule 106.H./I./J./S. member executes it on the floor of the exchange in open outcry.

1.3.3. NYMEX and COMEX Open Outcry

The member firm trading of a NYMEX and COMEX clearing member or Rule 106.J. member is entitled to member clearing fees when an equity member or lessee executes it on the floor of the exchange in open outcry.

1.4 Member Firm Trader Compensation and Profit Splits

Member firm trading and trader compensation must meet the following requirements:

- Traders cannot be responsible for losses beyond their share of profits earned and maintained in the account which have not yet been distributed to the trader.
- The firm must be allocated both a portion of the profits and losses of the member firm account.
- The profit split on agreements with any trader, including owners acting as traders, may not exceed 80/20 (i.e. 80% to the trader/20% to the firm).
 - For member firm trading conducted by a team of traders, the profit split to the team in total may not exceed 80/20 (i.e. 80% to the trader team/20% to the firm).
 - Further the 80% limit on profit splits to a trader or team of traders includes any individual who has a specific interest in its profitability including those involved in the supervision/training of the account(s) and/or trader(s).
- Non-owner traders cannot leave their share of profits in the firm for greater than two years without becoming an equity owner.
 - Non-owner trader's share of capital in an account may not exceed the trader's share of net profit/loss in the previous 24 month period.
 - If a trader leaves their share of any profits in the account for greater than two years, they must become an equity owner.

- The firm is prohibited from:
 - Setting minimum account balances for its traders.
 - Charging margin on positions to traders.
 - Charging fees on draws taken by traders.
 - Requiring or accepting security deposits from its traders.

2. <u>BEST PRACTICES</u>

2.1 Description of Best Practices

CME Group recognizes that certain business practices may be utilized when conducting customer business as well as member firm trading activities. The Best Practices were established to allow member firms to utilize certain business practices (most not allowed in the past) which are generally prohibited. In order to do so, the member firm must clearly demonstrate to CME Group their application of these non-compliant practices is not inconsistent with CME Group's goal of providing member fees only for member firm trading activity. Such practices will be reviewed individually and in the aggregate in relation to the firm's entire trading activities and operation.

Review of such non-compliant practices will reflect the following key principles of CME Group's member firm trading policies. First and foremost, the trading activity eligible for member fees must be conducted for the account and sole benefit of the member firm itself. The trading activity of individual customers/traders conducted in the name of the firm is not eligible for discounted member firm fees in order to prevent arcade type trading under the guise of member firm trading and to prevent the "selling" of member firm rates. Further, a member firm may only profit/benefit from the member firm trading activity through the performance of the trade and not from any other source such as a commission or charge for trade execution.

Non-compliance with the Best Practices below is generally prohibited as it is indicative of arcade type trading, the selling of rates, and/or profiting from sources other than the performance of the member firm trade. As such, while the Best Practices are not absolutes as the Requirements are, any non-compliance of the Best Practices will be carefully reviewed with the burden of responsibility on the member firm to clearly support and demonstrate to CME Group's satisfaction that the trading is of the member firm itself. Under limited circumstances in reviewing the totality of the member firm's trading operations and the violative practice(s), CME Group may deem the member firm's trading activities in accordance with our policies for member firm trading activity that is eligible for member firm fees.

2.1.1 Interest

The firm may not charge interest on debit balances to traders nor may it pay interest on credit balances to traders except where an options trading strategy is utilized in which interest on the premium is a key component of the overall profitability of the strategy.

The firm may not pay interest on holdbacks where holdbacks are permitted.

The firm may not pay interest on capital contributions.

2.1.2 Allocated Expenses

A firm may not allocate expenses to trades or traders in excess of actual direct and indirect expenses of the individual member firm trades or traders. Only actual expenses incurred may be allocated – a mark up on expenses is not permitted. Further, opportunity costs may not be allocated.

Expense allocations may be made on a per trade/contract basis and/or monthly, quarterly, yearly, or other time period basis.

Direct expenses may include items such as clearing and Globex fees, brokerage commissions (those charged by member firm's clearing firm), software, connection/line charges, licensing fees, and market subscriptions. Indirect expenses may include items such as rent, utilities, membership/share costs, and firm costs for accounting, legal, back-office, compliance, strategy development, programming, and human resource services.

For all expenses allocated the firm must maintain records of actual costs incurred. All rebates of expenses incurred must also be reflected in the allocated costs. Further total costs incurred may not be allocated only to traders but must be allocated to all areas of the member firm's operations which benefit; for example rent should be allocated across all areas of the firm utilizing office space. If an expense is otherwise allocated directly to a trader (for example a line charge) such expense may not be included in the allocated costs.

The total amount of expenses allocated must be reasonable to the actual costs incurred. Allocated expenses must be reviewed, and if necessary adjusted, routinely to ensure they continue to be reasonable in relation to actual expenses. Member firms must maintain and provide adequate supporting calculations and documentation of such allocated expenses and their reasonableness.

2.1.3 Capital Usage Fee

A firm may not charge a fee for capital usage to individual traders of the member firm's accounts.

2.1.4 Cost of Capital Fee

A firm may not charge a fee for the cost of capitalizing the firm (and thus the member firm's trading accounts) to individual traders.

2.1.5 Owners Interest in Member Firm Accounts

Individual owners and investing LLCs (as permitted) of a member firm may not have a specific interest in the profitability of a member firm account or group of accounts other than a member

firm account that the individual owners or owners of the investing LLC trade or provide direct supervision/training to. Thus, an individual owner/investing LLC may not be entitled to a direct percentage of the profits of a member firm account traded by a specific "independent" employee(s) or contractor(s) of the member firm.

2.2 Application of Best Practices

As previously stated non-compliance with the Best Practices is indicative of profiting from sources other than the performance of the member firm trade and is generally indicative of a customer relationship versus a member firm trader relationship. Non-compliance with the above practices will be carefully reviewed with the burden of responsibility on the member firm to clearly support and demonstrate the trading as of the member firm itself. Upon review of the practice, CME Group will in its sole judgment determine whether the member firm's practices are consistent with CME Group's policies for member firm trading activity that is eligible for member firm fees.

If a member firm has any questions concerning the acceptability of its current or potential business practices that may appear inconsistent with the Best Practices, please contact the Audit Department at (312) 930-3230 for forwarding to the Fee Policy Team for discussion and review.

3. <u>PENALTIES</u>

The policies set forth herein will be strictly enforced by CME Group. A member, clearing member, or corporate member found to have engaged in fraudulent or dishonest conduct or to have acted in bad faith will be subject to a charge of a major rule violation. Major rule violations are punishable by a fine up to \$1,000,000 plus the monetary value of any benefit received as a result of the violative activity.

If you have any questions, please call the Audit Department at (312) 930-3230.

Exhibit L

Chicago Mercantile Exchange Inc. CME Clearing Member Firm Member Firm Trading Attestation

(CME Clearing Member)

The trades of a CME clearing member ("clearing member") may receive equity member fee rates – less than charged to non-member customers. The member firm trades of a clearing member and all of its 100% owned subsidiaries are entitled to equity member fees.

In order for clearing members to receive equity member fees on CME trades, all member firm trading must be conducted in accordance with CME's Fee Policy Bulletins at <u>http://www.cme.com/clearing/audit/adv/</u> for Member Firm Trading Policies.

Requirements (Absolutes)

A member firm trading account is evidenced through:

- The financial benefit and risk shall be solely of the member firm only firm capital is at risk of loss.
- No non-owner traders may make any contributions or payments to the member firm or member firm trading account nor have any capital at risk in connection with their trading of the member firm account.
- All contributions by owners of the member firm are subject to risk of loss from any and all trading and business activities of the firm.
- All profits and losses of the member firm account are written off to the income of the member firm and are taxed to the member firm in accordance with IRS regulations.
- All trading must be done in member firm trading accounts held in the name of the clearing member.

Further, clearing member trading activity must be conducted by traders including operators/administrators of Automated Trading Systems ("ATS") that are:

- Bona-fide W-2 employees (or equivalent W-2 of a foreign jurisdiction) of the clearing member; or
- Independent contractors and other self-employed individuals whose total compensation (that is, all compensation) is reported on an IRS Form 1099-MISC ("1099-MISC") (or equivalent document of a foreign jurisdiction) of the clearing member; or
- Owners who maintain at least \$500,000 in bona-fide capital; or
- Individual equity members of CME trading within their division of membership; or
- Rule 106.F. Clearing Member Transfer members; or
- Registered Commodity Trading Advisors ("CTAs"), exempt CTAs under CFTC Regulations 4.14(a)(4), 4.14(a)(5), 4.14(a)(8)(i)(D) or 4.14(a)(10), and Investment Managers authorized by the Financial Services Authority ("FSA").

All clearing member traders must be assigned unique trader IDs, those IDs and the associated clearing member trader must be appropriately registered in CME's Exchange Fee System and all Globex trades (orders) must be identified with the registered ID of the trader executing the trade.

Chicago Mercantile Exchange Inc. CME Clearing Member Firm Member Firm Trading Attestation

In addition, member firm trading must meet the following requirements:

- Traders cannot be responsible for losses beyond their share of profits earned and maintained in the account which have not yet been distributed to the trader.
- The firm must be allocated both a portion of the profits and losses of the member firm account.
- The profit split on agreements with any trader, including owners acting as traders, may not exceed 80/20 (i.e. 80% to the trader/20% to the firm).
 - For member firm trading conducted by a team of traders, the profit split to the team in total may not exceed 80/20 (i.e. 80% to the trader team/20% to the firm).
 - Further the 80% limit on profit splits to a trader or team of traders includes any individual who has a specific interest in its profitability including those involved in the training/supervision of the account(s) and/or trader(s).
- Non-owner traders cannot leave their share of profits in the firm for greater than one year without becoming an equity owner.
 - Non-owner trader's share of capital in an account may not exceed the trader's share of net profit/loss in the previous 12 month period.
 - If a trader leaves their share of any profits in the account for greater than one year, they
 must become an equity owner.
- The firm is prohibited from:
 - Setting minimum account balances for its traders.
 - Charging margin on positions to traders.
 - Charging fees on draws taken by traders.
 - Requiring or accepting security deposits from its traders.

Best Practices

CME recognizes that certain business practices may be utilized when conducting customer business as well as member firm trading activities. The Best Practices were established to allow member firms to utilize certain business practices (most not allowed in the past) which are generally prohibited. In order to do so, the member firm must clearly demonstrate to CME their application of these non-compliant practices is not inconsistent with CME's goal of providing member fees only for member firm trading activity. Such practices will be reviewed individually and in the aggregate in relation to the firm's entire trading activities and operation.

Review of such non-compliant practices will reflect the following key principles of CME's member firm trading policies. First and foremost, the trading activity eligible for member fees must be conducted for the account and sole benefit of the member firm itself. The trading activity of individual customers/traders conducted in the name of the firm is not eligible for discounted member firm fees in order to prevent arcade type trading under the guise of member firm trading and to prevent the "selling" of member firm rates. Further, a member firm may only profit/benefit from the member firm trading activity through the performance of the trade and not from any other source such as a commission or charge for trade execution.

Non-compliance with the Best Practices below is generally prohibited as it is indicative of arcade type trading, the selling of rates, and/or profiting from sources other than the performance of the member firm trade. As such, while the Best Practices are not absolutes as the Requirements are, any non-compliance of the Best Practices will be carefully reviewed with the burden of responsibility on the clearing member to clearly support and demonstrate to CME's satisfaction that the trading is of the clearing member itself. Under limited circumstances

Chicago Mercantile Exchange Inc. CME Clearing Member Firm Member Firm Trading Attestation

in reviewing the totality of the clearing member's trading operations and the violative practice(s), CME may deem the clearing member's trading activities in accordance with our policies for clearing member trading activity that is eligible for equity member fees. **Please check the box next to each practice which you do not comply with regarding your member firm trading:**

- □ The firm may not charge interest on debit balances to traders nor may it pay interest on credit balances to traders except where an options trading strategy is utilized in which interest on the premium is a key component of the overall profitability of the strategy.
- □ The firm may not pay interest on holdbacks where holdbacks are permitted.
- □ The firm may not pay interest on capital contributions.
- □ The firm may not allocate expenses to trades or traders in excess of actual direct and indirect expenses of the individual member firm trades or traders. Only actual expenses incurred may be allocated a mark up on expenses is not permitted. Further, opportunity costs may not be allocated. Clearing members must maintain and provide adequate supporting calculations and documentation of such allocated expenses and their reasonableness.
- A firm may not charge a fee for capital usage to individual traders of the member firm's accounts.
- A firm may not charge a fee for the cost of capitalizing the firm (and thus the member firm's trading accounts) to individual traders.
- Individual owners and investing LLCs (as permitted) of a clearing member may not have a specific interest in the profitability of a clearing member account or group of accounts other than a clearing member account that the individual owners or owners of the investing LLC trade or provide direct supervision/training to.

I represent that all current and future member firm trading activity of clearing member receiving equity member clearing fee rates will conform to the requirements for such trading activity established by CME Group Inc.

I attest that the above information is true and correct. I further acknowledge that confirming incorrect information may subject me to CME Group Inc. disciplinary action and/or penalties.

Signed and accepted by a corporate officer and a duly authorized human resource or legal representative of my organization.

	Corporate Officer *	HR or Legal Representative
Signature:		
Printed Name:		
Title:		
Date:		

* Acceptable Signor: CFO, CEO, COO, or equivalent officer.

Exhibit M

AUTHORIZATION AGREEMENT FOR PRE-AUTHORIZED PAYMENTS (DEBITS AUTHORIZATION IS NOT TRANSFERABLE OR NEGOTIABLE)

I hereby authorize CME Group Inc. to initiate debit entries to the checking account indicated below and the institution named below for the payment of amounts owed by this company to CME Group Inc., including its subsidiaries, Chicago Mercantile Exchange Inc. and The Board of Trade of the City of Chicago, Inc.

I agree to instruct my bank to honor all such transfers. In the event a transfer is returned to CME Group Inc. dishonored and uncollected, the amount indicated on the transfer will be immediately due and payable, and further participation in this service may be terminated at the option of CME Group Inc. In the event I choose to discontinue this service, I agree to honor any transfers covering amounts due and owing to CME Group Inc. which have been drawn on my account prior to receipt by CME Group Inc. of written notice of such discontinuance.

I understand that CME Group Inc. reserves the right to cancel this service at any time upon written notice to my company. I also reserve the right to cancel my company's participation in this service by written notice.

I understand CME Group Inc. will debit Clearing Firms bank account on the 7th business day for Clearing/Exchange Fees and Non-Clearing Charges on the 25th day of the month.

I. BANK INFORMATION (Please attach a void check)

BANK:

CITY: _____STATE: _____

TRANSIT/ABA NUMBER:

ACCOUNT NUMBER:

1, 1 1

This authorization is to remain in effect until cancelled by either CME Group Inc. or the undersigned.

II. CLEARING FIRM INFORMATION

Firm Name:

Firm No:

ADDRESS:

CITY/STATE/ZIPCODE:

PHONE NUMBER:

This authorization is to remain in effect until cancelled by either CME Group Inc. or the undersigned.

AUTHORIZED SIGNATURES

NAME	TITLE
 NAME	TITLE

Customer accounts payable or accounting contact/Phone Number:

OTC Clearing Firms Only

AUTHORIZATION FOR PRE-AUTHORIZED PAYMENTS (DEBITS AUTHORIZATION IS NOT TRANSFERABLE OR NEGOTIABLE)

CME Clearing Firm identified below ("<u>Clearing Firm</u>") hereby authorizes Chicago Mercantile Exchange Inc. (and/or any of its affiliates, including without limitation The Board of Trade of the City of Chicago, Inc. and New York Mercantile Exchange, Inc.) (collectively, "<u>CME</u>") to initiate debit entries from each of the respective checking account(s) listed below, held at each of the bank(s) named below (each, an "<u>Authorized Bank</u>"), for the payment of amounts owed by Clearing Firm to CME (and/or its subsidiaries) (each, a "<u>Transfer</u>").

Clearing Firm agrees to instruct each respective Authorized Bank to honor all such Transfers. In the event that any initiated Transfer is returned to CME by the applicable Bank dishonored and uncollected, the amount indicated on the Transfer will be immediately due and payable by Clearing Member, and further participation in this service may be terminated in CME's sole discretion.

Clearing Firm understands that CME reserves the right to cancel this service at any time upon written notice to Clearing Firm. Clearing Firm also reserves the right to cancel its participation in this service by prior written notice. In the event Clearing Firm chooses to discontinue this service, Clearing Firm agrees to honor any Transfers covering amounts due and owing to CME which have been drawn on any of its account identified below prior to receipt by CME of written notice of such discontinuance.

Clearing Firm understands CME will debit Clearing Firm's bank account *in the currency billed* on the 7th business day of the month for Clearing/Exchange Fees and Non-Clearing Charges on the 25th day of the month.

CURRENCY	BANK NAME	СІТҮ	STATE/ COUNTRY	ACCOUNT Number	IBAN Number	SWIFT CODE/ABA Number
USD						
AUD						
CAD						
CHF						
GBP						
JPY						
EUR						
SEK						
DKK						
NOK						
HKD						
NZD						
SGD						
HUF						
ZAR						
PLN						
CZK						

I. AUTHORIZED BANK INFORMATION (Please note "DNA" for any currency that does not apply)

II. CLEARING FIRM INFORMATION

Firm Name:	
Firm No:	
Address:	
City/State/ZIP Code:	
Phone Number:	
Accounts Payable/Accounting Contact & Phone Number:	
II. CLEARING FIRM AUTHORIZED SIGNATURES	

CLEARING FIRM

Ву:	By:	
Name:	Name:	
Title:	Title:	_

Exhibit N

GIVE-UP PAYMENT SYSTEM™ CLEARING MEMBER AGREEMENT AND PARTICIPATION FORM

This Give-Up Payment System ("GPS") Clearing Member Agreement is between the Chicago Mercantile Exchange Inc. ("CME") and _______("Clearing Member").

CME, via the GPS, will calculate the net amount of give-up fees owed by or due the Clearing Member based on Clearing Member's total give-up transactions as a carrying firm and/or executing firm during the calendar month. Clearing Member agrees to authorize the financial institution identified below to pay CME the amount of give-up fees owed by Clearing Member as a carrying firm to other members, less the amount of give-up fees owed by other members to Clearing Member in its capacity as an executing firm. If the amount of give-up fees owed to Clearing Member as an executing firm exceed the amount owed by Clearing Member as a carrying firm, then CME will initiate a credit entry to Clearing Member in the amount of such excess.

The account identified below is the deposit account maintained by Clearing Member for participation in the GPS:

Financial Institution			
Branch Name			
Specific Address of	Branch		
Bank Contact Perso	on	Tel	ephone
Exact Account Nam	ne		
	Check one: Savings	Checking	Money Market
Account Number		_ Bank Routing No	umber
Taxpayer I.D. Numl	per		
Name of customer of with this firm for pay		learing Member div	visions to be associated
Clearing Member C	ontact Person	Tele	phone

Γ	FOR CHECKING AND MONEY MARKET ACCOUNTS, ATTACH A VOIDED CHECK OR COPY THEREOF BELOW
	-VOIDED CHECK OR COPY THEREOF-

Clearing member authorizes CME to act on its behalf by instructing the Bank designated above, to accept and act upon all credit and debit entries to the Account that are indicated by CME thereunder, including, but not limited to entries made under the following circumstances: (i) in the event of a mistake, error or omission by CME relating to the above debit and/or credit entries; (ii) in order to return or deduct give-up fees as is indicated based on a recalculation of net give-up fees, pursuant to the GPS.

Clearing Member understands and agrees that CME Rule 578— LIMITATION OF LIABILITY, NO WARRANTIES, applies to Clearing Member's use of the GPS. IN ADDITION TO THOSE LIMITATIONS SET FORTH IN RULE 578, CME SHALL NOT BE LIABLE TO CLEARING MEMBER OR ANY OTHER PERSON FOR ANY DAMAGES RESULTING FROM CME'S FAILURE TO NOTIFY THE DESIGNATED BANK, OR AS A RESULT OF PROVIDING AN INCORRECT OR PARTIAL NOTIFICATION TO THE BANK, OF ANY MATTER RELATING TO OBLIGATIONS AND PAYMENTS INVOLVING THE GPS.

Clearing Member agrees to pay a monthly service fee to CME for GPS processing.

Clearing Member	
By (please print)	Title
Signature	Date

Please complete the attached W-9 form and submit with this clearing member participation form.

GPS[™] is a trademark of the Chicago Mercantile Exchange Inc.

Exhibit O

CME Group Member Firm Online System Access Request Form User Information

Request Type	Add (new Access)	Change (adding additional system access)	Dele (removiaccess	ring	(fo	esume
Existing User - ID	:		— (Must be fill	ed in if request t	ype is Char	nge. Delete, or Resume)
Clearing M	lember Fi	rm Infor	mation			
Firm#:		Firm Name:				
End User I	nformatio	n				
			_ Business	Phone: ()	
	(First, Middle Initial,					
Firm Address:					ity:	
					IIV.	
					-	
IN ORDER TO PI	ROCESS PASS	SWORD RES D ONE OF TH	ETS OVER	THE PHON		
IN ORDER TO PI PROVIDE AI	ROCESS PASS N ANSWER TO Du born in?	SWORD RES D ONE OF TH	ETS OVER E FOLLOW	The phon Ing ques	NE YOU	BELOW:
IN ORDER TO PI PROVIDE AI What city were yo	ROCESS PASS N ANSWER TO ou born in? prite city?	SWORD RES D ONE OF TH	ETS OVER E FOLLOW	The phon Ing ques		BELOW:
PROVIDE AI What city were yo What is your favo What is your pet	ROCESS PASS N ANSWER TO ou born In? prite city? s name?	SWORD RES	ETS OVER	The phon Ing ques		BELOW:
IN ORDER TO PI PROVIDE AI What city were yo What is your favo What is your pet	ROCESS PASS N ANSWER TO ou born in? orite city? 's name? school did you	SWORD RES D ONE OF TH	ETS OVER	The phon Ing ques		BELOW:
IN ORDER TO PI PROVIDE AI What city were yo What is your favo What is your pet' What secondary	ROCESS PASS N ANSWER TO ou born in? orite city? s name? school did you Signer Inf	SWORD RES D ONE OF TH attend?	ETS OVER E FOLLOW	THE PHON		BELOW:
IN ORDER TO PI PROVIDE AI What city were yo What is your favo What is your pet What secondary Approved	ROCESS PASS N ANSWER TO ou born in? orite city? s name? school did you Signer Inf ature:	SWORD RES D ONE OF TH attend?	ets over E Follow	THE PHON ING QUES	ne:	BELOW:

* PLEASE ALLOW A MINIMUM OF 48 HOURS FOR PROCESSING YOUR SECURITY REQUEST.

CME Group Member Firm Online System Access Request Form User Information

			and a summer summer second	
Exchanges	User	Needs	Access	10:

Exchanges: CME ____ CBT___ NYMEX___ COMEX___ DME___ ERIS ____

Firm #'s:_____

Environments Needed:

Production ____ New Release ____ Certification ____

REQUESTED SYSTEM

Please identify below the Online System you wish to access

System	Update Access	Read-Only Access
Front End Clearing (FEC)		
FEC+		
Deliveries		
Depository Deliveries		N/A
EREP - Operations Reports	N/A	
EREP - Risk Reports	N/A	
EREP - Financial Reports	N/A	
EREP - Delivery Reports	N/A	
Broker Payment System (BPS)		
Give-Up Payment System (GPS)		
Fee System Portal		
Positions		
Asset Management		
Settlements Firm		N/A
	the second s	and the second se

Special Instructions:

Firm Support Group 20 S. Wacker Drive Chicago, IL 60606

Fax: (312) 604-9450

* DIRECT SECURITY ACCESS INQUIRIES TO THE FIRM SUPPORT GROUP AT (312) 930-3444 Opt. # 2

* PLEASE ALLOW A MINIMUM OF 48 HOURS FOR PROCESSING YOUR SECURITY REQUEST.



OTC Online System Access Request Form User Information

Request Type	Add		Change		Delete		Resume	
Existing User ID:	Click he	re to enter	text.	(must be f	illed in if request	type is Change	e, Delete, or Resum	ne)

Clearing Member Firm Information

Firm#: Click here to enter text.

End User Information

User name: Click here to enter text. (First, Middle Initial, Last) Business Phone: Click here to enter text.

Firm Name: Click here to enter text.

Firm Address: Click here to enter text.

User Email Address: Click here to enter text.

City: Click here to enter text.

Page 1

IN ORDER TO PROCESS PASSWORD RESETS OVER THE PHONE YOU WILL NEED TO PROVIDE AN ANSWER TO ONE OF THE FOLLOWING QUESTIONS BELOW:

Birth Place? Click here to enter text.

Date of Birth (MM/DD/YYYY)? Click here to enter text.

School? Click here to enter text.

Approved Signer Information

Authorizing Signature:		Print Name:	
Title:	Date:	Phone:	
		a start of the second star	and a construction of the first of the

Direct security access inquiries to the EASE Team at (312) 930-3444 Opt #2

Please allow a minimum of 48 hours for processing your security request

Our fax number is (312) 604-9450



OTC Online System Access Request Form User Information

Exchanges User Needs Access To:

CMD (CDS) 🗆 CME (IRS) 🗆

Firm #'s : Click here to enter text.

Environments Needed:

Production \Box

New Release

Certification \Box

Requested System

Please identify below the Online System you need access to:

System	Update Access	Read-Only Access
Front End Clearing (FEC) and FEC+		
FEC for OTC IRS (DMS)		N/A
EREP - Operations Reports	N/A	
EREP - Risk Reports	N/A	
EREP - Financial Reports	N/A	
Fee System Portal (EFS)		
Asset Management		
Settlements Firm		N/A

Special Instructions:

Click here to enter text.

Direct security access inquiries to the EASE Team at (312) 930-3444 Opt #2

Please allow a minimum of 48 hours for processing your security request



Third Party Platform Access Authorization

If Clearing Member Firm intends to access FEC through a third party platform instead of directly, this section must be completed. The purpose of this section is for Clearing Member Firm to allow a third party platform to interact with CME in a limited capacity as outlined below. BY AUTHORIZING A THIRD PARTY PLATFORM, CLEARING FIRMS ACKNOWLEDGE THAT ANY ACTION (OR FAILURE TO PERFORM ACTION) BY THE THIRD PARTY PLATFORM WILL BE VIEWED AS IF THE ACTION (OR FAILURE TO PERFORM ACTION) WAS PERFORMED BY THE CLEARING FIRM.

Responsibility that Clearing Member Firm delegates to third party platform

Type of Responsibility	Click here to enter text.
OTC IRS FEC Accept / Reject	Click here to enter text.
OTC CDS FEC Accept / Reject	Click here to enter text.
OTC FX FEC Accept / Reject	Click here to enter text.

Authorized Third Party Platform Information

Name of the Platform	Click here to enter text.	
Primary Contact Name	Click here to enter text.	
Primary Contact Phone	Click here to enter text.	
Primary Contact Email	Click here to enter text.	
Secondary Contact Name	Click here to enter text.	41 (
Secondary Contact Phone	Click here to enter text.	
Secondary Contact Email	Click here to enter text.	

Direct security access inquiries to the EASE Team at (312) 930-3444 Opt #2

Please allow a minimum of 48 hours for processing your security request

Exhibit P



BROKERAGE PAYMENT SYSTEM FLOOR BROKER PARTICIPATION FORM

The account identified below is the deposit account maintained by Floor Broker for participation in the Brokerage Payment System™:

Financial Institution:	
Branch Name:	
Specific Name of Branch:	
Bank Contact Person:	
Telephone Number:	
Exact Account Name:	
Check One: Savings Checking	
Bank Routing Number: Accour	nt Number
Taxpayer Identification Number:	
FOR CHECKING AND MONEY MARKET ACCOUNTS, ATTACH A VOIDED CH	
THIS CHANGE EFFECTS BROKERAGE FOR THE MONTH OF Are you presently a member of a Broker Group? YES	
If yes, please identify the principal or spokesperson:	
Floor Broker authorizes the CME to act on its behalf by in above, to accept and act upon all credit and debit entindicated by CME hereunder.	
Broker Symbol	
Floor Broker (please print)	
Signature: Date: Please complete the attached W-9 form and submit with this Floor B	
riease complete the attached w-s form and submit with this Floor E	noker participation form.

Exhibit Q

CME Group

BROKERAGE PAYMENT SYSTEM™ BROKER AGREEMENT

This Agreement, effective as of ______, 20____, is entered into by and between Chicago Mercantile Exchange Inc., ("CME"), having its principal place of business at 20 South Wacker Drive, Chicago, Illinois 60606 and ______, a CME or CBOT Member or KCBOT permit holder and independent broker (" Broker"), conducting business at CME.

RECITALS

WHEREAS, CME has developed certain software known as the Brokerage Payment System or "BPS," which calculates amounts owed by clearing members to brokers for trade execution services:

WHEREAS, CME has implemented a mandatory automatic brokerage billing system based upon the BPS, that calculates the amount of brokerage owed by clearing members to brokers, automatically debits and credits such amounts to the accounts of such clearing members and brokers and creates reports relating to such calculations and transfers ("Services"); and

WHEREAS, the undersigned Broker will receive and CME will provide such Services to the Broker;

NOW THEREFORE, in consideration of the mutual promises contained herein, CME and Broker hereby agree as follows:

1. Authorization of Services

Subject to the terms and conditions set forth herein, Broker hereby authorizes CME to initiate credit entries to the account specified in Exhibit A attached hereto ("Account"), in accordance with the policies for transmitting payments of brokerage fees that are owed to Broker by clearing members for which Broker provided trade execution services ("Clearing Members"). Further, Broker authorizes CME to initiate debit entries to the Account in the event of any mistake, error or omission by CME relating to any such credit entry. Broker authorizes CME to act on its behalf by instructing the Bank designated In Exhibit A attached hereto ("Bank"), to accept and act upon all credit and debit entries to the Account that are initiated by CME hereunder.

2. Calculation of Brokerage Payments

For the purposes of calculating Clearing Members' payment obligations to Broker, CME will provide such Clearing Members with the opportunity to establish, and CME will reply upon, the brokerage rates that each such Clearing Member wishes to pay Broker for the performance of trade execution services. At the end of every

month, CME will calculate the fees due to Broker for trade execution services provided to Clearing Members during such month. CME's calculations will be based upon the number of cleared contracts executed by Broker on behalf of such Clearing Members and/or their customers during such calendar month, as indicated by such Broker's Cleared Trades Report.

3. Transfer of Funds

CME will debit the Clearing Members accounts in the required amounts and will credit the Account by the amount calculated pursuant to the provisions of section 2 hereof, less the amount of service fees due in accordance with section 5 hereunder.

4. Reports

CME will provide reports on a periodic basis to Broker and such Clearing Members which contain a calculation of the cleared trades and the brokerage fees paid, and showing all pertinent data and related information.

5. Fees

Broker agrees to pay CME a monthly service fee of [twenty-five cents (\$.25)] for each Clearing Member from whom Broker receives a payment hereunder; provided, however, that no fee shall be paid for any month in which the payment of brokerage fees by any such Clearing Member to Broker is less than [\$25.00]. Broker agrees that CME shall deduct from the amount credited to Broker's account each month, all service fees incurred by Broker during such month.

CME may also collect funds due from brokers of any kind through deduction in payments from the BPS application. Such funds include, but are not limited to, CME incurred brokerage fees, floor-related fees, electronic device charges and fines.

6. Compliance

Broker and CME will comply with and be bound by the policies and procedures as in effect from time to time relating to the Services as well as the policies and procedures of the Bank that relate to the Agreement.

7. Financial Institution Change

Broker agrees that it will provide a newly executed agreement at least twenty (20) days prior to any change in the Bank or account name or number identified in Exhibit A.

8. Termination

This Agreement may be terminated by CME or Broker at any time by giving twenty (20) days prior written notice to the other party. Notwithstanding such termination, this Agreement shall remain in full force and effect as to all transactions that have occurred prior to the date of termination.

9. Confidentiality

During the term of this Agreement and at all times thereafter, Broker shall keep and maintain any Confidential Information (defined hereafter) that Broker may receive in strictest confidence and shall not disclose such information to any third party except as

required by order of a court of competent jurisdiction or pursuant to a government request. For purposes of the preceding sentence, the term Confidential Information shall include the elements of the BPS Software and all programming, systems, user documentation, technical information, know-how, technology, formulae, information, system designs, prototypes, ideas, inventions, improvements, and data and files relating thereto that are not generally known to the public.

10. Warranties, Liability and Indemnification

- a) BROKER ACKNOWLEDGES AND AGREES THAT THE BROKERAGE PAYMENT SYSTEM AND THE SERVICES ARE PROVIDED "AS IS" AND THAT CME DOES NOT MAKE ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS RELATING TO THE BROKERAGE PAYMENT SYSTEM AND THE SERVICES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
- b) BROKER ACKNOWLEDGES AND AGREES THAT NEITHER CME, NOR ANY OF ITS BOARD MEMBERS, OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, OR AFFILIATES SHALL BE LIABLE UNDER ANY CIRCUMSTANCES WHATSOEVER TO BROKER, A SUCCESSOR OR REPRESENTATIVE THEREOF OR ANY PERSON OR ENTITY ASSOCIATED THEREWITH FOR ANY DIRECT DAMAGES, OR FOR ANY SPECIAL, PUNITIVE, EXEMPLARY, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS OR COMMERCIAL LOSSES), ARISING OUT OF: (1) ANY DEFECT, ERROR, FAILURE OR MALFUNCTION IN THE BROKERAGE PAYMENT SYSTEM; (2) ANY FAULT, DELAY, ACT, OMISSION OR INACCURACY IN PROVIDING THE SERVICES OR ANY TERMINATION OF THE SERVICES; (3) ANY CLAIM ALLEGING THAT THE SERVICES OR ANY ACTIONS TAKEN BY CME IN CONNECTION WITH THIS AGREEMENT VIOLATE ANY RIGHTS OF BROKER, OR (4) FROM ANY OTHER CAUSE WHATSOEVER, REGARDLESS OF THE FORM(S) OF ACTION OF ANY OF THE FOREGOING, WHETHER BASED ON WARRANTY, CONTRACT, TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR OTHERWISE, AND WHETHER OR NOT CME HAS RECEIVED NOTICE OF THE POSSIBILITY OR CERTAINTY OF SUCH DAMAGES OR LOSSES.
- c) Broker hereby agrees to indemnify and hold CME and its Board members, directors, officers, employees, agents and affiliates harmless from and against any and all liabilities, losses, costs, damages, interest claims, and expenses, including court costs and attorneys' fees, which CME or any of its Board members, directors, officer, employees, agents or affiliates sustains or incurs as a consequence of any claim, proceeding or action; (1) that relates directly or indirectly to Broker's use of or inability to use the Brokerage Payment System or the Services rendered or to be rendered pursuant to this Agreement; (2) alleging that CME's Services or other actions related to this Agreement violate any rights of Broker; (3) arising from any act or omission of Broker or Broker's affiliates, employees or agents; (4) arising from the misuse, disclosure or misappropriate by Broker of any Confidential Information obtained by Broker; (5) alleging any facts which, if true, would constitute a breach by Broker of any obligation,

representation or warranty contained in this Agreement, or (6) claiming damages based on Broker's use of the Brokerage Payment System pursuant to this agreement.

- CME will promptly correct any errors or omissions caused by CME in any debit or credit entries initiated pursuant to this Agreement.
- e) The provisions of this section 10 shall survive any termination of this Agreement.

11. Notices

Any written notice or other written communication required or permitted to be given pursuant to this Agreement shall be hand delivered or sent by United States registered mail, postage prepaid, to the parties at the addresses indicated above and, if to the Broker, directed to his or her attention (unless another person or address is substituted by Broker in the following space): and, if to CME, directed to the attention of Associate Director, Shareholder Relations and Membership Services Department.

12. Miscellaneous

- Headings are used for reference purposes only, and shall not be deemed to a part of this Agreement.
 - b) This Agreement shall be interpreted, construed and enforced in accordance with the laws of the State of Illinois without regard to any provision of Illinois law that would apply the substantive law of a different jurisdiction. The parties agree that any action, suit or proceeding arising out of or related to this Agreement shall be commenced in the United Stated District Court for the Northern District of Illinois, or if no federal jurisdiction exists, then in the Circuit Court of Cook County, Illinois. Each party hereby agrees to submit to the jurisdiction of such courts and to waive any objections based on venue in any action, suit or proceeding arising out of or related to this Agreement.
 - c) This Agreement embodies that entire agreement of the parties with respect to the subject matter hereof, and supersedes all previous negotiations, representations, and agreements with respect hereto, and shall be binding upon the parties hereto, and their respective successors and assigns. This Agreement may be amended only by a writing signed by both parties.
 - d) No waiver or any breach hereof, of any of the terms and conditions hereof or any default hereunder, shall be deemed a waiver of any other breach or default or in any way affect any other terms or conditions hereof.
 - e) If any provision of this Agreement is determined to be invalid or unenforceable, the remaining provisions of the Agreement shall not be affected thereby and shall be binding upon the parties hereto, and shall be enforceable as though the invalid or unenforceable provision were not contained herein.

- f) Neither party shall bear any responsibility or liability to the other party for any losses arising our of any delay in or interruption of its performance of its obligations under this Agreement due to any act of God, fire, flood, severe or adverse weather conditions, act of governmental authority judicial decree, act of the public enemy or due to war, riot, civil commotion, insurrection, labor difficulties (including, without limitation, any strike or other work stoppage or slowdown), or other cause beyond the reasonable control of the party so affected.
- g) This Agreement shall not be assigned or transferred by Broker and any attempt to so assign or transfer this Agreement shall be null and void.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the date first above written.

CHICAGO MERCANTILE EXCHANGE INC.	BROKER
Ву:	Ву:
Print:	Print:
Title:	

6186.txt

EXHIBIT A

The Account referred to in the Agreement is the following deposit Account maintained by Broker:

Financial Institution:
Branch Name:
Specific Name of Branch:
Bank Contact Person:
Telephone Number:
Account Name:
Check One: Savings Checking
Account Number:
Bank Routing Number:
Social Security Number:
Primary Clearing Member:
Telephone Number:
Broker's Designated Contact:
Telephone Number:
Broker Symbol:

ATTACH A VOIDED CHECK OR COPY THEREOF BELOW:

-VOIDED CHECK OR COPY THEREOF-

6186.txt

Exhibit R



BROKERAGE PAYMENT SYSTEM™ BROKER AGREEMENT

This	Agree	ment,	effective a	as of			, 20_	, is e	ntered
into by and	betwe	en Cl	nicago Mei	rcantile Exc	hange Inc.	, ("CME"),	having its p	rincipal p	lace of
business	at	20	South	Wacker			Illinois		
("NYMEX/C Business") o				방송 방법 영상 이상 위에서 영상 영상 위치가 여러 가지 않는 것.	broker ("	Broker"),	Mercantile and CPC ubsidiaries.		

(PLEAS	E CHECK APPR	OPRIATE BOX	()
NYMEX	AND/OR	COMEX [
	RECITALS	5	

WHEREAS, CME has developed certain software known as the Brokerage Payment System or "BPS," which calculates amounts owed by clearing members to brokers for trade execution services:

WHEREAS, CME has implemented a mandatory automatic brokerage billing system based upon the BPS, that calculates the amount of brokerage owed by clearing members to brokers, automatically debits and credits such amounts to the accounts of such clearing members and brokers and creates reports relating to such calculations and transfers ("Services"); and

WHEREAS, the undersigned Broker will receive and CME will provide such Services to the Broker;

NOW THEREFORE, in consideration of the mutual promises contained herein, CME and Broker hereby agree as follows:

1. Authorization of Services

Subject to the terms and conditions set forth herein, Broker hereby authorizes CME to initiate credit entries to the account specified in Exhibit A attached hereto ("Account"), in accordance with the policies for transmitting payments of brokerage fees that are owed to Broker by clearing members for which Broker provided trade execution services ("Clearing Members"). Further, Broker authorizes CME to initiate debit entries to the Account in the event of any mistake, error or omission by CME relating to any such credit entry. Broker authorizes CME to act on its behalf by instructing the Bank designated In Exhibit A attached hereto ("Bank"), to accept and act upon all credit and debit entries to the Account that are initiated by CME hereunder.

2. Calculation of Brokerage Payments

For the purposes of calculating Clearing Members' payment obligations to Broker, CME will provide such Clearing Members with the opportunity to establish, and CME will reply upon, the brokerage rates that each such Clearing Member wishes to pay Broker for the performance of trade execution services. At the end of every

month, CME will calculate the fees due to Broker for trade execution services provided to Clearing Members during such month. CME's calculations will be based upon the number of cleared contracts executed by Broker on behalf of such Clearing Members and/or their customers during such calendar month, as indicated by such Broker's Cleared Trades Report.

3. Transfer of Funds

CME will debit the Clearing Members accounts in the required amounts and will credit the Account by the amount calculated pursuant to the provisions of section 2 hereof, less the amount of service fees due in accordance with section 5 hereunder.

4. Reports

CME will provide reports on a periodic basis to Broker and such Clearing Members which contain a calculation of the cleared trades and the brokerage fees paid, and showing all pertinent data and related information.

5. Fees

Broker agrees to pay CME a monthly service fee of [twenty-five cents (\$.25)] for each Clearing Member from whom Broker receives a payment hereunder; provided, however, that no fee shall be paid for any month in which the payment of brokerage fees by any such Clearing Member to Broker is less than [\$25.00]. Broker agrees that CME shall deduct from the amount credited to Broker's account each month, all service fees incurred by Broker during such month.

CME shall also collect funds due from brokers of any kind through deduction in payments from the BPS application. Such funds include, but are not limited to, CME incurred brokerage fees, floor-related fees, electronic device charges and fines.

6. Compliance

Broker and CME will comply with and be bound by the policies and procedures as in effect from time to time relating to the Services as well as the policies and procedures of the Bank that relate to the Agreement.

7. Financial Institution Change

Broker agrees that it will provide a newly executed agreement at least twenty (20) days prior to any change in the Bank or account name or number identified in Exhibit A.

8. Termination

This Agreement may be terminated by CME or Broker at any time by giving twenty (20) days prior written notice to the other party. Notwithstanding such termination, this Agreement shall remain in full force and effect as to all transactions that have occurred prior to the date of termination.

9. Confidentiality

During the term of this Agreement and at all times thereafter, Broker shall keep and maintain any Confidential Information (defined hereafter) that Broker may receive in strictest confidence and shall not disclose such information to any third party except as required by order of a court of competent jurisdiction or pursuant to a government request. For purposes of the preceding sentence, the term Confidential Information shall include the elements of the BPS Software and all programming, systems, user documentation, technical information, know-how, technology, formulae, information, system designs, prototypes, ideas, inventions, improvements, and data and files relating thereto that are not generally known to the public.

10. Warranties, Liability and Indemnification

- a) BROKER ACKNOWLEDGES AND AGREES THAT THE BROKERAGE PAYMENT SYSTEM AND THE SERVICES ARE PROVIDED "AS IS" AND THAT CME DOES NOT MAKE ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS RELATING TO THE BROKERAGE PAYMENT SYSTEM AND THE SERVICES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
- BROKER ACKNOWLEDGES AND AGREES THAT NEITHER CME GROUP b) INC., AND ANY OF ITS SUBSIDIARIES, NOR ANY OF ITS BOARD MEMBERS, OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, OR AFFILIATES SHALL BE LIABLE UNDER ANY CIRCUMSTANCES WHATSOEVER TO BROKER, A SUCCESSOR OR REPRESENTATIVE THEREOF OR ANY PERSON OR ENTITY ASSOCIATED THEREWITH FOR ANY DIRECT DAMAGES. OR FOR ANY SPECIAL, PUNITIVE, EXEMPLARY, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS OR COMMERCIAL LOSSES). ARISING OUT OF: (1) ANY DEFECT, ERROR, FAILURE OR MALFUNCTION IN THE BROKERAGE PAYMENT SYSTEM; (2) ANY FAULT, DELAY, ACT, OMISSION OR INACCURACY IN PROVIDING THE SERVICES OR ANY TERMINATION OF THE SERVICES: (3) ANY CLAIM ALLEGING THAT THE SERVICES OR ANY ACTIONS TAKEN BY CME IN CONNECTION WITH THIS AGREEMENT VIOLATE ANY RIGHTS OF BROKER, OR (4) FROM ANY OTHER CAUSE WHATSOEVER, REGARDLESS OF THE FORM(S) OF ACTION OF ANY OF THE FOREGOING, WHETHER BASED ON WARRANTY, CONTRACT, TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR OTHERWISE, AND WHETHER OR NOT CME HAS RECEIVED NOTICE OF THE POSSIBILITY OR CERTAINTY OF SUCH DAMAGES OR LOSSES.
- c) Broker hereby agrees to indemnify and hold CME and its Board members, directors, officers, employees, agents and affiliates harmless from and against any and all liabilities, losses, costs, damages, interest claims, and expenses, including court costs and attorneys' fees, which CME or any of its Board members, directors, officer, employees, agents or affiliates sustains or incurs as a consequence of any claim, proceeding or action; (1) that relates directly or

indirectly to Broker's use of or inability to use the Brokerage Payment System or the Services rendered or to be rendered pursuant to this Agreement; (2) alleging that CME's Services or other actions related to this Agreement violate any rights of Broker; (3) arising from any act or omission of Broker or Broker's affiliates, employees or agents; (4) arising from the misuse, disclosure or misappropriate by Broker of any Confidential Information obtained by Broker; (5) alleging any facts which, if true, would constitute a breach by Broker of any obligation, representation or warranty contained in this Agreement, or (6) claiming damages based on Broker's use of the Brokerage Payment System pursuant to this agreement.

- CME will promptly correct any errors or omissions caused by CME in any debit or credit entries initiated pursuant to this Agreement.
- e) The provisions of this section 10 shall survive any termination of this Agreement.

11. Notices

Any written notice or other written communication required or permitted to be given pursuant to this Agreement shall be hand delivered or sent by United States registered mail, postage prepaid, to the parties at the addresses indicated above and, if to the Broker, directed to his or her attention (unless another person or address is substituted by Broker in the following space): and, if to CME, directed to the attention of Associate Director, Shareholder Relations and Membership Services Department.

12. Miscellaneous

- Headings are used for reference purposes only, and shall not be deemed to a part of this Agreement.
 - b) This Agreement shall be interpreted, construed and enforced in accordance with the laws of the State of Illinois without regard to any provision of Illinois law that would apply the substantive law of a different jurisdiction. The parties agree that any action, suit or proceeding arising out of or related to this Agreement shall be commenced in the United Stated District Court for the Northern District of Illinois, or if no federal jurisdiction exists, then in the Circuit Court of Cook County, Illinois. Each party hereby agrees to submit to the jurisdiction of such courts and to waive any objections based on venue in any action, suit or proceeding arising out of or related to this Agreement.
 - c) This Agreement embodies that entire agreement of the parties with respect to the subject matter hereof, and supersedes all previous negotiations, representations, and agreements with respect hereto, and shall be binding upon the parties hereto, and their respective successors and assigns. This Agreement may be amended only by a writing signed by both parties.
 - d) No waiver or any breach hereof, of any of the terms and conditions hereof or any default hereunder, shall be deemed a waiver of any other breach or default or in any way affect any other terms or conditions hereof.

- e) If any provision of this Agreement is determined to be invalid or unenforceable, the remaining provisions of the Agreement shall not be affected thereby and shall be binding upon the parties hereto, and shall be enforceable as though the invalid or unenforceable provision were not contained herein.
- f) Neither party shall bear any responsibility or liability to the other party for any losses arising our of any delay in or interruption of its performance of its obligations under this Agreement due to any act of God, fire, flood, severe or adverse weather conditions, act of governmental authority judicial decree, act of the public enemy or due to war, riot, civil commotion, insurrection, labor difficulties (including, without limitation, any strike or other work stoppage or slowdown), or other cause beyond the reasonable control of the party so affected.
- g) This Agreement shall not be assigned or transferred by Broker and any attempt to so assign or transfer this Agreement shall be null and void.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the date first above written.

CHICAGO MERCANTILE EXCHANGE INC.	BROKER			
Ву:	Ву:			
Print:	Print:			
Títle:	Address:			
	Telephone:			
	Email:			

6186a.txt

EXHIBIT A

The Account referred to in the Agreement is the following deposit Account maintained by Broker:

Financial Institution:
Branch Name:
Specific Name of Branch:
Bank Contact Person:
Telephone Number:
Account Name:
Check One: Savings Checking
Account Number:
Bank Routing Number:
Tax ID #/Social Security Number:
Primary Clearing Member:
Telephone Number:
Broker's Designated Contact:
Telephone Number:
Broker Symbol:

ATTACH A VOIDED CHECK OR COPY THEREOF BELOW:

-VOIDED CHECK OR COPY THEREOF-

6186a.txt

Exhibit S



MEMBER FIRM DESIGNATED SPOKESPERSON AND AUTHORIZED SIGNOR ACKNOWLEDGEMENT

CME requires that member firms designate "a representative who shall be authorized to deal with the Exchange with respect to the membership" owned or leased by the firm. Such authorized representative shall be responsible to the Exchange as if such person was a member as defined by Rule 400.

Member Firm Name			and an internation	<u></u>
Address				
City	State	Country	Zip Code	
Phone Number	R.P.	Tax I.D. #		
Email Address*				
Name and Signature of Office	ers Authorized to act	on behalf of the fi	m:	
Name (please print)	Signa	ture	Designated Spokesperson	Authorized Signor
Officer Name /Title (please p	rint)			
Signature	asster – Costianito			

Date

*General Correspondence will be sent electronically.

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DESIGNATED SPOKESPERSON ACKNOWLEDGEMENT

Rule 901.B requires that "an authorized representative (i.e., officer, principal, or partner) represent the clearing member before the Exchange and its committees. Such authorized representative shall be responsible to the Exchange for any representations made to the Exchange as if such person was a member as defined by Rule 400."

(Officer Name/Title)

_____ is the Designated Spokesperson

authorized to represent _____

(Clearing Firm)

Officer Name/Title (other than designated spokesperson)

Signature

Date

G:/forms/dspkprsn.doc

Exhibit T

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Name (as shown on your income tax return)

je 2.	Business name/disregarded entity name, if different from above				
Print or type See Specific Instructions on page 2.	Check appropriate box for federal tax classification:	Exemptions (see instructions): Exempt payee code (if any)			
	Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partner Other (see instructions) ►	ship) ►	Exemption from FATCA reporting code (if any)		
	Address (number, street, and apt. or suite no.)	Requester's name	and address (optional)		
	City, state, and ZIP code				
	List account number(s) here (optional)				
Par	t Taxpayer Identification Number (TIN)	- 25 - 22			
to avo reside entitie	your TIN in the appropriate box. The TIN provided must match the name given on the "Name old backup withholding. For individuals, this is your social security number (SSN). However, for ent alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other es, it is your employer identification number (EIN). If you do not have a number, see <i>How to ge</i> n page 3.	ora			
	. If the account is in more than one name, see the chart on page 4 for guidelines on whose per to enter.	Employe	-		
Par	t II Certification				

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
- 3. I am a U.S. citizen or other U.S. person (defined below), and
- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign	Signature of
Here	U.S. person ►

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. The IRS has created a page on IRS.gov for information about Form W-9, at www.irs.gov/w9. Information about any future developments affecting Form W-9 (such as legislation enacted after we release it) will be posted on that page.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, payments made to you in settlement of payment card and third party network transactions, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and 4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct.

Note. If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

· An individual who is a U.S. citizen or U.S. resident alien,

• A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,

· An estate (other than a foreign estate), or

Date >

• A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

Form W-9 (Rev. 8-2013)

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States:

• In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity,

• In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust, and

• In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that gualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS a percentage of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,

2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See Exempt payee code on page 3 and the separate Instructions for the Requester of Form W-9 for more information.

Also see Special rules for partnerships on page 1.

What is FATCA reporting? The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code* on page 3 and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account, for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

Sole proprietor. Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name/disregarded entity name" line.

Partnership, C Corporation, or S Corporation. Enter the entity's name on the "Name" line and any business, trade, or "doing business as (DBA) name" on the "Business name/disregarded entity name" line.

Disregarded entity. For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulation section 301.7701-2(c)(2)(iii). Enter the owner's name on the "Name" line. The name of the entity entered on the "Name" line should never be a disregarded entity. The name on the "Name" line must be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on the "Name" line. If the direct owner of the entity is also a disregarded entity is also a disregarded entity is a foreign LLC that is not disregarded or federal tax purposes. Enter the disregarded entity's name on the "Business name/disregarded entity name" line. If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Note. Check the appropriate box for the U.S. federal tax classification of the person whose name is entered on the "Name" line (Individual/sole proprietor, Partnership, C Corporation, S Corporation, Trust/estate).

Limited Liability Company (LLC). If the person identified on the "Name" line is an LLC, check the "Limited liability company" box only and enter the appropriate code for the U.S. federal tax classification in the space provided. If you are an LLC that is treated as a partnership for U.S. federal tax purposes, enter "P" for partnership. If you are an LLC that has filed a Form 8832 or a Form 2553 to be taxed as a corporation, enter "C" for C corporation or "S" for S corporation, as appropriate. If you are an LLC that is disregarded as an entity separate from its owner under Regulation section 301.7701-3 (except for employment and excise tax), do not check the LLC box unless the owner of the LLC (required to be identified on the "Name" line) is another LLC that is not disregarded for U.S. federal tax purposes. If the LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the "Name" line.

Other entities. Enter your business name as shown on required U.S. federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name/disregarded entity name" line.

Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the *Exemptions* box, any code(s) that may apply to you. See *Exempt payee code* and *Exemption from FATCA reporting code* on page 3.

Form W-9 (Rev. 8-2013)

Exempt payee code. Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends. Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.

Note. If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following codes identify payees that are exempt from backup withholding: 1—An organization exempt from tax under section 501(a), any IRA, or a

custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)

2-The United States or any of its agencies or instrumentalities

3—A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities

4-A foreign government or any of its political subdivisions, agencies, or instrumentalities

5-A corporation

6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States

7—A futures commission merchant registered with the Commodity Futures Trading Commission

8-A real estate investment trust

 $9-\mbox{An entity}$ registered at all times during the tax year under the Investment Company Act of 1940

10-A common trust fund operated by a bank under section 584(a)

11-A financial institution

12-A middleman known in the investment community as a nominee or custodian

13—A trust exempt from tax under section 664 or described in section 4947 The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for	THEN the payment is exempt for
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney, and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements.

A-An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B-The United States or any of its agencies or instrumentalities

C-A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities

D-A corporation the stock of which is regularly traded on one or more established securities markets, as described in Reg. section 1.1472-1(c)(1)(i)

E-A corporation that is a member of the same expanded affiliated group as a corporation described in Reg. section 1.1472-1(c)(1)(i)

F-A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state G-A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I-A common trust fund as defined in section 584(a)

J-A bank as defined in section 581

K-A broker

L-A trust exempt from tax under section 664 or described in section 4947(a)(1) M-A tax exempt trust under a section 403(b) plan or section 457(g) plan

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note. See the chart on page 4 for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at www.ssa.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an TIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/businesses and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting IRS.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note. Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, or 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on the "Name" line must sign. Exempt payees, see *Exempt payee code* earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

 Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of: The individual The actual owner of the account or, if combined funds, the first individual on the account ' The minor ' The grantor-trustee ' The actual owner ' The owner ' Give name and EIN of: The owner Legal entity ' The corporation		
 Individual Two or more individuals (joint account) 	The actual owner of the account or, if combined funds, the first		
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor ²		
 a. The usual revocable savings trust (grantor is also trustee) b. So-called trust account that is not a legal or valid trust under state law 			
5. Sole proprietorship or disregarded entity owned by an individual	The owner '		
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulation section 1.671-4(b)(2)(i)(A))	The grantor*		
For this type of account:	Give name and EIN of:		
 Disregarded entity not owned by an individual 	The owner		
8. A valid trust, estate, or pension trust	Legal entity *		
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation		
 Association, club, religious, charitable, educational, or other tax-exempt organization 	The organization		
11. Partnership or multi-member LLC	The partnership		
12. A broker or registered nominee	The broker or nominee		
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity		
 Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulation section 1.671-4(b)(2)(i)(B)) 	The trust		

List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or "DBA" name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see Sozeial rules for partnerships on page 1.

*Note. Grantor also must provide a Form W-9 to trustee of trust.

Page 4

Note. If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund. To reduce your risk:

Protect your SSN,

· Ensure your employer is protecting your SSN, and

Be careful when choosing a tax preparer

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov*. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: *spam@uce.gov* or contact them at *www.ftc.gov/idtheft* or 1-877-IDTHEFT (1-877-438-4338).

Visit IRS.gov to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

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For Paperwork Reduction Act Notice, see separate instructions.

Cat. No. 25047Z



APPENDIX 2-A

Licensing Agreement between AMM and CME

CONFIDENTIAL

[Redacted]

APPENDIX 2-B

CME Clearing House Manual of Operations

CONFIDENTIAL

[Redacted]

APPENDIX 2-C

CME Clearing's Annual Compliance Report, Fiscal Year 2012

CONFIDENTIAL

[Redacted]